Midway Village Redevelopment Project

Sustainable Communities Environmental Assessment

General Plan Amendment: GPA-9-18-13666

Zone Change: ZC-18-13662

Design Review: DR-9-18-13665

April 6, 2020

Lead Agency:

City of Daly City
333 90th Street
Daly City, California 94015

Technical Assistance:

Stantec Consulting Services Inc.
1340 Treat Boulevard, Suite 300
Walnut Creek, California 94597

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Abbreviations and Acronyms

µg/m^3	micrograms per cubic meter
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ac	acre
AFY	acre-feet per year
AIA	Airport Influence Area
amsl	abobe mean sea level
APN	Assessor's Parcel Number
AP Zone Act	Alquist-Priolo Special Studies Zone Act of 1972
AQP	air quality plan
AWSC	All Way Stop Control
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
Bayshore Park	David R. Rowe/Bayshore Park
BMP	best management practice
BSD	Bayshore Sanitary District
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalOES	California Office of Emergency Services
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CALUCP	Comprehensive Airport Land Use Compatibility Plan
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
C/CAG	City/County Association of Governments
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDMG	California Department of Mines and Geology
CE	Critically Endangered
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CH4	Methane
City	City of Daly City
CMP	Congestion Management Program
CMRA	Construction Materials Recycling Association
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide

CO_2e	carbon dioxide equivalent
CY	cubic yard
dB	decibel
dBA	A-weighted sound level
DCPD	City of Daly City Police Department
DDA	Disposition and Development Agreement
DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
du	dwelling units
du/ac	dwelling units per acre
DWR	California Department of Water Resources
DWWR	Department of Water and Wastewater Resources
EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
°F	degrees Fahrenheit
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FCAA	Federal Clean Air Act
FE	Federally Endangered
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FP	Federally Protected
FT	Federally Threatened
FTA	Federal Transit Administration
GCP	General Construction Permit
General Plan	Daly City General Plan
GHG	greenhouse gas
gpd	gallons per day
GSA	Groundwater Sustainability Agency
HACSM	Housing Authority of the County of San Mateo
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFC	Hydrofluorocarbon
hp	horsepower
HRA	Health Risk Assessment
I-280	Interstate 280
in/sec	inch/second
ITE	Institute of Transportation Engineers
KBTU	1,000 British Thermal Units
kWh	kilowatt-hours
KSF	1,000 square feet
lbs	pounds
lbs/day	pounds per day

L_{dn}	day-night sound level
L_{eq}	equivalent sound level
L_{max}	maximum sound level
LEV	low-emission vehicle
L_{min}	minimum sound level
LOS	level of service
LRA	Local Responsibility Area
L_{xx}	percent sound level (e.g., L_{10}, L_{20},)
mg/m^3	milligrams per cubic meter
mgd	million gallons per day
Midway Village area	Midway Village Housing Complex
MIR	Maximum Impacted Receptor
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
mph	miles per hour
MRZ	Mineral Resource Zone
$MTCO_2e$	metric tons of carbon dioxide equivalent per year
$MTCO_2e$/SP/yr	metric tons of carbon dioxide equivalent per service population per year
MTC	Metropolitan Transportation Commission
MUNI	San Francisco Municipal Transportation Agency
N2O	Nitrous Oxide
NCCP	Natural Community Conservation Plan
NCFA	North County Fire Authority
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NOA	naturally-occurring asbestos
NOx	Nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NSFHA	Non-Special Flood Hazard Area
NSMCSD	North San Mateo County Sanitation District
PAH	polycyclic aromatic hydrocarbon
PFC	perfluorinated chemical
PG&E	Pacific Gas and Electric Company
Plan Bay Area	Plan Bay Area 2040
PM	particulate matter
$PM_{2.5}$	particulate matter 2.5 microns in diameter or less
PM_{10}	particulate matter 10 microns in diameter or less
PP	Public Park
ppb	part per billion
ppm	part per million
PPV	peak particle velocity
PRC	Public Resources Code
project site	Midway Village area and Bayshore Park
proposed project	Midway Village Redevelopment Project
R-3	Multiple Family Residential District
RAMP	Regional Advance Mitigation Planning

RAP	Remedial Action Plan
RCNM	Roadway Construction Noise Model
R-HD	High Density Residential
ROG	reactive organic gases
RTP	Regional Transportation Plan
SamTrans	San Mateo County Transit District
SB	Senate Bill
SCEA	Sustainable Communities Environmental Assessment
SCS	Sustainable Communities Strategy
SE	State Endangered
sf	square feet
SF6	Sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFO	San Francisco International Airport
SFPUC	San Francisco Public Utilities Commission
SLCP	short-lived climate pollutant
SIP	State Implementation Plan
SO_2	Sulfur dioxide
SR	State Route
SRA	State Responsibility Area
SSC	Species of Special Concern
SSSC	Side Street Stop Control
SWAT	Special Weapons and Tactics
SWB	South Westside Groundwater Basin
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCR	Tribal Cultural Resource
TDM	Travel Demand Management
TMDL	total maximum daily load
tpy	trips per year
U.S. 101	U.S. Highway 101
USCB	U.S. Census Bureau
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VDECS	Verified Diesel Emissions Control Strategy
VMT	vehicle miles traveled
VTA	Santa Clara Valley Transit Authority
VVB	Visitation Valley Groundwater Basin
WEAP	Worker Environmental Protection Program
WHRS	California Wildlife Habitat Relationship System
WWTP	Wastewater Treatment Plant
ZEV	zero-emissions vehicle

SUSTAINABLE COMMUNITIES ENVIRONMENTAL ASSESSMENT

This Sustainable Communities Environmental Assessment (SCEA) has been prepared pursuant to Section 21155.2 of the Public Resources Code (PRC).

Project Title: Midway Village Redevelopment Project

Project Description: The Midway Village Housing Complex (Midway Village area) is being proposed for redevelopment as part of the Midway Village Redevelopment Project (proposed project). Currently the Midway Village area is developed with 150 residential units, 223 parking spaces, a child-care facility (Bayshore Child-Care Center), open space, an existing street system, and 5,100 square feet (sf) of community center and office space for the County Housing Authority of the County of San Mateo (HACSM). Additionally, an existing park, David R. Rowe/Bayshore Park (Bayshore Park), is currently located directly northeast of the Midway Village area and the area will be redeveloped as part of the proposed project.

The proposed project would involve redevelopment of the Midway Village area and the Bayshore Park which would include mixed-use development consisting of 555 residential units, 746 parking spaces, a child-care facility, a community center, office space for property management and other ancillary services, a revised street system, and recreation facilities. The existing Bayshore Park would be relocated to a different location within the proposed project site and would be rough graded before it is returned to the City and developed with various park amenities (development of the new park amenities is not part of the proposed project). HACSM currently administers several affordable housing programs throughout San Mateo County, including the existing Midway Village area. These affordable homes are restricted for low- and very low-income households and would remain as such under the proposed project. Other ancillary improvements as part of the proposed project would include landscaping, water and wastewater line improvements, and pedestrian walkways.

Project Location: The proposed project is located within the City of Daly City, California in San Mateo County. Specifically, the project site is bound by Schwerin Street to the west and Martin Street to the south, with Midway Drive running directly through the center of the project site. The project site is approximately 15 acres.

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Required Findings: The City of Daly City has determined that: 1) the proposed project is consistent with the general use designations, density, building intensity, and applicable policies specified for the project area in the Plan Bay Area 2040 (Plan Bay Area 2017b) prepared by the Metropolitan Transportation Commission and Association of Bay Area Governments for the San Francisco Bay Area Region; 2) the proposed project qualifies as a transit priority project pursuant to PRC Section 21155(b); 3) the proposed project is a residential or mixed-use project as defined by PRC Section 21159.28(d); 4) all potentially significant or significant effects required to be identified and analyzed pursuant to the California Environmental Quality Act (CEQA) have been identified and analyzed in an initial study;

and 5) the proposed project, as mitigated, either avoids or mitigates to a level of insignificance all potentially significant or significant effects of the proposed project required to be analyzed pursuant to CEQA.

The attached Environmental Checklist has been prepared by the City of Daly City in support of this SCEA. Further information including the proposed project file and supporting reports and studies may be reviewed at the Economic and Community Development Department, 333 90th Street, Daly City, California, 94015.

Mitigation Measures: Pursuant to Section 21155.2 of the PRC, this SCEA: 1) incorporates all feasible mitigation measures, performance standards, or criteria set forth in the prior applicable environmental impact reports (EIRs), including the Plan Bay Area EIR (Plan Bay Area 2017a) and the City of Daly City General Plan EIR, and adopted in findings made pursuant to Section 21081; and 2) contains measures that either avoid or mitigate to a level of insignificance all potentially significant or significant effects of the proposed project require to be identified in this SCEA.

Michael VanLonkhuysen
Planning Manager
City of Daly City, California

By: ______________________ Date: 4-2-20

1.0 INTRODUCTION

The Midway Village Housing Complex (Midway Village area) is being proposed for redevelopment as part of the Midway Village Redevelopment Project (proposed project). Currently the Midway Village area is developed with 150 residential units, 223 parking spaces, a child-care facility (Bayshore Child-Care Center), open space, an existing street system, and office space for the Housing Authority of the County of San Mateo (HACSM). Additionally, an existing park, David R. Rowe/Bayshore Park (Bayshore Park), is currently located directly northeast of the Midway Village area and this area will be redeveloped as part of the proposed project.

The proposed project would involve redevelopment of the Midway Village area and the Bayshore Park would include mixed-use development consisting of 555 residential units, 746 parking spaces, a child-care facility, a community center, office space for property management and other ancillary services, a revised street system, and recreation facilities. The existing Bayshore Park would be relocated to a different location within the proposed project site and would be rough-graded before it is returned to the City and developed with various park amenities (development of the new park amenities is not part of the proposed project). HACSM currently administers the several affordable housing programs throughout San Mateo County, including the existing Midway Village area. These affordable homes are restricted for low- and very low-income households and would remain as such under the proposed project. Other ancillary improvements of the proposed project would include landscaping, water and wastewater line improvements, and pedestrian walkways.

1.1 PROJECT TITLE

Midway Village Redevelopment Project

1.2 LEAD AGENCY

City of Daly City
Economic and Community Development
333 90th Street
Daly City, California 94015

1.3 LEAD AGENCY CONTACT

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1.4 PROJECT APPLICANT

MidPen Housing
303 Vintage Park Drive, Suite 250
Foster City, California 94404

1.5 PURPOSE

The purpose of a Sustainable Communities Environmental Assessment (SCEA) is to evaluate the environmental effects of the proposed project in accordance with the California Environmental Quality Act (CEQA). In addition, this SCEA evaluates the proposed project's consistency with the Metropolitan Transportation Commission (MTC)/Association of Bay Area Governments (ABAG) Plan Bay Area 2040 Regional Transportation Plan (RTP)/ Sustainable Communities Strategy (SCS) for the San Francisco Bay Area Region and incorporates feasible mitigation measures, performance standards, and/or criteria from prior applicable environmental impact reports (EIRs) into the proposed project.

An SCEA is a form of CEQA documentation established by Senate Bill (SB) 375 to provide streamlined environmental review for certain "transit priority projects." Transit priority projects are residential or mixed-use residential projects that provide a minimum net density of 20 dwelling units per acre and are located within 0.50 mile of a major transit stop or high-quality transit corridor (Public Resources Code [PRC] Section 21155[b]).

An SCEA is comparable to an Initial Study-Mitigated Negative Declaration since the lead agency must find that all potentially significant impacts of a project have been identified, adequately analyzed, and mitigated to a level of insignificance. However, unlike a negative declaration, the SCEA need not consider the cumulative effects of the project that have been adequately addressed and mitigated in prior EIRs. Also, growth-inducing impacts are not required to be referenced, described, or addressed, and project-specific or cumulative impacts from cars and light duty truck trips on global climate change or the regional transportation network need not be referenced, described, or discussed.

1.6 PROJECT LOCATION

The proposed project is located within the City of Daly City, California (City) in San Mateo County (See Figure 2.1-1). Specifically, the project site is bound by Schwerin Street to the west and Martin Street to the south, with Midway Drive running directly through the center of the project site (See Figure 2.1-2). The project site is approximately 15 acres.

1.7 EXISTING SETTING AND SURROUNDING LAND USES

The project site is located in the Bayshore neighborhood, which is referred to as Planning Area 13 in the Daly City General Plan (General Plan), located north of Guadalupe Canyon Parkway and west of Bayshore Boulevard. The project site is surrounded by the following land uses:

- **North and East**: A Pacific Gas and Electric (PG&E) facility including administrative buildings, parking, industrial storage, and a power distribution area.
- **South:** A Toll Brothers site (i.e., an in-progress home construction site operated by the Toll Brothers construction company) that is currently a graded, undeveloped area.
- **West**: Mixed single- and multi-family residences.

1.8 LAND USE DESIGNATIONS AND ZONING

1.8.1 General Plan Land Use Designation

The General Plan defines High Density Residential (R-HD) and Public Park (PP) as the following:

High Density Residential

This designation applies primarily to multi-family residential structures where residential density is between 35.1 and 50 dwelling units per gross acre. The proposed project is located within the Bayshore planning area that was annexed into the City in 1963. The Bayshore neighborhood consists primarily of detached single-family residential homes, the Geneva Avenue commercial corridor, and a low intensity industrial area immediately north of MacDonald Avenue near the San Francisco border (City of Daly City 2013).

Public Park

This land use designation applies to all developed public open space, including all state, regional, and local parks and city-maintained tot lots, that provides recreational opportunities to the community.

The project site includes Bayshore Park, which provides open space and playgrounds for recreational use in the area. Additionally, common areas would be incorporated into the proposed project to provide for additional open and recreational space (see Section 2.3.3, Recreational Areas, for more detail regarding Bayshore Park).

1.8.2 Zoning

The City Zoning Code identifies the project site as Multiple-Family Residential District (R-3) (City Code section 17.12). R-3 zoning allows for 1 unit per 500 square feet of lot size (Municipal Code Section 17.12.010), which amounts to 1,023 units of housing for the 11.75 acres of the proposed residential land.

1.9 STATUTORY BACKGROUND

The Sustainable Communities and Climate Protection Act of 2008 amended CEQA to add Chapter 4.2, Implementation of the Sustainable Communities Strategy (PRC Section 21155), which provides a CEQA exemption for sustainable community projects and streamlined CEQA analysis for transit priority projects.

PRC Section 21083.3 provides that if a “development project is consistent with the general plan of a local agency and an environmental impact report was certified with respect to that general plan, the application of this division to the approval of that development project shall be limited to effects on the environment which are peculiar to the parcel or to the project and which were not addressed as significant effects in the prior environmental impact report, or which substantial new information shows will be more significant than described in the prior environmental impact report.” (PRC Section 21083.3[b]) The corresponding CEQA Guideline provides that a project is “consistent” if its density is the same or less than the standard expressed for the parcel in the general plan for which an EIR has been certified and if the project complies with the density-related standards contained in that plan.(14 CCR Section 15183[i][2])

The City’s 2030 General Plan Land Use Map indicates that the proposed project site is designated as High Density Residential. It is also designated as High Density Residential and Public Park in the General Plan EIR, certified by the City Council on March 25, 2013. The High-Density Residential designation allows a density of 35.1 to 50 dwelling units per gross acre. The proposed project’s density is approximately 48 dwelling units/acre. Because the proposed project would have a density consistent with the High Density Residential designation that was analyzed in the General Plan EIR, it is eligible for the exemption and environmental review shall be limited to effects on the environment which are peculiar to the Property or to the Project and which were not addressed as significant effects in the General Plan EIR.

The environmental analysis in this document focuses on that required for a SCEA (see Section 3.0) but it is noted that the Environmental Analysis (see Section 4.0) also considers the project's consistency with the General Plan and therefore establishes applicability under the exemption for projects consistent with a General Plan for which an EIR was certified.

Further, streamlining provision is the SCEA, the provisions of which are primarily specified in PRC Section 21155.2. Section 21155.2(a) states that, if a transit priority project incorporates all feasible mitigation measures, performance standards, or criteria set forth in the prior applicable EIRs and adopted findings made pursuant to PRC Section 21081, then it shall be eligible for an SCEA. The specific substantive and procedural requirements for the approval of an SCEA include the following:

1. An initial study shall be prepared for a SCEA to identify all significant impacts or potentially significant impacts of the transit priority project, except for the following:

    a. Growth-inducing impacts, and

    b. Project-specific or cumulative impacts from cars and light trucks on global climate change or the regional transportation network.

2. The initial study shall identify any cumulative impacts that have been adequately addressed and mitigated in a prior applicable certified EIR. Where the lead agency determines the impact has been adequately addressed and mitigated, the impact shall not be cumulatively considerable.

3. The SCEA shall contain mitigation measures that either avoid or mitigate to a level of insignificance all potentially significant or significant effects of the project required to be identified in the initial study.

4. The SCEA may be approved by the lead agency after the lead agency's legislative body conducts a public hearing, reviews comments received, and finds the following:

    a. All potentially significant or significant effects required to be identified in the initial study have been identified and analyzed, and

    b. With respect to each significant effect on the environment required to be identified in the initial study, either of the following apply:

        i. Changes or alterations have been required in or incorporated into the project that avoid or mitigate the significant effects to a level of insignificance.

        ii. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.

5. The lead agency's decision to review and approve a transit priority project with a SCEA shall be reviewed under the substantial evidence standard.

For a detailed analysis of the proposed project's compliance with the SCEA statutory requirements, see Section 3.0, SCEA and Transit Priority Project Consistency.

1.10 CEQA AND PUBLIC AGENCY REVIEW

CEQA requires that project proponents disclose the significant impacts to the environment from proposed development projects. The intent of CEQA is to foster good planning and to consider environmental issues during the planning process. The City is the Lead Agency under CEQA for the preparation of this SCEA. The CEQA Guidelines (Section 21067) define the Lead Agency as, "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment." Approval of the proposed project is considered a public agency discretionary action, and therefore, the proposed project is subject to compliance with CEQA. The City has directed the preparation of an SCEA to comply with CEQA.

Stantec has prepared this document at the direction of the City. The purpose of this document is to disclose the environmental consequences of implementing the proposed project to decision-makers and the public. The public, City residents, and other local and state resource agencies will be given the opportunity to review and comment on this document during a 30-day public review period. Comments received during the review period will be considered by the City prior to certification of this SCEA and project approval.

The public review period will commence on **April 6, 2020** and end on **May 5, 2020**, pursuant to CEQA Guidelines Section 15105. If you wish to send written comments (including via email), they must be received by 5:00 p.m. on **May 5, 2020**. Written comments should be addressed to the following:

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This SCEA and supporting documents are available at the City of Daly City Economic and Community Development Department, located at 333 90th Street, City of Daly City, California 94015, and online at the following URL: www.dalycity.org/45midwayscea

1.11 DOCUMENT ORGANIZATION

This SCEA is organized as follows:

Section 1.0 Introduction. This section provides introductory information about the proposed project and background information regarding SB 375 and the SCEA process and streamlining provisions.

Section 2.0: Project Description. This section describes the purpose of and need for the proposed project, identifies project objectives, and provides a detailed description of the proposed project.

Section 3.0: SCEA Criteria and Transit Priority Project Consistency. This section includes a discussion of the proposed project's consistency with the transit priority project criteria listed above and demonstrates that the proposed project satisfies all necessary criteria for approval of a SCEA as set forth in PRC Sections 21155 and 21155.2.

Section 4.0: Environmental Checklist and Environmental Evaluation. This section presents an analysis of a range of environmental issues identified in the CEQA Appendix G Environmental Checklist and determines if the proposed project would result in no impact, a less than significant impact, a less than significant impact with mitigation incorporated, or a potentially significant impact for each topic. If impacts are determined to be potentially significant after incorporation of applicable mitigation measures, an EIR would be required. For this proposed project, however, mitigation measures have been incorporated, where needed, that would reduce all potentially significant impacts to a less than significant level.

Section 5.0: References. This section lists the references used in preparation of this SCEA.

Section 6.0: List of Preparers. This section identifies report preparers**.**

1.12 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1.12-1 summarizes the potential environmental effects of the proposed project, the recommended mitigation measures, if applicable, and the level of significance after mitigation. As shown in Table 1.12-1, development of the proposed project with mitigation measures would not result in any significant and unavoidable impacts. CEQA requires public agencies to establish a monitoring and reporting program for the purpose of ensuring compliance with those mitigation measures adopted as conditions of approval in order to mitigate or avoid significant environmental impacts identified in a CEQA document. A Mitigation Monitoring and Reporting Program (MMRP), incorporating the mitigation measures set forth in this document, would be adopted at the time of adoption of the SCEA.

Table 1.12-1 Summary of Impacts and Mitigation Measures

Environmental Impact	Finding	Mitigation Measure
4.1 Aesthetics		
AES-1: Have a substantial adverse effect on a scenic vista?	NI	• None Required
AES-2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	NI	• None Required
AES-3: In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public Views are those that are experienced from a publicly accessible vantage point). If the Project is in an urbanized area, the potential of the project to conflict with applicable zoning and other regulations governing scenic quality?	NI	• None Required
AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	NI	• None Required
4.2 Agricultural Resources		
AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	NI	• None Required
AG-2: Conflict with existing zoning for agricultural use, or a Williamson Act contract?	NI	• None Required
AG-3: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	NI	• None Required
AG-4: Result in the loss of forest land or conversion of forest land to non-forest use?	NI	• None Required
AG-5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	NI	• None Required

Environmental Impact	Finding	Mitigation Measure
4.3 Air Quality		
AIR-1: Conflict with or obstruct implementation of the applicable air quality plan?	LTS/M	• Mitigation Measure AIR-1 (PBA EIR MM 2.2-2)
AIR-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard?	LTS	• None Required
AIR-3: Expose sensitive receptors to substantial pollutant concentrations?	LTS/M	• Mitigation Measure AIR-1 (PBA EIR MM 2.2-2) • Mitigation Measure AIR-2: Tier 4 Interim Engine Requirements • Mitigation Measure AIR-3: Installation of MERV 13 Filters for Phase 1 and Phase 2
AIR-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	LTS	• None Required
4.4 Biological Resources		
BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species in local or regional plans, policies, or regulations, or regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	LTS/M	• Mitigation Measure BIO-1 (PBA EIR MM 2.9-1[a])
BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish or U.S. Fish and Wildlife Service?	NI	• None Required
BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	NI	• None Required
BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	NI	• None Required
BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	LTS	• None Required
BIO-6: Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan?	NI	• None Required

Environmental Impact	Finding	Mitigation Measure
4.5 Cultural Resources		
CUL-1: Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	NI	• None Required
CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	LTS/M	• Mitigation Measure CUL-1 (PBA EIR MM 2.11-1)
CUL-3: Disturb any human remains, including those interred outside of formal cemeteries?	LTS	• None Required
4.6 Energy		
EN-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	LTS	• None Required
EN-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	LTS	• None Required
4.7 Geology and Soils		
GEO-1: Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii. Strong seismic ground shaking? iii. Seismic-related ground failure, including liquefaction? iv. Landslides?	LTS/M	• Mitigation Measure GEO-1: Implement Geotechnical Design Recommendations.
GEO-2: Result in substantial soil erosion or the loss of topsoil?	LTS/M	• Mitigation Measure HYD-1: Prepare and Implement a SWPPP
GEO-3: Be located on strata or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	LTS/M	• Mitigation Measure GEO-1: Implement Geotechnical Design Recommendations • Mitigation Measure GEO-2: Prepare and Implement Dewatering and Shoring Plans • Mitigation Measure HAZ-1: Modification, Amendment, or Rescindment of Deed Restriction and Consultation with Applicable Regulatory Agency and Development of a Worker Environmental Protection Program (WEAP)

Environmental Impact	Finding	Mitigation Measure
GEO-4: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	LTS/M	• Mitigation Measure GEO-1: Implement Geotechnical Design Recommendations
GEO-5: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	NI	• None Required
GEO-6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	LTS/M	• Mitigation Measure GEO-3 (PBA EIR MM 2.11-3)
4.8 Greenhouse Gases		
GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	LTS	• None Required
GHG-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	LTS	• None Required
4.9 Hazards and Hazardous Materials		
HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	LTS/M	• Mitigation Measure HAZ-1: Modification, Amendment, or Rescindment of Deed Restriction and Consultation with Applicable Regulatory Agency and Development of a Worker Environmental Protection Program (WEAP) • Mitigation Measure GEO-2: Prepare and Implement Dewatering and Shoring Plans
HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	LTS/M	• Mitigation Measure HAZ-1: Modification, Amendment, or Rescindment of Deed Restriction and Consultation with Applicable Regulatory Agency and Development of a Worker Environmental Protection Program (WEAP)
HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	LTS/M	• Mitigation Measure AIR-1 (PBA EIR MM 2.2-2) • Mitigation Measure HAZ-1: Modification, Amendment, or Rescindment of Deed Restriction and Consultation with Applicable Regulatory Agency and Development of a Worker Environmental Protection Program (WEAP)

Environmental Impact	Finding	Mitigation Measure
HAZ-4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	LTS/M	• Mitigation Measure HAZ-1: Modification, Amendment, or Rescindment of Deed Restriction and Consultation with Applicable Regulatory Agency and Development of a Worker Environmental Protection Program (WEAP) • Mitigation Measure HAZ-2 (PBA EIR MM 2.13-4)
HAZ-5: For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	LTS	• None Required
HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	LTS	• None Required
HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	NI	• None Required
4.10 Hydrology and Water Quality		
HYD-1: Violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	LTS/M	• Mitigation Measure HYD-1: Prepare and Implement a SWPPP
HYD-2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	LTS/M	• Mitigation Measure HAZ-1: Modification, Amendment, or Rescindment of Deed Restriction and Consultation with Applicable Regulatory Agency and Development of a Worker Environmental Protection Program (WEAP) • Mitigation Measure GEO-2: Prepare and Implement Dewatering and Shoring Plans
HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: a. Result in substantial erosion or siltation on- or off-site; b. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; c. Create or contribute runoff water which would exceed the capacity of existing or planned	LTS/M	• Mitigation Measure HYD-1: Prepare and Implement a SWPPP

Environmental Impact	Finding	Mitigation Measure
stormwater drainage systems or provide substantial additional sources of polluted runoff; or d. Impeded or redirect flood flows.		
HYD-4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	LTS	• None Required
HYD-5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	LTS/M	• Mitigation Measure HYD-1: Prepare and Implement a SWPPP • Mitigation Measure GEO-2: Prepare and Implement Dewatering and Shoring Plans
4.11 Land Use and Planning		
LU-1: Physically divide an established community?	LTS	• None Required
LU-2: Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	LTS/M	• Mitigation Measure HAZ-1: Modification, Amendment, or Rescindment of Deed Restriction and Consultation with Applicable Regulatory Agency and Development of a Worker Environmental Protection Program (WEAP)
4.12 Mineral Resources		
MIN-1: Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the State?	NI	• None Required
MIN-2: Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	NI	• None Required
4.13 Noise		
NOI-1: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards or other agencies?	LTS/M	• Mitigation Measure NOI-1: (PBA EIR MM 2.6-5) • Mitigation Measure NOI-2: Project Fixed-Source Noise • Mitigation Measure NOI-3: Construction Traffic • Mitigation Measure NOI-4: (PBA EIR MM 2.6-1[a]) • Mitigation Measure NOI-5: Construction Activity
NOI-2: Generation of excessive groundborne vibration or groundborne noise levels?	LTS	• None Required

Environmental Impact	Finding	Mitigation Measure
NOI-3: For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	NI	• None Required
4.14 Population and Housing		
POP-1: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	LTS	• None Required
POP-2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	LTS	• None Required
4.15 Public Services		
PUB-1: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other facilities?	Fire protection, Police protection, schools = LTS/M Parks, other public facilities = LTS	• Mitigation Measure PUB-1 (PBA EIR MM 2.14-1)
4.16 Recreation		
REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	LTS	• None Required
REC-2: Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	LTS	• None Required

Environmental Impact	Finding	Mitigation Measure
4.17 Transportation		
TRANS-1: Conflict with a program plan, ordinance, or policy addressing the circulation systems, including transit, roadway, bicycle and pedestrian facilities?	LTS/M	• Mitigation Measure TRANS-1 (PBA EIR MM 2.1-7) • Mitigation Measure TRANS-2: Travel Demand Management Plan
TRANS-2: Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	NI	• None Required
TRANS-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersection(s) or incompatible uses (e.g. farm equipment))?	LTS/M	• Mitigation Measure TRANS-3: Driveway Distance
TRANS-4: Result in inadequate emergency access?	NI	• None Required
4.18 Tribal Cultural Resources		
TRIB-1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size, or object with cultural value to the California Native American tribe and that is: i. listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	LTS/M	• Mitigation Measure CUL-1 (PBA EIR MM 2.2-2) • Mitigation Measure TRIB-1 (PBA EIR MM 2.11-5)
4.19 Utilities and Service Systems		
UTIL-1: Require or result in the relocation or construction of new or expanded water, wastewater, or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	LTS/M	• Mitigation Measure UTIL-1 (PBA EIR MM 2.12-1[a]) • Mitigation Measure UTIL-2 (PBA EIR MM 2.12-2) • Mitigation Measure UTIL-3 (PBA EIR MM 2.12-3[a]) • Mitigation Measure UTIL-4 (PBA EIR MM 2.12-4)

Environmental Impact	Finding	Mitigation Measure
UTIL-2: Have sufficient water supply available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	LTS	• None Required
UTIL-3: Result in a determination by the wastewater treatment provider which serves tor may serve the project that is has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	LTS/M	• Mitigation Measure UTIL-1 (PBA EIR MM 2.12-1[a]) • Mitigation Measure UTIL-2 (PBA EIR MM 2.12-2) • Mitigation Measure UTIL-3 (PBA EIR MM 2.12-3[a])
UTIL-4: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	LTS/M	• None Required
UTIL-5: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	LTS	• None Required
4.20 Wildfire		
WF-1: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: that is: a. Would the project impair an adopted emergency response plan or emergency evacuation plan? b. Would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	LTS	• None Required

Environmental Impact	Finding	Mitigation Measure
4.21 Mandatory Findings		
MFS-1: Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	LTS/M	• All mitigation measures listed in Sections 4.1 through 4.20.
MFS-2: Have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?	LTS/M	• All mitigation measures listed in Sections 4.1 through 4.20.
MFS-3: Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	LTS/M	• All mitigation measures listed in Sections 4.1 through 4.20.

2.0 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The Midway Village area is being proposed for redevelopment as part of the proposed project. Currently the Midway Village area is developed with 150 residential units, 223 parking spaces, a child-care facility (Bayshore Child-Care Center), open space, an existing street system, and office space for HACSM. Additionally, an existing park, Bayshore Park, is currently located directly northeast of the Midway Village area and will be redeveloped as part of the proposed project.

The proposed project would involve redevelopment of the Midway Village area and the Bayshore Park would include mixed-use development consisting of 555 residential units, 746 parking spaces, a child-care facility, a community center, office space for property management and other ancillary services, a revised street system, and recreation facilities. The existing Bayshore Park would be relocated to a different location within the proposed project site and would be rough-graded before it is returned to the City and developed with various park amenities (development of the new park amenities is not part of the proposed project). HSCSM currently administers several affordable housing programs throughout San Mateo County, including the existing Midway Village area. These affordable homes are restricted for low- and very low-income households and would remain as such under the proposed project. Other ancillary improvements as part of the proposed project would include landscaping, water and wastewater line improvements, and pedestrian walkways.

2.1.1 Project Location

The proposed project is located within the City, in San Mateo County (See Figure 2.1-1) and includes the Midway Village area and the Bayshore Park (project site). The project site is bound by Schwerin Street to the west and Martin Street to the south, with Midway Drive running directly through the center of the project site (See Figure 2.1-2). The project site is approximately 15 acres and comprises the following 39 San Mateo County Assessor's Parcel Numbers (APNs):

005-330-020	005-330-100	005-330-180	005-330-260	005-330-340
005-330-030	005-330-110	005-330-190	005-330-270	005-330-350
005-330-040	005-330-120	005-330-200	005-330-280	005-330-360
005-330-050	005-330-130	005-330-210	005-330-290	005-330-370
005-330-060	005-330-140	005-330-220	005-330-300	005-330-380
005-330-070	005-330-150	005-330-230	005-330-310	005-330-390
005-330-080	005-330-160	005-330-240	005-330-320	005-330-400
005-330-090	005-330-170	005-330-250	005-330-330	

2.1.2 General Plan and Zoning

The 37 parcels on the project site have a General Plan land use designation of High Density Residential (R-HD); two parcels (005-330-330 and 005-330-390) in the northeast corner of the project site have a General Plan designation of Public Park (PP) that encompass the existing Bayshore Park. All of the 39 parcels are zoned as a Multiple Family Residential District (R-3).

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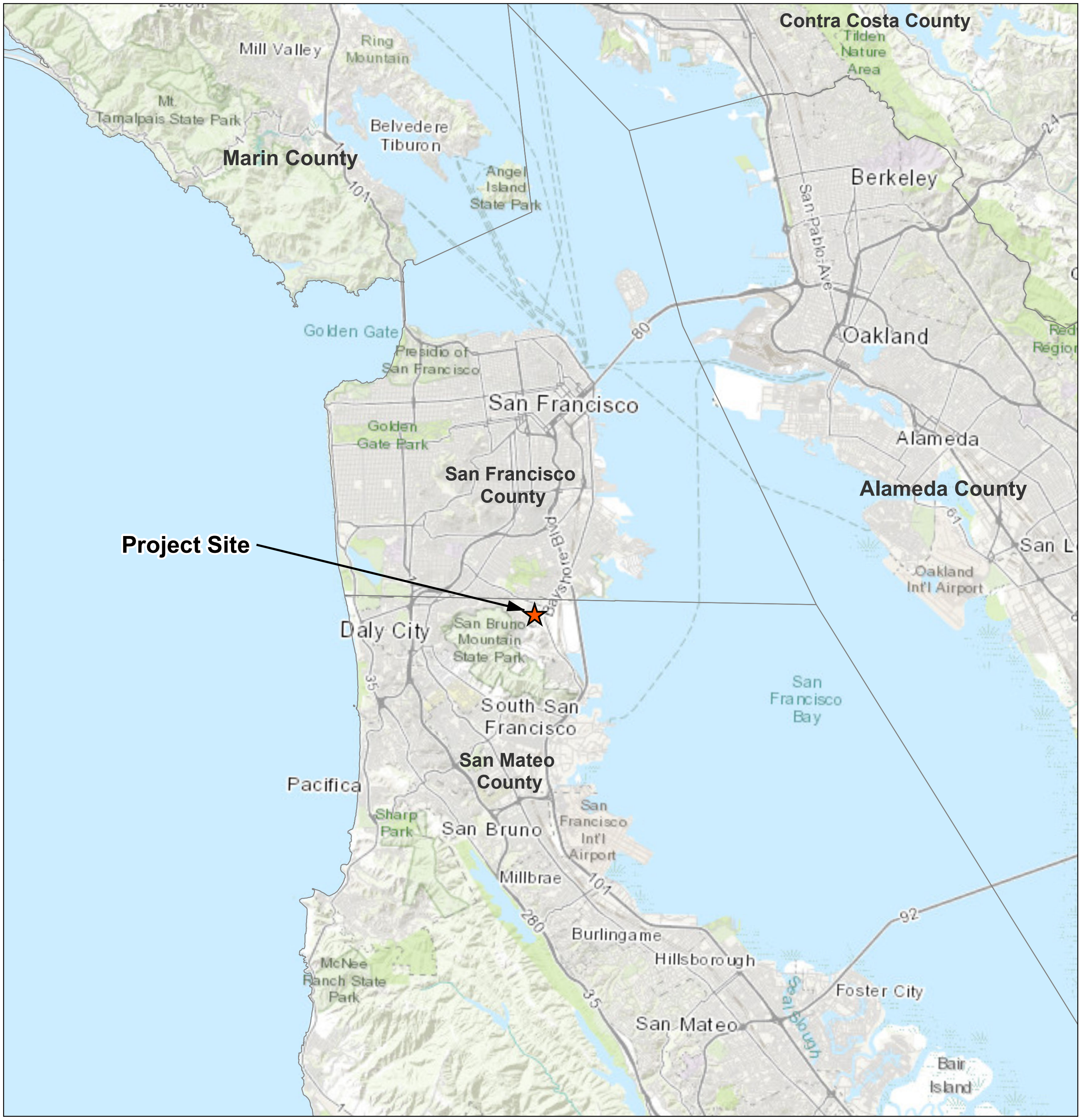

Legend

★ Project Site

County Boundary

Figure No.
2.1-1

Title
Regional Location

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

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Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Data Sources Include: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

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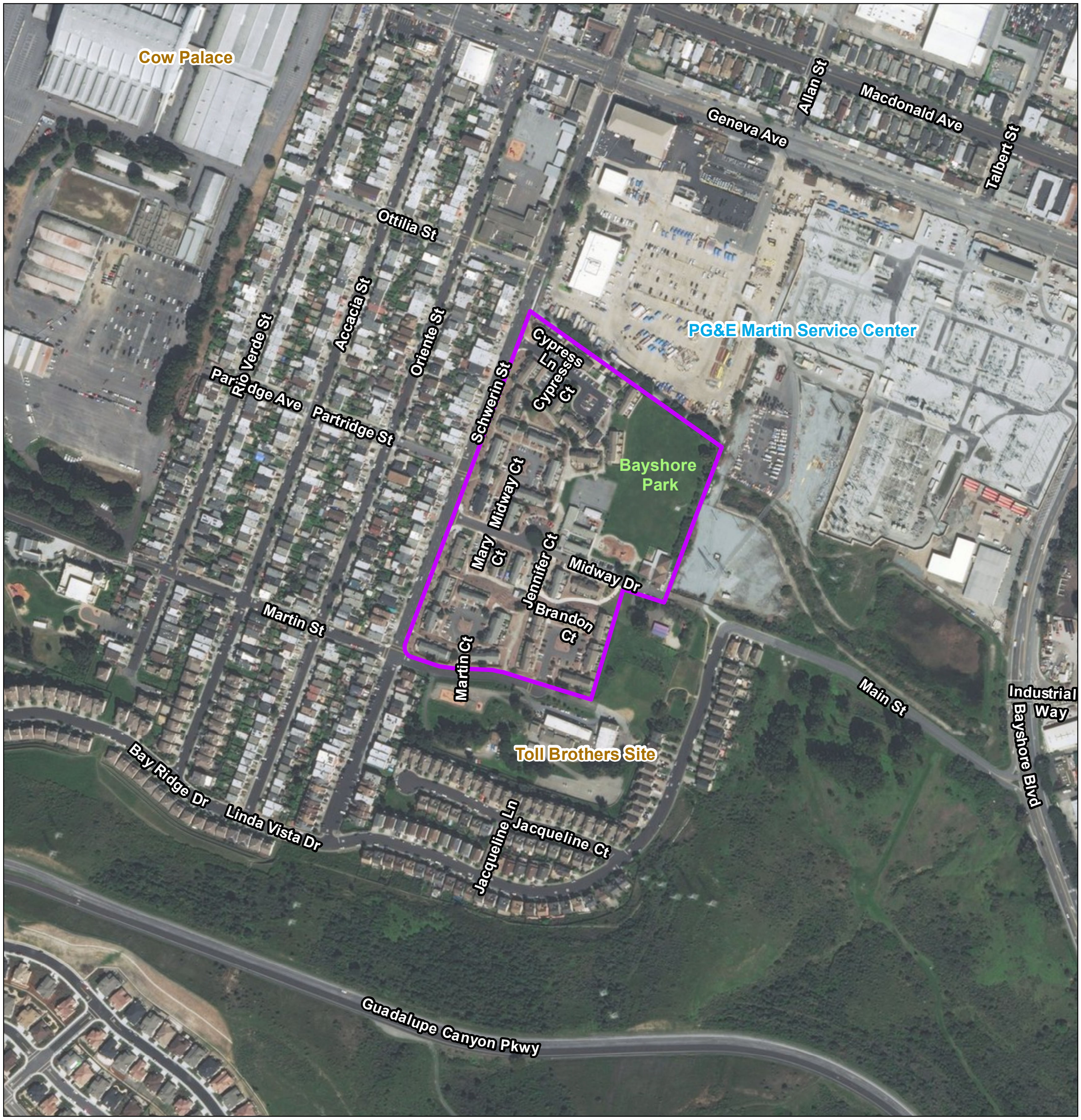

Legend
Project Site

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
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Figure No.
2.1-2

Title
Project Site Location

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location 185704589
Daly City, CA

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General Plan Land Use Designation

The General Plan defines High Density Residential (R-HD) and Public Park (PP) as the following:

High Density Residential

This designation applies primarily to multi-family residential structures where residential density is between 35.1 and 50 dwelling units per gross acre. The proposed project is located within the Bayshore planning area that was annexed into Daly City in 1963. The Bayshore neighborhood primarily consists of detached single-family residential homes, the Geneva Avenue commercial corridor, and a low intensity industrial area immediately north of MacDonald Avenue near the San Francisco border (City of Daly City 2013). Since the high density residential land use designation allows between 35.1 and 50 dwelling units per gross acre, this would amount to a maximum of 587 units for the 11.75 aces, which is consistent with the 555 units proposed for the proposed project.

Public Park

This land use designation applies to all developed public open space, including all state, regional and local parks and city-maintained tot lots, that provides recreational opportunities to the community.

The project site includes Bayshore Park, which provides open space and playgrounds for recreational use in the area. Additionally, common areas would be incorporated into the proposed project to provide for additional open and recreational space (see Section 2.3.3, Recreational Areas, for more detail regarding Bayshore Park).

The proposed project includes different land use designations (R-HD and PP) and would include a transfer of these two land use designation from one portion of the project site to another, within the entirety of the site (See Figures 2.1-3 and 2.1-4). As such, a General Plan amendment has been requested to relocate the location of the park on the project site. The current Bayshore Park area is proposed as a housing development, while the area that is proposed to have the new Bayshore Park is now designated as residential. These designations must be switched under a General Plan amendment (the Applicant has also reserved the right to request the relocation as a concession under the Density Bonus Law).

Zoning

The City Zoning Code identifies the project site as Multiple-Family Residential District (R-3) (City Code section 17.12). Uses permitted in this district include the following, as shown in Table 2.1-1 below:

Table 2.1-1: Table of Permitted Uses

Uses Permitted	Use Permit	Maximum Height (feet)	Minimum Lot Area (square feet)	Minimum Lot Width (feet)	Maximum Lot Coverage	Minimum Front Yard (feet)	Minimum Rear Yard (feet)
Multiple-Family Dwelling	No	36	3,000-2,500	33-25	75%	15	10
Motel, professional office, rest home, boardinghouse	Yes	-	-	-	-	-	-

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Legend

Project Site

Existing General Plan Land Use Designation

High Density Residential

Public Park

Figure No.
2.1-3

Title
Existing General Plan Land Use Designations

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

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Feet
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Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
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Project Site

Proposed General Plan Land Use Designation

High Density Residential

Public Park

Notes

1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Data Sources Include: bing - (c) 2010 Microsoft Corporation and its data suppliers

Figure No.
2.1-4

Title
Proposed General Plan Land Use Designations

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

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R-3 zoning allows for one unit per 500 square feet of lot size (Municipal Code Section 17.12.010), which amounts to 1,023 units of housing for the 11.75 acres of the proposed residential land. Accordingly, the proposed 555 units would be consistent with this requirement.

State Density Bonus Law

The following waivers are being requested because without them, the applicable requirements would physically preclude construction of the units to which the project is entitled to the State Density Bonus Law (Government Code Section 65915):

Multifamily Rental Units:

- The maximum height required for the site would be raised from 36 feet to 60 feet to accommodate the four-story buildings onsite.
- The front setback under R-3 zoning would be reduced to zero; however, the proposed buildings generally would have a 5-foot setback from adjacent parcels.

Townhome Units:

- Minimum lot would be lowered from 3,000 square feet to 1,100 square feet per unit.
- The front yard setback would be lowered from 15 feet to 8 feet.
- The minimum lot width would be lowered from 33 feet to 20 feet.
- The maximum lot coverage would be raised from 50 percent to 70 percent.
- The maximum height would be raised from 30 feet to 55 feet.

2.2 EXISTING SITE CONDITIONS

The existing Midway Village area is located in an urban area and is currently developed with 3 one-story and 34 two-story structures. Most of these structures include residential dwelling units with additional structures for a child-care facility and a play area. There are currently 477 residents living on the project site and 109 students enrolled at the Bayshore Child-Care Center, which is operated by Peninsula Family Services. The Bayshore Child-Care Center is a daytime-only facility that operates from 7 AM to 6 PM with 24 employees. There are also seven employees at the San Mateo County Housing Authority offices, which are located on the project site at the end of Midway Drive.

Bayshore Park is 3.3 acres and includes an open grass area, play structures, and basketball courts. There are six existing roadway courts in the Midway Village area including Martin Court, Brandon Court, Jennifer Court, Mary Court, Midway Court, and Cypress Lane. These areas have clusters of existing multi-family units and marked parking spaces. Sporadic landscaping also occurs throughout the development with a mix of trees, shrubbery, and grasses. Walking pathways connect the residential units together and provide access throughout the development.

2.2.1 Surrounding Land Uses

The project site is located in the Bayshore neighborhood, which is referred to as Planning Area 13 in the General Plan, located north of Guadalupe Canyon Parkway and west of Bayshore Boulevard. The project site is surrounded by the following land uses:

- **North and East:** A PG&E facility, including administrative buildings, parking, industrial storage, and a power distribution area.

- **South:** A Toll Brothers site (i.e., an in-progress home construction site operated by the Toll Brothers construction company) that is currently a graded, undeveloped area.
- **West:** Mixed single and multi-family residences.

2.2.2 Site History

The Midway Village area is listed as a certified cleanup site on the Department of Toxic Substance Control (DTSC) EnviroStor database. A Phase I Environmental Site Assessment (ESA) was prepared for the project site. The site history from this Phase I ESA is summarized below:

From approximately 1906 to 1916, a manufactured gas plant (MPG) operated on what is today the PG&E Martin Service Center property located directly north of the project site. This plant used crude oil to create gas used for lighting. This process produced a waste material called lampblack that contained polycyclic aromatic hydrocarbons (PAHs), which impacted soils where the plant existed. In 1944, the federal government obtained parts of the PG&E property, including the project site, to build Navy housing. When land for this housing was graded, approximately 20,000 cubic yards (CY) of soils contaminated with MPG waste was used to fill low-lying areas prior to construction of the housing, as the health effects associated with MPG waste were unknown

In 1976, the Navy housing was demolished, and the Midway Village Housing Complex was built a year later (Midway Village area). In 1977, the City of Daly City created Bayshore Park on the property immediately adjacent to and northeast of the Midway Village area. It wasn't until 1990 that the Department of Toxic Substances Control (DTSC) became aware of the contamination in and around the Midway Village area, as well as the Bayshore Park area and the child-care facility.

Various site investigations including testing of the soils and groundwater in and around the Midway Village area occurred in the early 90s. In 1993, the DTSC approved a cleanup and Remedial Action Plan (RAP) for the Midway Village area, which included soil removal of the top 2 to 5 feet of soils in select areas (approximately 2,983 CY of material) followed by capping of these areas with 2 to 5 feet of clean soil, concrete patios, asphalt, or walkways. This work was completed by 1994. Then in 1998, DTSC approved a similar plan for Bayshore Park.

Until recently, investigative activities were concentrated on PAHs and metals in shallow and semi-shallow soil. Other parameters in soil have, until recently, also been evaluated to a lesser extent, including volatile organic compounds (VOCs), metals, cyanide, and phenols. In accordance with Engineering/Remediation Resources Group's (ERRG's) *Midway Village/Bayshore Park Remediation Project Workplan* dated 5 September 2002, PAH-contaminated soil that exceeded clean up levels at depth was removed from portions of Midway Village in the area north of Midway Drive (Village North) and Bayshore Park. A durable cover consisting of two to five feet of clean soil, landscaping with a minimum of two feet of clean soil, or hardscapes including concrete building pads, concrete or asphalt walkways, patios, and roadways (cap) was placed over areas of remaining contamination, generally consisting of the entire Bayshore Park and isolated locations in the vicinity of Buildings 22 through 24, 28, 29, and 31 through 35 (ERRG, 2002). Analytical data for five sources of backfill were provided to DTSC for approval prior to cap (soil) placement (ERRG, 2002).

Multiple Village North parcels and Bayshore Park are subject to three DTSC Land Use Covenants (LUCs), recorded on September 24, 1998 (1998 LUC),[1] October 17, 2002 (2002 LUC),[2] and November 23, 2010 (2010 LUC,[3] together with the 1998 LUC and 2002 LUC, the Existing LUCs) to prevent human direct contact with soil without agency oversight. The portion of Midway Village located south of Midway Drive (Village South), and some parcels on Village North are not subject to Existing LUCs. The areas covered by the Existing LUCs (i.e., Midway Village North parcels and Bayshore Park) are subject to requirements of Operations and Maintenance (O&M) Agreements with the DTSC. The O&M Agreements outline requirements for the cap inspection, maintenance, and reporting (SCS Engineers, 2017). The 2002 LUC is recorded on the land underlying Bayshore Park and contains a prohibition on residential use. Neither the 1998 LUC nor the 2010 LUC contain this restriction. The Existing LUCs are discussed in further detail in Section 4.9.1 hereof.

Since December of 2018, 3 soil gas sampling events have been conducted at the Site under the oversight of the DTSC. In December of 2018 and April of 2019, soil gas testing was performed at the Village North portion of the Site and on November 9, 2018, soil gas testing was performed at the Village South portion of the Site. The soil gas sampling revealed elevated concentrations of VOCs in soil gas at the Site with the exception of Village South. The Project Applicant, County and the City are working with the DTSC to develop appropriate measures to ensure that site conditions will be maintained in a manner protective of human health and the environment, including future Site users. These measures, as well as the results of this sampling, are discussed in further detail in Section 4.9.1 hereof.

2.3 PROJECT CHARACTERISTICS

The proposed project is a mixed-use redevelopment project consisting of residential development, parking spaces, child-care services, a community center, ancillary office space, a revised street system, and open space/recreational uses. The project site totals approximately 15 acres. The proposed project would include 555 total residences, 746 parking spaces, up to 3.5 acres of City-owned park (Bayshore Park), a child-care center, a community center, office space for property management and other ancillary services, and various other open space/recreational elements such as picnic and exercise areas. Currently, the 150 residential units in the Midway Village area consist of 150 very low-income affordability units. The 555 residential units under the proposed project would consist of 104 extremely low-, 170 very low-, and 254 low-income affordability units to allow for low-income families. The remaining 27 units would consist of 7 units for onsite property managers, and the remaining 20 units would consist of for-sale townhomes that would be sold below market rate. Building heights would vary between one and four stories, with a maximum height of 60 feet. Figures 2.3-1 through 2.3-3 show the overall layout of the proposed project features.

The residences would be a mix of apartments including 92 studios, 116 one-bedroom apartments, 190 two-bedroom apartments, 133 three-bedroom apartments, and 24 four-bedroom apartments. The proposed project (including these residences) would be constructed in four phases, which would include demolition of existing structures, and relocation of current residents and the child-care facility onsite as each phase is underway. Table 2.3-1 below shows the proceeding logical development of these phases while Figures 2.3-4 and 2.3-5 depict the demolition and construction phases, respectively.

[1] The land subject to the 1998 LUC consists of APNs 005-330-250, 005-330-260, 005-330-270, 005-330-340, 005-330-350, 005-330-360, 005-330-370, and 005-330-380.
[2] The land subject to the 2002 LUC consists of APNs 005-330-330 and 005-330-390.
[3] The land subject to the 2010 LUC consists of APNs 005-330-280, 005-330-290, 005-330-300, and 005-330-310.

Table 2.3-1: Proposed Tentative Phasing Overview

Phase	Activity	
Phase 1	Demolition	• Demolition of San Mateo County Housing Authority offices only
	Construction	• 29 studio apartments • 24 one-bedroom apartments • 56 two-bedroom apartments • 30 three-bedroom apartments • 8 four-bedroom apartments • Garage A
Phase 2	Demolition	• Demolition of 46 residences • 46 families relocated to Phase 1
	Construction	• 27 studio apartments • 37 one-bedroom apartments • 32 two-bedroom apartments • 28 three-bedroom apartments • 4 four-bedroom apartments • Bayshore Child-Care Center
Phase 3	Demolition	• Demolition of existing child-care center • Demolition of 56 residences • 56 families relocated to Phase 1 and Phase 2
	Construction	• 18 studio apartments • 27 one-bedroom apartments • 49 two-bedroom apartments • 40 three-bedroom apartments • 6 four-bedroom apartments • Community center • Garage D
Phase 4	Demolition	• Demolition of 18 residences • 48 families relocated to Phase 1, 2, and 30 families relocated to Phase 4
	Construction	• 18 studio apartments • 28 one-bedroom apartments • 53 two-bedroom apartments • 35 three-bedroom apartments • 6 four-bedroom apartments • Park rough-graded and returned to the City of Daly City • Park redeveloped by City of Daly City
Total Residences		**555**

The proposed project is anticipated to be developed over a 6-year period; however, based on market conditions, phasing could be spaced out significantly up to 15 years. For the purposes of this analysis, a conservative approach concentrating the construction into a 6-year period was used. Each of the four phases of development would include demolition of a portion of the existing buildings onsite followed by new building construction. Existing tenants would only need to move one time during redevelopment, directly into their new units. Construction of the new child-care facility would occur early in the development process (Phase 2) to ensure that the students are relocated and settled as early as possible in the process.

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Source: David Baker Architects
Date: September 18, 2019

Figure No.
2.3-1

Title
Project Site Plan

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

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Source: David Baker Architects
Date: September 18, 2019

Figure No.
2.3-2

Title
Project Site Plan

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

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Figure No.
2.3-3

Title
Project Site Plan

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

Source: David Baker Architects
Date: September 18, 2019

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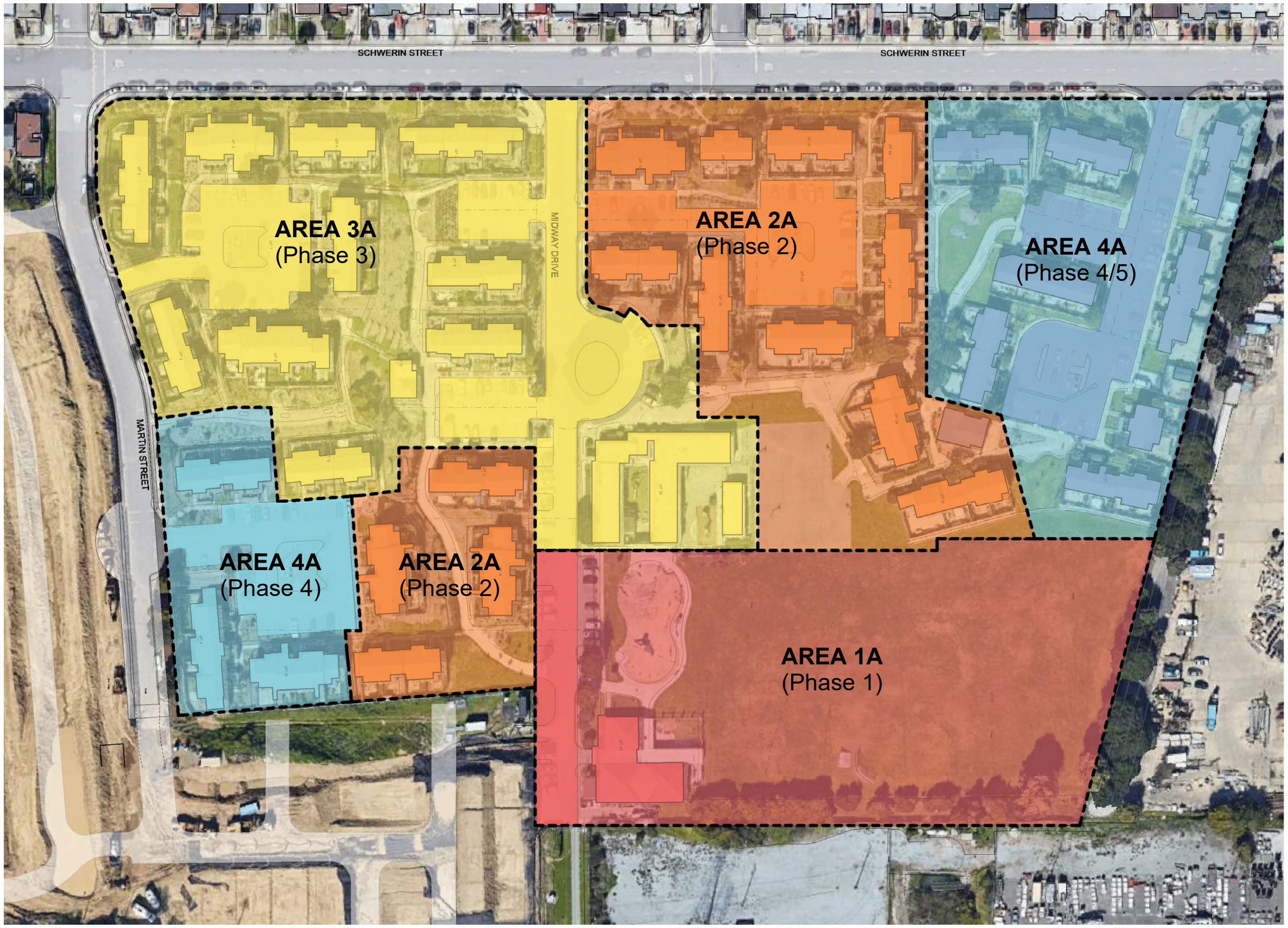

Demolition

- Demo Phase 1
- Demo Phase 2
- Demo Phase 3
- Demo Phase 4
- Demo Phase 5

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Figure No.
2.3-4

Title
Demolition Phasing Plan

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

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Source: David Baker Architects
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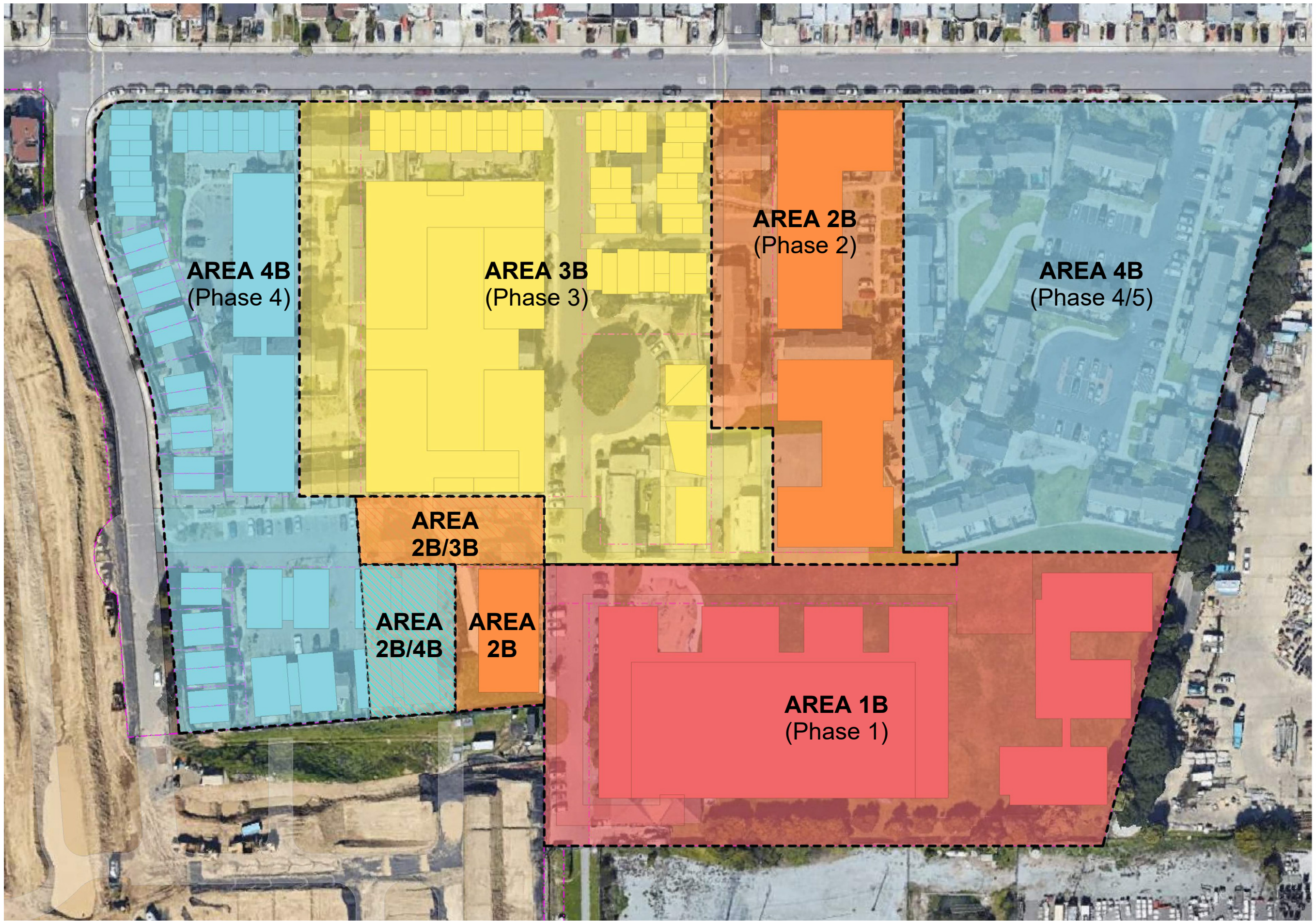

NEW CONSTRUCTION

- New Construction Phase 1
- New Construction Phase 2
- New Construction Phase 3
- New Construction Phase 4
- Park Returned to City

Stantec

Figure No.
2.3-5
Title
Construction Phasing Plan
Client/Project
City of Daly City
Midway Village Redevelopment Project
Project Location
Daly City, CA
185704589

Source: David Baker Architects
Date: September 18, 2019

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The Midway Village area currently consists of 172,500 square feet (sf) of residential, office, and child-care space. The total square footage for the proposed project would be 881,600 sf of mixed residential, office space, common space, a child-care facility, and a community center. The office space is included within the community center space. The breakdown of square footage of each structure under the proposed project is included in Table 2.3-2.

Table 2.3-2: Square Footage of Proposed Structures

Building	Building Type	Square Feet (sf)	Total Square Feet (sf)
Building A	Common A	4,690	237,100
	Garage	152,592	
	Residential	72,690	
	Residential Townhome	7,128	
Building A2	Common A2	4,691	73,512
	Residential	68,821	
Building B	Common B	5,720	68,965
	Residential	63,245	
Building B2	Child-care	16,760	50,280
	Residential	33,520	
Building C	Common C	4,230	28,920
	Residential	24,690	
Community Center	Community Center/Office Space	5,100	5,100
Building D	Common D	4,446	191,197
	Garage	88,432	
	Residential	86,419	
	Residential Townhome	11,900	
Building E	Common E	2,627	51,386
	Residential	48,758	
Building F	Residential	51,180	51,180
Townhome	Residential Townhome – Martin	12,600	85,560
	Residential Townhome – Park	27,000	
	Residential Townhome – Schwerin	45,960	
Townhome For Sale	Townhome- For Sale – Martin	38,401	38,401
		Total	**881,600**

2.3.1 Employment and Future Residents Estimate

Currently there are 31 employees located onsite at both the child-care and office facilities. It is estimated that approximately 15 to 20 additional employees would be needed onsite, depending on the type of special needs populations ultimately served (e.g., formerly homeless, veterans, senior citizens, or transition-aged youth). These staff members would support the child-care facility and Community Center and would provide property management services for the residential units in the development. Employees for maintenance of Bayshore Park would be City employees and are not included in the estimated 15 to 20 employees for the remainder of the project site.

Consistent with the General Plan EIR assumptions and the United States Census Bureau (USCB), the analysis used an average of 3.3 residents per household, with each household representing 95 percent of total housing units with a 5 percent vacancy rate (City of Daly City 2012, USCB 2019). Accordingly, 95 percent of the 555 units would be 527 units, resulting in 1,739 residents. Since the Midway Village area includes 477 existing residents, the proposed project would result in 1,262 new residents. However, for the purposes of this analysis, a more conservative approach of 100 percent occupancy was used which would result in 1,832 total residents, or 1,355 new residents.

2.3.2 Landscaping

Although there is currently some landscaping on the project site, including existing trees and vegetation, this landscaping would be removed during each respective demolition phase and redeveloped as part of the proposed project. Any tree that would be removed and is within public property would be required to comply with Sections 12.40.120 and 12.40.140 of the City's Municipal Code related to tree removal permits and replacement trees[4]. Landscaping for the proposed project would include pavers for stormwater infiltration, native plant stormwater swales, and shade trees. These landscaping features would provide pedestrian-friendly frontages throughout the project site. Additionally, the open spaces in the housing portions of the project site would have planters to manage stormwater. Finally, street frontage and setback areas would have flower plantings and sidewalk shade trees. Figure 2.3-6 shows an overview of the landscaping anticipated for the proposed project, as well as the recreational areas, which are discussed in further detail below.

2.3.3 Recreational Areas

The Midway Village area currently does not incorporate many recreation or common areas in between the residences beyond what currently is provided by Bayshore Park. The proposed project would include various recreation areas that would provide opportunities to foster community and interaction with open space throughout the project site. These residential areas are for residential use only, with the exception of Bayshore Park, which would be open to the public. These recreational areas are spilt into six different areas: The Garden, The Family Room, Residents Park, Residents Garden, Family Court, and Bayshore Park. These six areas are described in further detail below and shown on Figure 2.3-6.

The Garden

The Garden would be approximately 7,000 sf of open space located in the southwest portion of the new development, west of Building E. This area would include a community garden for use by the residents and an exercise deck.

The Family Room

The Family Room will be approximately 17,000 sf and would be located in the center area of the new development and would be surrounded on the west, north, and east of Building D. This area includes a multi-use lawn, a tot play area, and an outdoor dining area.

[4] The City's Municipal Code 12.40.140 requires replacement trees to be a minimum of two 24-inch box size (the combined canopy of which is approximately 10 percent of the average street tree canopy in the City or replacement canopy of 17 sf). If it is determined that replacement trees cannot be planted in the same frontage, costs for two trees, each 24-inch box size, plus labor for planting, shall remain in effect. This replacement tree shall be planted on specified alternate public property.

The Garden

- COMMUNITY GARDEN
- EXERCISE DECK

The Family Room

- MULTI USE LAWN
- TOT PLAY AREA
- OUTDOOR DINING AREA

Residents Park

- OUTDOOR DINING AREA
- MULTI USE LAWN
- PLAZA
- TERRACE SEATING
- PLAY AREA

Residents Garden

- MEDITATION GARDEN
- OUTDOOR DINING AREA

Family Court

- PICNIC AREA
- PLAY AREA

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Figure No.
2.3-6

Title
Recreational Areas and Landscaping

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

Source: David Baker Architects
Date: September 18, 2019

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Residents Park

The Residents Park would be approximately 18,000 sf located in the center area of the new development, west of the new community center. This area would include an outdoor dining area, a multi-use lawn, a plaza, terrace seating, and play area.

Residents Garden

The Residents Garden would be approximately 2,500 sf located in the northern portion of the new development and would be surrounded on the northeast, and south by Building B. This area would include a meditation garden and an outdoor dining area.

Family Court

The Family Court would be approximately 6,000 sf and would be located in the northeastern portion of the new development, west of Building A2. This area would include a picnic area and a play area.

Bayshore Park

Bayshore Park is an existing City park adjacent to the existing Midway Village area. As described, the park would maintain its existing purpose; however, it would be relocated within the new Midway Village Redevelopment to the northern most portion of the project site. The proposed project would include grading activities and installation of utility connections associated with the new park; however, development of the park would be the responsibility of the City. As such, though development of the park is not included in the Applicant's proposed project, the re-grading of the new Bayshore Park location is included in the resource analyses in Section 3.0. For the purpose of the environmental analysis, a conceptual design is presented in Figure 2.3-6. This conceptual design has been developed to anticipate final design, and this SCEA will consider the greatest environmental impact. Future improvements at the park may include, but are not guaranteed to include, a 55,800 sf soccer field, a 3,825 sf tennis court, a 6,600 sf playground, a 10-foot-wide jogging path with workout stations around the perimeter of the park, restrooms (1,300 sf), and up to 45 additional shared parking spaces (12,500 sf). Other variations of the park design could include a soccer field (362 feet by 482 feet), a smaller playground structure (600 sf), and the addition of two basketball courts (each 185 feet by 136 feet) and two tennis courts (each 170 feet by 91 feet). The final design and development of the park would be subject to City standards including the City's Municipal Code at the time of development.

For the purposes of analysis in this SCEA, the 'worst case' assumption or highest possible impact for Bayshore Park has been used to quantify potential environmental impacts related to environmental resource considerations. Environmental resource areas' impacts would depend on the resource category. Park features that have the greatest impact area, or most impervious surface (i.e., two basketball courts, and two tennis courts, largest playground, etc.) would require more intensive construction activities and would result in long-term operational impacts. For a conservative assumption, this analysis assumes 24,225 sf of total impervious surface within the redeveloped Bayshore Park. For other resource areas, such as utilities, the greatest impact would occur if more water is required to supply the restroom, a larger open field, or more landscaping. A conservative assumption for this analysis assumes 10,404 gallons of water per day would be required for Bayshore Park irrigation once it is developed, which represents a net decrease from existing conditions of 11,404 gallons of water per day. However, the addition of restrooms at the newly developed Bayshore Park would result in an additional 976 gallons per day of water. No water features or water associated recreational uses beyond irrigation and landscaping are assumed for the proposed project. Impacts related to construction truck trips and the air quality analysis would be greatest if more intensive construction activities are required for the development of the park. A conservative assumption for this analysis assumes up to 2 feet of grading for the entire Bayshore Park (up to 3.5 acres) and approximately 25 percent of the total surface area of the park would require cement surfaces (i.e., from the tennis courts, basketball courts, parking, etc.).

2.3.4 Vehicular Access

Four main access points located within the project area would connect the project site to the larger circulation system within the City. Midway Drive and two new access streets would provide public access from Schwerin Street to the center portions of the Midway Village Redevelopment. On the southern edge of the development, a new street access would be created from the existing Martin Street. Pedestrian access thorough the new development would be differentiated by the patterned concrete and raised sidewalks throughout the site that would connect with the City's existing sidewalk structure along the southern and western property boundaries. The relocated Bayshore Park would be accessed from Schwerin Street.

Streets would typically be 20 to 36 feet wide and would include two-way travel and parking on either side of the street. Sidewalks would be approximately 12 feet wide and would include landscaping and fire hydrants.

2.3.5 Parking

The proposed project meets the Zoning Ordinance requirements (City Municipal Code Section 17.34.020[D]), which allows low income housing to provide at least three-quarters of the normally required number of spaces. All parking would be located aboveground. The breakdown of parking is included in Table 2.3-3 below and shown on Figure 2.3-7.

Table 2.3-3: Parking

Structure or Location	Number of Spaces
Garage A	378
Garage D	250
Child-care Loading Parking	13
Resident Assigned Spaces	60
Resident Loading Spaces	5
Ownership Space	40
Total	746

2.3.6 Aesthetics and Design

Based on the General Plan and City Zoning Ordinance, the proposed project is consistent with the surrounding area; however, the proposed project would be subject to a Design Review by the City to ensure that the proposed project is consistent with existing features in the surrounding area and City code requirements. The proposed project would allow for residential intensification with mixed-use elements on and adjacent to the main thoroughfares of the City, which are well-served by public transportation. The maximum height for the proposed buildings would be raised from 36 feet to 60 feet to accommodate the four-story buildings onsite, which would be consistent with the City's Municipal Code.

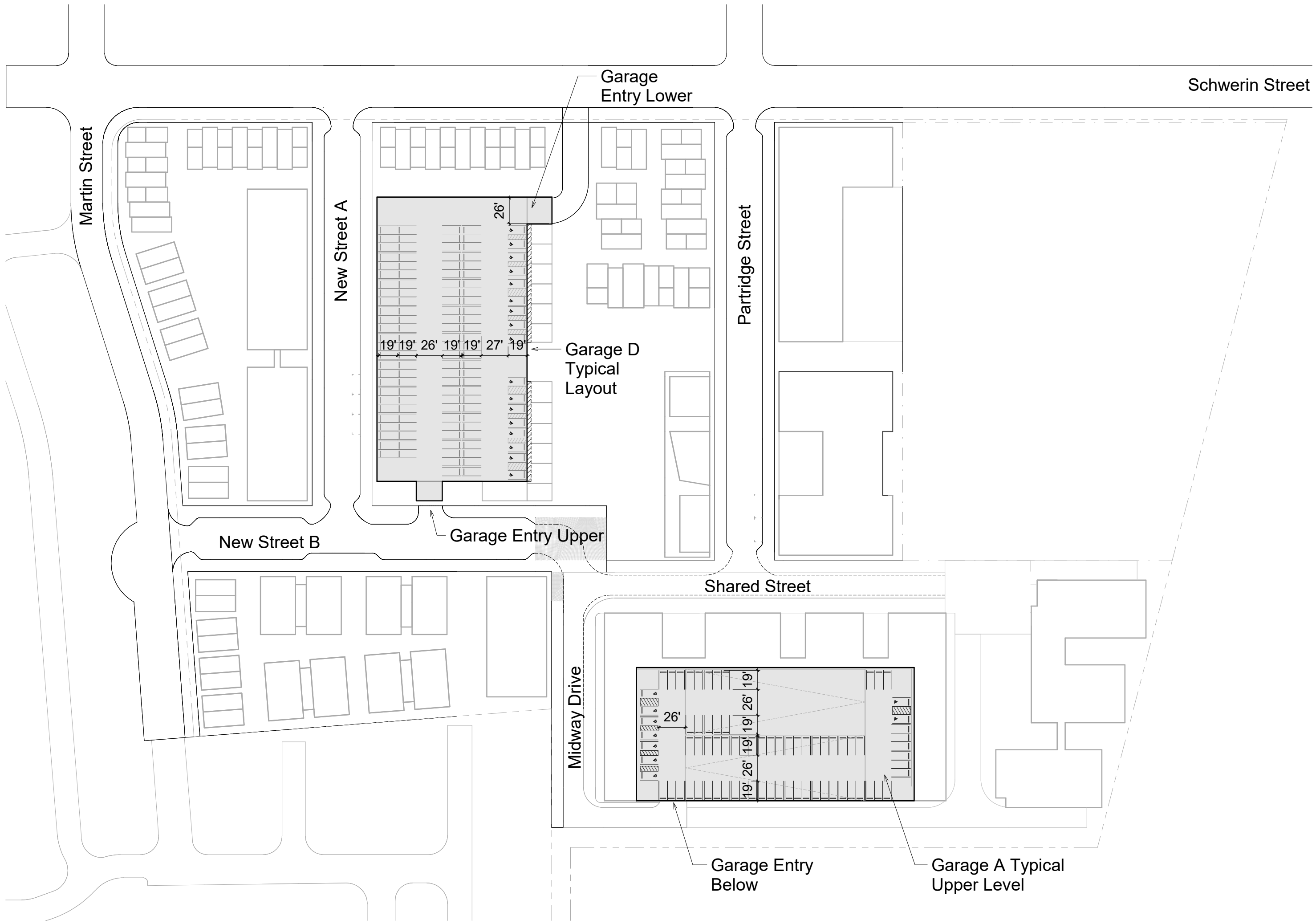

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Figure No.
2.3-7

Title
Parking Plan

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

Source: David Baker Architects
Date: September 18, 2019

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The proposed project design would complement the existing design and appearance of the adjacent commercial and residential area. The buildings would be highly articulated on all four sides to maximize architectural interest and minimize building massing. Bayshore Park would be designed similar to the existing park on the site; however, the park would be relocated within the project site and would include improvements such as a jogging path, workout station, and ball fields/courts, which would depend on the final approved design by the City (see Section 2.3.3, Recreational Areas, for more details regarding the design of Bayshore Park).

The proposed project has been designed with a number of architectural treatments and changes in plane and volume. Building exteriors would consist of materials such as stucco, fiber cement siding, fiber cement panels, brick veneer, metal panels, storefront windows, vinyl windows, metal awnings, metal railings, glass railings, and metal louvre. Renderings of the proposed project and overall design are shown in Figures 2.3-8 through 2.3-11. Additionally, the proposed project would require a maximum of 50 new fire hydrants per the California Fire Code and City design standards (Section 6.02.C).

2.3.7 Alternative Transportation

Existing transit service to the project site is provided by the San Francisco Municipal Transportation Agency (MUNI), San Mateo County Transit District (SamTrans), Caltrain, and Bay Area Rapid Transit (BART) as described in Section 4.17, Transportation. As shown in Figure 2.3-12, MUNI provides bus service near the project site via Route 9, which travels between Daly City and San Francisco. The closest MUNI bus stop to the project site is located on Schwerin Street at MacDonald Avenue, approximately 0.30 mile north of the site. SamTrans provides bus service near the project site on Geneva Avenue via Routes 24 and 29 on school days. SamTrans Route 292, an express bus, is located approximately 1.5 mile away; Route 397 provides limited “night owl” service between downtown San Francisco and the Palo Alto transit center, with service to San Francisco International Airport. From the Palo Alto transit center, connections are provided to Santa Clara Valley Transit Authority (VTA). The route serves Daly City, with the stop at Bayshore Boulevard and Geneva Avenue, located approximately 0.65 mile away.

The Daly City Bayshore Shuttle operated by SamTrans provides free shuttle service between the Daly City BART station and Bayshore Boulevard/Geneva Avenue, with a connection to the Balboa BART station. The shuttle has a stop immediately fronting the site, at the intersection of Schwerin Street and Martin Street. The Bayshore/Brisbane Senior Shuttle is operated by SamTrans and the San Mateo County Transportation Authority. It operates similarly to a paratransit service except that it circles on a fixed route between Bayshore Caltrain Station and South San Francisco (with connections to other SamTrans bus routes) until it receives a call to book a trip.

The Caltrain station nearest to the project site is the Bayshore Station, which is located approximately 1.5 miles from the project site, on Tunnel Avenue at the border of Brisbane and San Francisco. The nearest BART station is the Balboa BART station, located approximately 2.25 miles northwest of the project site. Trains run on approximately 15-minute headways during commute hours.

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Figure No.
2.3-8

Title
Uphill Rendering

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

Source: David Baker Architects
Date: September 18, 2019

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Figure No.
2.3-9

Title
Downhill Rendering

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

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Date: September 18, 2019

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Source: David Baker Architects
Date: September 18, 2019

Figure No.
2.3-10
Title
Rendering of Community Square
Client/Project
City of Daly City
Midway Village Redevelopment Project
Project Location
Daly City, CA
185704589

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Stantec

Figure No.
2.3-11

Title
Rendering of Schwerin St. and Partridge St. Intersection

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA 185704589

Source: David Baker Architects
Date: September 18, 2019

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Legend

- Closest Muni Stop
- Project Site
- 0.5 mile Buffer

Nearby Transit Routes

- San Francisco Muni Routes
- SamTrans School-day Only Routes
- SamTransRoutes Connecting to Caltrain Station
- SamTransRoutes Connecting to BART and Caltrain stations

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet
2. Data Sources Include: bing - (c) 2010 Microsoft Corporation and its data suppliers

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Figure No.
2.3-12

Title
Transit Priority Area

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

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Feet
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2.3.8 Sustainability

The proposed project would incorporate a variety of operational sustainability features that would reduce its demand for resources, use non-toxic materials, and promote waste reduction, including but not limited to, the following:

- The 555 residential units would be within walking distance of multiple Daly City MUNI and SamTrans bus stops.
- Solar thermal or photovoltaic panels would be installed on the new buildings, which would reduce energy consumption requirements.
- Proximity to neighborhood-oriented retail services would reduce vehicle miles traveled.
- A majority of the garage spaces are provided in two parking structures, which allows for greater landscaping and green space, thereby reducing heat island effects.
- Energy efficiency improvements would be made for at least 10 percent efficiency above 2016 Title 24 standards.

2.3.9 Utilities

The City currently provides water and some utility service to the Midway Village area and Bayshore Park and would continue to do so under the proposed project. Bayshore Sanitary District (BSD) provides wastewater collection and pumping services for the project area. PG&E currently provides power and gas services to the project site and would continue to do so.

Water Supply

The project site is served by the City's Department of Water and Wastewater Resources (DWWR). A large portion of the City's water supply is received from the San Francisco Public Utilities Commission (SFPUC). Recycled water from the North San Mateo County Sanitation District wastewater treatment plant is provided to the City whenever feasible. According to the General Plan, multi-family residential water consumption accounts for 30 percent and commercial accounts for 9 percent of total City water use.

Table 2.3-4 shows the proposed water supply needed to serve the proposed project. According to the water supply assessment (Appendix A), there would be sufficient water capacity to serve the proposed project.

Table 2.3-4: Water Supply

Proposed Project	No. of Units	Approximate Area[a] (ft^2)	Approximate Number of Occupants[b]	Land Use Classifications	Unit Water Demands[b,c]	Average Day Demands[d] AFY
Phase 1						
Building A/parking garage A	78	234,000 (86,000/148,000)	3.12	multiple-family residential	60 gpcd	16.4
Building A2	70	71,000	3.12	multiple-family residential	60 gpcd	14.7
Subtotal	148	305,000				31.0
Phase 2						
Building B	58	69,000	3.12	multiple-family residential	60 gpcd	12.2

Proposed Project	No. of Units	Approximate Area[a] (ft^2)	Approximate Number of Occupants[b]	Land Use Classifications	Unit Water Demands[b,c]	Average Day Demands[d] AFY
Building B2 (childcare center)	36	50,500	3.12	multiple-family residential	60 gpcd	7.5
Building C	34	29,000	3.12	multiple-family residential	60 gpcd	7.1
Townhomes	22	27,000	3.12	multiple-family residential	60 gpcd	4.6
Subtotal	150	175,500				31.5
Phase 3						
Building D/parking garage D	95	192000 (103,500/88,500)	3.12	multiple-family residential	60 gpcd	19.9
Community center	-	5,500	-	multiple-family residential	0.135 gpsfpd	0.8
Townhomes	22	46,000	3.12	multiple-family residential	60 gpcd	4.6
Subtotal	117	51,500				25.4
Phase 4						
Building E	65	60,000	3.12	multiple-family residential	60 gpcd	13.6
Building F	40	45,000	3.12	multiple-family residential	60 gpcd	8.4
Townhomes	15	12,600	3.12	multiple-family residential	60 gpcd	3.1
Townhomes (ownership)	20	39,000	3.12	single-family residential	60 gpcd	4.2
Subtotal	140	156,600				29.4
Buildout						
Park[e]	-	145,000 (72,500)	-	public park	0.135 gpsfpd	11.0
Proposed project total		**761,100**				**128.2 ***

Notes:

* The total projected demand for the Midway Redevelopment is approximately 128 AFY or about 114,000 gpd.

a. Approximate total building areas of all floor levels within the exterior walls provided by Applicant

b. Approximate number of occupants and unit water demands are from Near- and Long-Term Water Resources Planning (BC, 2012). Hotel: 60 gallons per day (gpd) per room. Theater/Restaurant/Gym: 0.135 gpsfpd

c. gpcd = gallons per capita per day; gpsfpd = gallons per square foot per day; gps = gallons per minute per sprinkler; gpd/rm = gallons per day per room

d. Average day demands converted to AFY (acre feet per year)

e. Water use for the proposed Bayshore Park is uncertain. Brown and Caldwell assumed 50% of total area as landscaping and applied a demand factor of 0.135 gpsfpd

Source: Brown and Caldwell 2020 (See Appendix A)

Wastewater

The project site is currently served by an 18-inch sewer line located beneath Midway Drive that runs from the intersection of Schwerin Street and Midway Drive to the Carlyle Pump Station located at 96 Industrial Way. This pump station has four 30 horse power pumps and the maximum capacity of this pump station with four pumps running is 3,320 gallons per minute (gpm). Wastewater collection and pumping are provided by BSD and treatment is provided by the San Francisco Public Utilities Commission (SFPUC). No improvements are anticipated for the sewer lines.

Table 2.3-5 shows the existing and proposed increase (proposed minus existing use) in wastewater generated by the proposed project. According to calculations provided in Appendix B, there would be sufficient wastewater capacity to serve the proposed project.

Table 2.3-5: Wastewater Generated

Project Characteristic	Demand Factor [1, 2]		Existing Consumption [3] (gallons/day)	Proposed Project Consumption [3] (gallons/day)	Increase in Use (gallons/day)
Residential	200	gallons/du/day	30,000	111,000	81,000
Office/Community Center	10	gallons/person/day	70	900	830
Day Care	10	gallons/student/day	1,090	1,250	160
Bayshore Park Restrooms [4]	488	gallons/restroom/day	0	976	976
			Total	**114,126**	**82,966**

Notes:

1. Residential demand is based on Bayshore Sanitary District 2018 Master Plan wastewater design criteria of 200 gallons per day per dwelling unit.
2. Office/community center and child-care demand factor is based on City of Oakland Sewer flow rate of 10 gallons per day per person.
3. Existing and proposed employees/students counts for office/community center and daycare are provided by DBarchitects.
   - Child-care: 109 existing and 125 proposed students
   - Office/community center: 7 existing and 90 proposed students
4. Assumes 20 fixtures per restroom.

du = dwelling unit

Electricity

The project site receives electrical service from PG&E. Underground electricity and natural gas lines would be extended to the project site from existing facilities in Schwerin Street. The proposed project would include energy conservation features, including homes that are energy efficient with a goal to exceed the state's current Title 24 requirements by meeting current Tier 2 Energy Efficiency standards. Section 4.6, Energy, contains detailed information on the proposed project's energy usage.

Stormwater

The Midway Village area and Bayshore Park is currently connected to the City's storm drain system and would continue to be connected under the proposed project. Currently the project site includes 374,980 sf of impervious surface, including the Midway Village area and 20,875 sf of impervious surface at Bayshore Park. The proposed project would include 456,595 sf of new impervious surface (including both the redeveloped Midway Village area [432,370 sf] and the redeveloped Bayshore Park [24,225 sf]). Existing stormwater drainage within the site carries runoff from the Sunnydale Watershed which empties at the northeast edge of the site via a 60-inch storm main. The 60-inch storm main ultimately outfalls into the Bayshore Channel in a siphon condition.

Stormwater would be treated at landscaped areas and with permeable pavers that would retain and treat runoff. Planters throughout the project site would be used as flow-through planters to treat and discharge runoff before entering the City's stormwater system. The proposed project consists of the following design measures: direct runoff onto vegetated areas, permeable pavers at the courtyards to minimize and treat runoff from the project site, direct runoff to curbed planters through roof drains, pervious vehicular turf block, direct runoff into bioretention areas, direct runoff into flow through planters, and non-pervious pavement. The Bayshore Park site would be graded and prepped to allow for adequate stormwater drainage from the site, and stormwater design features would be incorporated into the final park design to maintain this drainage. According to calculations provided in Appendix C, there would be sufficient stormwater capacity to serve the proposed project.

2.4 PROJECT CONSTRUCTION

2.4.1 Schedule

The proposed project would require demolition, site preparation, and construction in phases, with each of these activities occurring in each phase. Tables 2.4-1 through 2.4-4 show the anticipated phased construction schedule based on the assumption that construction would begin in 2021, and it is estimated all phases would be completed by 2026 (6 years of construction are anticipated); however, construction may extend up to 15 years due to market conditions. Six years is a conservative assumption because potential impacts would be more concentrated rather than spreading construction activities out over 15 years. Construction for the new park amenities would be coordinated by the City and would occur after construction of the residential portion of the proposed project is complete. The construction schedule is the same for each phase but sequential. It is anticipated that ancillary improvements would occur concurrently with the construction of the facilities, by phase.

Table 2.4-1: Phase 1 Construction Schedule

Task	Start Date	End Date	Workdays
Demolition	1/15/2021	1/31/2021	12
Site Preparation	2/1/2021	3/1/2021	20
Grading	3/2/2021	3/20/2021	15
Building Construction	3/20/2021	10/30/2021	175
Paving	7/1/2021	8/1/2021	23
Architectural Coating	11/1/2021	12/20/2021	35

Table 2.4-2: Phase 2 Construction Schedule

Task	Start Date	End Date	Workdays
Demolition	9/1/2023	10/10/2023	25
Site Preparation	10/15/2023	11/25/2023	28
Grading	11/26/2023	12/18/2023	16
Building Construction	12/20/2023	8/2/2024	155
Paving	6/1/2024	7/20/2024	35
Architectural Coating	8/3/2024	9/25/2024	38

Table 2.4-3: Phase 3 Construction Schedule

Task	Start Date	End Date	Workdays
Demolition	7/10/2025	9/4/2025	40
Site Preparation	9/5/2025	10/24/2025	35
Grading	11/1/2025	12/6/2025	25
Building Construction	12/7/2025	8/17/2026	175
Paving	6/1/2026	7/31/2026	48
Architectural Coating	8/16/2026	10/5/2026	35

Table 2.4-4: Phase 4 Construction Schedule

Task	Start Date	End Date	Workdays
Demolition	7/10/2025	9/4/2025	40
Site Preparation	9/5/2025	10/24/2025	35
Grading	11/1/2025	12/6/2025	25
Building Construction	12/7/2025	8/17/2026	175
Paving	6/1/2026	7/31/2026	48
Architectural Coating	8/16/2026	10/5/2026	35

Typically, project demolition, grading, and construction activities would be limited to the daytime hours between 7 AM and 9 PM, except that work in the public right-of-way or City facilities would only occur between construction hours authorized by City permits; additionally, some nighttime work and work on the weekends may occur. The project construction activities would be compliant with the City's Municipal Code Section 9.22.030, which states that between the hours of 10 PM and 6 AM, no person shall cause, create, or permit any noise that may be heard beyond the confines of the property of origin.

2.4.2 Access and Staging

Workers would access the project site from the City streets and U.S. Highway 101 (U.S. 101). Materials would typically be stored onsite in the future parking lot areas. However, flooring and photovoltaic panels may be stored offsite. Demolition, grading, and construction work is generally anticipated to occur within the project site; however, work may extend as far as the centerline of Schwerin Street for connections of utility lines. Construction materials and equipment would be delivered using trucks during the daytime hours (between 7 AM and 9 PM).

2.4.3 Construction Equipment and Workers

Construction equipment anticipated onsite is listed in Table 2.4-5. No pile driving is proposed. Rammed aggregate piers would be used to reinforce the soils onsite for the one podium structure, Building D. Demolition, grading, and construction workers required for each phase of the proposed project would fluctuate between 15 and 75 workers per day with an average of 35 workers per day. Additional construction equipment for the improvements is accounted for in each phase as shown in Table 2.4-5.

Table 2.4-5: Proposed Construction Equipment

Phase Name	Off-Road Equipment Type
Demolition	Concrete/industrial saws
	Excavators
	Rubber-tired dozers
	Tractors/loaders/backhoes
Site Preparation	Graders
	Tractors/loaders/backhoes
	Excavators
Grading	Concrete/industrial saws
	Graders
	Rubber-tired dozers
	Tractors/loaders/backhoes
Building Construction	Cranes
	Forklifts
	Tractors/loaders/backhoes
Paving	Cement and mortar mixers
	Paving equipment
	Pavers
	Rollers
	Tractors/loaders/backhoes
Architectural Coating (Painting)	Air compressors

2.4.4 Grading and Demolition

There would be approximately 63,734 CY of earth movement on the project site. The maximum depth of cut and fill onsite would range from 13 to 26 feet (pers. Comm. Patrick Chour June 28, 2019).

Trees, roots, vegetation, organic surficial soil, and concrete would be removed from structural areas unless specified in the final design plans by the City. The depth of organic surficial soil to be removed would vary but would average 3 feet.

It is anticipated that 12 of the 15 total acres of surface area would be affected by grading operation at the project site, including Bayshore Park, and the proposed project would include a total of 456,595 sf of impervious surface upon buildout of the proposed project (pers. Comm. Matt Lewis October 17, 2019). Due to the potentially contaminated soils on the project site from previous grading and capping activities, it is possible that further contaminated soils could be encountered during demolition and grading activities, particularly in areas that currently have existing structures that would be demolished. Specifically, under Buildings A, A2, and B2, a passive Vapor Barrier would be required to protect against potentially contaminated soils in these areas. Soil fill may be required depending on further geotechnical investigations prior to any grading activities. These fill activities would be in addition to what occurred as part of the 1994 and 1998 cleanup of the site. The maximum soil fill that would be required at the project site would include 3,018 CY of suitable material, as deemed appropriate by the geotechnical engineer.

During excavation activities, groundwater may be encountered at the project site and temporary construction dewatering may be necessary. All temporary construction dewatering would be in accordance with a Waste Discharge Requirement permit from the San Francisco Bay Regional Water Quality Control Board (RWQCB).

The Existing LUCs on the project site limit alteration of the soils within the site and includes the following restrictions related to soil management and the cap:

"*4.02. Soil Management*

a) *The Owner shall provide the [DTSC] written notice at least fourteen (14) days prior to any activities that will disturb the soil below the Cap (e.g., excavation, grading, removal, trenching, filling, earth movement or mining). Any such activities must comply with a Soil Management Plan and a Health and Safety Plan approved by [DTSC].*

b) *No notice shall be required for activities that temporarily disturb only the top 2 feet of soil. However, at the conclusion of such activities, the Owner is required to maintain at least 2 feet of clean soil above the contaminated layer.*

c) *Any contaminated soils brought to the surface by grading, excavation, trenching, or backfilling shall be managed in accordance with all applicable provisions of state and federal law.*

4.03. Non-Interference with Cap

a) *All uses and development of the Capped Property shall preserve the integrity Cap.*

b) *The Cap shall not be altered without written approval by [DTSC], except as allowed in section 4.02 of this Covenant.*

c) *Covenanter shall notify [DTSC] of each of the following: (i) the type, cause, location, and date of any damage to the Cap; and (ii) the type and date of repair of such damage. Notification to [DTSC] shall be made as provided below within ten (10) working days after the completion of any repairs. Timely and accurate notifications by any Owner or Occupant shall satisfy this requirement on behalf of all other Owners and Occupants."*

2.4.5 Lighting and Security

Lighting currently exists in the Midway Village area in the form of streetlights and lights in residences. Low-level lighting would be installed and expanded on as part of the proposed project in the common courtyard and recreational areas, including Bayshore Park once it is developed. All proposed project lighting would be shielded and directed downward to avoid light trespass and minimize the potential for glare or spillover onto adjacent properties. Lighting would be used from dusk to dawn for security purposes during operations. Proposed project lighting including lit building numbers would conform to National Electric Safety Code requirements and all applicable City lighting requirements, including those specified in the Plan Bay Area EIR.

2.5 PROJECT OBJECTIVES AND REQUIRED PROJECT APPROVALS

2.5.1 Objectives

The proposed project includes the following project objectives:

1. Construct new affordable housing and mixed-use development consistent with the General Plan.
2. Provide affordable housing in accordance with the City's Regional Housing Needs Allocation, the City's Housing Allocation Plan, and Government Code 65915/SB 1818.
3. Provide onsite property management services for residents of Midway Village Redevelopment.
4. Provide a livable neighborhood with an appropriate street design; connections to transit, parks, and recreation; and a diversity of housing types.
5. Reduce vehicle miles travelled by siting affordable rental housing at sites that can be developed with high densities near public transportation to reduce greenhouse gas (GHG) emissions.

The RTP/SCS forecast includes 660,000 new housing units and 1,119,920 new jobs by 2040 in the Bay Area. The General Plan's Administrative Draft Housing Element 2014–2022 forecast includes 1,350 of the new housing units (between 2014 and 2022) and 9,180 of the new jobs (between 2010 and 2025) to be in the City. Approximately 30 percent (405 new housing units) of the housing growth in the City would be from the proposed project.

In accordance with the City Planning Department's application review process, the proposed project is "consistent with the use designation, density, building intensity, and applicable policies specified for the project area" in an SCS, which has been accepted by the Air Resources Board as meeting applicable GHG reduction targets (PRC Section 21159.28).

The project site is located within a Priority Development Area as identified by ABAG (Bayshore [Daly City]), and the project site is located within a Transportation Priority Area as identified by ABAG and Daly City. The proposed project falls within the planning assumption that MTC projected for the Plan Bay Area in the RTP/SCS.

2.5.2 Approvals

This SCEA would be used by the City as the Lead Agency to evaluate the potential environmental impacts of the proposed project. Anticipated proposed project approvals/actions may include but are not limited to the following:

- Adoption of the SCEA: City of Daly City
- General Plan Amendment to relocate land use designations within project site: City of Daly City
- Approval of State Density Bonus Law Development Standard Waivers: City of Daly City
- Design Review: City of Daly City
- Sign Permit: City of Daly City
- Right-of-Way Abandonment: City of Daly City
- Tree Removal Permit: City of Daly City
- National Pollutant Discharge Elimination System Permit: Regional Water Quality Control Board
- Approval of plans and contract documents and payment of fees: Bayshore Sanitary District
- Deed Restriction Amendment or Rescindment Approval: DTSC

Other ministerial approvals, such as building-related permits and City encroachment permits, are also anticipated. Additionally, all work related to improvements and proposed project grading would be subject to the City Municipal Code, including the Zoning Ordinance, Building Code, and Fire Code.

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3.0 SCEA CRITERIA AND TRANSIT PRIORITY PROJECT CONSISTENCY

3.1 SENATE BILL 375

The State of California adopted SB 375, also known as "The Sustainable Communities and Climate Protection Act of 2008," which outlines growth strategies that better integrate regional land use and transportation planning and that help meet the State of California's GHG emissions reduction mandates. SB 375 requires the state's 18 metropolitan planning organizations to incorporate a SCS into the regional transportation plans to achieve their respective region's GHG emission reduction targets set by the California Air Resources Board (CARB). Correspondingly, SB 375 provides various CEQA streamlining provisions for projects that are consistent with an adopted applicable SCS and meet certain objective criteria; one such CEQA streamlining tool is the SCEA.

The MTC and ABAG are the joint metropolitan planning organization for the San Francisco Bay Area region, including San Mateo County. On July 26, 2017, MTC and ABAG jointly adopted its second RTP/SCS known as Plan Bay Area 2040 (Plan Bay Area), which serves as an update to the 2013 Plan Bay Area RTP/SCS.

For the San Francisco Bay Area region, CARB has set GHG emissions reduction targets at a 7 percent reduction in per-capita emissions from cars and light-duty trucks by 2020, and a 15 percent reduction by 2035 relative to 2005 levels. The Plan Bay Area outlines strategies to meet or exceed the targets set by CARB. By Executive Order, approved June 25, 2018, CARB officially determined that the Plan Bay Area would, if implemented, meet CARB's 2020 and 2035 GHG emission reduction targets (CARB 2017a).

3.2 TRANSIT PRIORITY PROJECT CRITERIA

PRC Section 21155 sets forth the requirements for a project to qualify as a transit priority project. To qualify, a project must be: 1) consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in a sustainable communities strategy (see California PRC Section 21155[a]); and 2) a "transit priority project" (as defined in California PRC Section 21155[b]).

The following information demonstrates that the proposed project is a qualified transit priority project pursuant to the requirements of PRC Sections 21155(a) and 21155(b), and therefore, is eligible for certain CEQA streamlining benefits by way of preparing an SCEA for purposes of compliance with CEQA.

1. ***The project must be consistent with the general land use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or alternative planning strategy.***

   Plan Bay Area is the applicable RTP/ SCS for the proposed project. The proposed project would be consistent with the land use designation, density, and building intensity requirements identified by the Plan Bay Area.

   Plan Bay Area identifies the subject property as falling within the Priority Development Area of the Bayside subregion of Plan Bay Area for the City. The policies of the Plan Bay Area document are embedded in the metrics and growth forecast assumption of the Plan Bay Area document. For the purposes of determining consistency, projects consistent with the growth forecast assumptions of the Plan Bay Area are consistent with these policies. The proposed Midway Village Redevelopment Project is consistent with these growth forecast assumptions because it is consistent with the allowed uses, densities and intensities of the applicable adopted local land use plan (in this case, the City's 2030 General Plan).

ABAG has determined that the policies of Plan Bay Area are general in nature and integrated into the metrics, growth forecasts, and land use modeling for which proposed project consistency is demonstrated above. There are no additional policies specifically applicable to this proposed project or project area. Proposed project consistency with the Plan Bay Area is addressed more specifically throughout this document.

2. Contains at least 50 percent residential use, based on total building square footage and, if the project contains between 26 percent and 50 percent nonresidential uses, a floor area ratio of not less than 0.75;

The proposed project is comprised of 592,312 sf of residential use, 31,504 sf of common space/community center space, 16,760 sf of day care space, and 241,024 sf of parking garage. Residential use is approximately 67% of the total (592,312 sf ÷ 881,600). The proposed project would be consistent with this criterion.

3. Provides a minimum net density of at least 20 units per acre; and

The proposed residential density of the project is 37 dwelling units per acre (du/ac) (555 dwelling units [du] ÷ 15 acres [ac]). The proposed project would be consistent with this criterion.

4. Is within one-half mile of a major transit stop or high-quality transit corridor included in a regional transportation plan.

PRC Section 21155(b) defines a "high-quality transit corridor" as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. PRC Section 21099 defines a "transit priority area" as an area within 0.5 mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." PRC Section 21064.3 defines a "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." PRC Section 21155(b) states that a "major transit stop" is defined in PRC Section 21064.3, except that, for purposes of Section 21155(b), it also includes major transit stops that are included in the applicable regional transportation plan.

The proposed project is within a Transit Priority Area studied within the Plan Bay Area. One-hundred percent of the proposed project is within the required 0.5 mile of a major transit stop. As described further in Section 4.17, Transportation, the project site is within 0.30 mile of a MUNI bus stop and surrounding businesses. MUNI Route #9 operates on 9-minute headways on weekday peak periods and 11 minutes on weekends. Therefore, the proposed project would be consistent with this criterion.

3.3 PREVIOUS RELEVANT ENVIRONMENTAL ANALYSIS

PRC Sections 21151.2(a) and 21159.28(a) require that a transit priority project incorporate all feasible mitigation measures, performance standards, or criteria from prior applicable EIRs, which for the proposed project would include the City of Daly City General Plan EIR and the Plan Bay Area Program EIR.

City of Daly City General Plan EIR

In February 2013, the City certified a Program EIR for the 2030 General Plan Update. The EIR analyzes the potential effects resulting from implementation of the designated land uses and policies in the General Plan. The General Plan was developed to be a self-mitigating document; consequently, all policies included in the General Plan were designed to avoid or minimize impacts resulting from plan implementation. As such, the General Plan EIR does not include impact-specific mitigations. Rather, the General Plan EIR references policies that reduce the General Plan impacts to each respective resource category. As a result, there are no mitigation measures from the General Plan EIR that directly apply to the proposed project, but the proposed project is subject to all relevant policies through the City's development review process. General Plan policies applicable to the proposed project are incorporated in the respective resource sections in Section 4.0, Environmental Checklist and Environmental Evaluation.

Plan Bay Area EIR

The Plan Bay Area Program EIR, certified on March 25, 2013, serves as an informational document to inform decision-makers and the public of the potential environmental consequences of approving the Plan Bay Area. The Plan Bay Area EIR includes mitigation measures designed to help avoid or minimize significant environmental impacts. It is the intent of MTC/ABAG that lead agencies and others use the information contained within the Plan Bay Area Program EIR in order to "tier" subsequent environmental documentation of projects in the region.

The Mitigation Monitoring and Reporting Program for the Plan Bay Area EIR does not include project-level mitigation measures that are required to be incorporated into a project. However, the Plan Bay Area EIR Mitigation Monitoring and Reporting Program does provide a list of mitigation measures that MTC/ABAG determined a lead agency can and should consider, as applicable and feasible, where the lead agency has concluded that a project has the potential to result in significant effects.

As such, this SCEA, where applicable, incorporates relevant mitigation measures previously identified by the Plan Bay Area EIR. If incorporation of an applicable Plan Bay Area mitigation measure is not sufficient to reduce an identified, project-specific impact, then a project-specific mitigation measure is presented in the analysis and would be implemented to ensure less than significant impacts. The applicable mitigation measures previously identified by the Plan Bay Area EIR are incorporated in the respective resource sections in Section 4.0, Environmental Checklist and Environmental Evaluation.

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4.0 ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

The environmental resources checked below would be potentially affected by this proposed project, involving at least one impact that would require mitigation to reduce the impact from "Potentially Significant" to "Less Than Significant" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology and Soils	☐ Greenhouse Gases	☒ Hazards and Hazardous Materials
☒ Hydrology and Water Quality	☒ Land Use and Planning	☐ Mineral Resources
☒ Noise	☐ Population and Housing	☒ Public Services
☐ Recreation	☒ Transportation	☒ Tribal Cultural Resources
☒ Utilities and Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

Evaluation of Environmental Impacts

This section presents the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures recommended as appropriate as part of the proposed project.

For this checklist, the following designations are used:

Significant and Unavoidable: An impact that could be significant, and for which mitigation has not been identified. If any significant and unavoidable impacts are identified after applicable mitigation measures have been applied, an EIR must be prepared. An SCEA cannot be used in the case of a project for which this conclusion is reached in any impact category.

Less Than Significant With Mitigation Incorporated: This designation applies where applicable and feasible mitigation measures previously identified in prior applicable EIRs or in the Plan Bay Area EIR have reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact" and pursuant to Section 21155.2 of the PRC, those measures are incorporated into the SCEA.

This designation would also apply where the incorporation of new project-specific mitigation measures not previously identified in prior applicable EIRs or in the Plan Bay Area EIR has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact".

Less Than Significant Impact: Any impact that would not be considered significant under CEQA, relative to existing standards.

No Impact: The proposed project would not have any impact.

Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the Applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

☒ I find that the proposed project is a qualified "transit priority project" that satisfies the requirements of Sections 21155 and 21155.2 of the Public Resources Code (PRC), and/or a qualified "residential or mixed use residential project" that satisfies the requirements of Section 21159.28(d) of the PRC, and although the proposed project could have a potentially significant effect on the environment, there will not be a significant effect in this case, because this Sustainable Communities Environmental Assessment (SCEA) Initial Study identifies measures that either avoid or mitigate to a level of insignificance all potentially significant or significant effects of the proposed project.

4-2-20

Signature | Date

4.1 AESTHETICS

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

4.1.1 Environmental Setting

On September 27, 2013, Governor Brown signed SB 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under CEQA for several categories of development projects, including the development of infill projects in transit priority areas. PRC Section 21099(a)(7) defines a transit priority area as an area located within 0.5 mile of a major transit station that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." A major transit stop is a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

PRC Section 21099(d)(1) states that a project's aesthetic impacts shall not be considered a significant impact on the environment if:

1. The project is in a transit priority area;
2. The project is on an infill site; and
3. The project is residential, mixed-use residential, or an employment center.

Further provisions of SB 743 provide that this legislation "does not affect, change, or modify the authority of a lead agency to consider aesthetic impacts pursuant to local design review ordinances or other discretionary powers provided by other laws or policies (PRC Section 21099[d][2][A]), and that aesthetic impacts do not include impacts on historical or cultural resources (Section 21099[d][2][B]).

The proposed project meets each of the above three criteria because it meets the following requirements: (1) the project site is located within 0.5 mile of several local bus transit lines; (2) the project site is located on an infill site that is already developed as the Midway Village area; and (3) the proposed project would be a mixed-use residential project with a community center, recreational areas, and office space.

Because of the mixed-use residential character of the proposed project and its location within an urban transit priority area, the proposed project's aesthetic impacts are not considered significant. Nonetheless, the proposed project is evaluated under the respective Initial Study questions herein for **disclosure/informational purposes only**.

4.1.2 Previous Environmental Analyses

City of Daly City General Plan EIR Summary

Chapter 3.1 of the General Plan EIR discusses impacts related to aesthetics. The General Plan EIR determined that new development must not substantially affect scenic vistas, visual character, or light and glare conditions. The City has established zoning standards, design review practices, and General Plan policies to ensure that new development is compatible with existing development, and therefore impacts are less than significant.

The following General Plan policies are applicable to the proposed project:

Policy LU-8: Ensure that landscape and hardscape improvements made to all residential properties are environmentally sound and do not negatively impact existing neighborhood aesthetics.

Policy HE-31: Ensure that, in instances where higher density mixed-use development is permitted adjacent to existing neighborhoods, the impacts of building height are decreased to the maximum extent feasible without reducing permitted General Plan density.

Plan Bay Area EIR Summary

Section 2.10 of the Plan Bay Area EIR discusses impacts related to visual resources. As discussed in the Plan Bay Area EIR, per the requirements set forth in PRC Section 21099, visual impacts would not be considered significant in transit priority areas if projects are located on an infill site and consist of residential, mixed-use residential, or an employment center. The proposed project meets the requirements of PRC Section 21099, and therefore Mitigation Measures 2.10-1, 2.10-3, 2.10-4, and 2.10-5 identified by the Plan Bay Area EIR would not be applicable.

4.1.3 Project-Specific Analysis

Impact AES-1 Have a substantial adverse effect on a scenic vista?

Impact Analysis

As described, the General Plan identifies San Bruno Mountain and the Coastline as natural scenic vistas within the City. As described, the General Plan identifies Guadalupe Canyon Parkway as a scenic corridor that provides scenic vistas, which is located approximately 0.25 mile from the project site. Guadalupe Canyon Parkway can provide views of the coastline and San Bruno Mountains depending on the direction of travel. Portions of the project site are visible from Guadalupe Canyon Parkway based on the topography of the area but are partially blocked by the existing topography and vegetation in the area. No other scenic corridors or vistas are located nearby. The project site is developed and characterized by the existing buildings, landscaping, as well as open space from the Bayshore Park, which provides open space and playgrounds for recreational use in the area. Mostly undeveloped hillsides are located to the south of the project site in the midground view against the backdrop of existing urban land uses. The proposed project would construct buildings ranging from one to four stories that would be approximately 60 feet in height. The height of the proposed buildings would be comparable to the existing buildings on the project site and nearby and would not block views of scenic vistas. The proposed structures would include architectural design features that would blend with the existing design elements of the surrounding area, in accordance with applicable General Plan and City Zoning Ordinance requirements. Furthermore, pursuant to CEQA Section 21099(d), the proposed project would result in no impact on aesthetics.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AES-2	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Impact Analysis

There are three eligible state scenic highways within the City; however, none are officially designated. These highways include State Route (SR) 35, SR 1, and Interstate 280 (I-280). Scenic potential along these corridors is related to the views of the coastline and San Bruno Mountain. The project site is located approximately 4.5 miles from SR 35, 2 miles from SR 1, and 2 miles from I-280. No portions of the project site or the surrounding project area are visible from these highways. The General Plan also identifies Guadalupe Canyon Parkway as a scenic corridor; however, the designated portions of this roadway are not directly adjacent to the project site. Therefore, the proposed project would not damage scenic resources within a state scenic highway, and no impact would occur. Furthermore, pursuant to CEQA Section 21099(d) the proposed project would result in no impact on aesthetics.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AES-3	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis

The project site is in an urbanized area, and therefore, this analysis focuses on whether the proposed project would conflict with applicable zoning and other regulations governing scenic quality.

As addressed in Section 2.0, Project Description, and Section 3.9, Land Use and Planning, following recommendation by the Planning Commission and subsequent approval by the City Council, the proposed project would be consistent with the General Plan and zoning ordinances related to architectural finishes. The project site is designated as High Density Residential (R-HD) and Public Park (PP). The designation applies to areas where the City intends to provide, through the Zoning Ordinance, regulatory incentives and/or requirements for developers to construct buildings that contain a vertical mix of uses. The introduction of the R-HD designation is intended to allow for residential intensification in the project area, both of which are well-served by public transportation, so that they may be transformed into more vibrant urban streets as identified during the Envision Daly City process and reduce economic blight. Using the development policies and building design requirements for R-HD as set forth by Title 24 and the City's Code, the proposed project has been designed as a combination of a variety of land uses, structures, and amenities that would also be aesthetically compatible with the surrounding area. Bayshore Park would be relocated to a different section of the project site. The proposed project includes different land use designations (R-HD and PP) and would include a transfer of these two land use designation from one portion of the project site to another, within the entirety of the site. As such, the proposed project would not conflict with applicable zoning or other regulations governing scenic quality, and impacts would be less than significant. Furthermore, pursuant to CEQA Section 21099(d) the proposed project would result in no impact on aesthetics.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AES-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact Analysis

The existing Midway Village currently contains lighting. The proposed project would expand lighting as part of the redevelopment, with the addition of new buildings, residents, landscaping, and lighting changes to Bayshore Park. Accordingly, exterior security lighting would be re-installed and expanded throughout the project site including on buildings, along pedestrian paths, in parking areas, and in the Bayshore Park area. This lighting would primarily be required for security and safety purposes, although it is anticipated that the proposed project would also include decorative and accent lighting for aesthetic and design reasons. Regardless of the intended purpose, the use of exterior lighting must comply with the City Code, which requires exterior lighting to be designed and installed in such a manner that the light source is shielded from view off the site unless required for necessary safety reasons. Further, the proposed project would be required to comply with the design review process outlined in the City Code, which requires that general architectural considerations, such as exterior lighting, are compatible with design and character of adjacent or neighboring properties and the minimization of light from lights and buildings.

As a result, any exterior lighting used on the project site would be shielded and located as to direct light away from adjacent uses and to avoid light spillover onto these uses. All exterior lighting used as part of the proposed project would comply with the provisions contained in both the City Code and the General Plan. Further, no podium lighting (such as lighting for stadiums or ball fields) would be required for the Bayshore Park area.

Additionally, proposed project construction would be subject to the requirements of the most recent California Building Code (CBC; California Code of Regulations [CCR] Title 24), including Title 24, Part 6 CCR. Compliance with the Title 24 lighting and energy requirements would ensure that light from the proposed project would not spill over to adjacent uses. Proposed project construction would be subject to the requirements of the CBC (CCR Title 24). Section 132 of Title 24, Part 6 of CCR regulates lighting characteristics such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off. The standards require that outdoor lighting be automatically controlled so that it is turned off during daytime hours and during other times when it is not needed. Luminaires with lamps larger than a specified wattage must be classified as cut-off so that the majority of the light is directed toward the ground. Therefore, with adherence to the above-referenced standards and requirements, proposed project impacts associated with light would be less than significant. Furthermore, pursuant to CEQA Section 21099(d) the proposed project would result in no impact on aesthetics.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

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4.2 AGRICULTURAL AND FORESTRY RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use?	☐	☐	☐	☒

4.2.1 Environmental Setting

The California Department of Conservation (DOC) administers the Farmland Mapping and Monitoring Program (FMMP), California's statewide agricultural land inventory. The FMMP database identifies the project site as "Urban and Built-up Land." Accordingly, there are no agricultural or forest resources on or adjoining the project site. The general area has been developed in various mixed urban uses for over 60 years. The City has not designated the project site or surrounding area as a forest or timberland resource zones, and there is no active timberland production in the general vicinity of the project site (DOC 2016).

The California Land Conservation Act (Government Code Section 51200 et seq.) of 1965, commonly known as the Williamson Act, provides a tax incentive for the voluntary enrollment of agricultural and open space lands in contracts between local government and landowners. A Farmland Security Zone is an area created within an agricultural preserve by a board of supervisors upon the request of a landowner or group of landowners. There are no agricultural lands on or adjoining the project site; therefore, no Williamson Act or Farmland Security Zone contracts are associated with the project site.

4.2.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

The City does not contain any agriculture or forestry resources within its limits; therefore, there are no mitigation measures from the General Plan EIR that would apply to the proposed project.

Plan Bay Area EIR Summary

The Plan Bay Area EIR determined that land use and transportation projects have the potential to convert agricultural and open space lands to urban uses. Conversion could be substantial within a county or local municipality depending on the location. The City does not contain any agriculture or forestry resources within its limits; therefore, there are no mitigation measures from the Plan Bay Area EIR that would apply to the proposed project.

4.2.3 Project-Specific Analysis

Impact AG-1 Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Impact Analysis

The proposed project is located in a highly urbanized portion of the City. There are no agricultural resources on or adjoining the project site. The FMMP database identifies the area as “Urban and Built-up Land” (DOC 2016). Additionally, the General Plan does not identify any agricultural resources within the vicinity of the project site (City of Daly City 2013). As such, the proposed project would have no impact on agricultural land.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AG-2 Conflict with Existing Zoning for Agricultural Use or a Williamson Act Contract?

Impact Analysis

There are no agricultural resources on or adjoining the project site. The General Plan does not identify any agricultural resources or Williamson Act lands within the vicinity of the project site. The proposed project would result in no impact with respect to agricultural resources.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AG-3 Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Impact Analysis

No forest resources are located on or adjoining the project site. The FMMP database identifies the area as “Urban and Built-up Land” (DOC 2016). The General Plan does not identify any forestry resources, timberland resource zones, or active timberland production in the general vicinity of the project site. As such, the proposed project would have no impact on forestland or forestry resources.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AG-4 Result in the Loss of Forestland or Conversion of Forestland to Non-Forest Use?

Impact Analysis

The General Plan does not identify any forestry resources, timberland resource zones, or active timberland production in the general vicinity of the project site. As such, the proposed project would not result in the loss of forestland or conversion of forestland to non-forest use and would have no impact on forestland or forestry resources.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AG-5 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use?

Impact Analysis

There are no agricultural or forest resources on or adjoining the project site. The FMMP database identifies the area as “Urban and Built-up Land” (DOC 2016). There are no forest resources or timberland resource zones in the City or the surrounding area, and there is no active timberland production in the general vicinity of the project site. Additionally, the General Plan does not identify any agriculture or forestry resources within the vicinity of the project site. As such, the proposed project would have no impact on agricultural land, forestland, or forestry resources.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

4.3 AIR QUALITY

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard?	☐	☐	☒	☐
c) Expose Sensitive Receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.1 Environmental Setting

The City of Daly City is in San Mateo County, which is within the boundaries of the San Francisco Bay Area Air Basin (SFBAAB) and is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD) and CARB. The Federal Clean Air Act (FCAA) establishes the framework for modern air pollution control. The FCAA, enacted in 1970 and amended in 1990, directs the U.S. Environmental Protection Agency (EPA) to establish ambient air quality standards. These standards are divided into primary and secondary standards. The former are set to protect human health, and the latter are set to protect environmental values such as plant and animal life.

Toxic Air Contaminants

Toxic air contaminants (TACs) are air contaminants not included in the California Ambient Air Quality Standards (CAAQS) but are considered hazardous to human health. TACs are defined by CARB as those pollutants that "may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health."

Generally, the health effects associated with TACs are assessed locally rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage; TACs can also cause short-term acute effects such as eye watering, respiratory irritation, running nose, throat pain, and headaches. For evaluation purposes, TACs are separated into carcinogens and non-carcinogens. Carcinogens are assumed to have no safe threshold below which health impacts would not occur, and the cancer risk is expressed as excess cancer cases per one million exposed individuals (typically over a lifetime of exposure).

Diesel Particulate Matter

Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases: gas and particle. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and PAHs. The particle phase also has many different types of particles that can be classified by size or composition. The size of diesel particulates that are of greatest health concern are those that are in the categories of fine and ultra-fine particles. The composition of these fine and ultra-fine particles may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals, and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines, such as the on-road diesel engines of trucks, buses, and cars, and off-road diesel engines that include locomotives, marine vessels, and heavy-duty equipment (CARB 2019a).

Asbestos

Asbestos is a fibrous mineral that both naturally occurs in ultramafic rock (a rock type commonly found in California) and is used as a processed component of building materials. Because asbestos has been proven to cause a number of disabling and fatal diseases, such as asbestosis and lung cancer, it is strictly regulated either based on its natural widespread occurrence or in its use as a building material. In the initial Asbestos National Emission Standards for Hazardous Air Pollutants rule promulgated in 1973, a distinction was made between building materials that would readily release asbestos fibers when damaged or disturbed (friable) and those materials that were unlikely to result in significant fiber release (non-friable). The EPA has since determined that, when severely damaged, otherwise non-friable materials can release significant amounts of asbestos fibers. Asbestos has been banned from many building materials under the Toxic Substances Control Act, FCAA, and the Consumer Product Safety Act. Naturally occurring asbestos (NOA) is known to occur in many parts of California and is commonly associated with ultramafic or serpentinite rock. According to the U.S. Geological Survey (USGS) Geologic Map, the proposed project is not located in an area known to contain ultramafic or serpentinite rock (USGS 2011).

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. Existing sensitive receptors in the vicinity of the project site include Bayshore Elementary School, which is located approximately 320 feet north of the northern most portion of the project site, as well as residences west of the project site.

Air Quality Standards

According to CARB, “Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop plans, known as State Implementation Plans (SIPs). A SIP is a prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The 1990 amendments to FCAA set deadlines for attainment based on the severity of an area's air pollution problem” (CARB 2019b).

The SIP for the State of California is administered by the CARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California’s SIP incorporates individual federal attainment plans for each regional air district. SIPs are prepared by the regional air district and sent to CARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

The CARB also administers CAAQS for the 10 air pollutants designated in the California Clean Air Act. The 10 state air pollutants are the six federal standards listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The federal ambient air quality standards and CAAQS are summarized in Table 4.3-1.

Table 4.3-1: California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]	National Standards[2]	
		Concentration	Primary[3]	Secondary[4]
Ozone[5]	1 Hour	0.09 ppm (180 μg/m^3)	—	Same as Primary Standard
	8 Hour	0.070 ppm (137 μg/m^3)	0.070 ppm (137 μg/m^3)	
Respirable Particulate Matter[6]	24 Hour	50 μg/m^3	150 μg/m3	Same as Primary Standard
	Annual Arithmetic Mean	20 μg/m^3	—	
Fine Particulate Matter[6]	24 Hour	—	35 μg/m^3	Same as Primary Standard
	Annual Arithmetic Mean	12 μg/m^3	12 μg/m^3	
Carbon Monoxide	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	—
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	—
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	—	—
Nitrogen Dioxide	1 Hour	0.18 ppm (339 μg/m^3)	100 ppb (188 μg/m^3)	—
	Annual Arithmetic Mean	0.030 ppm (57 μg/m^3)	0.053 ppm (100 μg/m^3)	Same as Primary Standard
Sulfur Dioxide[7]	1 Hour	0.25 ppm (655 μg/m^3)	75 ppb (196 μg/m^3)	—
	3 Hour	—	—	0.5 ppm (1300 μg/m^3)
	24 Hour	0.04 ppm (105 μg/m^3)	0.14 ppm (for certain areas)	—
	Annual Arithmetic Mean	—	0.030 ppm (for certain areas)	—
Lead[8, 9]	30-Day Average	1.5 μg/m^3	—	—
	Calendar Quarter	—	1.5 μg/m^3	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 μg/m^3	
Visibility-Reducing Particles[10]	8 Hour	See Footnote 1	No National Standards	
Sulfates	24 Hour	25 μg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m^3)		
Vinyl Chloride[8]	24 Hour	0.01 ppm (26 μg/m^3)		

Notes:

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
4. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
5. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
6. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/m^3 to 12.0 μg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/m^3, as was the annual secondary standard of 15 μg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
7. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
8. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
9. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
10. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

μg/m^3 = micrograms per cubic meter

CARB = California Air Resources Board

mg/m^3 = milligrams per cubic meter

$PM_{2.5}$ = particulate matter 2.5 microns in diameter or less

PM_{10} = particulate matter 10 microns in diameter or less

ppb = parts per billion

ppm = parts per million

SO_2 = sulfur dioxide

Source: CARB 2019a

As summarized in Table 4.3-2, SFBAAB and San Mateo County are currently designated as nonattainment areas for state ozone, particulate matter 2.5 microns in diameter or less ($PM_{2.5}$), and particulate matter 10 microns in diameter or less (PM_{10}) standards, as well as federal ozone and $PM_{2.5}$ standards, but are listed as unclassified under national PM_{10}. The standards for carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead are being met in the Bay Area. Because SFBAAB is nonattainment for the federal and state ozone standards, BAAQMD has prepared an ozone attainment demonstration plan to satisfy the federal 1-hour zone planning requirement and a clean air plan to satisfy the state's 1-hour ozone planning requirement. The 2017 Clean Air Plan, which was adopted in April 2017, builds from and incorporates components of the 2010 Clean Air Plan and is designed to provide integrated control strategies to reduce ozone, particulate matter (PM), TACs, and GHGs.

Table 4.3-2: San Mateo County Area Designations for State and National Ambient Air Quality

Criteria Pollutants	State Designation	National Designation
Ozone	Non-attainment	Non-attainment
PM_{10}	Non-attainment	Unclassified
$PM_{2.5}$	Non-attainment	Non-attainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	—
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	—
Visibility Reducing Particles	Unclassified	—

Notes:
$PM_{2.5}$ = particulate matter 2.5 microns in diameter or less
PM_{10} = particulate matter 10 microns in diameter or less
Source: CARB 2018a

Nearly all development projects in the Bay Area have the potential to generate air pollutants that may increase the difficultly of attaining federal ambient air quality standards and CAAQS. Therefore, for most projects, evaluation of air quality impacts is required to comply with CEQA. To help public agencies evaluate air quality impacts, BAAQMD has developed the CEQA Air Quality Guidelines. BAAQMD's guide includes recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors. The BAAQMD's guide also includes screening criteria for localized CO emissions and thresholds for new stationary sources of TACs (BAAQMD 2017).

Table 4.3-3 presents the thresholds of significance for reactive organic gases (ROG), nitrogen oxides (NOX), construction-related particulate matter, operational CO, and carbon dioxide equivalent (CO2e), which are based on substantial evidence, as presented in Appendix D of the BAAQMD's *2017 CEQA Air Quality Guidelines and 2009 Revised Draft Options and Justification Report, CEQA Thresholds of Significance*. The BAAQMD's CEQA Thresholds of Significance were developed as a result of substantial supreme court decisions, such as the Sierra Club v. County of Fresno (226 Cal. App. 4th 704) court case.

Table 4.3-3: 2017 BAAQMD Proposed Project-Level Air Quality CEQA Thresholds of Significance

Criteria Pollutants	Construction-Related	Operational-Related	
Criteria Air Pollutants and Precursors (regional)	**Average Daily Emissions (lbs/day)**	**Average Daily Emissions (lbs/day)**	**Maximum Annual Emissions (tpy)**
ROG	54	54	10
NO_x	54	54	10
PM_{10} (exhaust)	82	82	15
$PM_{2.5}$ (exhaust)	54	54	10
$PM_{10}/PM_{2.5}$ (fugitive dust)	Best Management Practices	None	

Criteria Pollutants	Construction-Related	Operational-Related
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)
GHGs (projects other than stationary sources)	None	Compliance with Qualified GHG Reduction Strategy OR 1,100 $MTCO_2e$/yr OR 4.6 $MTCO_2e$/SP/yr (residents + employees)

Notes:
CO = carbon monoxide
GHG = greenhouse gas
lbs/day= pounds per day
$MTCO_2e$/yr= metric tons of carbon dioxide equivalent per year
$MTCO_2e$/SP/yr= metric tons of carbon dioxide equivalent per service population per year
NO_X = nitrogen oxide
$PM_{2.5}$ = particulate matter 2.5 microns in diameter or less
PM_{10} = particulate matter 10 microns in diameter or less
ppm = parts per million
ROG = reactive organic gas
tpy= trips per year
Source: BAAQMD 2017

In its June 2009 *Thresholds of Significance Justification Report*, *CEQA Thresholds of Significance,* BAAQMD provides evidence to support the development and applicability of its thresholds of significance for project-generated emissions of criteria pollutants and precursors, which may be used at the discretion of a lead agency overseeing the environmental review of projects located within the San Francisco Bay Area Air Basin. As stated in the BAAQMD Justification Report, the “formulation of a standard of significance requires the lead agency to make a policy judgement about where the line should be drawn to distinguish adverse impacts it considers significant from those that are not deemed significant. This judgment must; however, be based on scientific information and other factual data to the extent possible” (BAAQMD 2009). Notably, CEQA-related air quality thresholds of significance are tied to achieving or maintaining attainment designation with the national air quality standards and state air quality standards, which are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective of human health.

BAAQMD has established rules and regulations to attain and maintain federal air quality standards and CAAQS. The rules and regulations that apply to this proposed project include but are not limited to the following (BAAQMD 2019):

Regulation 2, Rule 2

New Source Review. This rule requires any new source resulting in an increase of any criteria pollutant to be evaluated for adherence to best available control technology. For compression internal combustion engines, best available control technology requires that the generator be fired on “California Diesel Fuel” (fuel oil with a sulfur content less than 0.05% by weight and less than 20% by volume of aromatic hydrocarbons). All stationary internal combustion engines larger than 50 horsepower must obtain a Permit to Operate. If the engine is diesel-fueled, then it must also comply with the District-administered Statewide Air Toxics Control Measure for Stationary Diesel Engines.

Regulation 2, Rule 5

New Source Review of Toxic Air Contaminants. This rule applies to preconstruction review of new and modified sources of toxic air contaminants, contains project health risk limits, and requires Toxics Best Available Control Technology.

Regulation 8, Rule 3

Architectural Coatings. This rule governs the manufacture, distribution, and sale of architectural coatings and limits the ROG content in paints and paint solvents. Although this rule does not directly apply to the proposed project, it does dictate the ROG content of paint available for use during the construction.

Regulation 8, Rule 15

Emulsified and Liquid Asphalts. Although this rule does not directly apply to the proposed project, it does dictate the ROG content of asphalt available for use during the construction through regulating the sale and use of asphalt and limits the ROG content in asphalt.

Formaldehyde

The Composite Wood Products Regulation (17 CCR 93120 et seq.) is a CARB regulation that reduces public exposure to formaldehyde through the establishment of strict emission performance standards on particleboard, medium density fiberboard and hardwood plywood (collectively known as composite wood products). The regulation, adopted in 2007, established two phases of emissions standards: an initial Phase I, and later, a more stringent Phase 2 that requires all finished goods, such as flooring, destined for sale or use in California to be made using complying composite wood products. As of January 2014, only Phase 2 products are legal for sale in California.

On December 12, 2016, EPA published in the Federal Register a final rule to reduce exposure to formaldehyde emissions from certain wood products produced domestically or imported into the United States. EPA worked with CARB to help ensure the final national rule was consistent with California's requirements for similar composite wood products.

CALGREEN (CCR Title 24, Part 11) includes mandatory and voluntary measures for building materials, including formaldehyde emissions limits consistent with CARB's Composite Wood Products Regulation. (See CALGREEN Section 5.504.5 in the mandatory requirements for non-residential development).

4.3.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.2 of the General Plan Draft EIR evaluated the potential impacts of future development on ambient air quality and the potential for exposure of people, including sensitive receptors, to unhealthy pollutant concentrations. The General Plan EIR determined implementation of General Plan policies would reduce potential air quality impacts to less than significant levels.

The following General Plan policies would be applicable to the proposed project:

Policy RME-5: Assess projected air emissions from new development and associated construction and demolition activities in conformance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, and relative to state and federal standards.

Policy RME-6: Minimize exposure of residents to objectionable smoke and odors by proactively regulating potential sources.

Plan Bay Area EIR Summary

The following summarizes the potential air quality impacts discussed in Chapter 2.2 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.2-1: Applicable Air Quality Plan. The Plan Bay Area EIR analyzed the potential impact related to conflicting with or obstructing implementation of an applicable air quality plan, which includes the BAAQMD 2017 Clean Air Plan and determined there would be a less than significant impact. No mitigation measures were identified.

Impact 2.2-2: Net Increase in Construction-Related Emissions. The Plan Bay Area EIR analyzed the potential impact related to substantial increase in construction-related emissions and determined with implementation of Plan Bay Area EIR Mitigation Measures 2.2-2, the impact would be less than significant (Refer to Impact AIR-1 in Section 4.4.3, Project-Specific Analysis). Projects using CEQA streamlining provisions of SB 375 must apply Mitigation Measure 2.2-2 to address site-specific conditions.

PBA EIR MM 2.2-2: *When screening levels are exceeded (refer to Table 2.2-8 of PBA EIR), implementing agencies and/or project sponsors shall implement measures, where applicable, feasible, and necessary based on project- and site-specific considerations, that include, but are not limited to the following:*

Construction Best Practices for Exhaust

- *The applicant/general contractor for the project shall submit a list of all off-road equipment greater than 25 horsepower (hp) that would be operated for more than 20 hours over the entire duration of project construction, including equipment from subcontractors, to BAAQMD for review and certification. The list shall include all information necessary to ensure the equipment meets the following requirement:*
- *1) Be zero emissions OR 2) have engines that meet or exceed either EPA or ARB Tier 2 off-road emission standards; and 3) have engines that are retrofitted with an ARB Level 3 Verified Diesel Emissions Control Strategy (VDECS), if one is available for the equipment being used. Equipment with engines that meet Tier 4 Interim or Tier 4 Final emission standards automatically meet this requirement; therefore, a VDECS would not be required.*
- *Idling time of diesel powered construction equipment and trucks shall be limited to no more than two minutes. Clear signage of this idling restriction shall be provided for construction workers at all access points.*
- *All construction equipment shall be maintained and properly tuned in accordance with the manufacturers' specifications.*
- *Portable diesel generators shall be prohibited. Grid power electricity should be used to provide power at construction sites; or propane and natural gas generators may be used when grid power electricity is not feasible.*

Construction Best Practices for Dust

- *All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. For projects over five acres in size, soil moisture should be maintained at a minimum of 12 percent. Moisture content can be verified by lab samples or a moisture probe.*
- *All haul trucks transporting soil, sand, or other loose material off-site shall be covered.*
- *All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. Dry power sweeping should only be performed in conjunction with thorough watering of the subject roads.*
- *All vehicle speeds on unpaved roads and surfaces shall be limited to 15 mph.*
- *All roadway, driveway, and sidewalk paving shall be completed as soon as possible. Building pads shall be paved as soon as possible after grading.*
- *All construction sites shall provide a posted sign visible to the public with the telephone number and person to contact at the Lead Agency regarding dust complaints. The recommended response time for corrective action shall be within 48 hours. BAAQMD's Complaint Line (1-800-334-6367) shall also be included on posted signs to ensure compliance with applicable regulations.*
- *All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.*
- *Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.*
- *Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.*
- *The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.*
- *All trucks and equipment, including their tires, shall be washed off before leaving the site.*
- *Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.*
- *Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.*

These BMPs are consistent with recommendations in BAAQMD's CEQA guidelines and Planning Healthy Places [BAAQMD 2017]. Applicable mitigation measures shall be required at the time grading permits are issued.

Impact 2.2-3: Net Increase in Emissions of Criteria Pollutants. The Plan Bay Area EIR analyzed the potential impacts related to a net increase in emissions of criteria pollutants compared to existing conditions. The Plan Bay

Area EIR determined that implementation of the proposed Plan could result in a net decrease in ROG, NO_x, and CO emissions; however, it could also result in a net increase of PM emissions. The Plan would result in a net increase of criteria pollutants from mobile and area-sources compared to existing conditions. The Plan Bay Area EIR identified Mitigation Measures 2.2-3(a) through 2.2-3(d) to reduce PM emissions from mobile and area-sources. The MTC/ABAG cannot require local implementing agencies to adopt some or all of Mitigation Measures 2.2-3(a) through 2.2-3(d); therefore, for the program-level review, this impact was determined to be significant and unavoidable. Although the proposed project would result in an increase of criteria pollutants, these Mitigation Measures are not applicable to the proposed project, and project-specific mitigation has been included in the impact analysis.

Impact 2.2-4: Cumulative Net Increase in Emissions of Criteria Pollutants. The Plan Bay Area EIR analyzed the localized net increase in TACs or $PM_{2.5}$ concentrations at sensitive receptors and determined that the impact would be less than significant. No mitigation measures were identified.

Impact 2.2-5: Sensitive Receptors Exposure to TACs and $PM_{2.5}$ Concentrations in Transit Priority Areas. The Plan Bay Area EIR analyzed the localized net increase TACs or $PM_{2.5}$ concentrations in transit priority areas that would result in a cancer risk level greater than 100 in a million and determined that, with the implementation of Plan Bay Area Mitigation Measure 2.2-5(a), the impact would be less than significant. According to Figure 2.2-10 in the Plan Bay Area EIR, the proposed project is not located within a TAC risk area. Therefore, Mitigation Measure 2.2-5(a) would not be applicable to the proposed project.

Impact 2.2-6: Increase of TACs and/or $PM_{2.5}$ Emissions in Disproportionally Impacted Communities. Implementation of the Plan Bay Area could result in changes in TAC and/or $PM_{2.5}$ exposure levels that would disproportionally impact minority and low-income communities. These impacts would vary across counties. The Plan Bay Area EIR identified Mitigation Measures 2.2-6(a) through 2.2-6(d); however, the impact would remain significant and unavoidable. These Mitigation Measures are plan-level specific and are not applicable to the proposed project.

Impact 2.2-7: Substantial Odors. As discussed in the Plan Bay Area EIR, objectionable odors associated with construction of the proposed Plan would be regulated through BAAQMD regulations, or would otherwise be temporary and be subject to local zoning ordinances as well as local air district permitting processes. Therefore, the Plan Bay Area EIR determined that impacts would be less than significant. No mitigation measures were identified.

4.3.3 Project-Specific Analysis

As of August 5, 2013, the BAAQMD requires the use of the California Emissions Estimator Model (CalEEMod) for CEQA-related air quality and GHG analyses. To assess potential air quality and GHG emissions generated from the proposed project, CalEEMod was run using estimations of proposed project construction activities and predicted future operational parameters (Appendix D). The model was run using the following assumptions/project details:

- Construction would begin in 2021 and it is estimated that all phases would be completed by 2026 (6-years of construction anticipated). Once constructed, the proposed project would generate approximately 3,106 daily trips.
- Solar thermal or photovoltaic panels would be included as a project design feature. The amount of onsite renewable energy is unknown; therefore, no reductions for onsite renewable energy were quantified. In addition, electricity emissions estimates are only relevant to GHG emissions.
- As a project design feature, the proposed project would be built to achieve energy efficiency improvements that would exceed 2016 Title 24 standards by at least 10 percent.

- The proposed project would be required to comply with existing regulations. For instance, compliance with BAAQMD Regulation 6, Rule 3, Wood-burning Devices, would be required by existing regulations.
- Existing land uses occupying the site would be removed as part of the proposed project. Existing land uses, as represented to estimate existing emissions, are described below:
  - o The Bayshore Child-Care Center serving 109 students and 150 low-rise apartment units.
- The results of the CalEEMod simulation are enumerated in Tables 4.3-4 and 4.3-5 form the basis for the results analysis.

The 2017 BAAQMD adopted significance thresholds for construction-related and operational ROG, NO_X, PM, CO, and CO_2e, these thresholds are included in Table 4.3-3.

Impact AIR-1 Conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis

The BAAQMD's 2017 Clean Air Plan is the regional air quality plan (AQP) for SFBAAB. It identifies strategies to bring regional emissions into compliance with federal and state air quality standards. The BAAQMD's Guidance provides two criteria for determining if a plan-level project is consistent with the current AQP control measures. However, the BAAQMD does not provide a threshold of significance for project-level consistency analysis. Therefore, the following criteria will be used for determining a project's consistency with the AQP.

- Criterion 1: Does the project support the primary goals of the AQP?
- Criterion 2: Does the project include applicable control measures from the AQP?
- Criterion 3: Does the project disrupt or hinder implementation of any AQP control measures?

Criterion 1

The primary goals of the 2017 Clean Air Plan, the current AQP to date, are as follows:

- Attain air quality standards.
- Reduce population exposure to unhealthy air and protecting public health in the Bay Area.
- Reduce GHG emissions and protect the climate.

The proposed project supports the primary goals of the AQP by providing a mixed-use, pedestrian-oriented development within an existing urbanized community, adjacent to alternative transit infrastructure, jobs, housing, and community services.

Additionally, the proposed project's air quality modeling indicates that all emissions of criteria pollutants would be below the BAAQMD 2017 significance thresholds as shown in Table 4.3-4 and Table 4.3-5; thus, the proposed project would facilitate achievement of the primary goals of the AQP.

Table 4.3-4: Construction Emissions (Unmitigated Average Daily Rate)

Parameter	Air Pollutants			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Total Emissions (tons)	7.37	10.25	0.41	0.38
Total Emissions (pounds)	14,740	20,500	820	760
Average Daily Emissions (pounds/day)[1]	18.11	25.18	1.01	0.93
Significance Threshold (pounds/day)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	No	No	No	No

Notes:

1. Calculated by dividing the total number of pounds by the total 814 working days of construction for the entire construction period.

Calculations use rounded totals.

lbs = pounds

NO_X = oxides of nitrogen

PM_{10} = particulate matter 10 microns in diameter

$PM_{2.5}$ = particulate matter 2.5 microns in diameter

ROG = reactive organic gases

Source of thresholds: BAAQMD 2017

Source of emissions: CalEEMod Output (see Appendix D).

Table 4.3-5: Annual Operational Emissions (Unmitigated)

Emissions Source	Tons per Year			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Area	4.21	0.06	0.02	0.02
Energy	0.06	0.49	0.04	0.04
Mobile (Motor Vehicles)	0.86	2.39	3.66	1.00
Total Project Annual Emissions	5.12	2.94	3.72	1.06
Existing Emissions	1.11	0.91	1.11	0.32
Net Project Annual Emissions	4.01	2.03	2.61	0.75
Significance Threshold (tons per year)	**10**	**10**	**15**	**10**
Exceeds Significance Threshold?	No	No	No	No

Notes:

NO_X = oxides of nitrogen

$PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

PM_{10} = particulate matter 10 microns or less in diameter
ROG = reactive organic gases
Source: CalEEMod output (see Appendix D).

Table 4.3-6: Daily Operational Emissions (Unmitigated)

Emissions Source	Pounds per Day			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Net Project Annual Emissions (tons/year)	4.01	2.03	2.61	0.75
Net Project Annual Emissions (pounds/year)	8,023	4,064	5,226	1,495
Significance Threshold	54	54	82	54
Exceeds Significance Threshold?	No	No	No	No

Notes:
NO_X = oxides of nitrogen
$PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
PM_{10} = particulate matter 10 microns or less in diameter
ROG = reactive organic gases
Source: CalEEMod output (see Appendix D).

<u>Criterion 2</u>

The 2017 Clean Air Plan contains 85 control measures aimed at reducing air pollution in the Bay Area. Along with the traditional stationary, area, mobile source, and transportation control measures, the 2017 Clean Air Plan contains a number of new control measures designed to protect the climate and promote mixed-use, compact development to reduce vehicle emissions and exposure to pollutants from stationary and mobile sources.

The project site is currently served and would continue to be served by MUNI Route 9 with a stop approximately 0.30 mile north of the proposed project; by SamTrans bus service via Routes 24 and 29, with the closest stop located approximately 0.25 mile from the proposed project. The Daly City Bayshore Shuttle operated by SamTrans provides free shuttle service between the Daly City BART station and Bayshore Boulevard/Geneva Avenue, with a connection to the Balboa BART station. The shuttle has a stop immediately fronting the proposed project. The Caltrain station nearest to the project site is the Bayshore Station, which is located approximately 1.5 miles from the project site on Tunnel Avenue at the border of Brisbane and San Francisco. The nearest BART station is the Balboa BART station, located approximately 2.25 miles northwest of the project site. Trains run on approximately 15-minute headways during commute hours. The proposed project would also provide bicycle parking spaces and interior bicycle storage within individual buildings which does not currently exist in the Midway Village area. In accordance with the Daly City General Plan, the proposed project would incorporate strategies and improvements that would commit to using transportation demand management strategies and actions decreasing the dependency on single-occupant automobiles and increase transit use, ridesharing, and walking. The proposed project would also provide bicycle parking spaces and interior bicycle storage within individual buildings which does not currently exist in the Midway Village area. In accordance with the Daly City General Plan, the proposed project would incorporate strategies and improvements that would commit to using transportation demand management strategies and actions decreasing the dependency on single-occupant automobiles and increase transit use, ridesharing, and walking.

Relative to the energy and climate measures contained in the 2017 Clean Air Plan, the proposed project applicant would be required to conform to the energy efficiency requirements of the California Building Standards Code, also known as Title 24. The Building Efficiency Standards were adopted, in part, to meet an Executive Order in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards. Title 24 has been recently updated, including certain revisions to the energy usage components of the CALGreen Code. The Title 24 standards are updated on an approximately 3-year cycle to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 Standards are 7 percent more efficient than 2016 Standards for residential construction; however, once rooftop solar electricity generation is factored in, 2019 standards will use approximately 53 percent less energy than 2016 standards. Nonresidential buildings will use approximately 30 percent less energy. The proposed project would be required to comply with the then-current version of the CALGreen Code.

In summary, the proposed project would meet all of the energy and climate measures contained in the 2017 Clean Air Plan through project design features and implementation of Mitigation Measure AIR-1 (PBA EIR MM 2.2-2).

Criterion 3

The proposed project would not preclude extension of a transit line or bike path, propose excessive parking beyond parking requirements, or otherwise create an impediment or disruption to implementation of any AQP control measures. Additionally, the project site would include perimeter paths which would residents and visitors to access San Mateo County transit stops adjacent to the site.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure AIR-1 (PBA EIR MM 2.2-2) is required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact AIR-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard?

Impact Analysis

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants, including ozone and PM, is a result of past and present development, and thus, cumulative impacts related to these pollutants could be considered cumulatively significant. Future attainment of standards is a function of successful implementation of BAAQMD attainment plans. Consequently, the BAAQMD's approach to cumulative thresholds of significance is relevant to whether a project's individual emissions would result in a cumulatively considerable contribution to the Bay Area existing cumulative impacts related to air quality conditions. According to the BAAQMD CEQA Guidelines, if a project's emissions would be less than BAAQMD thresholds, the project would not be expected to result in a cumulatively considerable contribution to a significant cumulative impact. However, exceedance of the project-level thresholds would not necessarily constitute a significant cumulative impact.

As discussed above, the proposed project emissions would be less than the 2017 recommended BAAQMD thresholds. In addition, the proposed project would be required to comply with all applicable BAAQMD rules and regulations. Therefore, the proposed project's individual emissions would not be expected to result in a cumulatively considerable contribution to a significant cumulative impact, and impacts would be considered to be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact AIR-3 Expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis

This discussion addresses whether the proposed project would expose sensitive receptors to construction-generated fugitive dust (PM_{10}), NOA, construction-generated DPM, operational related TACs, or operational CO hotspots. According to BAAQMD, some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. Existing sensitive receptors in the vicinity of the project site include Bayshore Elementary School, which is located approximately 320 feet north of the northernmost portion of the project site, the existing day care facility, and residences west of the project site. As the proposed project would be built out in phases, the residences that are completed and occupied would also become sensitive receptors.

Fugitive Dust PM_{10}

Fugitive dust (PM_{10}) would be generated from site grading and other earth-moving activities. Most of this fugitive dust would remain localized and would be deposited near the project site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from the project site. The project would implement Mitigation Measure AIR-1 (PBA EIR MM 2.2-2) requiring fugitive dust control measures that are consistent with best management practices (BMPs) established by the BAAQMD to reduce the proposed project's construction-generated fugitive dust impacts to a less than significant level.

In addition, due to the potentially contaminated soils on the project site from previous grading and capping activities, it is possible that further contaminated soils could be encountered during demolition and grading activities, particularly in areas that currently have existing structures that would be demolished. Specifically, under Buildings A, A2, and B2, a passive Vapor Barrier would be required to protect against potentially contaminated soils in these areas.

Naturally Occurring Asbestos

Construction in areas of rock formations that contain NOA could release asbestos to the air and pose a health hazard. BAAQMD enforces CARB's air toxic control measures at sites that contain ultramafic rock. The air toxic control measures for construction, grading, quarrying and surface mining operations were signed into state law on July 22, 2002, and became effective in SFBAAB in November 2002. The purpose of this regulation is to reduce public exposure to NOA. A review of the map with areas more likely to have rock formations containing NOA in California indicates that there is no asbestos in the immediate project area (USGS 2011). Therefore, it can be reasonably concluded that the project would not expose sensitive receptors to NOA. Impacts would be less than significant.

Diesel Particulate Matter

A Health Risk Assessment (HRA) was prepared for the project to assess potential criteria pollutant and health impacts that would result from construction of the proposed project, consistent with guidelines and methodologies from BAAQMD, CARB, OEHHA, and EPA (Appendix D). The HRA evaluated the estimated excess lifetime cancer risk and $PM_{2.5}$ concentrations associated with diesel exhaust that would be emitted by onsite construction activities and diesel and gasoline exhaust emitted from vehicles associated with trips generated during construction.

Health risks were estimated for sensitive receptors located with 1,000 feet of the project boundary. A sensitive receptor is defined by the BAAQMD as, "Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas."

The HRA-evaluated DPM (represented as exhaust $PM_{2.5}$) and $PM_{2.5}$ (exhaust $PM_{2.5}$ and fugitive $PM_{2.5}$) emissions generated during construction of the proposed project and the related health risk impacts for sensitive receptors located within 1,000 feet of the project boundary. According to the BAAQMD, a project would result in a significant impact if it would individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 10.0 in one million, an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient $PM_{2.5}$ increase greater than 0.3 micrograms per liter ($\mu g/m^3$).

The project site is located within 1,000 feet of existing and planned sensitive receptors, including existing and planned onsite sensitive receptors, that could be exposed to diesel emission exhaust during the phased construction period. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to concentrations at the receptor locations of interest. The impacts were analyzed for seven scenarios based on receptor locations. Scenario 1 analyzed impacts from all phases of construction at existing and planned offsite sensitive receptors within approximately 1,000 feet of the project boundary (Figure 4.3-1). The other six scenarios, which are summarized in Table 4.3-7, analyze the onsite receptors at existing and proposed locations of sensitive receptors.

Table 4.3-7: Summary of Each Scenario Analyzed

Scenario	Description of Scenario
Scenario 1: All Offsite Receptors	All Offsite Receptors: Exposed to Phases 1+2+3+4 Demolition and Phases 1+2+3+4 Construction
Scenario 2: Existing Phase 2 Receptors	Existing Phase 2 Receptors: Exposed to Phase 1 Demolition and Phase 1 Construction

Scenario	Description of Scenario
Scenario 3: Existing Phase 3 Receptors	Existing Phase 3 Receptors: Exposed to Phases 1+2 Demolition and Phases 1+2 Construction
Scenario 4: Existing Phase 4 Receptors	Existing Phase 4 Receptors: Exposed to Phases 1+2+3 Demolition and Phases 1+2+3 Construction
Scenario 5: New Phase 1 Receptors	New Phase 1 Receptors: Exposed to Phases 2+3+4 Demolition and Phases 2+3+4 Construction
Scenario 6: New Phase 2 Receptors	New Phase 2 Receptors: Exposed to Phases 3+4 Demolition and Phases 3+4 Construction
Scenario 7: New Phase 3 Receptors	New Phase 3 Receptors: Exposed to Phases 4 Demolition and Phases 4 Construction

Source: Stantec 2020, Appendix D.

The construction DPM emissions were assumed to be generated within the project area being constructed in each phase. Because the demolition and construction phasing areas differ, emissions from demolition activities were assumed to be generated with the demolition phasing areas. The demolition phasing areas are shown in Figure 2.3-4, while the construction phasing areas are shown in Figure 2.3-5. Construction was assumed to occur on a schedule of 8 hours per day and 5 days per week.

Table 4.3-8 presents a summary of the project's construction cancer risk, chronic non-cancer hazard, and $PM_{2.5}$ concentration impacts at the Maximum Impacted Receptor (MIR) prior to the application of any equipment mitigation for each scenario analyzed. Annual $PM_{2.5}$ emissions were estimated assuming implementation of Mitigation Measure AIR-1 (PBA EIR 2.2-2).

Table 4.3-8: Estimated Health Risks and Hazards during Project Construction—Unmitigated

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Scenario 1: All Offsite Receptors			
Risks and Hazards at the MIR: Infant[1]	62.10	0.07791	0.5506
Risks and Hazards at the MIR: Child[1]	31.24	0.07791	0.5506
Risks and Hazards at the MIR: Adult[1]	3.47	0.07791	0.5506
Scenario 2: Existing Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	49.65	0.09340	0.5911
Risks and Hazards at the MIR: Child[1]	11.21	0.09340	0.5911
Risks and Hazards at the MIR: Adult[1]	1.25	0.09340	0.5911

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Scenario 3: Existing Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	54.35	0.06819	0.8452
Risks and Hazards at the MIR: Child[1]	27.34	0.06819	0.8452
Risks and Hazards at the MIR: Adult[1]	3.04	0.06819	0.8452
Scenario 4: Existing Phase 4 Receptors			
Risks and Hazards at the MIR: Infant[1]	91.57	0.11489	0.4904
Risks and Hazards at the MIR: Child[1]	46.07	0.11489	0.4904
Risks and Hazards at the MIR: Adult[1]	5.11	0.11489	0.4904
Scenario 5: New Phase 1 Receptors			
Risks and Hazards at the MIR: Infant[1]	106.28	0.09522	0.6683
Risks and Hazards at the MIR: Child[1]	26.75	0.09522	0.6683
Risks and Hazards at the MIR: Adult[1]	2.97	0.09522	0.6683
Scenario 6: New Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	73.53	0.08857	0.7229
Risks and Hazards at the MIR: Child[1]	13.49	0.08857	0.7229
Risks and Hazards at the MIR: Adult[1]	1.50	0.08857	0.7229
Scenario 7: New Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	30.12	0.03628	0.2328
Risks and Hazards at the MIR: Child[1]	5.43	0.03628	0.2328
Risks and Hazards at the MIR: Adult[1]	0.61	0.03628	0.2328
Highest From Any Scenario			
Risks and Hazards at the MIR	106.28	0.11489	0.8452
BAAQMD Thresholds of Significance	**10**	**1**	**0.30**
Exceeds Individual Source Threshold?	Yes	No	Yes

Notes:
$\mu g/m^3$ = micrograms per liter
BAAQMD = Bay Area Air Quality Management District
MIR = Maximum Impacted Receptor
$PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
1. The MIR for each scenario analyzed is shown in Table 4.3-8.

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)

2. Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the REL of 5 $\mu g/m^3$.

Source: Stantec 2020, Appendix D.

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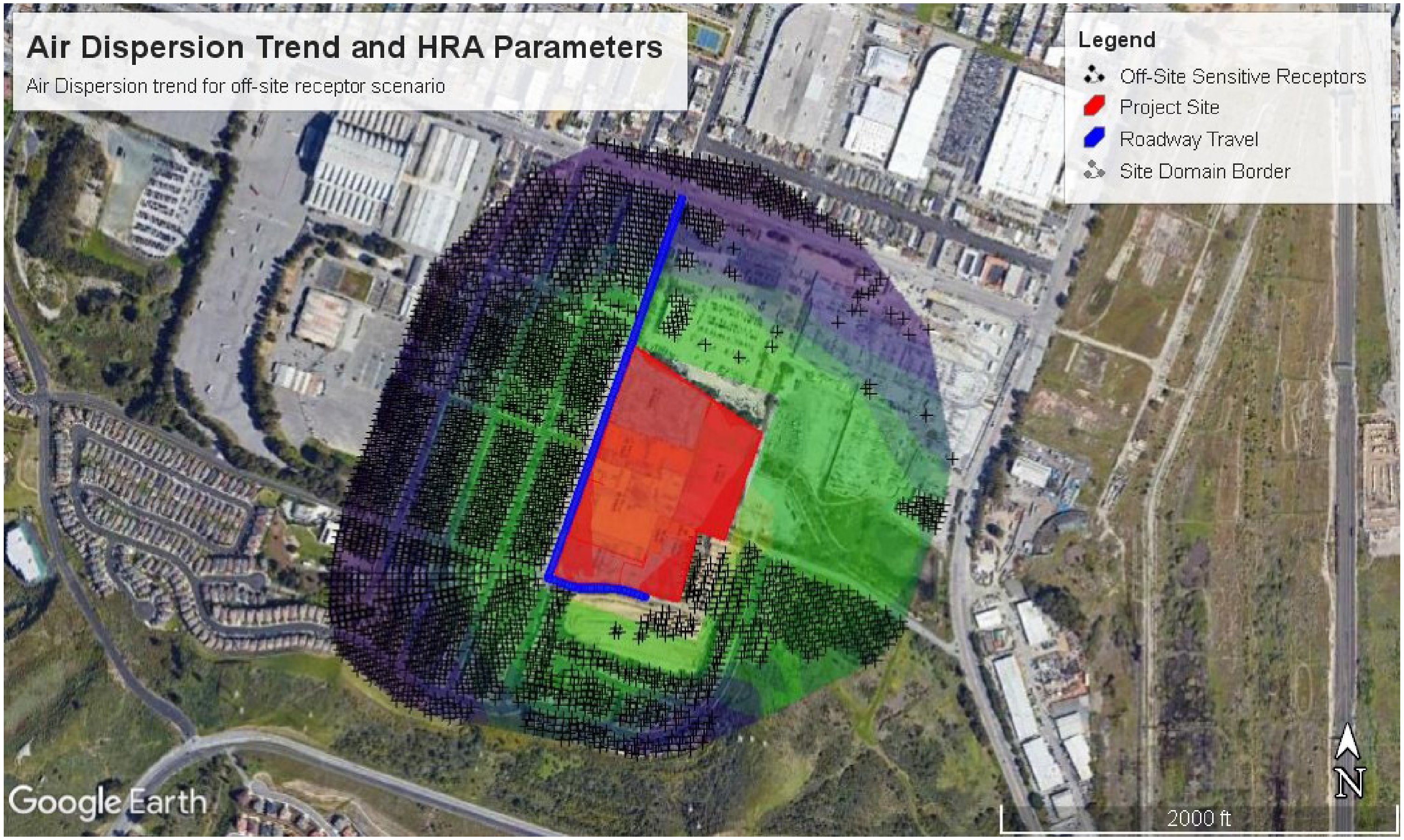

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Figure No.
4.3-1

Title
Modeling Parameters (Off-site Sensitive Receptors Scenario)

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

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As shown above in Table 4.3-8, the project construction DPM emissions would not exceed the BAAQMD's chronic non-cancer hazard index threshold of significance at the MIR in any scenario; however, the project construction DPM emissions would exceed the BAAQMD's cancer risk threshold of significance, and the proposed project's $PM_{2.5}$ emissions would exceed the BAAQMD's annual $PM_{2.5}$ threshold of significance in at least one scenario. Therefore, Mitigation Measure AIR-2, which requires all construction equipment greater than 50 hp to meet the Tier 4 Interim emissions standards, would be necessary to reduce potentially significant impacts from construction of the proposed project.

Table 4.3-9 presents a summary of the proposed project's construction cancer risk, chronic non-cancer hazard, and $PM_{2.5}$ concentration impacts at the MIR after implementation of Mitigation Measure AIR-2.

Table 4.3-9: Estimated Health Risks and Hazards during Project Construction—Mitigated

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Scenario 1: All Offsite Receptors			
Risks and Hazards at the MIR: Infant[1]	5.96	0.00747	0.01975
Risks and Hazards at the MIR: Child[1]	3.00	0.00747	0.01975
Risks and Hazards at the MIR: Adult[1]	0.33	0.00747	0.01975
Scenario 2: Existing Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	3.36	0.00632	0.1557
Risks and Hazards at the MIR: Child[1]	0.76	0.00632	0.1557
Risks and Hazards at the MIR: Adult[1]	0.084	0.00632	0.1557
Scenario 3: Existing Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	5.13	0.02127	0.2758
Risks and Hazards at the MIR: Child[1]	2.58	0.02127	0.2758
Risks and Hazards at the MIR: Adult[1]	0.287	0.02127	0.2758
Scenario 4: Existing Phase 4 Receptors			
Risks and Hazards at the MIR: Infant[1]	5.92	0.00743	0.2138
Risks and Hazards at the MIR: Child[1]	2.98	0.00743	0.2138
Risks and Hazards at the MIR: Adult[1]	0.331	0.00743	0.2138
Scenario 5: New Phase 1 Receptors			
Risks and Hazards at the MIR: Infant[1]	14.89	0.01334	0.2748
Risks and Hazards at the MIR: Child[1]	3.75	0.01334	0.2748
Risks and Hazards at the MIR: Adult[1]	0.416	0.01334	0.2748

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Scenario 6: New Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	7.13	0.00859	0.3273
Risks and Hazards at the MIR: Child[1]	1.31	0.00859	0.3273
Risks and Hazards at the MIR: Adult[1]	0.145	0.00859	0.3273
Scenario 7: New Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	2.61	0.00314	0.0671
Risks and Hazards at the MIR: Child[1]	0.48	0.00314	0.0671
Risks and Hazards at the MIR: Adult[1]	0.05	0.00314	0.0671
Highest From Any Scenario			
Maximum Risks and Hazards	14.89	0.02127	0.3273
BAAQMD Thresholds of Significance	**10**	**1**	**0.30**
Exceeds Individual Source Threshold?	Yes	No	Yes

Notes:
$\mu g/m^3$ = micrograms per liter
BAAQMD = Bay Area Air Quality Management District
MIR = Maximum Impacted Receptor
$PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
[1] The MIR for each scenario analyzed is shown in 4.3-8
[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the REL of 5 $\mu g/m^3$.
Source: Stantec 2020, Appendix D.

As noted in Table 4.3-9, the proposed project would not exceed any applicable significance threshold after application of Mitigation Measure AIR-2 in Scenarios 1-4 or in Scenarios 7; however, the proposed project would exceed an applicable threshold in both Scenarios 5 and 6. Specifically, the cancer risk in Scenario 5 would exceed the BAAQMD's threshold of 10 in million for the cancer risk health impact, and the applicable $PM_{2.5}$ concentration threshold would be exceeded in Scenario 6. As noted in Table 4.3-7, Scenario 5 analyzes the health impacts of the sensitive receptors that would occupy Phase 1 of the proposed project and would be exposed to emissions from demolition and construction activities associated with Phases 2 through 4 of the proposed project. Scenario 6 analyzes the health impacts of the sensitive receptors that would occupy Phase 2 of the proposed project and could be exposed to emissions from demolition and construction activities associated with Phases 3 and 4 of the proposed project. Because Scenarios 5 and 6 are the only scenarios in which an applicable health risk threshold was exceeded, and because Scenarios 5 and 6 include residential development contemplated by the proposed project, additional mitigation is available to further reduce the potential impact.

Mitigation Measure AIR-3, which requires the installation of MERV 13 filters in proposed residences included in Phases 1 and 2 of the proposed project would be implemented to reduce this impact to less than significant. MERV 13 filters would trap particles at an efficiency rate of 60 percent. After the installation and maintenance of an air filtration system rated at MERV 13 per Mitigation Measure AIR-3, the cancer risk from project construction at the MIR (a residence in Phase 1 of the proposed project) would be reduced to approximately 6 in a million and the $PM_{2.5}$ concentrations at the MIR (a sensitive receptor in Phase 2 of the proposed project) would be reduced to approximately 0.13 μg/m^3. As shown in Table 4.3-10 the health risk impacts to the future residents would be less than the BAAQMD recommended significance thresholds of 10 in a million and 0.3 μg/m^3, respectively. Therefore, construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations after the implementation of additional mitigation.

Table 4.3-10: Estimated Health Risks and Hazards during Project Construction—Additional Mitigation

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration (μg/m^3)
Scenario 1: All Offsite Receptors			
Risks and Hazards at the MIR: Infant[1]	5.96	0.00747	0.01975
Risks and Hazards at the MIR: Child[1]	3.00	0.00747	0.01975
Risks and Hazards at the MIR: Adult[1]	0.33	0.00747	0.01975
Scenario 2: Existing Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	3.36	0.00632	0.1557
Risks and Hazards at the MIR: Child[1]	0.76	0.00632	0.1557
Risks and Hazards at the MIR: Adult[1]	0.084	0.00632	0.1557
Scenario 3: Existing Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	5.13	0.02127	0.2758
Risks and Hazards at the MIR: Child[1]	2.58	0.02127	0.2758
Risks and Hazards at the MIR: Adult[1]	0.287	0.02127	0.2758
Scenario 4: Existing Phase 4 Receptors			
Risks and Hazards at the MIR: Infant[1]	5.92	0.00743	0.2138
Risks and Hazards at the MIR: Child[1]	2.98	0.00743	0.2138
Risks and Hazards at the MIR: Adult[1]	0.331	0.00743	0.2138
Scenario 5: New Phase 1 Receptors			
Risks and Hazards at the MIR: Infant[1]	5.96	0.00534	0.1099
Risks and Hazards at the MIR: Child[1]	1.50	0.00534	0.1099

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Risks and Hazards at the MIR: Adult[1]	0.17	0.00534	0.1099
Scenario 6: New Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	2.85	0.00344	0.1309
Risks and Hazards at the MIR: Child[1]	0.52	0.00344	0.1309
Risks and Hazards at the MIR: Adult[1]	0.058	0.00344	0.1309
Scenario 7: New Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	2.61	0.00314	0.0671
Risks and Hazards at the MIR: Child[1]	0.48	0.00314	0.0671
Risks and Hazards at the MIR: Adult[1]	0.05	0.00314	0.0671
Highest From Any Scenario			
Maximum Risks and Hazards	**5.96**	**0.00747**	**0.2758**
BAAQMD Thresholds of Significance	**10**	**1**	**0.30**
Exceeds Individual Source Threshold?	No	No	No

Notes:

$\mu g/m^3$ = micrograms per liter

BAAQMD = Bay Area Air Quality Management District

MIR = Maximum Impacted Receptor

$PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

[1] The MIR for each scenario analyzed is shown in 4.3-8

[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the REL of 5 $\mu g/m^3$.

Source: Stantec 2020, Appendix D.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project would increase traffic volumes on streets near the project site; therefore, the proposed project would be expected to increase local CO concentrations. Concentrations of CO approaching the ambient air quality standards are only expected where background levels, traffic volumes, and congestion levels are high. The BAAQMD's preliminary screening methodology for localized CO emissions provides a conservative indication of whether project-generated vehicle trips would result in the generation of CO emissions that contribute to an exceedance of the applicable threshold of significance. According to the BAAQMD CEQA Guidelines, the proposed project would result in a less than significant impact to localized CO concentrations if the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, a regional transportation plan, and local congestion management agency plans.
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

According to the Final Transportation Impact Study prepared for the proposed project by Hexagon Transportation Consultants, Inc., the proposed project would not generate traffic that would result in deterioration of an intersection from acceptable Level of Service (LOS) (LOS A through D) to LOS E or F under existing plus project conditions. As provided in the Existing Plus Project scenario in the Traffic Impact Study, the proposed project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour. Areas where vertical and/or horizontal mixing is substantially limited include areas such as tunnels, parking garages, bridge underpasses, natural or urban street canyons, and below-grade roadways. The proposed project would not be affecting roadways in areas where vertical and/or horizontal mixing is substantially limited; the proposed project would not increase traffic volumes to more than 24,000 vehicles per hour in an area where vertical and/or horizontal mixing is substantially limited. Therefore, in accordance with BAAQMD's second tier screening criteria, the proposed project would not be expected to result in the generation of localized CO emissions in excess of the applicable threshold of significance.

As discussed above, the proposed project would not cause or be exposed to substantial pollutant concentrations, including localized CO or TAC emissions, such as DPM and NOA. Therefore, exposure of sensitive receptors to substantial pollutant concentrations would not occur, and the impact is less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure AIR-1 (PBA EIR MM 2.2-2), Mitigation Measure AIR-2, and Mitigation AIR-3 are required.

MM AIR-2: **Tier 4 Interim Engine Requirements –** Prior to the issuance of any demolition, grading, or building permits (whichever occurs earliest), the project applicant and/or construction contractor shall prepare a construction operations plan that, during construction activities, requires all off-road equipment with engines greater than 50 horsepower to meet particulate matter emissions standards for Tier 4 Interim engines. The construction contractor shall maintain records documenting its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information shall include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number. The project applicant and/or construction contractor shall submit the construction operations plan and records of compliance to the City.

MM AIR-3: **Installation of MERV 13 Filters for Phase 1 and Phase 2 –** The applicant shall install high efficiency MERV filters with a rating of 13 in the intake of the residential ventilation systems in all residential units that would be included in Phases 1 and Phase 2 of the project. To ensure maintenance and replacement of the MERV filters in the individual units, the owner/property manager shall commit to maintaining and replacing the MERV 13 filters in accordance with the manufacturer's recommendations lasting through the end of all construction associated with the proposed project. A signed commitment letter from the owner/property manager shall be submitted to City prior to the first occupancy of Phase 1 of the project.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact AIR-4	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis

Odors are generally regarded as an annoyance rather than a health hazard. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. According to the CARB's Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. The project site is not located near any such land uses, and the proposed project would not introduce any such land uses.

Residential, retail, or office land uses are not typically associated with the creation of substantial objectionable odors. Diesel fumes from construction equipment are often found to be objectionable; however, construction is temporary, and associated diesel emissions would be regulated per federal, state, and local regulations, including compliance with all applicable BAAQMD rules and regulations, which would help to control construction-related odorous emissions. Therefore, construction of the proposed project would not be expected to create objectionable odors affecting a substantial number of people.

For the aforementioned reasons, construction and operation of the proposed project would not create objectionable odors, nor would the project site be affected by any existing sources of substantial objectionable odors, and a less than significant impact related to objectionable odors would result.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

4.4 BIOLOGICAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Widlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

4.4.1 Environmental Setting

Regionally, the project site has a Mediterranean climate characterized by cool, dry summers and moderate winters, with average annual temperatures ranging from 65.2 to 49.3 degrees Fahrenheit (°F). Historical data used to describe the climate was collected at the San Francisco International Airport Station, approximately 5.5 miles south of the project site (Western Regional Climate Center 2019). Precipitation in the project site occurs as rain. Average annual rainfall is 19.94 inches and primarily occurs from October through May.

A Stantec biologist conducted a desktop analysis based on a review of existing information about sensitive biological resources known to occur near the project site to determine whether biological resources are absent, present, and/or are likely to be present. For the purpose of this evaluation, special-status plant species include plants that are as follows: 1) listed as threatened or endangered under the California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA); 2) proposed for federal listing as threatened or endangered; 3) state or federal candidate species; 4) designated as rare by the California Department of Fish and Wildlife (CDFW); or 5) California Rare Plant Rank 1A, 1B, 2A or 2B species. Special-status animal species include species that are as follows: 1) listed as threatened or endangered under CESA or FESA; 2) proposed for federal listing as threatened or endangered; 3) state or federal candidate species; or 4) identified by the CDFW as species of special concern or fully protected species.

Sensitive natural communities are those communities that are highly limited in distribution and may or may not contain rare, threatened, or endangered species. The California Natural Diversity Database (CNDDB) ranks natural communities according to their rarity and endangerment in California. Habitats are considered sensitive if they are identified on the CDFW List of Vegetation Alliances and Associations as being highly imperiled or classified by CDFW in the CNDDB as natural communities of special concern – Ranks S1 to S3.

A CNDDB and California Native Plant Society (CNPS) database search for special-status species typically includes nine U.S. Geological Survey 7.5-minute quadrangle maps for a small project located within a single quadrangle—the quadrangle that covers the study area—and the eight quadrangles that surround the project quadrangle. In this case, the *San Francisco South, San Francisco North, Oakland West,* and *Hunter's Point* topographic quadrangles within a 5-mile radius of the project site were queried.

Other information sources consulted to determine which special-status species could potentially occur in the project site included the following:

- USGS California 7.5-minute topographic quadrangles for San Francisco South, San Francisco North, Oakland West, and Hunter's Point;
- Aerial photographs of the project site and surrounding vicinity (Google Earth 2019);
- United States Fish and Wildlife Service (USFWS) list of endangered and threatened species that may occur in the project site (USFWS 2019a);
- USFWS Designated Critical Habitat (USFWS 2019a)
- USFWS National Wetlands Inventory (USFWS 2019b)
- The CDFW CNDDB plant and animal records within 5 miles of the project site (CDFW 2019a);
- Special Animals List (CDFW 2019b);
- The CNPS online Inventory of Rare and Endangered Plants (CNPS 2019)
- California Wildlife Habitat Relationships System (WHRS) (CDFW 2014).

Based on this review of existing information, a list of special-status species that have the potential to occur or are known to occur in the project site and vicinity was developed. The list was refined based on the habitat within and adjacent to the project site to determine the potential for those species to occur.

Habitat Communities

Habitat types within the project site were classified based on descriptions provided in *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988), as well as the California Natural Community List (CDFW 2019c), which is adapted from the technical approach and vegetation alliance classification system described in *A Manual of California Vegetation* (Sawyer et al. 2009). The habitat community present in the project site includes Urban. No aquatic resources were identified in the project site. A description of the habitat within the project site is provided below.

Urban

The project site consists of residential and commercial structures, parking areas, landscaped areas, and an existing park. The existing park includes an open grass area, play structures, and basketball courts. Landscaped areas throughout the project site include ornamental trees and shrubs planted adjacent to roadways and walkways. Additionally, there are trees planted adjacent to the northern and eastern boundary of the project site.

Aquatic Habitats

No aquatic habitats occur within the project site; however, a small unnamed creek flows underneath the project site through a box culvert system that outlets approximately 50 feet east of the project limits into an open earthen channel. The project would not impact the existing culvert that flows underneath the project. Based on aerial imagery, vegetation along the unnamed creek includes unknown shrubs and herbaceous species. Approximately 650 feet downstream of the project site, there is an existing marsh adjacent to the channel. The unnamed creek continues flowing through another box culvert until it reaches an open channel and into the San Francisco Bay. The creek appears to receive runoff from the surrounding developments and roadsides.

Special-Status Species

Plants

A total of 65 special-status plant species were identified based on a review of pertinent literature, the USFWS species list and CNDDB and CNPS database records. CNNDB special-status plant species occurrences were reviewed within 5 miles of the project site. For each species, habitat requirements were assessed and compared to the habitats in the project site and immediate vicinity to determine if potential habitat occurs in the project site. The project site does not provide suitable habitat for special-status plants due to the existing development. The unnamed creek, once it outlets adjacent to the project site in an open earthen channel, has limited suitable habitat; therefore, there is low potential to support the following special-status plants within the unnamed creek channel:

- bristly sedge (*Carex comosa*) – CNPS 2B.1
- California seablite (*Suaeda californica*) – Federal Endangered (FE), CNPS 1B.1
- johnny-nip (*Castilleja ambigua* var. *ambigua*) – CNPS 4.2
- marsh sandwort (*Arenaria paludicola*) – FE, State Endangered (SE), CNPS 1B.1
- water star-grass (*Heteranthera dubia*) – CNPS 2B.2

Wildlife

A total of 58 special-status animal species were identified based on a review of pertinent literature, the USFWS species list, CNDDB database records, and a query of the California WHRS (CDFW 2014). CNNDB special-status animal species occurrences were reviewed within 5 miles of the project site. For each species, habitat requirements were assessed and compared to the habitats in the project site and the immediate vicinity to determine the species' potential to occur in or near the project site. The project site does not provide suitable habitat for special-status species due to the existing development. The unnamed creek, once it outlets adjacent to the project site in an open earthen channel, has limited suitable habitat; therefore, there is low potential to support the following special-status animals within the unnamed creek channel:

- California red-legged frog (*Rana draytonii*) – Federal Threatened (FT), Species of Special Concern (SSC)
- San Francisco gartersnake (*Thamnophis sirtalis tetrataenia*) – FE, SE, Federal Protected (FP)
- western bumble bee (*Bombus occidentalis*) – Critically Endangered (CE)
- western pond turtle (*Emys marmorata*) – SSC

Based on this review of existing information, a list of special-status species that have the potential to occur or are known to occur in the project site and vicinity was developed (Appendix E). The list was refined based on the habitat within and adjacent to the project site to determine the potential for those species to occur.

Critical Habitat

The project site is not within USFWS designated critical habitat. There is critical habitat within the vicinity of the project site, including Franciscan manzanita (*Arctostaphylos franciscana*) critical habitat located 0.77-mile northwest and Bay checkerspot butterfly critical habitat located 1.25 miles south of the project site.

4.4.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.3 of the General Plan EIR discusses impacts on biological resources. According to the General Plan EIR, due to the city's urban character there are no wetlands, riparian habitat, or wildlife corridors that would be impacted by future development. The General Plan EIR indicates two undeveloped areas within the Coastal Zone and San Bruno Mountain are the only areas that contain suitable habitat for special-status species. However, adherence to established regulations and General Plan policies would ensure potential impacts to special-status species in these areas would be less than significant. The General Plan EIR also determined that the General Plan would not conflict with the San Bruno Habitat Conservation Plan or the City's Urban Forestry Ordinance.

The following General Plan policies would be applicable to the proposed project:

Policy RME-8: Through the development of a Stormwater Management Program, ensure that all new development complies with applicable municipal stormwater Municipal Regional Stormwater National Pollutant Discharge Elimination Service (NPDES) Permit by incorporating controls that reduce water quality impacts over the life of the project in way that is both technically and economically feasible, and reduces pollutants in stormwater discharges to the maximum extent practicable.

Policy LU-17: Ensure that private development is responsible for providing any on- or offsite improvements related to and/or mitigating the impacts it causes.

Policy LU-18: Development activities shall not be allowed to significantly disrupt the natural or urban environment and all reasonable measures shall be taken to identify and prevent or mitigate potentially significant effects.

Policy LU-23: Through the development review process, work to protect and preserve special status plant and animal species.

Plan Bay Area EIR Summary

The following summarizes the potential impacts on biological resources discussed in Chapter 2.9 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.9-1a: Special-Status Species. The Plan Bay Area EIR analyzed the potential impacts related to species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by CDFW or USFWS, and determined with implementation of Plan Bay Area EIR Mitigation Measure 2.9-1(a), the impact would be less than significant (Refer to Impact BIO-1 in Section 4.4.3, Project-Specific Analysis).

> ***PBA EIR MM 2.9-1[a]:*** *Implementing agencies shall require project sponsors to prepare biological resource assessments for specific projects proposed in areas containing, or likely to contain, habitat for special-status plants and wildlife. The assessment shall be conducted by qualified professionals pursuant to adopted protocols and agency guidelines. Where the biological resource assessments establish that mitigation is required to avoid direct and indirect adverse effects on special-status plant and wildlife species, or compensate for unavoidable effects, mitigation shall be developed consistent with the requirements of CEQA, USFWS, CDFW, and local regulations and guidelines, in addition to requirements of any applicable and adopted Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP) or other applicable plans developed to protect species or habitat. Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:*

- *In support of CEQA, NEPA, CDFW, and USFWS review and permitting processes for individual proposed Plan projects, pre-project biological surveys shall be conducted as part of the environmental review process to determine the presence and extent of sensitive habitats and/or species in the project vicinity. Surveys shall follow established methods and shall be conducted at times when the subject species is most likely to be identified. In cases where impacts to state- or federally-listed plant or wildlife species are possible, formal protocol-level surveys may be required on a species-by-species basis to determine the local distribution of these species. Coordination with the USFWS and/or CDFW shall be conducted early in the planning process at an informal level for projects that could adversely affect federal or state candidate, proposed, threatened, or endangered species to determine the need for consultation or permitting actions. Projects shall obtain incidental take authorization from the permitting agencies as required before project implementation.*
- *Project designs shall be reconfigured, whenever practicable, to avoid special-status species and sensitive habitats. Projects shall minimize ground disturbances and transportation project footprints near sensitive areas to the extent practicable.*
- *Project activities in the vicinity of sensitive resources shall be completed during the period that best avoids disturbance to plant and wildlife species present to the extent feasible.*
- *Individual projects shall minimize the use of in-water construction methods in areas that support sensitive aquatic species, especially when listed species could be present.*
- *In the event that equipment needs to operate in any watercourse with flowing or standing water where special-status species may be affected, a qualified biological resource monitor shall be present to alert construction crews to the possible presence of such special-status species.*

- *If project activities involve pile driving or vibratory hammering in or near water, interim hydroacoustic threshold criteria for protected fish species shall be adopted as set forth by the Interagency Fisheries Hydroacoustic Working Group, as well as other avoidance methods to reduce the adverse effects of construction to sensitive fish, piscivorous birds, and marine mammal species.*
- *Construction shall not occur during the breeding season near riparian habitat, freshwater marshlands, and salt marsh habitats that support nesting bird species protected under the Endangered Species Act, Migratory Bird Treaty Act, or California Fish and Game Code (e.g., yellow warbler, tricolored blackbird, Ridgway's rail, etc.).*
- *A qualified biologist shall locate and fence off sensitive resources before construction activities begin and, where required, shall inspect areas to ensure that barrier fencing, stakes, and setback buffers are maintained during construction.*
- *For work sites located adjacent to special-status plant or wildlife populations, a biological resource education program shall be provided for construction crews and contractors (primarily crew and construction foremen) before construction activities begin.*
- *Biological monitoring shall be considered for areas near identified habitat for federal- and state-listed species, and a "no take" approach shall be taken whenever feasible during construction near special-status plant and wildlife species.*
- *Efforts shall be made to minimize the adverse effects of light and noise on listed and sensitive wildlife.*
- *Project activities shall comply with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures protective of special-status species.*
- *Compensatory mitigation for unavoidable loss of habitat or other impacts to special-status species may be achieved in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through Regional Advance Mitigation Planning (RAMP), as deemed appropriate by the permitting agencies.*

Impact 2.9-1b: Designated Critical Habitat. The Plan Bay Area EIR analyzed the potential impacts related to designated critical habitat for federally listed plant and wildlife species and determined with implementation of Mitigation Measure 2.9-1(b), the impact would be less than significant. Mitigation Measure 2.9-1(b) is not applicable to the proposed project (Refer to Impact BIO-2 in Section 4.4.3, Project-Specific Analysis) because there is no critical habitat in the project area.

Impact 2.9-2: Riparian Habitat, Federally Protected Wetlands, or Other Sensitive Natural Communities. As discussed in the Plan Bay Area EIR, projects would have the potential to affect jurisdictional waters and other sensitive habitats, resulting in a potentially significant impact. The Plan Bay Area EIR identifies Mitigation Measure 2.9-2 to reduce impacts to jurisdictional waters to a less than significant level. Mitigation Measure 2.9-2 is not applicable to the proposed project (Refer to Impact BIO-3 in Section 4.4.3, Project-Specific Analysis) because there is no riparian habitat or federally protected wetlands in the project area.

Impact 2.9-3: Movement of Native Resident or Migratory Fish or Wildlife Species, Wildlife Corridors, and Nursery Sites. The Plan Bay Area EIR analyzed the potential impacts related to substantially interfering with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridor, or impede the use of native wildlife nursery sites, and determined with implementation of Mitigation Measure 2.9-3, the impact would be less than significant. Mitigation Measure 2.9-3 is not applicable to the proposed project because there are no wildfire corridors in the project area (Refer to Impact BIO-4 in Section 4.4.3, Project-Specific Analysis).

Impact 2.9-4: Local Conservation Policies, Ordinances, and Plans. As discussed in the Plan Bay Area EIR, development projects would be required to follow city and county development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of biological resources. Additionally, consistency with an adopted HCP or other conservation plan is a legal requirement; and, the design, approval, and permitting of future development and transportation projects within an area covered by an HCP or other conservation plan are intended and expected to comply with that requirement. Therefore, the Plan Bay Area EIR determined that the potential for approved development projects to conflict with local policies or ordinances protecting biological resources would be less than significant and no mitigation measures were identified.

4.4.3 Project-Specific Analysis

Impact BIO-1	**Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

Impact Analysis

Special-Status Plant Species

There is no potential habitat within the project site for special-status plant species with occurrences within a 5-mile radius. The project site is completely developed, and the existing park and landscaped areas are frequently disturbed by maintenance activities such as mowing and trimming. Based on the lack of suitable habitat, the project site does not provide potential habitat for special-status plant species to occur, and there would be no impacts to special-status plants.

Special-Status Wildlife Species

Although there are CNDDB occurrence records within 5 miles of the project site for special-status animal species (CDFW 2019a), the project site does not provide suitable habitat (i.e., aquatic features, tall trees) for potential special-status animal species to occur. Due to the project site having landscaped areas and ornamental trees, the site provides minimal foraging and nesting habitat for migratory birds under the Migratory Bird Treaty Act or California Fish and Game Code. The adjacent creek, marsh, and associated aquatic vegetation may provide suitable habitat for aquatic and semi-aquatic special-status species and migratory nesting birds; however, this is outside the project site boundaries, and there would be no associated impacts.

Avoidance and minimization measures would be incorporated into the proposed project to avoid direct and indirect effects to special-status species and their habitat. If proposed project activities occur during the nesting bird season (generally considered from February 1 to August 31), construction may cause direct effects (e.g., tree removal and vegetation clearing) and indirect effects to nesting birds (e.g., noise and vibration) by causing adults to abandon active nests, resulting in nest failure and reduced reproductive success. Mitigation Measure BIO-1 (PBA EIR MM 2.9-1[a]) requires preconstruction nesting bird surveys to document all nests on the project site and implementation of protective buffers around documented nests during construction to minimize disturbance to nesting birds during construction. Based on the lack of suitable nesting habitat in the project site, there is low potential for special-status species to occur, and with the implementation of Mitigation Measure BIO-1 (PBA EIR MM 2.9-1[a]), impacts to migratory nesting bird species would be less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure BIO-1 (PBA EIR MM 2.9-1[a]) is required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact BIO-2	**Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Impact Analysis

The project site does not contain any sensitive natural communities as classified by the CDFW. In addition, no aquatic habitats were identified within the project site that could be considered waters of the United States and subject to the USACE and RWQCB jurisdiction under Sections 404 and 401 of the Clean Water Act, or subject to CDFW jurisdiction under Section 1600 of the California Fish and Game Code. Therefore, the proposed project would have no impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies and regulations or by the CDFW or USFW.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact BIO-3	**Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Impact Analysis

No aquatic resources or potential wetlands covered under the jurisdiction of the USACE or RWQCB occur within the project site. As such, there would be no impact to state or federally protected wetlands.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact BIO-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

Impact Analysis

Habitat corridors are segments of land that provide linkages between different habitats while also providing cover. On a broader level, corridors also function as avenues along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and threatened species can be replenished from other areas. Habitat corridors often consist of riparian areas along streams, rivers, or other natural features. Habitat corridors have been recognized by federal agencies, such as the USFWS, and the state as important habitats worthy of conservation. In general, movement corridors consist of areas of undisturbed land cover that connect larger, contiguous habitats. The project site does not act as a corridor for species dispersal or provide migration habitat connectivity to adjacent habitat and is not part of any defined essential connectivity areas as identified in the California Essential Habitat Connectivity Project (Spencer et al. 2010); therefore, the proposed project would have no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact BIO-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Analysis

The proposed project would not conflict with any local policies or ordinances protecting biological resources, including tree preservation policies or ordinances. A tree survey was conducted for the proposed project on September 3, 2019 (HortScience | Bartlett Consulting 2019) (Appendix F). The survey included all trees located within the project site and adjacent areas, specifically the northern and eastern limits of the proposed project. A total of 219 trees were counted, including 38 different native and non-native species. A total of 213 trees would be directly impacted by redevelopment and would require removal during each respective demolition phase. Two Italian stone pines (*Pinus pinea*) (#215 & 216) as well as four blackwood acacias (*Acacia melanoxylon*) (#216-219) could potentially be preserved. Minor pruning for adjacent trees along the northern project site limits may be needed for clearance. Additional trees within the SFPUC easement may be located within the development area and may need to be removed. Any tree that would be removed and is within public property would be required to comply with Sections 12.40.120 and 12.40.140 of the City's Municipal Code related to tree removal permits and replacement trees[5]. Therefore, the impact would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

[5] The City's Municipal Code 12.40.140 requires replacement trees to be a minimum of two 24-inch box size (the combined canopy of which is approximately ten percent of the average street tree canopy in the City or replacement canopy of 17 sf). If it is determined that replacement trees cannot be planted in the same frontage, costs for two trees, each 24-inch box size, plus labor for planting, shall remain in effect. This replacement tree shall be planted on specified alternate public property.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact BIO-6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact Analysis

The project site is adjacent to the San Bruno Mountain HCP; however, the project site does not fall within this HCP boundary or any other local, regional, or state HCP or natural community conservation plan. As such, there would be no impact with respect to conflicting with provisions of an adopted HCP, natural community conservation plan, or other approved local, regional, or state HCP.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

4.5 CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

4.5.1 Environmental Setting

This section provides an overview of the history of the City and of resources of historical significance that may be affected by the proposed project.

History of the City of Daly City

The City is located in the northwest portion of San Mateo County and shares a border with the City and County of San Francisco to the north, Pacifica to the south, and South San Francisco, Colma, and Brisbane to the east. West of Daly City is the Pacific Ocean. In general, the City is highly urbanized with residential, commercial, and institutional land uses. Most of the open space in the City is located along the coastline. Studies indicate that San Mateo County may have been inhabited between 3,500 and 2,500 B.C. Recent history shows that the area has been inhabited by the Ohlone Indian Tribe, the Spanish peoples, and Mexican peoples.

<u>Native American Period</u>

The Ohlone Tribe primarily occupied the coastline in the San Francisco Bay Area, stretching from San Francisco to Monterey Bay. The Ohlone concentrated near inland villages located on the Colma and San Bruno creeks, as well as a seasonal village on the coast at Mussel Rock. The Ohlone were known to hunt deer, rabbits, fish, wild geese, and ducks in addition to gathering food such as nuts, roots, berries, and shellfish such as mussels and clams. Most of the fishing was done on the inland bay areas, while the coast provided sea otters and seals.

<u>Spanish Period</u>

Considered the first Europeans to reach the San Francisco Bay Area, Spanish explorers led by Juan Bautista de Anza established the Mission of San Francisco de Asis (Mission Dolores) in 1776. The primary route between Mission Dolores and other missions was El Camino Real (now called Mission Street), which runs through the City.

<u>Mexican Period</u>

Between 1822 and 1848, under the Mexican rule of California, land was issued to individuals, including cattle ranchers and hide and tallow traders. The City was part of three land grants, including “Rancho Buri,” which was one of the largest grants within the Peninsula.

American Period

In 1868, John Daly purchased approximately 250 acres in the City and was the owner and operator of the San Mateo Dairy. As such, he would eventually become a prominent figure in the area, eventually having the City named after him in 1911 when the City became incorporated.

As a result of the 1906 earthquake, population surged in the areas surrounding Daly's ranch as he opened his land for emergency use by victims and people seeking refuge from the earthquake and fires. Eventually, a small community formed near Daly's ranch, and he ended up subdividing his land in 1907, leading to the City's first residential subdivision, known today as the Crocker neighborhood.

The largest surge in population occurred after World War II. Henry Doelger purchased 600 acres of sand dunes and cabbage patches along the western edges of the City, which was annexed in 1948 and subsequently developed into what is known today as the Westlake community. Doelger would continue to develop the area with thousands of homes and several shopping centers.

Historical Resources

There are no sites in the City listed on the National Register of Historic Places and/or the California Register of Historic Resources; however, there are approximately 46 other properties identified as having potential historic value at the local level within the City.

Archaeological Resources

According to the General Plan EIR, 58 cultural resource studies have been conducted in and around the City consisting of a mixture of architectural and archaeological studies generally concentrated around the I-280 corridor, the coastal margin, and the periphery of San Bruno Mountain (City of Daly City 2012). As a result of the studies, several areas have uncovered archaeological resources attributed to Native American history, located generally in the northern part of San Mateo County and in close proximity to sources of water, wetlands, coastal terraces, and sheltered valleys (City of Daly City 2012).

Furthermore, a brief review of a recorded resources map database and a general landform analysis of existing waterways and known archaeological resources indicate that the project area is not sensitive for archaeological resources.

4.5.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.4 of the General Plan EIR discusses potential impacts on prehistoric and historic resources. According to the General Plan EIR, new development has the potential to disrupt undiscovered archeological resources and unrecorded historic resources during proposed project construction. However, compliance with existing federal, state, and local laws as well as policies contained in the General Plan would reduce impacts on archeological and historic resources to less than significant levels.

The following General Plan policies are applicable to the proposed project:

Policy RME-19: Undertake measure to protect and preserve historic and archaeological resources.

Policy LU-19: Archaeological resources should be preserved where possible.

Plan Bay Area EIR Summary

The following summarizes the potential impacts to cultural resources discussed in Chapter 2.11 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.11-1: Historical Resources. The Plan Bay Area EIR analyzed the potential impacts related to a substantial adverse change in the significance of a historical resource as defined in Section 15064.5, and determined with the implementation of the Plan Bay Area EIR Mitigation Measure 2.11-1, the impact would be less than significant with mitigation (Refer to Impact CUL-1 in Section 4.5.3, Project-Specific Analysis).

PBA EIR MM 2.11-1: *Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:*

- *Realign or redesign projects to avoid impacts on known historic resources where possible.*
- *Require a survey and evaluation of structures greater than 45 years in age within the area of potential effect to determine their eligibility for recognition under State, federal, or local historic preservation criteria. The evaluation shall be prepared by an architectural historian, or historical architect meeting the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Professional Qualification Standards. The evaluation should comply with CEQA Guidelines section 15064.5(b), and, if federal funding or permits are required, with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. § 470 et seq.). Study recommendations shall be implemented.*
- *If avoidance of a significant architectural/built environment resource is not feasible, additional mitigation options include, but are not limited to, specific design plans for historic districts, or plans for alteration or adaptive re-use of a historical resource that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings.*
- *Comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect historic resources.*

Impact 2.11-2: Archaeological Resources. The Plan Bay Area EIR analyzed the potential impacts related to a substantial adverse change in the significance of a unique archaeological resource as defined in Section 15064.5 and determined with the implementation of Mitigation Measure 2.11-2 the impact would be less than significant. However, Mitigation Measure 2.11-2 is not relevant to the proposed project because no known archaeological resources are present in the project area.

Impact 2.11-4: Disturb Human Remains. The Plan Bay Area EIR analyzed the potential impacts related to the disturbance of human remains, including those interred outside of formal cemeteries, and determined impacts would be less than significant as projects are required to comply with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097. Compliance with these state regulations provide an opportunity to avoid or minimize the disturbance of human remains, and appropriately treat any remains that are discovered. Therefore, impacts to human remains would be less than significant, and no mitigation measures were identified.

4.5.3 Project-Specific Analysis

Impact CUL-1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Impact Analysis

A desktop review of buildings over the age of 45 was conducted by an architectural historian, and no historic resources (likely eligible under state, federal, or local historic preservation criteria) were identified. Thus, the proposed project is not anticipated to have an impact on any known or potential historical resources.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact CUL-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Impact Analysis

Based on a database review of recorded archaeological resources, no known archaeological resources are present in the project area. Further, the area and project site have been heavily developed, and it is very unlikely that buried archaeological resources are present. Although very unlikely, if archaeological resources are encountered during construction, adherence to the aforementioned requirements would be required to ensure that potentially significant archaeological resources pursuant to Section 15064.5 are treated appropriately. As such, Mitigation Measure CUL-1 (PBA EIR MM 2.11-1) would be required and would ensure that impacts associated with damage to buried archaeological resources would remain less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure CUL-1 (PBA EIR MM 2.11-1) is required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact CUL-3 Disturb any human remains, including those interred outside of formal cemeteries?

Impact Analysis

The proposed project would result in a significant impact if it would disturb any human remains, including those interred outside of formal cemeteries. Although the proposed project would include ground-disturbing activities during construction, the project site is highly disturbed and has had extensive previous ground disturbing activities. If human remains did exist on within the project site, they likely would have been discovered during these previous ground disturbing activities. In the very unlikely event that previously undiscovered human remains are discovered onsite during proposed project construction, the proposed project would be required to comply with California Health and

Safety Code Sections 7050.5 and 7052 and PRC Section 5097. Sections 7052 and 7050.5 of the Health and Safety Code states that the disturbance of Native American cemeteries is a felony, and that construction or excavation be stopped in the vicinity of discovered human remains until the County coroner can determined whether the remains are those of a Native American. If discovered remains are found to be Native American, the coroner must contact the California Native Heritage Commission. Additionally, compliance with Section 15064.5 of the CEQA Guidelines would set forth procedures in the event of an unexpected discovery of Native American human remains on non-federal land. Therefore, with adherence to standard state and federal regulations, impacts related to disturbance of human remains would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

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4.6 ENERGY

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

4.6.1 Environmental Setting

Natural gas and electricity are currently provided to the project area by PG&E. A number of regulations exist associated with reducing energy usage, one of the most prevalent being Parts 6 and 11 of CBC (CCR, Title 24). Part 6, the 2019 Building Energy Efficiency Standards, focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings, and includes requirements that will enable both demand reductions and future solar electric and thermal system installations. The 2019 Building Energy Efficiency Standards also include updates to the energy efficiency divisions of Part 11, the 2019 California Green Building Standards (otherwise known as the CALGreen Code). A set of prerequisites has been established for both the residential and nonresidential standards, which include efficiency measures that should be installed in any building project striving to meet advanced levels of energy efficiency. The California Energy Commission estimates that implementation of the 2019 Building Energy Efficiency Standards may reduce statewide annual electricity consumption by approximately 53 percent less energy than those under the 2016 standards and may reduce greenhouse gas emissions by 70,000 metric tons over three years (California Energy Commission 2019).

In addition, the City of Daly City has developed its Climate Action Plan (CAP), which identifies how the City and the broader community could reduce Daly City's GHG emissions and includes reduction targets, strategies, and specific actions.

The proposed project would be required to comply with all applicable regulations associated with energy efficiency, as well as the applicable Daly City General Plan policies.

4.6.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.6 of the General Plan EIR discusses impacts related to energy. Energy use under the General Plan would be moderated by applicable state regulations, and therefore would ensure that energy use will not be wasteful, inefficient, or unnecessary. The General Plan EIR also determined there would be a slight reduction in energy use per service population, indicating implementation of the General Plan would have a less than significant impact on energy use.

The following General Plan policies would be applicable to the proposed project:

Policy HE-24: Gradually increase energy and water efficiency standards for all new and existing housing while minimizing the costs of such standards.

Policy HE-25: Mandate the inclusion of green building techniques into most new construction.

Policy HE-29: Promote alternative sources of energy in all homes.

Plan Bay Area EIR Summary

Chapter 2.4 of the Plan Bay Area EIR discusses potential impacts related to energy consumption. Implementation of the Plan Bay Area would result in the densification of land use, increased energy efficiency from residential land uses, and a net reduction in the consumption of automotive fuel. Additionally, future land use projects would be required to comply with the Title 24 Standards Building Code and incorporate feasible measures to reduce wasteful, inefficient, or unnecessary consumption of energy during construction or operation, and would increase reliance on renewable energy sources. Therefore, the Plan Bay Area EIR determined that impacts related to energy consumption would be less than significant, and no mitigation measures were identified.

4.6.3 Project-Specific Analysis

Impact EN-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Impact Analysis

Construction

Off-Road Equipment

The proposed project is anticipated to be constructed in four phases, with Phase 1 breaking ground January 1, 2021 and Phase 4 completed in October 2026. Table 4.6-1 provides estimates of the project's construction fuel consumption from off-road construction equipment.

Table 4.6-1: Construction Off-Road Fuel Consumption

Phase	Construction Activity	Fuel Consumption (Gallons)
Phase 1	Demolition	2,242
	Site Preparation	3,763
	Grading	3,161
	Building Construction	19,287
	Paving	2,114
	Architectural Coating	420
Phase 2	Demolition	4,671
	Site Preparation	3,404
	Grading	2,654
	Building Construction	16,528
	Paving	3,052
	Architectural Coating	456

Phase	Construction Activity	Fuel Consumption (Gallons)
Phase 3	Demolition	7,474
	Site Preparation	6,586
	Grading	14,678
	Building Construction	19,287
	Paving	4,413
	Architectural Coating	420
Phase 4	Demolition	7,474
	Site Preparation	6,586
	Grading	5,268
	Building Construction	19,287
	Paving	5,441
	Architectural Coating	420
Phase 4 (Offsite Road Improvements)	Site Preparation	48
	Grading	107
	Paving	1,448
Total		**160,691**

Notes:
Totals may appear not to sum exactly due to rounding. All calculations were completed using unrounded values.
Source: Stantec 2020, Appendix D

As shown in Table 4.6-1, construction activities associated with the proposed project would be estimated to consume 160,691 gallons of diesel fuel. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. Table 4.6-2 provides an estimate of the total on-road vehicle fuel usage during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Table 4.6-2: Construction On-Road Fuel Consumption

Project Phase	Total Annual Fuel Consumption (gallons)
Phase 1	14,722
Phase 2	17,912
Phase 3	14,575
Phase 4	25,537
Phase 4 – Offsite Road Improvements	320

Project Phase	Total Annual Fuel Consumption (gallons)
Total Construction On-Road Fuel Consumption	**73,065**

Notes:

Totals may appear not to sum exactly due to rounding. All calculations were completed using unrounded values.

Source: Stantec 2020, Appendix D

Long-Term Operations

Transportation Energy Demand

Table 4.6-3 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the project site. These estimates were derived using the same assumptions used in the operational air quality analysis for the proposed project.

Table 4.6-3: Long-Term Operational Vehicle Fuel Consumption

Project Component	Trips per Day	Annual VMT	Average Fuel Economy (miles/gallon)	Total Annual Fuel Consumption (gallons)
Apartments	4,518	9,399,075	34.2	274,827
Day Care	511	974,085	34.2	28,482
			Total	**303,309**

Notes:

Percent of vehicle trips and VMT provided by CalEEMod.

Average fuel economy is provided by United States Department of Transportation, Bureau of Transportation Statistics and reflects fuel economy of overall fleet, not just new vehicles.

CalEEMod = California Emissions Estimator Model

VMT = vehicle miles traveled

Source: Stantec 2020, Appendix D

As shown in Table 4.6-3, annual vehicular fuel consumption is estimated to be 303,309 gallons of both gasoline and diesel fuel. In terms of land use planning decisions, the proposed project would constitute development within an established community and would not be opening up a new geographical area for development such that it would draw mostly new trips or substantially lengthen existing trips. The proposed project would be well positioned to accommodate existing population and reduce VMT. For these reasons, it would be expected that vehicular fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region.

Building Energy Demand

As shown in Tables 4.6-4 and 4.6-5, the proposed project is estimated to demand 2,340,535 kilowatt hours of electricity and 11,296,973 100-thousands of British Thermal Units of natural gas, respectively, on an annual basis.

Table 4.6-4: Long-Term Electricity Usage

Land Use	Size (ksf)	Title 24 Electricity Energy Intensity (kWh/size/ year)	Nontitle 24 Electricity Energy Intensity (kWh/size/ year)	Lighting Energy Intensity (kWh/size/ year)	Total Electricity Energy Demand (kWh/size/ year)	Total Electricity Demand (kWh/year)
Apartments	555	233.06	3172.76	810.36	4216.18	2,339,980
Day Care Center	125	0.66	1.27	2.51	4.44	555
Total						**2,340,535**

Notes:

The proposed project could potentially include a variety of uses consistent with the development standards; however, the land use selections above were based on estimating the "worst-case" scenario demand for electricity.

ksf = 1,000 square feet

kWh = kilowatt hour

Source: Stantec 2020, Appendix D

Table 4.6-5: Long-Term Natural Gas Usage

Land Use	Dwelling Units (ksf)	Title 24 Natural Gas Energy Intensity (KBTU/size/year)	Nontitle 24 Natural Gas Energy Intensity (KBTU/size/year)	Total Natural Gas Energy Demand (KBTU/size/year)	Total Natural Gas Demand (KBTU/year)
Apartments	555	17734.5	2615	20349.5	11,293,973
Day Care Center	125	14.85	1.62	16.47	2,059
Total					**11,296,031**

Notes:

The proposed project could potentially include a variety of uses consistent with the development standards; however, the land use selections above were based on estimating the "worst-case" scenario demand for electricity.

ksf = 1,000 square feet

KBTU= 1,000 British Thermal Units

Source: Stantec 2020, Appendix D

Buildings and infrastructure constructed pursuant to the proposed project would comply with the versions of CCR Titles 20 and 24, including CALGreen, that are applicable at the time that building permits are issued. In addition, the City's General Plan includes policies and programs that seek to reduce energy consumption.

It would be expected that building energy consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar buildings in the region. Current state regulatory requirements for new building construction contained in the 2019 CALGreen and Title 24 would increase energy efficiency and reduce energy demand in comparison to existing residential structures, and therefore would reduce actual environmental effects associated with energy use from the proposed project.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact EN-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis

The City's General Plan and Plan Bay Area include energy goals and policies to reduce the reliance on nonrenewable energy sources in existing and new commercial, industrial, and public structures. The City's CAP also includes strategies focused on green building, renewable energy, transportation and land use, education and waste management.

The proposed project would not conflict with the energy objectives of the General Plan, Plan Bay Area, nor the strategies in its CAP. The proposed project would constitute development within an established community and would not be opening up a new geographical area for development such that it would draw mostly new trips, or substantially lengthen existing trips. The proposed project would be well positioned to accommodate existing population and reduce VMT. The proposed project would not impede the City's bicycle and pedestrian network, would include onsite and offsite improvements of pedestrian infrastructure (sidewalks), and would provide bicycle parking in accordance with the City's Municipal Code.

The proposed project would comply with the versions of CCR Titles 20 and 24, including CALGreen, that are applicable at the time that building permits are issued and are in accordance with all applicable City measures.

For the above reasons, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The impact is less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

4.7 GEOLOGY AND SOILS

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving:	☐	☒	☐	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐

4.7.1 Environmental Setting

The following background setting information focuses on the existing topography of the project site, the underlying bedrock, and site seismicity, as well as the general conditions and expansiveness of the onsite soils. A Geotechnical Investigation dated February 5, 2020, was prepared for the project site by Rockridge Geotechnical (Appendix G).

The City is located in the Coast Range geomorphic province of California, a relatively geologically young and seismically-active region on the western margin of the North American plate. The Coast Range is composed of mountain ranges and valleys that trend northwest, subparallel to the San Andreas Fault. The Coast Range is composed of thick Mesozoic and Cenozoic sedimentary strata that dip beneath the alluvium of the Great Valley to the east. To the west is the Pacific Ocean; the coastline is uplifted, terraced, and wave-cut. The northern and southern ranges are separated by a depression containing the San Francisco Bay. West of the San Andreas is the Salinian Block, a granitic core extending from the southern extremity of the Coast Ranges to the north of the Farallon Islands.

The Alquist-Priolo Special Studies Zone Act of December 1972 (AP Zone Act) regulates development near active faults to mitigate the hazard of surface fault rupture. The AP Zone Act requires that the State Geologist (Chief of the California Department of Mines and Geology [CDMG]) delineates “special study zones” along known active faults in California. Cities and counties affected by these zones must regulate certain development projects within these zones. The AP Zone Act prohibits the development of structures for human occupancy across the faults displaced during the last 11,000 years. “Potentially” active faults are those that show evidence of surface displacement during the last 1.6 million years. A fault may be presumed to be inactive based on satisfactory geologic evidence; however, the evidence necessary to prove inactivity is sometimes difficult to obtain and locally may not exist.

Seismic potential in the City is dominated by the nearby San Andreas and Gregorio Fault System, a complex of active faults, where moderate to strong earthquakes have been generated, which lies as close as 4.4 miles southwest of the project site. The faults that comprise this system are typified by right-lateral, strike-slip movement. Other active earthquake faults in the region include the Hayward Fault, which lies roughly 13 miles east of the project site across the San Francisco Bay, and the Serra Fault, which passes as close as 3 miles to the southwest. Based on maps published by the California Geological Survey, the only Alquist-Priolo Earthquake Fault Zone that has been mapped in the immediate vicinity of the project area is the zone that flanks the San Andreas Fault. This zone does not cross the project site (DOC 2010, Rockridge Geotechnical 2020).

According to the Geotechnical Investigation completed for the proposed project area, the overall probability of a magnitude 6.7 or greater earthquake on a fault in the greater Bay Area in the next 30 years is estimated at 72 percent. According to the General Plan EIR, the probability of a large earthquake on the San Andreas Fault—the fault responsible for the 1906 San Francisco earthquake and the 1989 Loma Prieta earthquake—in the next 30 years is about 21 percent. The expected earthquake intensity is between VII and X on the Modified Mercalli Intensity Scale for an earthquake magnitude of 7.2 on the San Andreas Fault. Earthquake resistance of any building is dependent upon an interaction of seismic frequency, intensity, and duration with the structure’s height, condition, and construction materials.

Soil properties can affect the construction and maintenance of roads, building foundations, and infrastructure. The General Plan EIR indicates that the Natural Resources Conservation Service (NRCS, formerly the Soil Conservation Service) has mapped over nine soil types in the City. The City may be susceptible to some soil hazards, such as erosion, shrink/swell potential (expansive soils), and subsidence. The project site is not located in, or within 20 miles of a landslide hazard area (California Geologic Service 2020).

According to the Geotechnical Investigation completed for the project site, the north portion of the project site is underlain by artificial fill with Pleistocene-age alluvium occurring along the northern most edge of the area. The south portion of the project site is underlain by Quaternary-age hillslope deposits (Rockridge Geotechnical 2020). The groundwater depth varies from 1 to 12 feet below ground surface (bgs) at the project site; however, for preliminary design purposes the Geotechnical Investigation recommends assuming groundwater may be encountered at about 4 bgs (Rockridge Geotechnical 2020).

Paleontological Resources

The University of California Museum of Paleontology specimens list contains more than 300 localities where fossils have been found throughout San Mateo County. One such locality is located in the City at Mussel Rock; however, exact locations of the fossils are not provided in order to protect the paleontological resources. Two fossilized plant species have been found in that location, including the Pseudotsuga taxifolia and Pinus masonii (City of Daly City 2012). Mussel Rock is located approximately 5 miles southwest of the project site.

4.7.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.5 of the General Plan EIR discusses potential impacts on geology and soils. According to the General Plan EIR, part of the City is located within an Alquist-Priolo Earthquake Fault Hazard Zone, and as a result there is considerable risk of surface fault rupture within the City. Additionally, there is potential for soil erosion to increase during construction, and the threat of landslides also exists in the City. However, compliance with existing federal, state, and local laws, as well as policies contained in the General Plan would reduce potential impacts to less than significant levels.

The following General Plan policies are applicable to the proposed project:

Policy SE-1.2: Require site-specific geotechnical, soils, and foundation reports for development proposed on sites identified in the Safety Element and its Geologic and Hazard Maps as having moderate or high potential for ground failure.

Policy SE-5.3: Continue to analyze the significant seismic, geologic, and community-wide hazards as part of the environmental review process; require that mitigation measures be made as conditions of project approval.

Plan Bay Area EIR Summary

Geology and Soils

Chapter 2.7 of the Plan Bay Area EIR evaluated potential impacts related to geology and soils. The Plan Bay Area EIR determined that all impacts related to geology and soils would be less than significant, and no mitigation measures were identified because there are existing federal, state, and local regulations and oversight in place that would effectively reduce the inherent hazards associated with these conditions to an acceptable level.

Paleontological Resources

Chapter 2.11 of the Plan Bay Area EIR discusses potential impacts related to paleontological resources that may result from implementation of the proposed Plan Bay Area. As discussed in the Plan Bay Area EIR, projects involving excavation, grading, or soil removal in previously undisturbed areas have the greatest likelihood to encounter these resources and result in a potentially significant impact. The Plan Bay Area EIR identifies Mitigation Measure 2.11-3 to reduce impacts related to paleontological resources to a less than significant level (Refer to Impact GEO-6 in Section 4.7.3, Project-Specific Analysis).

PBA EIR MM 2.11-3: *Implementing agencies and/or project sponsors shall implement measures where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:*

- *Before construction activities, project sponsors shall conduct a record search using an appropriate database, such as the UC Berkeley Museum of Paleontology to determine whether the project area has been previously surveyed and whether resources were identified.*

- *If record searches indicate that the project is located in an area likely to contain important paleontological, and/or geological resources, such as sedimentary rocks which have yielded significant terrestrial and other fossils, project sponsors shall retain a qualified paleontologist to train all construction personnel involved with earthmoving activities about the possibility of encountering fossils. The appearance and types of fossils likely to be seen during construction will be described. Construction personnel will be trained about the proper notification procedures should fossils be encountered.*
- *If paleontological resources are discovered during earthmoving activities, the construction crew will be directed to immediately cease work in the vicinity of the find and notify the implementing agencies and/or project sponsors. The project sponsor will retain a qualified paleontologist for identification and salvage of fossils so that construction delays can be minimized. The paleontologist will be responsible for implementing a recovery plan which could include the following:*
    - *in the event of discovery, salvage of unearthed fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster-jacketing of large and/or fragile specimens, or more elaborate quarry excavations of richly fossiliferous deposits;*
    - *recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the geologic setting;*
    - *laboratory preparation (cleaning and repair) of collected fossil remains to a point of curation, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens;*
    - *cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;*
    - *transferal, for storage, of cataloged fossil remains to an appropriate repository, with consent of property owner;*
    - *preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection; and*
    - *project sponsors shall comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect paleontological or geologic resources.*

4.7.3 Project-Specific Analysis

Impact GEO-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

Impact Analysis

i) Fault Rupture

The project site is not located in a designated Alquist-Priolo Earthquake Fault Zone and there are no potentially active faults mapped within the site. The closest active faults to the project site include the San Andreas and San Gregorio faults which are over 4 miles southwest of the project site (Rockridge Geotechnical 2020). Therefore, the potential for damage to structures at the project site due to rupture of a known earthquake fault is low and impacts would be less than significant.

ii) Ground Shaking

The project site is in a seismically active region, and earthquake-related ground shaking is expected to occur during the designed life of the proposed project. Construction of the proposed project would be required to conform to the latest edition of the CBC, which includes engineering standards appropriate to withstand anticipated ground accelerations at the project site. Conformance with the earthquake design parameters of the CBC would be subject to City review as part of the building permit review process. Additionally, the proposed project would conform with all recommendations included in the Geotechnical Investigation and any future geotechnical investigations completed for the proposed project, as required by Mitigation Measure GEO-1. Specifically, due to underlying soils, Mitigation Measure GEO-1 would require a uniform support for the proposed structures within the project site. Soils underlying the portion of the site south of Midway Drive has moderate to high strength and low to moderate compressibility (Rockridge Geotechnical 2020). By placement of conventional spread footings bottomed on well-compacted fill and/or native soil, the new structures within the project area would be adequately supported. Therefore, with compliance with the CBC requirements and with implementation of Mitigation Measure GEO-1, which includes design measures included in the current and any subsequent geotechnical investigations, implementation of the proposed project would result in a less than significant impact related to ground shaking.

iii) Ground Failure, including Liquefaction

According to the Geotechnical Investigation, the project site is not susceptible to liquefaction or at risk for ground failure due to liquefaction or lateral spreading (Rockridge Geotechnical 2020). However, due to the underlying soils within the area, it is possible that if not properly accounted for in the project design, the underlying site soils could fail from ground shaking. As described above, the proposed project would be required to comply with the CBC specifications as well as Mitigation Measure GEO-1 which includes recommendations within the Geotechnical

Investigation related to stability of underlying soils within the project site. Therefore, the site soils would be adequately stabilized prior to the construction of the structures and potential impacts would be less than significant with mitigation incorporated.

iv) Landslides

The project site is slightly sloped from south to north within the project area. Elevation of the site ranges from approximately 8 feet above mean sea level (amsl) at the property line between the PG&E property and the Midway Village property (northern end) to approximately 100 feet amsl at the southern end of the project site along Martin Street. According to the Landslide Map Index prepared and managed by the California Department of Conservation – California Geological Survey, the project site is not located in, or within 20 miles of a landslide hazard area (California Geologic Service 2020). Therefore, the project would not be subject to seismically induced landslide hazards and no impact would occur.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure GEO-1 is required.

MM GEO-1: **Implement Geotechnical Design Recommendations.** Prior to issuance of grading permits, the Applicant shall incorporate all design specifications and recommendations contained within the Geotechnical Investigation into relevant project plans and specifications. This includes the recommendations in the current Preliminary Geotechnical Investigation (Rockridge Geotechnical 2020) and any subsequent geotechnical investigations or studies completed for the project. These specifications include, but are not limited to, foundation and settlement, imported soils, placement of support for structures through the use of footings or mats, use of concrete slab-on-grade floors, seismic design requirements, site preparation and grading, exterior concrete flatwork, drainage and landscaping, retaining walls, flexible pavement design, and use of portland cement concrete pavement. The project site plans shall be submitted to the City and reviewed as part of the building permit review process.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact GEO-2 Result in substantial soil erosion or the loss of topsoil?

Impact Analysis

Substantial soil erosion or loss of topsoil during construction could undermine structures and minor slopes, and this could be a concern during proposed project site development. Current project site design plans indicate there would be approximately 65,901 CY of cut and 108,993 CY of fill on the project site. The maximum depth of cut and fill onsite would range from 13 to 26 feet (pers. Comm. Patrick Chour June 28, 2019). Trees, roots, vegetation, and organic surficial soil would be removed from structural areas unless specified otherwise; the depth of organic surficial soil to be removed would vary from approximately 2 to 4 inches. It is anticipated that 12 of the 15 total acres of surface area would be affected by grading operation at the project site.

However, compliance with existing regulatory requirements, such as the implementation of grading erosion control measures specified in the CBC and Chapter 15.62 of the City's Municipal Code, would reduce impacts from erosion and the loss of topsoil. Examples of these control measures are BMPs such as hydroseeding or short-term biodegradable erosion control blankets; vegetated swales, silt fences, or other forms of protection at storm drain inlets; post-construction inspection of drainage structures for accumulated sediment; and post-construction clearing of debris and sediment from these structures. Chapter 15.62 of the Municipal Code, also known as the City of Daly City Grading, Erosion and Sediment Control Ordinance, contains rules and regulations that control site clearing, vegetation disturbances, landfills, land excavations, soil storage, and other activities that can cause sediments and other pollutants to enter the storm drain system. The ordinance also includes permit requirements, as well as procedures for the administration and enforcement of permits to appropriately control these development-related activities.

In addition, the proposed project would disturb more than 1 acre and be required to comply with the NPDES permitting program and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would identify BMPs to control the discharge of sediment and other pollutants during construction. As discussed in Section 4.10, Hydrology and Water Quality, the proposed project would implement a SWPPP and associated BMPs as part of Mitigation Measure HYD-1 (see Section, 4.10.3, Project-Specific Analysis) to reduce erosion impacts. Therefore, the proposed project would not result in substantial soil erosion or loss of topsoil, and impacts would be less than significant with implementation of Mitigation Measure HYD-1.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure HYD-1 is required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact GEO-3	Be located on strata or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Impact Analysis

According to the Geotechnical Investigation, the north portion of the project site is underlain by artificial fill with Pleistocene-age alluvium and the south portion of the project site is underlain by Quaternary-age hillslope deposits (Rockridge Geotechnical 2020). The fill in the north portion of the project site consists predominantly of medium dense to dense sand, silty sand and clayey sand, and stiff to very stiff clay. Additionally, the fill contains construction debris such as brick, metal, wood, glass, and concrete. Other areas within the north portion of the project site is underlain by marsh deposit consisting of soft to medium stiff clay with varying amounts of organics. The thickness of the marsh deposits range from about 2- to 4-feet. Beneath the marsh deposit lies alluvium consisting of interbedded medium dense to very dense sand with varying silt and clay content and stiff to hard clay. The south portion of the site, south of Midway Drive, consists of less than two feet of existing fill that is followed by alluvium consisting primarily of interbedded layers of very stiff to hard clay and medium dense to very dense clayey sand (Rockridge Geotechnical 2020). As such, the soils in the north portion of the project site are highly compressible and the soils in the south portion of the project site are low to moderately compressible (Rockridge Geotechnical 2020).

According to the Geotechnical Investigation, the project site is not susceptible to liquefaction or at risk for ground failure due to liquefaction or lateral spreading (Rockridge Geotechnical 2020). However, the underlying soils within the north portion of the project site are highly compressible and could become unstable with construction of the proposed project. Additionally, according to the Geotechnical Investigation groundwater varies from 1 to 12 feet bgs at the project site, but for design purposes it is recommended to assume groundwater may be encountered at about 4 bgs (Rockridge Geotechnical 2020). Project construction activities would excavate the project site up the 26 feet, and therefore groundwater may be encountered and require dewatering and shoring.

The proposed project would comply with the latest edition of the CBC and would incorporate the recommendations identified in the Geotechnical Investigation as Mitigation Measure GEO-1 to ensure the stability of foundations and reduce potential for differential settlement. In the event that construction activities such as excavation and trenching encounters shallow groundwater, common practices employed to facilitate construction include either dewatering the excavation or shoring the sides of the excavation to reduce groundwater inflow. If dewatering is used, the Applicant would be required to comply with the San Francisco Bay Area RWQCB construction dewatering permit requirements. Discharge of non-stormwater from an excavation that contains sediments or other pollutants to sanitary sewer, storm drain systems, creek bed (even if dry), or receiving waters without treatment is prohibited. Discharge of uncontaminated groundwater from dewatering is a conditionally exempted discharge by the San Francisco RWQCB. However, the removed water could potentially be contaminated due to the presence of contaminated soils onsite, from construction equipment, or sediments from excavation. Discharge of water resulting from dewatering operations would require an NPDES Permit, or a waiver (exemption) from the San Francisco RWQCB, which would establish discharge limitations for specific chemicals (if they occur in the dewatering flows). Additionally, discharged groundwater would be disposed of in accordance with Mitigation Measure HAZ-1, which requires the proposed project to prepare a Remediation Action Workplan to address onsite contaminated soils and groundwater (refer to Section 4.9, Hazards and Hazardous Materials for further discussion).

The proposed project would also implement Mitigation Measure GEO-2 and prepare a dewatering plan in accordance with the requirements of the RWQCB. The dewatering plan would detail the location of dewatering activities, equipment, and discharge point in accordance with the requirements of the RWQCB. The dewatering plan would be submitted to the City for review and approval. In the event shoring methods are implemented for the estimated 26-foot excavations, the Applicant would be required to prepare shoring plans in accordance with the California Division of Occupational Safety and Health regulations and the City of Daly City Public Works Department engineering standards and specifications. The shoring plans would be submitted to the City for approval. As such, impacts related to unstable soils would be less than significant with implementation of Mitigation Measures GEO-1, GEO-2, and HAZ-1.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measures GEO-1, GEO-2, and HAZ-1 are required.

MM GEO-2: **Prepare and Implement Dewatering and Shoring Plans.** If construction plans include excavation to 4 feet bgs, prior to issuance of a grading permit, the Applicant shall prepare and submit a dewatering plan to the City for approval. At a minimum, the dewatering plan shall detail dewatering methods, location of dewatering activities, equipment, groundwater sampling, disposal, and discharge point in accordance with the requirements of the San Francisco RWQCB. In the event shoring methods are implemented for the estimated 26-foot excavations, the Applicant shall submit all shoring plans to the City for approval prior to the issuance of a grading permit. All shoring plans shall be in accordance with the California Division of Occupational Safety and Health regulations and the City of Daly City Public Works Department engineering standards and specifications.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact GEO-4 Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact Analysis

The north portion of the project site consists of 10 feet of fill that is underlain by about 11 feet of highly compressible marsh deposits. The south portion of the site, south of Midway Drive, consists of less than two feet of fill that is underlain by alluvium (Rockridge Geotechnical 2020). These soils could have the potential to become unstable if not properly managed prior to the construction of structures due to the depth to groundwater and the presence of some clay soils. The proposed project would comply with the latest edition of the CBC and incorporate soil and structure stabilization recommendations as required by Mitigation Measure GEO-1, which includes the design recommendations of the Geotechnical Investigation completed for the proposed project. Specifically, the Geotechnical Investigation recommendations include installation of footings, mats, and engineered fill to be placed in various areas within the project site to support structures and reduce the potential for expanding soils (Rockridge Geotechnical 2020). All structures would be placed above ground and would not be located on expansive soils once constructed. Therefore, impacts related to expansive soils would be less than significant with Mitigation Measure GEO-1 incorporated.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure GEO-1 is required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact GEO-5 Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Impact Analysis

The proposed project includes a connection to the existing sewer line; therefore, no impact regarding the capability of soil to adequately support the use of septic tanks or alternative wastewater disposal systems would occur.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact GEO-6 Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Impact Analysis

The proposed project would cause a significant impact if it directly or indirectly destroyed a unique paleontological resource or site or unique geologic feature. The proposed project would include some ground-disturbance during construction-related activities, such as grading and the rerouting of utilities, which could directly or indirectly destroy a unique paleontological or unique geologic feature. As described in Chapter 2.0, Project Description, the maximum depth of cut and fill onsite would range from 13 to 26 feet. Although paleontological resources have been discovered at Mussel Rock, the project site is located approximately 5 miles southwest of that area and, therefore, would not directly or indirectly destroy those resources.

Even though discovery of paleontological or unique geological features is unlikely, it is still possible that unknown resources could be found. However, federal and state regulations would require protective measures for procedures in the event that resources are discovered. Section 5097 of the PRC specifies the procedures to be followed in the event of the unexpected discovery paleontological resources. Additionally, Section 15064.5(f) of the CEQA Guidelines requires that construction activities be halted until a qualified specialist can assess the significance of the find. Mitigation Measure GEO-3 (PBA EIR MM 2.11-3) would also be required and would ensure that a paleontological records search is completed for the project site and if the records search indicated that the project area is likely to contain paleontological and/or geologic resources, then a qualified paleontologist shall be required on the project site to train workers about the possibility of encountering fossils. Additionally, MM GEO-3 (PBA EIR MM 2.11-3) requires certain procedures to be followed in the event that a previously unknown paleontological or geologic resource is discovered during earth moving activities. Proper treatment and documentation of all discovered paleontological or geologic resources would be performed.

Adherence to the aforementioned requirements, General Plan policies, Mitigation Measure GEO-3 (PBA EIR MM 2.11-3) would ensure that the proposed project impacts associated with paleontological resources would be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure GEO-3 (PBA EIR MM 2.11-3) is required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

4.8 GREENHOUSE GASES

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

4.8.1 Environmental Setting

Greenhouse gases and climate change are cumulative global issues. CARB and EPA regulate GHG emissions within the State of California and the United States, respectively. While CARB has the primary regulatory responsibility within California for GHG emissions, local agencies can also adopt policies for GHG emission reduction.

Many chemical compounds in the Earth's atmosphere act as GHGs because they absorb and emit radiation within the thermal infrared range. When radiation from the Sun reaches the Earth's surface, some of it is reflected back into the atmosphere as infrared radiation (heat). GHGs absorb this infrared radiation and trap the heat in the atmosphere. Over time, the amount of energy from the Sun to the Earth's surface should be approximately equal to the amount of energy radiated back into space, leaving the temperature of the Earth's surface roughly constant. Many gases exhibit these "greenhouse" properties. Some of them occur in nature (water vapor, carbon dioxide, methane, and nitrous oxide) while others are exclusively human-made (like gases used for aerosols) (EPA 2014b).

The principal climate change gases resulting from human activity that enter and accumulate in the atmosphere are listed below:

- **Carbon Dioxide (CO_2):** CO_2 enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and chemical reactions (e.g., the manufacture of cement). CO_2 is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.

- **Methane (CH_4):** CH_4 is emitted during the production and transport of coal, natural gas, and oil. CH_4 emissions also result from livestock and agricultural practices and the decay of organic waste in municipal solid waste landfills.

- **Nitrous Oxide (N_2O):** N_2O is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.

- **Fluorinated Gases:** Hydrofluorocarbons (HFCs), perfluorinated chemicals (PFCs), and Sulfur hexafluoride (SF_6) are synthetic, powerful climate-change gases that are emitted from a variety of industrial processes. Fluorinated gases are often used as substitutes for ozone-depleting substances (i.e., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). These gases are typically emitted in smaller quantities, but because they are potent climate-change gases, they are sometimes referred to as high global warming potential gases.

4.8.1.1 Emissions Inventories and Trends

California's annual statewide GHG emission inventory is an important tool for establishing historical emission trends and tracking California's progress in reducing GHGs. In concert with data collected through various California Global Warming Solutions Act (Assembly Bill [AB] 32) programs, the GHG inventory is a critical piece in demonstrating the state's progress in achieving the statewide GHG target. The inventory provides estimates of anthropogenic GHG emissions within California, as well as emissions associated with imported electricity; natural sources are not included in the inventory. The inventory for 2017 shows that California's GHG emissions continue to decrease. In 2017, emissions from GHG emitting activities statewide were 424 million metric tons of CO2 equivalent ($MMTCO_2e$), 5 $MMTCO_2e$ lower than 2016 levels and 7 $MMTCO_2e$ below the 2020 GHG Limit of 431 $MMTCO_2e$. Consistent with recent years, these reductions have occurred while California's economy has continued to grow and generate jobs. Compared to 2016, California's GDP grew 3.6 percent while the carbon intensity of its economy declined by 4.5 percent. The most notable highlights in the inventory include:

- For the first time since California started to track GHG emissions, in-state and total electricity generation from zero-GHG sources (for purposes of the GHG inventory, these include solar, hydro, wind, and nuclear) exceeded generation from GHG-emitting sources.
- The transportation sector remains the largest source of GHG emissions in the state, but saw a 1 percent increase in emissions in 2017, the lowest growth rate over the past 4 years.
- Emissions from all other sectors have remained relatively constant in recent years, although emissions from high global warming potential gases have continued to increase as they replace Ozone Depleting Substances banned under the 1987 Montreal Protocol.

4.8.1.2 Potential Environmental Effects

For California, climate change in the form of warming has the potential to incur and exacerbate environmental impacts, including but not limited to changes to precipitation and runoff patterns, increased agricultural demand for water, inundation of low-lying coastal areas by sea-level rise, and increased incidents and severity of wildfire events. Although certain environmental effects are widely accepted to be a potential hazard to certain locations, such as rising sea level for low-lying coastal areas, it is currently infeasible to predict all environmental effects of climate change on any one location.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

Assembly Bill 32, California Global Warming Solutions Act (2006)

AB 32, the Global Warming Solutions Act of 2006, codified the State's GHG emissions target by directing CARB to reduce the State's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, the CARB, CEC, California Public Utilities Commission (CPUC), and Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the state's main strategies to reduce GHGs from business-as-usual emissions projected in 2020 back down to 1990 levels. Business-as-usual is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system.

Senate Bill 375, California's Regional Transportation and Land Use Planning Efforts (2008)

California enacted legislation (SB 375) to expand the efforts of AB 32 by controlling indirect GHG emissions caused by urban sprawl. SB 375 provides incentives for local governments and applicants to implement new conscientiously planned growth patterns. This includes incentives for creating attractive, walkable, and sustainable communities and revitalizing existing communities. The legislation also allows applicants to bypass certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Development of more alternative transportation options that would reduce vehicle trips and miles traveled, along with traffic congestion, would be encouraged. SB 375 enhances CARB's ability to reach the AB 32 goals by directing the agency in developing regional GHG emission reduction targets to be achieved from the transportation sector for 2020 and 2035. CARB works with the metropolitan planning organizations (e.g., ABAG and MTC) to align their regional transportation, housing, and land use plans to reduce VMT and demonstrate the region's ability to attain its GHG reduction targets. A similar process is used to reduce transportation emissions of ozone precursor pollutants in the Bay Area.

SB 350 Renewable Portfolio Standards

In September 2015, the California Legislature passed SB 350, which increases the states Renewables Portfolio Standard for content of electrical generation from the 33 percent target for 2020 to a 50 percent renewables target by 2030.

Executive Order EO-B-30-15 (2015) and SB 32 GHG Reduction Targets

In April 2015, Governor Brown signed Executive Order EO-B-30-15, which extended the goals of AB 32, setting a GHG emissions target at 40 percent of 1990 levels by 2030. On September 8, 2016, Governor Brown signed SB 32, which legislatively established the GHG reduction target of 40 percent of 1990 levels by 2030. In November 2017, CARB issued California's 2017 Climate Change Scoping Plan. While the state is on track to exceed the AB 32 scoping plan 2020 targets, this plan is an update to reflect the enacted SB 32 reduction target.

The new Scoping Plan establishes a strategy that will reduce GHG emissions in California to meet the 2030 target:

- Implement the Cap-and-Trade program that places a firm limit on 80 percent of the state's emissions;
- Achieve a 50-percent Renewable Portfolio Standard by 2030 (currently at about 29 percent statewide);
- Increase energy efficiency in existing buildings;
- Develop fuels with an 18-percent reduction in carbon intensity;
- Develop more high-density, transit-oriented housing;
- Develop walkable and bikeable communities;
- Greatly increase the number of electric vehicles on the road and reduce oil demand in half;
- Increase zero-emissions transit so that 100 percent of new buses are zero emissions;
- Reduce freight-related emissions by transitioning to zero emissions where feasible and near-zero emissions with renewable fuels everywhere else; and

- Reduce "super pollutants" by reducing methane and hydrofluorocarbons or HFCs by 40 percent.

In the updated Scoping Plan, CARB recommends statewide targets of no more than 6 metric tons of carbon dioxide equivalent ($MTCO_2e$) per capita (statewide) by 2030 and no more than 2 $MTCO_2e$ per capita by 2050. The statewide per capita targets account for all emissions sectors in the state, statewide population forecasts, and the statewide reductions necessary to achieve the 2030 statewide target under SB 32 and the longer-term state emissions reduction goal of 80 percent below 1990 levels by 2050.

Greenhouse Gas Significance Thresholds

BAAQMD's current CEQA Air Quality Guidelines currently recommends two project-specific thresholds and one plan-level threshold. Since the proposed project does not involve the preparation of a General Plan or Specific Plan, only the project-level thresholds are discussed further. The two project-level thresholds are a bright-line threshold of 1,100 $MTCO_2e$ and a GHG efficiency threshold of 4.6 $MTCO_2e$ per service population. The bright-line numeric threshold of 1,100 $MTCO_2e$ per year is a numeric emissions level below which a project's contribution to global climate change would be less than "cumulatively considerable." For projects that are above this bright-line cut-off level, emissions from these projects would still be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 $MTCO_2e$ per service population or better for mixed-use projects. Both thresholds were developed based off the 1990 state inventory and reductions identified to meet AB 32 targets for the year 2020. The GHG efficiency threshold was derived from looking at the land use inventory sector and statewide population and employment projections for AB 32 targets.

<u>Post-2020</u>

Given the recent legislative attention and case law regarding post-2020 goals and the scientific evidence that additional GHG reductions are needed through 2050 to stabilize CO_2 concentrations, the Association of Environmental Professionals' Climate Change Committee (2016) recommended in its Beyond 2020: The Challenges of Greenhouse Gas Reduction Planning by Local Governments in California white paper that CEQA analyses for most land use development projects can continue to rely on current thresholds for the immediate future, but that long-term projects should consider "post-2020 emissions consistent with 'substantial progress' along a post-2020 reduction trajectory toward meeting the 2050 target." The Beyond 2020 white paper further recommends that the "significance determination… should be based on consistency with 'substantial progress' along a post-2020 trajectory."

Project-Specific GHG Thresholds

As discussed above, for quantified emissions, the BAAQMD Guidelines recommend a GHG threshold of 1,100 metric tons or 4.6 metric tons per capita. These thresholds were developed based on meeting the 2020 GHG targets set in the scoping plan that addressed AB 32. In the event that the operation of a project would occur beyond 2020, a threshold that addresses a future target is appropriate.

Although BAAQMD has not published a quantified threshold for 2030 yet, this assessment uses a "Substantial Progress" efficiency metric of 2.8 $MTCO_2e$ per year per service population and a bright-line threshold of 660 $MTCO_2e$ per year based on the GHG reduction goals of EO B-30-15. The service population metric of 2.8 is calculated for 2030 based on the 1990 inventory and the projected 2030 statewide population and employment levels (BAAQMD 2016). The 2030 bright-line threshold is a 40 percent reduction of the 2020 1,100 $MTCO_2e$ per year threshold.

4.8.2 Previous Environmental Analysis

4.8.2.1 City of Daly City General Plan EIR Summary

Chapter 3.6 of the Daly City General Plan EIR discusses potential cumulative effects of GHGs within the Bay Area. As discussed in the Daly City General Plan EIR, GHG emissions are in and of themselves a significant cumulative impact. However, state regulations and implementation of General Plan policies that promote mixed uses, alternative modes of transportation, and energy efficiency would help to reduce GHG emissions to a less than significant level. Additionally, the Daly City General Plan EIR determined that the General Plan would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

The following General Plan policies are applicable to the proposed project:

Policy HE-24: Gradually increase energy and water efficiency standards for all new and existing housing while minimizing the costs of such standards.

Policy HE-25: Mandate the inclusion of green building techniques into most new construction.

4.8.2.2 Plan Bay Area EIR Summary

The following summarizes the potential impacts related to GHGs discussed in Chapter 2.5 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.5-2: Net Increase in Direct and Indirect GHG Emissions. The Plan Bay Area EIR determined that implementation of the Plan Bay Area would result in a net reduction in GHG emissions in 2040 when compared to existing conditions, and impacts would be less than significant. No mitigation measures were identified.

Impact 2.5-3: Conflict with Applicable Plans, Policies, or Regulations. The Plan Bay Area EIR determined that implementation of the Plan Bay Area could substantially conflict with the goal of SB 32 to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030. However, implementation of Mitigation Measure 2.5-3 would reduce potential impacts to less than significant level. Mitigation Measure 2.5-3 is not applicable to the proposed project because it is a plan level mitigation measure regarding implementation of Climate Action Plans and other regional plans for reducing GHG emissions.

Impact 2.5-4: Conflict with Local Policies or Plans. The Plan Bay Area EIR determined that implementation of the Plan Bay Area would not substantially conflict with local climate action plans or GHG reduction plans, and impacts would be less than significant. No mitigation measures were identified.

4.8.3 Project-Specific Analysis

Impact GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact Analysis

Thresholds

BAAQMD's current CEQA Guidelines recommend a GHG bright-line threshold of 1,100 $MTCO_2e$ or 4.6 $MTCO_2e$ per service population. If a project exceeds the 1,100 $MTCO_2e$ then the project's GHG efficiency is compared to the 4.6 $MTCO_2e$ per service population to determine significance. Notably, these thresholds were developed based on meeting the 2020 GHG targets set in the scoping plan that addressed AB 32. BAAQMD is in the process of updating its CEQA guidance. It is reasonable to base a post-2020 threshold off the same methodology BAAQMD used for developing its current recommendation.

Service Population

Currently there are 31 employees located onsite at both the child-care and office facilities. It is estimated that approximately 15 to 20 additional employees would be needed onsite, depending on the type of special needs populations ultimately served (e.g., formerly homeless, veterans, senior citizens, or transition-aged youth). These staff members would support the child-care facility and Community Center and would provide property management services for the residential units in the development. Employees for maintenance of Bayshore Park would be City employees and are not included in the estimated 15 to 20 employees for the remainder of the project site.

Consistent with the General Plan EIR assumptions and the United States Census Bureau (USCB), an average of 3.3 residents per household, with each household representing 95 percent of total housing units with a 5 percent vacancy rate (City of Daly City 2012, USCB 2019). Accordingly, 95 percent of 555 units would be 527 units, resulting in 1,739 residents. Since the Midway Village area includes 477 existing residents, the proposed project would result in 1,262 new residents. Therefore, the total new service population would be 1,282 residents plus employees.

Although BAAQMD has not published a quantified threshold for 2030 yet, this assessment uses a "Substantial Progress" efficiency metric of 2.8 MT CO_2e/year/service population and a bright-line threshold of 660 $MTCO_2e$/year based on the GHG reduction goals of EO B-30-15. The service population metric of 2.8 is calculated for 2030 based on the 1990 inventory and the projected 2030 statewide population and employment levels. The 2030 bright-line threshold is a 40 percent reduction of the 2020 1,100 $MTCO_2e$/year threshold. The 2030 thresholds were then interpolated to develop thresholds for 2026 of 836 MTCO2e/year for the bright-line threshold and 3.5 $MTCO_2e$ per year per service population.

Project-Specific Analysis

A project-specific analysis was completed for the proposed project. The analysis evaluated both construction and operational emissions.

Construction Emissions

Construction GHG emissions are generated from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. GHG emissions associated with construction for the proposed project are shown in Table 4.8-1.

Table 4.8-1: Construction GHG Emissions

Construction Year	MTCO2e per Year
2021	461
2023	194
2024	289
2025	602
2026	625
Maximum Annual Emissions	625

As shown in Table 4.8-1, maximum annual GHG emissions are estimated to be 625 MTCO2e. Neither the City nor BAAQMD have an adopted threshold of significance for construction related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable.

Operational Emissions

Long-term operational GHG emissions would result from proposed project-generated vehicular traffic, onsite combustion of natural gas, operation of any landscaping equipment, offsite generation of electrical power over the life of the project, the energy required to convey water to and wastewater from the project site, and the emissions associated with the hauling and disposal of solid waste from the project site.

The CalEEMod model, along with the project vehicle trip generation rates, was used to estimate GHG emissions associated with operation of the project. Table 4.8-2 shows the operational GHG results.

Table 4.8-2: Annual GHG Emissions for the Proposed Project

Source Category	Existing Land Use in 2026	Proposed Project in 2026	Existing Use in 2030	Proposed Project in 2030
Area	5	17	5	17
Energy Consumption	301	995	270	888
Mobile	945	3,165	876	2,933
Solid Waste Generation	45	140	45	140
Water Usage	28	80	24	70
Total	1,324	4,397	1,220	4,048
Net Emissions		**3,073**		**2,828**
Significance Threshold		836 $MTCO_2e$/year		600 $MTCO_2e$/year
Service Population Emissions ($MTCO_2e$/year/service population)		**2.4**		**2.2**
Significance Threshold		3.5 in 2026		2.8 in 2030
Exceeds both thresholds?		No		No

As shown in Table 4.8-2, the 2030 net emissions (2,828 $MTCO_2e$) exceed the 660 $MTCO_2e$ per year bright-line threshold. However, the service population emissions (2.2 $MTCO_2e$ per year per service population) do not exceed the 2030 per capita rate. Similarly, the 2026 net emissions (3,073 $MTCO_2e$) exceed the interpolated 836 $MTCO_2e$ per year bright-line threshold but do not exceed the 2026 interpolated per capita rate. To be considered significant, the project must exceed both the GHG significance threshold in metric tons per year and the service population significance threshold. Therefore, impacts would not be considered significant.

In addition, the proposed project implements the applicable operational GHG reduction strategies and sustainability measures from Plan Bay Area, as described in Section 2.3.7, Alternative Transportation, and Section 2.3.8, Sustainability. In addition, the proposed project would increase the housing density at an existing housing complex, thereby helping to reduce overall GHG emissions in the region. Therefore, the proposed project would not generate GHG emissions that would have a significant impact on the environment, and impacts would be considered less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis

The proposed project is consistent with and tiered off of the Plan Bay Area; the primary objective of the Plan is to achieve mandated reductions of GHG emissions and provide adequate housing for the projected 2040 regional population level pursuant to SB 375, The Sustainable Communities and Climate Protections Act of 2008. SB 375 outlines growth strategies that better integrate regional land use and transportation planning and that help meet the State of California’s GHG emissions reduction mandates. The Plan Bay Area outlines strategies to meet or exceed the targets set by CARB. By Executive Order, approved June 25, 2018, CARB officially determined that the Plan Bay Area would, if implemented, meet CARB’s 2020 and 2035 GHG emission reduction targets (CARB 2017b). The Plan Bay Area EIR found that the Plan could conflict with the goals of SB 32 unless mitigation was implemented. Mitigation for this impact includes the MTC and ABAG working with the BAAQMD and local comminutes to develop community-specific CAPs (Mitigation Measure 2.5.3). Although this mitigation measure is not applicable to the proposed project, Daly City has developed a CAP consistent with AB 32 and the 2020 emissions reduction target. As described above, in 2017, emissions from GHG emitting activities statewide were 7 MMTCO2e below the 2020 GHG limit established by AB 32. With the adoption of SB 32, the state has codified a 2030 GHG emissions reduction target of 40 percent below 1990 levels. In the future, the City may prepare an updated CAP to address the 2030 emissions target and identify measures to determine the proposed project’s consistency with SB 32. In the meantime, the table below identifies how the project is consistent with SB 32 Scoping Plan measures.

Table 4.8-3: Consistency with SB 32 2017 Scoping Plan Update

Scoping Plan Measure	Project Consistency
SB 350 50 Percent Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33 percent in 2020 to 50 percent in 2030.	Consistent: The project will purchase electricity from a utility subject to the SB 350 Renewable Mandate.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels	Not Applicable. This measure applies to existing buildings. New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency until residential housing and commercial development achieves zero net energy.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	Consistent. Vehicles accessing the project site will use fuel containing lower carbon content as the fuel standard is implemented.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario) Vehicle manufacturers will be required to meet existing regulations mandated by the low-emission vehicle (LEV) III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million zero-emission vehicles (ZEVs) on the road by 2030 and increasing numbers of ZEV trucks and buses.	Consistent. Future residents can be expected to purchase increasing numbers of more fuel efficient and zero emission cars and trucks each year. The 2019 CalGreen Code requires electrical service in multi-family dwellings as well as non-residential developments with ten or more parking spaces to be electric vehicle charger-ready. Home deliveries will be made by increasing numbers of ZEV delivery trucks.
Sustainable Freight Action Plan The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying more than 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero-emission freight vehicles and equipment powered by renewable energy by 2030.	Not Applicable. The measure applies to owners and operators of trucks and freight operations. However, home deliveries are expected to be made by increasing number of ZEV delivery trucks.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	Consistent. The project will include only natural gas hearths that produce very little black carbon compared to wood burning fireplaces and heaters.
Senate Bill 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	Consistent. The project will provide housing in the region that is consistent with the growth projections in the 2014 Regional Transportation Plan/Sustainable Communities Strategy. The proposed project is within a transit priority area and is subject to requirements applicable to those areas.

Scoping Plan Measure	Project Consistency
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	Consistent. The post-2020 Cap-and-Trade Program indirectly affects people who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the greenhouse gas emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, greenhouse gas emissions associated with California Environmental Quality Act projects' electricity usage are covered by the Cap- and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the program's first compliance period.
Natural and Working Lands Action Plan. The California Air Resources Board is working in coordination with several other agencies at the federal, state, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce greenhouse gas emissions and to cultivate net carbon sequestration potential for California's natural and working land.	Not Applicable. The project is a residential development and would not be considered natural or working lands.

Source: CARB 2017b Scoping Plan Update.

The 2017 Scoping Plan would achieve the bulk of the reductions from electric power, industrial fuel combustion, and transportation. Cap-and-trade would provide between 10 and 20 percent of the required reductions depending on the amounts achieved by the other reduction measures. Although the Scoping Plan Update focuses on state agency actions necessary to achieve the 2030 GHG limit, CARB considers local governments essential partners in achieving California's goals to reduce GHG emissions. The 2030 target will require an increase in the rate of emission reductions compared to what was needed to achieve the 2020 limit, and this will require action and collaboration at all levels, including local government action to complement and support state-level actions. For individual projects, the 2030 Scoping Plan Update suggests that all new land use development implement all feasible measures to reduce GHG emissions. The Scoping Plan does not define all feasible measures or attribute an amount of reductions required from new development beyond compliance with regulations. The proposed project is consistent with GHG reductions measures through energy efficiency and sustainability measures, as well as being consistent with the Plan Bay Area, which would result in an overall net reduction in GHG emissions in 2040 when compared to existing conditions, and impacts would be less than significant.

Lastly, the proposed project would comply with all relevant GHG reduction measures and strategies listed in the City's General Plan, including promoting mixed use, alternative modes of transportation, and energy efficiency. Therefore, the proposed project would not conflict with any applicable plans, policies, or regulations adopted for the purposes of reducing GHG emissions, and impacts would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

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4.9 HAZARDS AND HAZARDOUS MATERIALS

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely-hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

4.9.1 Environmental Setting

Hazardous materials, as defined by the CCR, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic: causes human health effects
- Ignitable: has the ability to burn
- Corrosive: causes severe burns or damage to materials
- Reactive: causes explosions or generates toxic gases

Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Government Code, Title 22, Sections 66261.20–24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

California Government Code, Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to compile, maintain, and update specified lists of hazardous material release sites. The CEQA (PRC Section 21092.6) requires the lead agency to consult the lists compiled pursuant to California Government Code, Section 65962.5 to determine whether the proposed project and any alternatives are identified on a federal or state listing database. The required lists of hazardous material release sites are commonly referred to as the “Cortese List” after the State Assembly member who sponsored the legislation. Since the statute was enacted more than 20 years ago, some of the provisions refer to agency activities that were conducted many years ago and are no longer being implemented and, in some cases, the information required in the Cortese List does not exist. Those requesting a copy of the Cortese List are now referred directly to the appropriate information resources contained on internet websites hosted by the boards or departments referenced in the statute, including the online EnviroStor database from the DTSC and the online GeoTracker database offered by the State Water Resources Control Board (SWRCB). These two databases include hazardous material release sites, along with other categories of sites or facilities specific to each agency’s jurisdiction. A search of the online databases in July of 2019 revealed that the Midway Village area is a military evaluation cleanup site, and the existing Bayshore Park is listed as a state response cleanup site (DTSC 2019a, SWRCB 2019).

As noted in Section 2.2 above, a manufactured gas plant operated on what is today the PG&E Martin Service Center property from approximately 1906 to 1916. The operations of the plant resulted in a waste material called lampblack that contained polycyclic aromatic hydrocarbons (PAHs). During World War II the federal government obtained parts of the PG&E property, including the project site, to build Navy housing. When land for this housing was graded, contaminated soils containing PAHs was used to fill low-lying areas prior to construction of the housing, as the health effects were unknown at the time. Various site investigations including testing of the soils and groundwater in and around the Midway Village area occurred in the early 1990s. As noted in Section 2.2 above, until recently, investigative activities were concentrated on PAHs and metals in shallow and semi-shallow soil. Other parameters in soil have also been evaluated to a lesser extent, including volatile organic compounds (VOCs), metals, cyanide, and phenols. In accordance with Engineering/Remediation Resources Group’s (ERRG’s) *Midway Village/Bayshore Park Remediation Project Workplan* dated 5 September 2002, PAH-contaminated soil that exceeded clean up levels at depth was removed from portions of Midway Village in the area north of Midway Drive (Village North) and Bayshore Park.

A durable cover consisting of two to five feet of clean soil, landscaping with a minimum of two feet of clean soil, or hardscapes including concrete building pads, concrete or asphalt walkways, patios, and roadways (cap) was placed over areas of remaining contamination, generally consisting of the entire Bayshore Park and isolated locations in the vicinity of Buildings 22 through 24, 28, 29, and 31 through 35 (ERRG, 2002). Analytical data for five sources of backfill were provided to DTSC for approval prior to cap placement (ERRG, 2002). The site was remediated, and no further action has been required since August 21, 2015, following certification by DTSC (DTSC 2019b).

Multiple Village North parcels and Bayshore Park are subject to three DTSC Land Use Covenants (LUCs), recorded on September 24, 1998 (1998 LUC),[6] October 17, 2002 (2002 LUC),[7] and November 23, 2010 (2010 LUC,[8] together with the 1998 LUC and 2002 LUC, the Existing LUCs) to prevent human direct contact with soil without agency oversight. The portion of Midway Village located south of Midway Drive (Village South), and some parcels on Village North are not subject to Existing LUCs. The areas covered by the Existing LUCs (i.e., Midway Village North parcels and Bayshore Park) are subject to requirements of Operations and Maintenance (O&M) Agreements with the DTSC. The O&M Agreements outline requirements for the cap inspection, maintenance, and reporting (SCS Engineers, 2017). The 2002 LUC is recorded on the land underlying Bayshore Park and contains a prohibition on residential use. Neither the 1998 LUC nor the 2010 LUC contain this restriction.

Since December of 2018, 3 soil gas sampling events have been conducted at the project site under the oversight of the DTSC. In December of 2018, soil gas testing was performed at the Village North portion of the project site under a Soil Gas Sampling Work Plan approved by the DTSC via email dated November 9, 2018. This sampling event detected elevated concentrations of VOCs in soil gas, including benzene, chloroform, ethylbenzene, naphthalene, xylenes, and 1,2,4-trimethylbenzene (1,2,4-TMB) (Langan, 2019). Additional testing was conducted at Village North in April 2019, during which testing elevated levels of the following VOCs were detected in soil gas: benzene, bromomethane, carbon tetrachloride, chloroethane, chloroform, chloromethane, 1,4-DCB, dichlorodifluoromethane, ethylbenzene, naphthalene, PCE, styrene, toluene, trichlorofluoromethane, trichlorotrifluoroethane, 1,2,4-TMB, 1,3,5-trimethylbenzene, vinyl chloride and xylenes (Langan, 2019). Soil gas testing was performed at Village South in November of 2019 and revealed elevated concentrations of VOCs, including benzene, chloroform, ethylbenzene, naphthalene, tetrachloroethene (PCE), vinyl chloride, and xylenes (Langan, 2020). The Project Applicant, County and the City are working with the DTSC to ensure that site conditions will be maintained in a manner protective of human health and the environment, including future Site users. This will include site mitigation and/or remedial activities, such as the development and approval of Response Plans and Soil Management Plans (SMPs) under the jurisdiction of the DTSC and/or other environmental agencies of applicable jurisdiction. Prior to the issuance of a grading permit for each phase of the Project, the Project Applicant shall document that the applicable regulatory agency has approved the necessary SMPs and/or environmental response plan documents addressing constituents of concern within the respective development phase. Prior to the issuance of a certificate of occupancy or operating permit, the developer shall document the applicable regulatory agency's approval that the Site may be used for its anticipated use.

As noted in Section 2.1 above, the current Bayshore Park is proposed for residential development and the park will be relocated to an area currently zoned for residential development. As such, the 2002 LUC will require a variance to allow for the residential use. To facilitate this, the Bayshore Park area will be made safe for residential use through site mitigation and remedial approaches. Appropriate techniques and approaches may include, among others, consolidation of impacted soil, engineering controls to separate impacted soil from human contact, excavation and appropriate management or removal. In addition to the significant portions of the Site that will be composed of durable covers, including building foundations, roads, engineered paths, and other hardscaped areas, landscaped areas will be covered with a clean soil cap composed of soil either presently available onsite or imported for construction mass grading purposes. This will require the use of approximately 21,500 CY of soil, including approximately 15,200 CY of imported clean fill and approximately 6,300 CY of clean soil from onsite. Impacts,

[6] The land subject to the 1998 LUC consists of APNs 005-330-250, 005-330-260, 005-330-270, 005-330-340, 005-330-350, 005-330-360, 005-330-370, and 005-330-380.
[7] The land subject to the 2002 LUC consists of APNs 005-330-330 and 005-330-390.
[8] The land subject to the 2010 LUC consists of APNs 005-330-280, 005-330-290, 005-330-300, and 005-330-310.

including impacts from truck trips such as greenhouse gas emissions, air toxicity, traffic, and circulation, have been evaluated in the Sections 4.3 (Air Quality), 4.8 (Greenhouse Gases), and 4.17 (Transportation) of this SCEA.

Additionally, vapor mitigation measures will be used to protect future Site users from soil gas, which could potentially enter the buildings and structures at locations where the structure overlays soil gas concentrations in excess of site-specific screening levels established by DTSC to be protective of human health. Such vapor mitigation measures may include, but are not limited to, vapor barriers, sub-slab venting or depressurization systems, or intrinsically safe designed foundations or structures. The foreseeable impacts from any vapor mitigation measures will be less than significant; the limited concentrations of VOCs released will either be vented from rooftop risers where it will quickly dissipate or will pass through filters, in the event that sub-slab depressurization is required.

In addition, institutional controls, including LUCs will be, will be put in place to protect future site users and the environment by ensuring the maintenance and efficacy of engineering controls and prohibiting land uses and activities that are not compatible with site mitigation activities.

The public airport nearest to the project site is San Francisco International Airport, which is located 5.4 miles to the south. There are no private airstrips located within 2 miles of the project site; however, the project site is within the boundaries of the Airport Influence Area (AIA) and would be subject to a determination of consistency from the Airport Land Use Commission to ensure that the proposed project is compatible with the Comprehensive Airport Land Use Compatibility Plan (CALUCP) for the Environs of San Francisco International Airport, dated July 2012 (Jacobs Consultancy Clarion Associates 2012), in accordance with Public Utility Code Section 21676.5(a). Additionally, the only school within 0.25 mile of the project site is Bayshore Elementary School, which is located approximately 320 feet north of the northernmost portion of the project site.

Federal regulations and regulations adopted by the BAAQMD apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with the regulations respecting asbestos and dust control may result in a Notice of Violation being issued by the BAAQMD, civil penalties under state and/or federal law, and possible action by the EPA under federal law. Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145).

There are no wildlands located within the City. The California Department of Forestry and Fire Protection (CAL FIRE) evaluates fire hazard severity risks according to areas of responsibility (i.e., federal, state, and local). According to CAL FIRE, there are not any very high fire hazard severity zones within the Local Responsibility Area on or near proximity to the project site. Likewise, there are no moderate, high, or very high fire hazard severity zones in the State Responsibility Areas in the vicinity of the project site (CAL FIRE 2008).

4.9.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.7 of the General Plan EIR discusses impacts related to hazardous materials, emergency response, and aircraft hazards. The General Plan EIR identified potentially significant impacts related to hazards and hazardous materials. However, compliance with existing federal, state, and local laws, as well as policies contained in the General Plan would reduce potential impacts to less than significant levels.

The following General Plan policies are applicable to the proposed project:

Policy SE-5.4: Utilize emergency evacuation routes as determined by the Police Department. The evacuation routes will follow the major roadways as set forth in the Circulation Element.

Plan Bay Area EIR Summary

The following summarizes the potential impacts related to hazards and hazardous materials discussed in Chapter 2.13 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.13-1: Routine Transport or Disposal of Hazardous Materials. The Plan Bay Area EIR determined future land use and transportation projects could increase the routine transport, use, storage, and disposal of hazardous wastes in the region. However, compliance with existing federal, state, and local regulations and oversight would effectively reduce potential impacts to a less than significant level. No mitigation measures were identified.

Impact 2.13-2: Accidental Release of Hazardous Materials into the Environment. The Plan Bay Area EIR determined future land use and transportation projects could increase the potential for unintentional upset and accident conditions. However, compliance with existing federal, state, and local regulations and oversight would effectively reduce potential impacts to a less than significant level. No mitigation measures were identified.

Impact 2.13-3: Emit or Handle Hazardous Materials Near Schools. The Plan Bay Area EIR determined all projects would comply with federal and state regulations that are designed to reduce the potential for the release of large quantities of hazardous materials and wastes into the environment to an acceptable level, and in particular to protect schools. Therefore, impacts would be less than significant. No mitigation measures were identified.

Impact 2.13-4: Hazardous Materials List Pursuant to California Government Code, Section 65962.5. The Plan Bay Area EIR determined that potential for encountering hazardous materials or wastes would be dependent on site-specific conditions. However, implementation of Mitigation Measure 2.13-4 would reduce impacts to a less than significant level (Refer to Impact HAZ-4 in Section 4.9.3, Project-Specific Analysis).

PBA EIR MM 2.13-4: *Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:*

- *If the project is located on or near a hazardous materials and/or waste site pursuant to Government Code Section 65962.5, or has the potential for residual hazardous materials and/or waste as a result of location and/or prior uses, the project sponsor shall prepare a Phase I ESA in accordance with the American Society for Testing and Materials' E-1527-05 standard. For work requiring any demolition or renovation, the Phase I ESA shall make recommendations for any hazardous building materials survey work that shall be done. All recommendations included in a Phase I ESA prepared for a site shall be implemented. If a Phase I ESA indicates the presence or likely presence of contamination, the implementing agency shall require a Phase II ESA, and recommendations of the Phase II ESA shall be fully implemented.*

Impact 2.13-5 and 2.13-6: Airport Land Use Plan or Vicinity of a Private Airstrip. The Plan Bay Area EIR analyzed the potential impacts related to the safety hazard for people residing or working within 2 miles of a public airport or in the vicinity of private airstrip. The Plan Bay Area EIR determined compliance with existing federal, state, and local regulations would reduce potential impacts to a less than significant level, and no mitigation measures were identified.

Impact 2.13-7: Emergency Response or Evacuation Plan. The Plan Bay Area EIR analyzed the potential impacts related to interference with emergency response and evacuation plans and determined that the impact would be less than significant. No mitigation measures were identified.

Impact 2.13-8: Wildland Fires. The Pan Bay Area EIR analyzed the potential impacts related to wildland fires and determined that the impact would be less than significant. No mitigation measures were identified.

4.9.3 Project-Specific Analysis

Impact HAZ-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

AND

Impact HAZ-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact Analysis

The proposed project would involve demolition of existing structures and construction of a mixed-use development that would include residential units, parking spaces, a child-care facility, a community center, office space, a revised street system, and recreational facilities. Residential uses are not typically associated with the routine transport, use, or disposal of hazardous materials and do not present a reasonably foreseeable release of hazardous materials. Any hazardous materials associated with the residential uses would primarily consist of typical household cleaning products and fertilizers. These items would be used in small quantities and in accordance with label instructions, which are based on federal and/or state health and safety regulations. Therefore, operation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through the release of hazardous materials through reasonably foreseeable upset and accident conditions.

During construction, small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used and transported to and from the site as needed. Accidental releases of small quantities of these substances could contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard; however, contractors would be required to transport, store, and handle hazardous materials required for construction in a manner consistent with relevant regulations and guidelines, including California Health and Safety Codes and City ordinances. Regulatory requirements for the transport of hazardous wastes in California are specified in Title 22 of the California Code of Regulations, Division 4.5, Chapters 13 and 29. In accordance with these regulations, transport of hazardous materials must comply with the California Vehicle Code, California Highway Patrol regulations (contained in Title 13 of the California Code of Regulations); the California State Fire Marshal regulations (contained in Title 19 of the California Code of Regulations); Department of Transportation (DOT) regulations (Title 49 of the Code of Federal Regulations); and EPA regulations (contained in Title 40 of the Code of Federal Regulations). The use of hazardous materials is regulated by the DTSC (Title 22, Division 4.5 of the California Code of Regulations).

According to the Geotechnical Investigation, groundwater at the project site varies from 1 to 12 feet bgs, but for design purposes it is recommended to assume groundwater may be encountered at about 4 bgs (Rockridge Geotechnical 2020). Project construction activities are anticipated to excavate the project site to 26 feet, and therefore may encounter groundwater. As discussed in Impact GEO-3, the proposed project would be required to implement Mitigation Measure GEO-2 and prepare a dewatering plan in accordance with the San Francisco Bay Area RWQCB construction dewatering permit requirements. Discharged groundwater could potentially be contaminated due to the presence of contaminated soils onsite, from construction equipment, or sediments from excavation. Discharge of water resulting from dewatering operations would require an NPDES Permit, or a waiver (exemption) from the San Francisco RWQCB, which would establish discharge limitations for specific chemicals (if they occur in the dewatering flows). As discussed further in Impact HAZ-4, the proposed project would also implement Mitigation Measure HAZ-1 to modify, amend, or rescind the 2002 LUC for the project site. Mitigation Measure HAZ-1 also requires implementation of an environmental response document, to be approved by the applicable regulatory agency, as well as compliance with a Soil Management Plan to address the movement of onsite contaminated soils and groundwater. Therefore, construction of the proposed project would result in a less than significant impact related to the routine transport, use, disposal, or accidental release of hazardous materials with implementation of Mitigation Measures GEO-2 and HAZ-1.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measures GEO-2 and HAZ-1 are required.

MM HAZ-1 **Modification, Amendment, or Rescindment of Deed Restriction and Consultation with an Applicable Regulatory Agency and Development of a Worker Environmental Protection Program (WEAP).** As a condition of approval of the proposed project, the Applicant shall consult with DTSC regarding the Existing LUCs on the site. A modification, amendment, or rescindment to one or more of the Existing LUCs will be required for the site since the 2002 LUC does not allow for residential development on the Bayshore Park portion of the site. The Applicant will enter into an agreement with the applicable regulatory agency on the appropriate actions to take regarding the potentially contaminated soils on the project site. As a condition of the agreement, an environmental response document will be required for the proposed project, which will include but is not limited to:

- Testing of soils and groundwater prior to the start of construction to identify contaminated soils and/or groundwater in the area;
- Removal and disposal of any contaminated soils or groundwater;
- Removal of any hazardous building materials in existing structures prior to demolition (e.g., asbestos, tile, lead-based paint, mercury switches and light fixtures, light fixtures with PCB transformers and ballast transformers);
- Capping of any soil that will not be covered by structural improvements (i.e., landscaped areas or exposed soils in the park area);
- Implementation of an SMP for the site;
- Approval and implementation of a Worker Environmental Protection Program; and
- Procedures to be followed in the event of discovery of unknown environmental conditions which may exist at the Site, such as subsurface structures, underground tanks and piping.

Consultation with the applicable regulatory agency and implementation of the environmental response document will include the general steps that will be taken to remediate the project site and reduce potential impacts to human health and the environment from the potentially contaminated soil and groundwater in the area.

Additionally, development and participation in a Worker Environmental Protection Program shall be required to ensure that all construction workers onsite are appropriately trained on the conditions of the site soils and the potentially hazards conditions of these soils. The Applicant and the contractor are responsible for ensuring that all onsite personnel attend the WEAP presentation, receive a summary handout, and sign a training attendance acknowledgement form to indicate that the contents of the program are understood and to provide proof of attendance. Each participant of the WEAP presentation shall be responsible for maintaining their copy of the WEAP reference materials and making sure other onsite personnel are complying with the recommended precautions. The contractor shall keep the sign in sheet onsite and submit copies of the WEAP sign-in sheet to the Applicant's project manager who shall keep it on file at their offices.

A building permit cannot be issued, and thus, the proposed project cannot begin construction, until the 2002 LUC is either modified, amended, or rescinded.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact HAZ-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact Analysis

The project site is adjacent to Bayshore Elementary School, which is located approximately 320 feet north of the project site. As explained in Impact HAZ-1 and Impact HAZ-2, the proposed project would not involve the use of significant quantities of hazardous materials, however construction of the proposed project has the potential to result in emissions of TACs/hazardous air pollutants in the form of DPM emissions from the operation of diesel-fueled internal combustion engines. Additionally, other potentially hazardous materials present within soils could be disturbed during construction activities and could become airborne and adversely affect nearby schools. Mitigation Measure AIR-1 (PBA EIR MM 2.2-2), would be required during construction to reduce construction-related dust and the potential for hazardous airborne particles to be released. Mitigation Measure AIR-1 (PBA EIR MM 2.2-2) would include specific instruction for handling construction equipment, such as limiting idling times, which would limit the amount of TACs released into the air near Bayshore Elementary School and the onsite daycare facility. Other emission reducing requirements would be included in Mitigation Measure AIR-1 (Mitigation Measure EIR MM 2.2-2), which could include the use of late model engines, low-emission diesel products, alternative fuels, and other options as they become available.

Hazardous materials used during construction would be typical of common construction activities and are discussed in Impact HAZ-1 and Impact HAZ-2 above. They would be handled by the contractor in accordance with applicable federal, state, and local regulations for hazardous substances as well as the requirements of Mitigation Measure HAZ-1. Additionally, the amount of these materials needed for onsite equipment maintenance would not be enough to cause a significant hazard to the public, or the nearby school, if released, since the quantity of these hazardous materials onsite at any one given time would only amount to a refueling truck and the construction equipment.

Further, PRC Section 21151.4 requires that projects located within 0.25 mile of a school that might reasonably be anticipated to emit hazardous air emissions or that would handle an extremely hazardous substance or a mixture containing extremely hazardous substances (in a quantity equal to or greater than the state threshold quantity specified pursuant to subdivision (j) of Section 25532 of the Health and Safety Code), would either need to consult with the school or give written notification to the school. The Applicant would comply with PRC Section 21151.4 and would notify the appropriate personnel at Bayshore Elementary School if construction activities would require work with hazardous materials or emissions within 0.25 mile of the school as well as by following applicable rules and regulations governing transport and use of hazardous materials as discussed herein. Therefore, the construction of the proposed project would have a less than significant impact to schools and would be in compliance with PRC Section 21151.4.

Therefore, the overall impact related to hazardous emissions within 0.25 mile of Bayshore School and the onsite daycare would be less than significant with Mitigation Measures AIR-1 (PBA EIR MM 2.2-2) and HAZ-1 incorporated.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measures AIR-1 (PBA EIR MM 2.2-2) and HAZ-1 are required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact HAZ-4 Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis

As stated in Section 4.9.1, Environmental Setting, the project site is located on two identified hazardous cleanup sites, pursuant to California Government Code, Section 65962.5, associated with the current Midway Village area and Bayshore Park (DTSC 2019a). Mitigation Measure HAZ-2 (PBA EIR MM 2.13-4) requires that a Phase I ESA be completed for any project that has the potential for residual hazardous materials and/or waste as a result of location and/or prior uses. A Phase I ESA was completed for the project area on April 14, 2017 (SCS Engineers 2017). The Phase I ESA discusses the listed sites and concludes that site development activities would be required to comply with the Existing LUCs. As such Mitigation Measure HAZ-1 would be required to either modify (amend) or lift (rescind) the 2002 LUC as well as require the development and participation in a Worker Environmental Protection Program (WEAP), to educate and inform construction workers of the potential hazards present of the project site. Implementation of Mitigation Measures HAZ-1 and HAZ-2 (PBA EIR MM 2.13.4) would ensure that the existing Cortese-listed site within the project area would not create a significant hazard to the public or future residents on the site during construction and operation of the proposed project. All potentially contaminated soils would be remediated to a level protective of human health and the environment and thus would not result in a significant impact to the public. The impact would be less than significant with Mitigation Measure HAZ-1 and Mitigation Measure HAZ-2 (PBA EIR MM 2.13-4).

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure HAZ-1 and Mitigation Measure HAZ-2 (PBA EIR MM 2.13-4).

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact HAZ-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Impact Analysis

The project site is located within the boundaries of the AIA of the San Francisco International Airport and would be subject to a determination of consistency from the airport land use commission to ensure that the proposed project is compatible with the CALUCP in accordance with Public Utilities Code Section 21676.5(a). The proposed project is not located in the "Outer Boundary of the Safety Field" or the "Noise Contour Zone," both of which could influence the project design. Under state law, local governments may submit development proposals to the airport land use commission for non-binding advisory review. The CALUCP encourages local governments to submit the following types of development proposals within Area B of the AIA to the airport land use commission for advisory review if the proposed project includes the following:

- Commercial or mixed-use development of more than 100,000 sf of gross building area;
- Residential or mixed-use development that includes more than 50 dwelling units;
- Public or private schools;
- Hospitals or other inpatient medical care facilities;
- Libraries; and
- Places of public assembly.

As discussed in Section 2, Project Description, the proposed project includes 555 dwelling units; however, review of the airport land use commission is only required for entitlements that require a policy change (e.g., General Plan amendment, rezoning, etc.). A General Plan amendment has been requested to relocate the location of the park on the project site. The current Bayshore Park area is proposed as a housing development, while the area that is proposed to have the new Bayshore Park is now designated as residential. These designations must be switched under a General Plan amendment and is therefore still consistent with the General Plan. Therefore, given that the proposed project is consistent with the General Plan and the airport land use commission has found the General Plan consistent with the CALUCP, any potential incompatibility impacts resulting in safety hazards for individuals residing or working in the project area would be considered a less than significant impact.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact HAZ-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact Analysis

The proposed project would not alter the existing street system besides minor improvements to the streets within the existing Midway Village area, and the limited construction activities associated with the proposed project improvements would not result in temporary blockage of any roadways. As a result, the proposed project would not impair implementation of or physically interfere with any emergency response or evacuation plan, and a less than significant impact would occur.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact HAZ-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Impact Analysis

The primary threat related to wildland fire is due to open grasslands abutting residential developments. The project site is surrounded by urban development on all sides with predominantly impervious surfaces. As such, the proposed project is not located near any open grassland. With implementation of the proposed project, the site would remain a developed area constructed with predominantly impervious surfaces. Further, the proposed project is not located in a State Responsibility Areas (SRA) or a very high fire hazard severity zone as documented by the California Department of Forestry and Fire protection (CAL FIRE) (CAL FIRE 2008). Additionally, the proposed project would be required to comply with all applicable fire safety standards set forth by the City regarding fire protection during construction including placement of new fire hydrants within the site; therefore, the proposed project would have no impact with respect to exposing people or structures to the risk of loss, injury, or death involving wildland fires.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

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4.10 HYDROLOGY AND WATER QUALITY

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that that the project may impede sustainable groundwater management of the basin?	☐	☒	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☒	☐	☐
i) Result in substantial erosion or siltation on- or offsite;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	☐	☒	☐	☐
iv) Impede or redirect flood flows	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

4.10.1 Environmental Setting

Climate and Precipitation

The City's climate is moderated by the cooling influence of the Pacific Ocean. Precipitation in the Bay Area typically occurs from October to April. Coastal fog during the summer months and relatively mild winter temperatures produce mean monthly minimum temperatures between 39°F and 54°F and mean monthly maximum temperatures between 60°F and 67°F.

Topography

The project site sits on a slightly sloping hillside with the highest elevation at the south side of the project site and the lowest elevation at the north side of the project site. Elevation of the site ranges from approximately 8 feet above mean sea level (amsl) at the property line between the PG&E property and the Midway Village property (northern end) to approximately 100 feet amsl at the southern end of the project site along Martin Street.

Watershed and Regional Drainage

A watershed is the geographic area draining into a river system, ocean, or other body of water through a single outlet and includes the receiving waters. The City contains five watershed areas, the two largest are the Vista Grande and Colma Creek watersheds. The northern portion of the City, including the project site, is located within the Vista Grande watershed area. The Vista Grande watershed area borders the City and County of San Francisco to the north, Colma Creek watershed to the south and east, and the Pacific Ocean on the west. The Vista Grande portion of the City's stormwater collection system drains the northwestern area of the City and an unincorporated portion of San Mateo County.

The project site lies on the border of the Vista Grande and Colma Creek watersheds. While the project site lies within the Vista Grande Watershed, it appears that site drainage would flow south down to Bayshore Boulevard into the Colma Creek watershed, which drains east into the San Francisco Bay (City of Daly City 2013).

Local Drainage

The project site is located within the Bayshore planning area and is served by the City's storm drain system, maintained by the Daly City Public Works Department. Existing stormwater on the site primarily runs offsite from south to north into the storm drain system.

Groundwater Supply

The project site overlies the southwest corner of the Islais Valley Groundwater Basin within the San Francisco Bay Hydrologic Region. The San Bruno Mountains bound the basin to the west. It is separated from the Downtown San Francisco Groundwater Basin to the north and the Visitacion Valley and South San Francisco Groundwater Basins to the south by bedrock topographic highs.

Geologically, the Islais Valley basin can be broadly classified as bedrock and unconsolidated sediment. Impermeable bedrock of the Franciscan Complex forms the base of the water-bearing formations. Unconsolidated material overlying the bedrock comprises the water bearing strata and consists of dune sand, the Colma Formation, bay mud and clay, and artificial fill. The Colma Formation consists of fine-grained sand, silty sand, and discontinuous beds of clay to 5 feet thick. The artificial fill is largely composed of dune sand with lesser amounts of silt and clay, and some manmade debris (Schlocker 1974). It reaches a maximum total thickness of about 60 feet. The unconsolidated material in aggregate has a maximum thickness of 200 feet, indicating a relatively low storage capacity for groundwater and minimal protection from potential surface contamination. No municipal water supply wells are located in the Islais Valley basin (USGS 1993, DWR 2004a).

The majority of the City lies within the South Westside Groundwater Basin (SWB); however, the project site lies within the Visitacion Valley Groundwater Basin (VVB). The 9-square-mile VVB is roughly triangular shaped and underlies the City and the San Bruno Mountains. Beneath the City, the groundwater basin (from lower to upper strata) consists of Franciscan Bedrock, Older Merced Formation, Upper Merced Formation, and Colma Formation overlain by clay and sand (DWR 2004b).

Pursuant to Water Code Section 10723.8, SFPUC recently notified the California Department of Water Resources (DWR) of its intent to undertake sustainable groundwater management of the seven groundwater basins that underlie the City and County of San Francisco, among them the Islais Valley (DWR Basin No 2-33 – the northern portion within the City, the Westside DWR Basin No. 2-35, and the Visitacion Valley DWR Basin 2-32). All of the basins are classified by DWR as very low priority basins under the Sustainable Groundwater Management Act. A public hearing held in accordance with Water Code Section 10723(b) on March 10, 2015, established the SFPUC as the Groundwater Sustainability Agency (GSA) for the seven groundwater basins within the City and County of San Francisco (SFPUC 2015). The composition of the GSA for the South Westside Basin has not yet been determined. Upon establishment of a GSA for the VVB, the SFPUC will enter into coordination agreements, as defined in Water Code Section 10721(d), with the individual agencies and water providers to ensure the coordinated implementation of Groundwater Sustainability Plans for the entire Visitacion Basin. The agreements will be consistent with the Regional Groundwater Storage and Recovery Project Operating Agreement among the SFPUC, California Water Service Company, and the cities of San Bruno and Daly City (SFPUC 2015).

Water Quality

The project site is located within the Vista Grande watershed near the Colma Creek watershed. Stormwater runoff from the project site would discharge into the City's storm drain system, which would eventually connect to Colma Creek and terminate in the San Francisco Bay.

State policy for water quality control in California is directed toward achieving the highest water quality consistent with maximum benefit to the people of the state. Aquatic ecosystems and underground aquifers provide many different benefits to the people of the state. The SWRCB is charged with protecting all these uses from pollution and nuisance that may occur as a result of waste discharges in the region. Beneficial uses of surface waters, groundwaters, marshes, and wetlands serve as a basis for establishing water quality objectives and discharge prohibitions to attain these goals.

In accordance with Section 303 (d) of the Clean Water Act, the state must present the EPA with a list of impaired water bodies that do not meet water quality standards. Once a water body has been placed on the 303(d) list of impaired waters, States are required to develop a total maximum daily load (TMDL) to address each pollutant causing impairment. A TMDL defines how much of a pollutant a water body can tolerate and still meet the water quality standards. The City is located in Regional Board Region 2 – San Francisco Bay Region. The beneficial uses of the surface water bodies in the City to which stormwater from the project site would discharge have been designated in the RWQCB Basin Plan.

Flooding

Flood hazard zones are areas subject to flood hazards that are identified on an official Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA). Flooding can be earthquake induced or the result of intense rainfall. Areas within a 100-year floodplain have a 1% probability of flooding in a given year. FEMA has designated the City as a Non-Special Flood Hazard Area (NSFHA), defined as an area that is in a moderate to low risk flood zone. An NSFHA is not in any immediate danger from flooding caused by overflowing rivers or hard rains (FEMA 2019).

According to FIRM Map. No. 06081C0035F, the project site is not within a 100-year or 500-year flood zone (FEMA 2019).

The California Office of Emergency Services (CalOES) has compiled dam inundation maps for the San Francisco Bay Area. A review of these maps indicate that the project site is not located within a dam inundation area (CalOES 2019).

A tsunami is a large tidal wave generated by an earthquake, landslide, or volcanic eruption. Tsunami inundation maps have also been developed for the San Francisco Bay Area. The project site is more than 4 miles from the Pacific Ocean at an elevation of 8 feet amsl at its lowest point and is not within the mapped tsunami inundation area (State of California 2009).

Seiches are waves that oscillate in enclosed water bodies, such as reservoirs, lakes, ponds, swimming pools, or semi enclosed bodies of water, such as San Francisco Bay. Because the project site is far from San Francisco Bay (more than 4 miles), it would not be subject to seiches.

The site is also outside of the influence of sea level rise, as shown on the National Oceanic and Atmospheric Administration sea level rise map. It is not subject to dike/levee failures (NOAA 2019).

4.10.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.8 of the General Plan EIR discusses potential impacts related to hydrology and water quality. Future development projects would conform to all regulatory requirements, and therefore would not violate any water quality standard or waste discharge requirement. Future development projects would also be required to comply with the Municipal Regional Stormwater NPDES Permit and the Statewide NPDES General Permit to reduce impacts from stormwater runoff and non-point pollutants. As such, adherence to existing regulations and General Plan policies would ensure that impacts related to hydrology and water quality are less than significant.

The following General Plan policies are applicable to the proposed project:

Policy RME-8: Through the development of a Stormwater Management Program, ensure that all new development complies with the applicable Municipal Regional Stormwater Permit by incorporating controls that reduce water quality impacts over the life of the project in ways that are both technically and economically feasible, and reduce pollutants in stormwater discharges to the maximum extent practicable.

Policy SE-2.3: Continue to require the habitable portions of new structures to have a finished flood elevation 1.5 feet above the projected 100-year water surface or to be adequately protected from flooding.

Policy SE-2.4: Prohibit any reduction of creek channel capacity, impoundment or diversion of creek channel flows which would adversely affect adjacent properties or the degree of flooding. Prevent erosion of creek banks.

Policy SE-2.5: Protect new development adjacent to creeks by requiring adequate building setbacks from creek banks and provision of access easements for creek maintenance purposes.

Plan Bay Area EIR Summary

Chapter 2.8 of the Plan Bay Area EIR discusses potential impacts on water resources. The Plan Bay Area EIR determined that future land use and development projects could adversely affect water quality, groundwater recharge, and drainage patterns and expose people to a significant risk of loss, injury, or death from flooding, seiche, tsunami, or mudflows. However, compliance with existing federal, state, and local regulations would ensure impacts are less than significant. No mitigation measures were identified.

4.10.3 Project-Specific Analysis

Impact HYD-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Impact Analysis

Construction

Construction activities and refueling and parking of construction equipment onsite during could result in the degradation of water quality if sediment, oil and greases, solvents, paints, and other chemicals were released into to nearby water bodies or storm drain system. Additionally, excavation and other soil-disturbing activities associated with the proposed project could potentially affect water quality as a result of movement of soil or sediment erosion from the contaminated soils on the project site (see section 4.9, Hazards and Hazardous Materials, for more detail). If movement of these soils occurs, this could potentially run into surface waters, thus resulting in contamination in runoff.

To minimize these potential impacts, the proposed project would be required to comply with the NPDES General Construction Permit (GCP) as well as prepare a Stormwater Pollution Prevention Plan (SWPPP) that requires the incorporation of BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. This would be further required by Mitigation Measure HYD-1, Prepare and Implement a SWPPP. The SWRCB mandates that projects that disturb 1 or more acres must obtain coverage under the Statewide GCP. Since the proposed project would involve development of 15 acres, it would be subject to these requirements. The GCP also requires that prior to the start of construction activities, the Applicant must file permit registration documents with the SWRCB, which includes a Notice of Intent, risk assessment, site map, annual fee, signed certification statement, SWPPP, and post-construction water balance calculations.

In addition, the proposed project must comply with the City's Grading, Erosion, and Sediment Control Ordinance, as specified in the Chapter 15.62 in the Municipal Code, to minimize potential impacts to water quality. An erosion and sediment control plan must be prepared and submitted with the grading plan for approval by the City Engineer prior to the start of construction.

The City is under the jurisdiction of the San Francisco RWQCB (Region 2) and is subject to the Waste Discharge Requirements of the Municipal Regional Stormwater Permit. Per the Municipal Regional Stormwater Permit, implementation of the following construction BMPs are also required (RWQCB 2015):

- Control and prevent discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, rinse water from architectural copper, and non-stormwater discharges, to storm drains and watercourses.

- Store, handle, and dispose of construction materials and wastes properly to prevent contact with stormwater.
- Do not clean, fuel, or maintain vehicles onsite, except in a designated area where wash water is contained and treated.
- Train and provide instruction to all employees and subcontractors regarding the construction BMPs.
- Protect all storm drain inlets in the vicinity of the site using sediment controls such as berms, fiber rolls, or filters.
- Limit construction access routes and stabilize designated access points.
- Attach the San Mateo Countywide Water Pollution Prevention Program's construction BMP plan sheet to project plans and require contractors to implement the applicable BMPs on the plan sheet.
- Use temporary erosion controls to stabilize all denuded areas until permanent erosion controls are established.
- Delineate clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses with field markers.
- Perform clearing and earth moving activities only during dry weather.
- Use sediment controls or filtration to remove sediment when dewatering and obtain all necessary permits.
- Trap sediment onsite using BMPs such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for soil stockpiles, etc.
- Divert onsite runoff around exposed areas; divert offsite runoff around the site (e.g., swales and dikes).
- Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
- Provide notes, specifications, or attachments describing the following:
    - Construction, operation, and maintenance of erosion and sediment control measures, including inspection frequency.
    - Methods and schedule for grading, excavation, filling, clearing of vegetation, and storage and disposal of excavated or cleared material.
    - Specifications for vegetative cover and mulch, including methods and schedules for planting and fertilization.
    - Provisions for temporary and/or permanent irrigation.

The Applicant or chosen contractor would prepare a SWPPP that addresses these and other structural and non-structural BMPs that would be implemented at the site.

In addition, the City reviews individual projects for stormwater conformance with applicable laws, policies, and guidelines and has the authority to inspect and conduct sampling at properties to ensure that the provisions of the City's Storm Water Management and Discharge Control Ordinance (Title 14 of the Municipal Code) are implemented. With development and implementation of the BMPs in the Erosion and Sediment Control Plan and the SWPPP and compliance with City, county, and state stormwater regulations, the construction impacts to water quality would be less than significant.

Operation

Runoff from high-density residential and commercial properties with parking typically contain oils, grease, fuel, antifreeze, byproducts of combustion (such as lead, cadmium, nickel, and other metals), roofing, gutter, and trim runoff, as well as fertilizers, herbicides, pesticides, and other pollutants associated with landscaping. In addition, sources of pollutants that accompany large-scale buildings would be present, such as onsite storm drain inlets, dumpster storage area, fire sprinkler test water, rooftop equipment, courtyard, sidewalks, and a parking lot.

Water quality in stormwater runoff is regulated locally by the San Mateo Countywide Water Pollution Prevention Program, which includes provisions set by the San Francisco Bay RWQCB. The San Mateo Countywide NPDES permit was amended in 2009 and now includes stricter requirements for incorporating post-construction stormwater control/low-impact development measures into new development and redevelopment projects. All development and redevelopment projects must incorporate site design, source control, and treatment measures to the maximum extent practicable and to use stormwater control measures that are technically feasible and not cost prohibitive. Also, each project regulated under the C.3 provisions must treat 100 percent of the amount of runoff for the project’s drainage area with onsite low-impact development treatment measures. Stormwater treatment requirements must be met by using evapotranspiration, infiltration, rainwater harvesting, and reuse, except where this is infeasible, in which case landscape-based biotreatment is allowed.

The threshold for requiring stormwater treatment includes any earthwork that would be greater or equal to 2,500 sf. Since the proposed project would require greater than 2,500 sf or earthwork, adherence to the C.3 provisions of the NPDES permit apply, and various prescribed measures must be incorporated into the project design.

The proposed project would incorporate site design measures, source control measures, and stormwater treatment control measures to minimize potential water quality impacts as follows:

- Landscaped areas and permeable pavers that would retain and treat their own runoff.
- Planters located on southeast portion of site, near the foot of the building, would be used as flow-through planters to treat and discharge runoff from impervious areas.
- Treated runoff would be discharged from the BMPs to the storm drain line on Schwerin Street.
- No runoff would be directly discharged to drainage systems outside the project site.

With the implementation of the proposed site designs, source control, treatment control measures, and management practices, the potential operational impact to water quality would be less than significant. Therefore, operational impacts of the proposed project would be less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure HYD-1 is required.

MM HYD-1 **Prepare and Implement a SWPPP.** The Applicant (or its contractor) shall obtain coverage for the proposed project under the Construction General Permit (Order No. 2009-009-DWQ, as amended by 2010-0014-DWQ and 20152-006-DWQ). Per the requirements of the California State Water Resources Control Board, the Applicant, or it contractor, shall prepare a SWPPP to reduce the potential for water pollution and sedimentation from proposed project activities. The SWPPP will address site runoff, assuring that project runoff will not affect or alter the drainage patterns on the site. The SWPPP shall comply with the City's Grading, Erosion, and Sediment Control Ordinance, as specified in the Chapter 15.62 in the Municipal Code, as well as the Waste Discharge Requirements of the Municipal Regional Stormwater Permit.

Level of Significance After Mitigation

Less Than Significant With Mitigation.

Impact HYD-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact Analysis

New construction could result in impacts related to groundwater if areas currently available for the infiltration of rainfall runoff are reduced and permeable areas are replaced by impermeable surfaces. The project site currently includes 374,980 sf of impervious surface, including the Midway Village area and 20,875 sf of impervious surface at Bayshore Park. The proposed project would include 456,595 sf of new impervious surface (including both the redeveloped Midway Village area and the redeveloped Bayshore Park).

Build-out of the proposed project would lead to an increased demand for water. The project site is located within the Islais Valley groundwater basin but draws water from the South Westside Groundwater Basin. The City obtains approximately 45 percent of its water supply from local groundwater wells. Although the South Westside Basin is not a formally adjudicated basin, the cities of San Bruno and Daly City and the California Water Service Company have established pumping limitations with implementation of the Groundwater Storage and Recovery Agreement, which was formally executed on December 16, 2014. The City has agreed to self-limit groundwater pumping to 3.43 million gallons per day (UWMP 2015).

Implementation of the proposed project would include features with permeable pavers that would retain and treat runoff. Planters throughout the project site would be used as flow-through planters to treat and discharge runoff before entering the City's stormwater system. Additionally, the following design measures would be implemented: direct runoff onto vegetated areas, permeable pavers at the courtyards to minimize and treat runoff from the project site, direct runoff to curbed planters through roof drains, pervious vehicular turf block, direct runoff into bioretention areas, direct runoff into flow through planters, and non-pervious pavement. The Bayshore Park site would be relocated within the project site, graded, and prepped to allow for adequate stormwater drainage from the site, and stormwater design features would be incorporated into the final park design to maintain this drainage in its new location. In addition, the City does not plan to increase its long-term groundwater pumping above existing levels, and the Westside Groundwater Basin is not in critical condition from overdraft (UWMP 2015). Therefore, the proposed project would have a less than significant impact on groundwater supply. Because the proposed project would incorporate these design features to direct stormwater flows and because the groundwater basin is not in overdraft conditions, operation of the proposed project would not substantially impede groundwater recharge.

Project construction activities would excavate the project site up to 26 feet. According to the Geotechnical Investigation, groundwater varies from 1 to 12 feet below ground surface (bgs) at the project site, but for design purposes it is recommended to assume groundwater may be encountered at about 4 bgs (Rockridge Geotechnical 2020). In the event that construction activities such as excavation and trenching encounter shallow groundwater, common practices employed to facilitate construction include either dewatering the excavation or shoring the sides of the excavation to reduce groundwater inflow.

If dewatering is used, the Applicant would be required to comply with the San Francisco Bay Area RWQCB construction dewatering permit requirements. Discharge of non-stormwater from an excavation that contains sediments or other pollutants to sanitary sewer, storm drain systems, creek bed (even if dry), or receiving waters without treatment is prohibited. Discharge of uncontaminated groundwater from dewatering is a conditionally exempted discharge by the San Francisco RWQCB. However, the removed water could potentially be contaminated due to the presence of contaminated soils onsite, from construction equipment, or sediments from excavation. Discharge of water resulting from dewatering operations would require an NPDES Permit, or a waiver (exemption) from the San Francisco RWQCB, which would establish discharge limitations for specific chemicals (if they occur in the dewatering flows). Additionally, discharged groundwater would be disposed of in accordance with Mitigation Measure HAZ-1, which requires the proposed project to prepare a Remediation Action Workplan to address onsite contaminated soils and groundwater (refer to Section 4.9, Hazards and Hazardous Materials for further discussion).

The proposed project would also implement Mitigation Measure GEO-2 and prepare a dewatering plan in accordance with the requirements of the RWQCB. The dewatering plan would detail the location of dewatering activities, equipment, and discharge point in accordance with the requirements of the RWQCB. The dewatering plan would be submitted to the City for review and approval. Therefore, construction of the proposed project would result in a less than significant impact to groundwater recharge with implementation of Mitigation Measures GEO-2 and HAZ-1.

Level of Significance Before Mitigation
Potentially Significant Impact.

Mitigation Measures
Mitigation Measures GEO-2 and HAZ-1 are required.

Level of Significance After Mitigation
Less Than Significant Impact With Mitigation.

Impact HYD-3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite;

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) Impede or redirect flood flows?

Impact Analysis

The proposed project would involve site improvements that would require grading and soil exposure during construction. If not controlled, the transport of these materials into local waterways could temporarily increase suspended sediment concentrations. To minimize this impact, the proposed project would be required to comply with all of the requirements in the State GCP, including preparation of permit registration documents and submittal of a SWPPP (as required through Mitigation Measure HYD-1) to the SWRCB prior to the start of construction activities. Specific construction and operational BMPs and design measures are outlined under Impact HYD-1, above. The proposed project would include 456,595 sf of new impervious surface (including both the redeveloped Midway Village area and the redeveloped Bayshore Park). This increase in impervious surface at the project site would increase the amount of stormwater runoff and/or potential flooding from the project site. The proposed project would also include areas consisting of landscaping and bioswales along the project site boundary that would allow for controlled capture and absorption of some surface flows in the area. In particular, stormwater at the project site would be diverted to the landscaped areas and bioswales, which would control the volume of stormwater at the project site to reduce the potential for flooding.

The project will require relocation of portions of the City's stormwater drainage system due to the placement of new structures. Any relocations would be required to be designed to accommodate a 100-year storm within the relocated sections to ensure that such relocations do not alter the City system's capacity.

As described, construction activities and refueling and parking of construction equipment onsite during could result in the degradation of water quality if sediment, oil and greases, solvents, paints, and other chemicals were released into to nearby water bodies or storm drain system. However, the proposed project would be required to comply with the City's Storm Water Management and Discharge Control Ordinance (Title 14 of the Municipal Code).

In addition to the above requirements for the construction of the whole proposed project, the proposed project would also be designed to meet the City's requirements to limit stormwater discharge volumes and runoff rates to the pre-project condition during each phase of construction. Due to phased construction for the proposed project, each phase alone has some potential to increase the rate or amount of surface runoff which may result in flooding or contribute runoff water which would exceed the capacity of existing stormwater drainage systems. In order to prevent this, each phase of construction would be designed to meet the City's requirements to limit stormwater discharge volumes and runoff rates to the pre-project condition both overall and upon completion of each individual phase. The SWPPP, which is required through Mitigation Measure HYD-1, would be implemented throughout construction activities, including during each phase of construction, and therefore the proposed project would meet the City's requirements to limit stormwater discharge volumes and runoff rates.

Additionally, the project site is not located on a FEMA flood zone and therefore would not impede or redirect flood flows. Therefore, with implementation Mitigation Measure HYD-1, as well as adherence to General Plan policies, impacts associated with the alteration of the drainage pattern of the project site would be less than significant with mitigation incorporated.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure HYD-1 is required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact HYD-4 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis

The project site is located over four miles from the Pacific Ocean, at an elevation of 8 feet amsl at its lowest point. Tsunamis typically affect coastlines and areas up to 0.25 mile inland. Due to the project site's distance from the coast, potential impacts related to a tsunami are minimal. Additionally, the project site is not susceptible to impacts resulting from a seiche because of its distance from any enclosed bodies of water. The nearest enclosed body of water to the project site is the San Francisco Bay, which is located approximately 1.2 miles east of the project site. Because the project site is located on relatively high ground from the surrounding area, and proposed project engineering design features would address any slope stability issue onsite, mudflows would not pose an issue. Therefore, a less than significant impact would occur related to inundation by seiche, tsunami, or mudflow.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact HYD-5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis

The majority of the City lies within the South Westside Groundwater Basin (SWB); however, the project site within the Visitacion Valley Groundwater Basin (VVB). DWR classifies the VVB as a very low priority basin under the Sustainable Groundwater Act. As described, the composition of the GSA for the South Westside Basin has not yet been determined. Upon establishment of a GSA for the VVB, the SFPUC will enter into coordination agreements, as defined in Water Code Section 10721(d), with the individual agencies and water providers to ensure the coordinated implementation of Groundwater Sustainability Plans for the entire Visitacion Basin. The agreements will be consistent with the Regional Groundwater Storage and Recovery Project Operating Agreement among the SFPUC, California

Water Service Company, and the cities of San Bruno and Daly City (SFPUC 2015). Therefore, the proposed project would not conflict with or obstruct implementation of a sustainable groundwater management plan.

The proposed project is required to comply with the policies and objectives of the Water Quality Control Plan for the San Francisco RWQCB. As discussed, the proposed project would be required to implement Mitigation Measure HYD-1 and obtain coverage under the NPDES Construction General Permit requiring preparation of a SWPPP. The SWPPP would be implemented during construction and would incorporate BMPs that meet the requirements of the RWQCB's Water Quality Control Plan to reduce potential impacts to water quality. In the event that construction activities such as excavation and trenching encounter shallow groundwater, the proposed project would also implement Mitigation Measure GEO-2 and prepare a dewatering plan in accordance with the requirements of the San Francisco RWQCB. The dewatering plan would detail the location of dewatering activities, equipment, and discharge point in accordance with the requirements of the RWQCB. The dewatering plan would be submitted to the City for review and approval. Therefore, the proposed project would not conflict with or obstruct implementation of the Water Quality Control Plan for the RWQCB and impacts would be less than significant with implementation of Mitigation Measure HYD-1.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measures GEO-2 and HYD-1 are required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

4.11 LAND USE AND PLANNING

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐

4.11.1 Environmental Setting

The project site is located in the Bayshore neighborhood, which is referred to as Planning Area 13 in the General Plan, located north of Guadalupe Canyon Parkway and west of Bayshore Boulevard. According to the General Plan, the Bayshore neighborhood primarily contains detached single-family residential homes and low-intensity industrial areas. Existing densities in the area range from a low of 2 to 14.5 du/ac to a very high density of over 50 du/ac. John McLaren Park is located approximately 0.7 mile north of the project site, Bayshore Park is located directly within the project site, and other small community parks are scattered throughout the neighborhood.

According to the General Plan, land use planning challenges within the Bayshore neighborhood include aging sewer and water lines, lack of pedestrian and roadway infrastructure, and lack of easily developable land. Opportunities in this neighborhood include the revitalization of commercial areas, infill single-family, retail office development, and park and open space development (City of Daly City 2013). The project site is approximately 15 acres and comprises 39 San Mateo County APNs, as outlined in Section 2, Project Description. The General Plan designates 37 parcels as High Density Residential (R-HD) and 2 parcels as Public Park (PP). All of the 39 parcels are zoned as a Multiple Family Residential District (R-3).

The project site is currently occupied by existing residents and is bordered on all sides by a mix of residential, commercial, and industrial use. The project site is surrounded by the following land uses:

- North and East: A PG&E facility, including administrative buildings, parking, industrial storage, and a power distribution area.
- South: A Toll Brothers site (i.e., an in-progress home construction site operated by the Toll Brothers construction company) that is currently a graded, undeveloped area.
- West: Mixed single- and multi-family residences.

4.11.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.9 of the General Plan EIR discusses potential impacts related to land use. The General Plan EIR determined that implementation of the General Plan would not physically divide an established community and would not conflict with existing local plans and zoning ordinances. Impacts would be less than significant.

Plan Bay Area EIR Summary

The following summarizes the potential impacts related to land use and planning discussed in Chapter 2.3 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.3-2: Physically Divide Established Community. The Plan Bay Area EIR determined that implementation of the projected land use growth would create more centralized development and would not physically divide established communities. However, transportation projects could result in potential division from placement of structures. The Plan Bay Area EIR identified Mitigation Measure 2.3-2 to reduce impacts from transportation projects to a less than significant level. The proposed project would not be characterized as a transportation project; therefore, this mitigation measure is not applicable.

Impact 2.3-3: Conflict with Applicable Land Use Plans, Policies, or Regulations. The Plan Bay Area EIR determined that future development and/or transportation projects could conflict with existing long-range plans. However, projects would be required to demonstrate consistency with relevant plans to obtain permits and otherwise meet agency requirements. Therefore, this impact is less than significant, and no mitigation measures were identified.

4.11.3 Project-Specific Analysis

Impact LU-1 Physically divide an established community?

Impact Analysis

The project site is currently developed with 150 residential units, 223 parking spaces, a child-care facility (Bayshore Child-Care Center), open space, an existing street system, and office space for HACSM. Additionally, an existing park, Bayshore Park, is currently located directly north and east of the Midway Village area. The proposed project would involve redevelopment of the Midway Village area and would include mixed-use development consisting of 555 residential units, 746 parking spaces, a child-care facility, a community center, office space for property management and other ancillary services, a revised street system, and recreation facilities. Additionally, Bayshore Park would be relocated and returned to the City to be redeveloped as part of the proposed project.

During construction, the proposed project would cause temporary disturbance to the established community and residents within the Midway Village area. This temporary disturbance would include relocation of residents and the child-care facility to a different location within the project site, as described in Section 2, Project Description. In addition, Bayshore Park would be relocated to a different section of the project site. The area would continue to operate as a residential area with child-care and park facilities onsite once construction is complete. Therefore, the proposed project would not physically divide an established community, and the impact would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact LU-2 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis

Table 4.11-1 provides a consistency analysis for applicable land use plans, policies, and regulations with jurisdiction over the proposed project. Applicable regulations are as follows:

- Daly City General Plan
- Daly City Municipal Code

Table 4.11-1: Applicable Plan and Policy Consistency Analysis

Policy/Goal Number	Policy/Goal	Determination of Plan Consistency
Policy LU-1:	Maintain and, where possible, encourage larger commercial development sites throughout the City.	**Consistent.** This site is an existing residential site and does not include uses for large commercial operations. The proposed project would not change the existing land use of the site.
Policy LU-2:	Continue to allow neighborhood-serving businesses in neighborhoods where such businesses presently exist and where such continued operation does not impact the quality of life within the neighborhood.	**Consistent.** The proposed project would not affect the operation of any existing businesses and would improve quality of life within the neighborhood by providing additional commercial opportunities for new business and affordable housing.
Policy LU-4:	Provide regulatory incentives for developers to construct higher-density mixed-use development along Mission Street, Geneva Avenue, and any other locations in close proximity to public transit.	**Consistent.** The proposed project represents higher-density mixed-use development is within 2.2 mile of the Balboa BART Station, within 0.30 mile of a MUNI bus stop and surrounding businesses.
Policy LU-7:	Recognize the physical differences between different parts of the City and regulate land uses within these areas accordingly (same as Policy RME-20).	**Consistent.** The proposed project would comply with local regulations, such as design review, to ensure consistency between design and surrounding land uses.
Policy LU-9:	Ensure that traffic from commercial development does not significantly increase traffic on residential streets.	**Consistent.** The proposed project would generate minimal vehicle trips associated with the 5,100 sf of community center/office space. The project site is within 2.2 mile of the Balboa BART Station and 0.30 mile of a MUNI bus stop and surrounding businesses.
Policy LU-16:	Regulate of the size, quantity, and location of signs to maintain and enhance the visual appearance of the City.	**Consistent.** The proposed project would include the addition of new signs for both the residential and commercial components; however, the proposed project would comply with all local ordinances and regulations governing sign regulations and design guidelines.

Policy/Goal Number	Policy/Goal	Determination of Plan Consistency
Policy LU-17:	Ensure that private development is responsible for providing any on- or off-site improvements related to and/or mitigating the impacts it causes.	**Consistent.** The proposed project would comply with applicable fees and/or mitigation measures to reduce potential impacts identified in this SCEA.
Policy LU-18:	Development activities shall not be allowed to significantly disrupt the natural or urban environment and all reasonable measures shall be taken to identify and prevent or mitigate potentially significant effects.	**Consistent.** The proposed project is suitably scaled for the subject parcel and all reasonable measures would be taken to identify and address potentially significant effects.

Notes:
BART = Bay Area Rapid Transit
City = City of Daly City
SCEA = Sustainable Communities Environmental Assessment
sf = square feet

The proposed project is consistent with all applicable land use policies as set forth by the General Plan, per the policy consistency analysis above The proposed project includes different land use designations (R-HD and PP) and would include a transfer of these two land use designation from one portion of the project site to another, within the entirety of the site. As such, a General Plan amendment has been requested to relocate the location of the park on the project site. The current Bayshore Park area is proposed as a housing development, while the area that is proposed to have the new Bayshore Park is now designated as residential. These designations must be switched under a General Plan amendment, and therefore would still be consistent under the General Plan.

The proposed project is located within the R-3 zoning designation, which has a maximum density of 87.7 dwelling units per acre. R-3 zoning allows for 1 unit per 500 square feet of lot size (Municipal Code Section 17.12.010), which amounts to 1,023 units of housing for the 11.75 acres of the proposed residential land. Accordingly, the proposed 555 units would be consistent with this requirement.

According to the City Zoning Code Section 17.47.080, the developer may submit a written request for a density bonus, waivers, incentives, or concessions pursuant to California Government Code §65915 that states: "When an applicant seeks a density bonus for a housing development within…the jurisdiction of a city…that local government shall provide the applicant incentives or concessions for the production of housing units…as prescribed in this section." The City shall grant the density bonus and incentives or concessions when the applicant for the housing development seeks and agrees to construct, among other categories. Per subsection (g)(1) of §65915, "density bonus" means a density increase of at least 20 percent, with a maximum of 35 percent. Accordingly, the following waivers are requested for the proposed project:

<u>Multifamily Rental Units:</u>

- The maximum height required for the site be raised from 36 feet to 60 feet to accommodate the four-story buildings onsite.
- The front setback under R-3 zoning be reduced to zero, however generally the proposed buildings would have a 5-foot setback from adjacent parcels.

Townhome Units:

- Minimum lots would be lowered from 3,000 square feet to 1,100 square feet per unit.
- The front yard setback would be lowered from 15 feet to 8 feet.
- The minimum lot width would be lowered from 33 feet to 20 feet.
- The maximum lot coverage would be raised from 50 percent to 70 percent.
- The maximum height would be raised from 30 feet to 55 feet.

In summary, the proposed project would not conflict with the General Plan or zoning ordinance and the impact would be less than significant.

Additionally, as discussed in Section 4.9.3, Project-Specific Analysis, Impact HAZ-4, the project site is located on two identified hazardous cleanup sites, pursuant to California Government Code, Section 65962.5, and the Existing LUCs, including the 2002 LUC, currently restrict development on a portion of the project site. As discussed under Impact HAZ-4, the 2002 LUC would need to be modified, amended, or rescinded to allow for construction of the proposed project (as the 2002 LUC does not allow for residential development). As such, Mitigation Measure HAZ-1 would be required to modify, amend, or rescind the 2002 LUC on the project site. As a condition of this mitigation measure, a building permit cannot be issued for the proposed project until the 2002 LUC is either modified, amended, or rescinded through DTSC approval. Therefore, with implementation of Mitigation Measure HAZ-1 the proposed project would not conflict with the 2002 LUC and the impact would be less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure HAZ-1 is required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

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4.12 MINERAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

4.12.1 Environmental Setting

The California Geological Survey classifies lands into Aggregate and Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geology Board, as mandated by the Surface Mining and Reclamation Act of 1974. These MRZs identify whether known or inferred significant mineral resources are present in an area. Local government is required to incorporate identified MRZs resource areas delineated by the state, into their general plans. Accordingly, the General Plan does not identify any MRZs within the City. In addition, the City has not identified mineral resources of value, and the City has not been delineated as a locally important mineral recovery site.

4.12.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

The City does not contain any mineral resources within its limits; therefore, there are no mitigation measures from the General Plan EIR that would apply to the proposed project.

Plan Bay Area EIR Summary

The Plan Bay Area EIR determined that land use and transportation projects could result in development that would preclude the future extraction of mineral resources. However, projected land use growth was designed to be consistent with local planning documents, which are required to consider MRZs. In addition, most projects would occur within urban areas where extraction of mineral resources is unlikely. Accordingly, the impact would be less than significant, and no mitigation measures were identified.

4.12.3 Project-Specific Analysis

Impact MIN-1 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis

The General Plan does not identify any MRZs within the City. There is no history of mineral resource extraction in the area, nor is such use planned for the future. Therefore, the proposed project would have no impact on loss of availability of a known mineral resource.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact MIN-2	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Impact Analysis

No mineral resources of value to the region and the residents of the state have been identified within the City. The City has not been delineated as a locally important mineral recovery site. As a result, the proposed project would have no impact on loss of availability of a locally important mineral resource.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

4.13 NOISE

Would the Project Result In:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity if the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project within the vicinity of a private airstrip or airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people be residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

4.13.1 Environmental Setting

Noise Fundamentals and Terminology

Noise is generally defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. Because noise is an environmental pollutant that can interfere with human activities, evaluation of noise is necessary when considering the environmental impacts of the proposed project.

Sound is mechanical energy (vibration) transmitted by pressure waves over a medium such as air or water. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient (existing) sound level. Although the decibel (dB) scale, a logarithmic scale, is used to quantify sound intensity, it does not accurately describe how sound intensity is perceived by human hearing. The perceived loudness of sound is dependent upon many factors, including sound pressure level and frequency content. The human ear is not equally sensitive to all frequencies in the entire spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called A-weighting, written as dBA and referred to as A-weighted decibels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise.

With respect to how humans perceive and react to changes in noise levels, a 1 dBA increase is imperceptible, a 3 dBA increase is barely perceptible, a 5 dBA increase is clearly noticeable, and a 10 dBA increase is subjectively perceived as approximately twice as loud (Egan 2007). These subjective reactions to changes in noise levels were developed on the basis of test subjects' reactions to changes in the levels of steady-state pure tones or broadband noise and to changes in levels of a given noise source. These statistical indicators are thought to be most applicable to noise levels in the range of 50 to 70 dBA, as this is the usual range of voice and interior noise levels. Numbers of agencies and municipalities have developed or adopted noise level standards consistent with these and other similar studies to help prevent annoyance and to protect against the degradation of the existing noise environment.

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (L_{eq}), the minimum and maximum sound levels (L_{min} and L_{max}, respectively), percentile-exceeded sound levels (such as L_{10}, L_{20}), the day-night sound level (L_{dn}), and the community noise equivalent level (CNEL). L_{dn} and CNEL values differ by less than 1 dB. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment.

For a point source such as a stationary compressor or construction equipment, sound attenuates based on geometry at a rate of 6 dB per doubling of distance. For a line source such as free-flowing traffic on a freeway, sound attenuates at a rate of 3 dB per doubling of distance (Federal Highway Administration 2011a). Atmospheric conditions, including wind, temperature gradients, and humidity, can change how sound propagates over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface, such as grass, attenuates at a greater rate than sound that travels over a hard surface, such as pavement. The increased attenuation is typically in the range of 1 to 2 dB per doubling of distance. Barriers, such as buildings and topography that block the line of sight between a source and receiver, also increase the attenuation of sound over distance (Federal Highway Administration 2011b).

Because decibels are logarithmic units, sound pressure levels cannot be added or subtracted through ordinary arithmetic. On the dB scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, their combined sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one source produces a sound pressure level of 70 dBA, two identical sources would combine to produce 73 dBA. The cumulative sound level of any number of sources can be determined using decibel addition.

Vibration Standards

Vibration is like noise such that noise involves a source, a transmission path, and a receiver. While related to noise, vibration differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and a frequency. A person’s perception to the vibration would depend on his or her individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system that is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities. The City does not have specific policies pertaining to vibration levels. However, vibration levels associated with construction activities and proposed project operations are addressed as potential noise impacts associated with the proposed project implementation.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. In Table 4.13-1, the general threshold at which human annoyance could occur is noted as 0.1 in/sec peak particle velocity (PPV). Table 4.13-2 indicates that the threshold for damage to structures ranges from a PPV of 0.2 to 0.6 in/sec.

Table 4.13-1: Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.90	0.10
Severe	2.00	0.40

Notes: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

in/sec = inches per second

PPV = peak particle velocity

Source: Caltrans 2013.

Table 4.13-2: Guideline Vibration Damage Potential Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Notes:

in/sec = inches per second

PPV = peak particle velocity

Source: Caltrans 2013, Caltrans 2004

Operation of heavy construction equipment, particularly pile driving and other impact devices such as pavement breakers, create seismic waves that radiate along the surface of the earth and downward into the earth. These surface waves can be felt as ground vibration. Vibration from operation of this equipment can result in effects ranging from annoyance of people to damage of structures. Varying geology and distance will result in different vibration levels containing different frequencies and displacements. In all cases, vibration amplitudes will decrease with increasing distance.

Perceptible groundborne vibration is generally limited to areas within a few hundred feet of construction activities. As seismic waves travel outward from a vibration source, they excite the particles of rock and soil through which they pass and cause them to oscillate. The actual distance that these particles move is usually only a few ten-thousandths to a few thousandths of an inch. The rate or velocity (in in/sec) at which these particles move is the commonly accepted descriptor of the vibration amplitude, referred to as the PPV.

Table 4.13-3 summarizes typical vibration source levels generated by various construction equipment.

Table 4.13-3: Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet
Vibratory roller	0.210
Large bulldozer	0.089
Loaded trucks	0.076
Small bulldozer	0.003

Note:
PPV = peak particle velocity
Source: FTA 2018

Vibration amplitude attenuates over distance and is a complex function of how energy is imparted into the ground and the soil conditions through which the vibration is traveling. The following equation can be used to estimate the vibration level at a given distance for typical soil conditions (FTA 2018). PPVref is the reference PPV from Table 4.13-3:

$PPV = PPV_{ref} \times (25/Distance)^{1.5}$

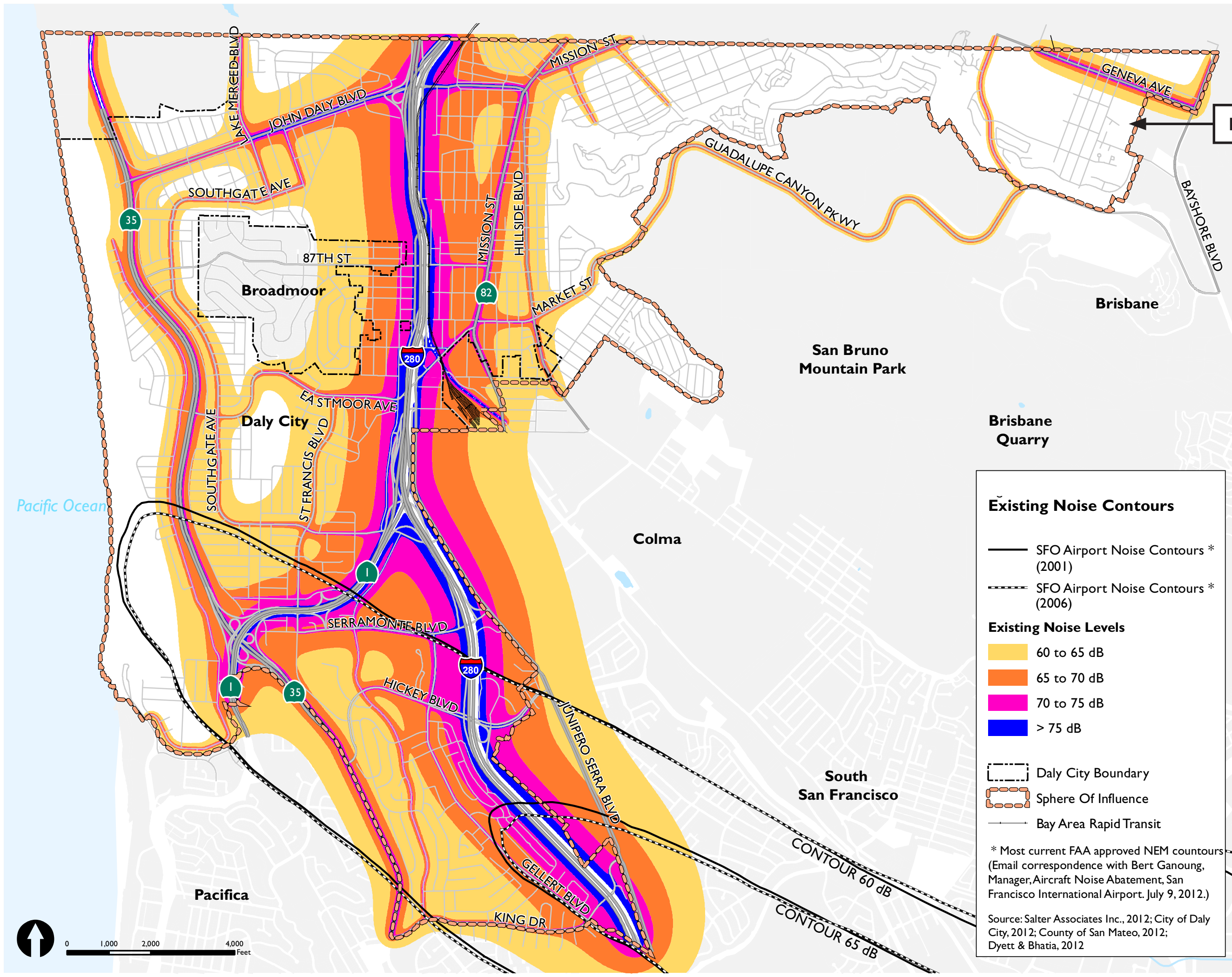
4.13.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.10 of the General Plan EIR discusses potential impacts related to construction noise, traffic noise, airport noise, and groundborne vibration. The General Plan EIR determined certain locations in the City would experience traffic noise increases by more than 3 dB. While it is possible to minimize potential noise impacts with implementation of noise-attenuating features, the City cannot guarantee that these measures would take place. Therefore, the General Plan EIR determined that impacts related to traffic noise would result in a significant and unavoidable impact. The General Plan EIR determined that impacts related to construction noise, airport noise, and groundborne vibration would be less than significant as future projects would be required to comply with City's noise standards included in Chapter 9.22 of the Municipal Code.

The following General Plan policies apply to the proposed project:

Policy NE-1: Use the future noise contour map to identify existing and potential noise impact areas (See Figure 4.13-1).



Stantec

Figure No.
4.13-1

Title
Existing Noise Contours

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

Source: Daly City General Plan EIR
Date: 2013

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Policy NE-2: Use the State Office of Noise Control Guidelines as a guide to assess development that will need additional noise study and mitigations.

Policy NE-3: Maintain a CNEL level of not more than 70 dBA L_{eq} in residential areas.

Policy NE-4: Maintain a noise level not in excess of 75 dBA CNEL in open space, parks, and tot lots, including outdoor activity areas such as outdoor entertainment or green space of multi-family projects.

Policy NE-5: Maintain the City's current standard of 75 dBA CNEL for office, commercial, and professional areas.

Task NE-5.1: Additional noise studies should be conducted in "Conditionally Acceptable" noise environments to ensure adequate mitigation features are employed. "Conditionally Acceptable" noise environments are defined by the Daly City Noise and Land Use Compatibility Matrix as shown in Figure 4.13-2. Usually, conventional construction with closed windows and fresh air supply systems will maintain a healthy noise environment.

Policy NE-6: Require new development to perform additional acoustical studies in noise environments that are identified as 'Conditionally Acceptable' or 'Normally Unacceptable' to the Guidelines.

Task NE-6.1: Require acoustical studies for new development through the discretionary review and California Environmental Quality Act processes, while paying particular attention to borderline noise environments. Conditions and mitigations, as appropriate, should be attached to projects.

Plan Bay Area EIR Summary

The following summarizes the potential noise impacts discussed in Chapter 2.6 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.6-1: Construction Noise Levels and Groundborne Vibration. The Plan Bay Area EIR determined that future development projects have the potential to result in substantial construction noise and vibration levels such that nearby sensitive receptors could be adversely affected, and noise standards exceeded. However, impacts would be less than significant with implementation of Mitigation Measure 2.6-1(a) (Refer to Impact NOI-1 in Section 4.13-3, Project-Specific Analysis).

PBA EIR MM 2.6-1(a): *To reduce construction noise levels, implementing agencies and/or project sponsors shall:*

- *comply with local construction-related noise standards, including restricting construction activities to permitted hours as defined under local jurisdiction regulations (e.g.; Alameda County Code restricts construction noise to between 7:00 AM and 7:00 PM on weekdays and between 8:00 AM and 5:00 PM on weekends);*
- *properly maintain construction equipment and outfit construction equipment with the best available noise suppression devices (e.g., mufflers, silencers, wraps);*
- *prohibit idling of construction equipment for extended periods of time in the vicinity of sensitive receptors;*
- *locate stationary equipment such as generators, compressors, rock crushers, and cement mixers a minimum of 50 feet from sensitive receptors, but further if possible;*

- *erect temporary construction-noise barriers around the construction site when adjacent occupied sensitive land uses are present within 75 feet;*
- *use noise control blankets on building structures as buildings are erected to reduce noise emission from the site; and*
- *use cushion blocks to dampen impact noise from pile driving.*

Impact 2.6-2: Increased Noise from Traffic and Transit. The Plan Bay Area EIR determined that some areas would result in regional average noise increases and localized traffic-related noise levels that exceed applicable thresholds and would result in a substantial permanent increase in noise. The Plan Bay Area EIR determined that traffic noise impacts would be less than significant with implementation of Mitigation Measure 2.6-2. Mitigation Measure 2.6-2 is not applicable to the proposed project because the proposed project is not located within the 70 dBA CNEL noise contour of a freeway.

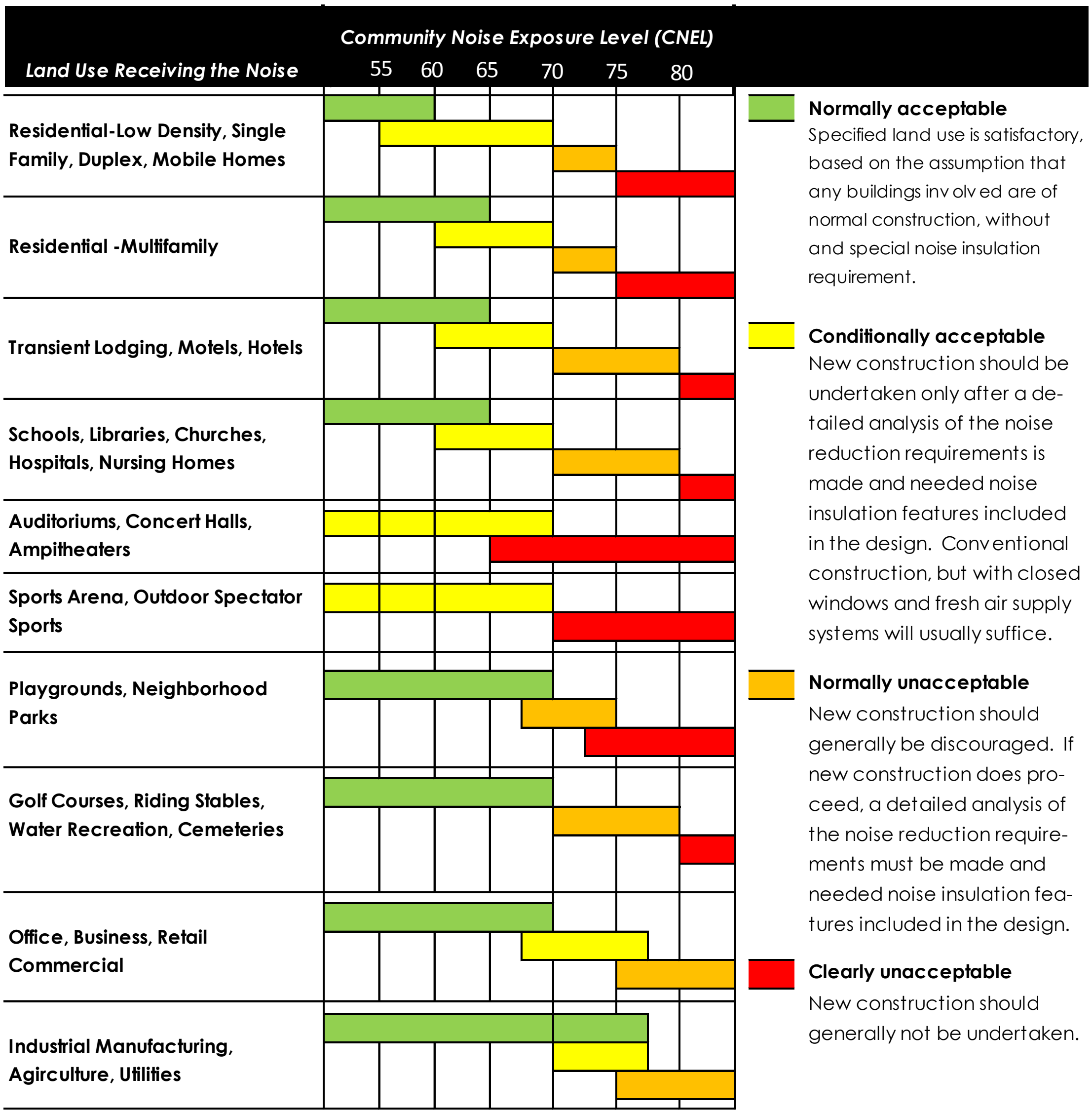
Impact 2.6-3 and Impact 2.6-4: Rail Transit Noise and Vibration. The Plan Bay Area EIR determined that future rail transit projects would result in new noise and vibration sources that could affect existing sensitive land uses. However, impacts would be less than significant with implementation of Mitigation Measures 2.6-3(a), 2.6-3(b), 2.6-3(c), 2.6-4(a), 2.6-4(b), and 2.6-4(c). The proposed project does not involve the construction of a rail transit line, and therefore these mitigation measures are not applicable.

Impact 2.6-5: Ambient Noise. The Plan Bay Area EIR determined that future development projects could expose existing or new sensitive receptors to noise levels that exceed land use compatibility thresholds, resulting in a substantial permanent increase in noise. However, this impact would be reduced to a less than significant level with implementation of Mitigation Measure 2.6-5 (Refer to Impact NOI-1 in Section 4.13-3, Project-Specific Analysis).

PBA EIR MM 2.6-5: *To reduce exposure to new and existing sensitive receptors from non-transportation noise associated with projected development, implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:*

- *Local agencies approving land use projects shall require that routine testing and preventive maintenance of emergency electrical generators be conducted during the less sensitive daytime hours (per the applicable local municipal code). Electrical generators or other mechanical equipment shall be equipped with noise control (e.g., muffler) devices in accordance with manufacturers' specifications.*
- *Local agencies approving land use projects shall require that external mechanical equipment, including HVAC units, associated with buildings incorporate features designed to reduce noise to below 70 dBA CNEL or the local applicable noise standard. These features may include, but are not limited to, locating equipment within equipment rooms or enclosures that incorporate noise reduction features, such as acoustical louvers, and exhaust and intake silencers. Equipment enclosures shall be oriented so that major openings (i.e., intake louvers, exhaust) are directed away from nearby noise-sensitive receptors.*

Impact 2.6-6: Airport Noise Levels. The Plan Bay Area EIR analyzed the potential impacts related to increased noise exposure from aircraft or airports and determined with the implementation of Plan Bay Area Mitigation Measure 2.6-6 the impact would be less than significant. The proposed project is not located within an airport land use plan and therefore this mitigation measure is not applicable (Refer to Impact NOI-3 in Section 4.13-3, Project-Specific Analysis).



Stantec

Figure No.
4.13-2

Title
Daly City Noise Compatibility Guidelines

Client/Project
City of Daly City
Midway Village Redevelopment Project

Project Location
Daly City, CA

185704589

Source: Daly City General Plan EIR
Date: 2013

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4.13.3 Project-Specific Analysis

Project Location and Sensitive Receptors

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are considered to be more sensitive to noise intrusion than are commercial or industrial activities. Ambient noise levels can also affect the perceived desirability or livability of a development.

The project site is located in the northeast region of the City at the intersection of Midway Drive, Schwerin Street, and Martin Street, near the border of the City and County of San Francisco. The project site is bordered by existing Midway Village single- and multi-family residences to the west and south; a PG&E facility, including administrative buildings, parking, industrial storage, and a power distribution area to the north and east; and a Toll Brothers site, which is currently graded and undeveloped, also to the south. The closest major roadway to the project site is Bayshore Boulevard, which is about 1,320 feet away. U.S. 101 is approximately 1.06 miles from the project site. The Cow Palace is about 980 feet from the west edge of the project site. The San Francisco International Airport is located approximately 5.4 miles from the project site.

The closet sensitive receptors to the project site are the existing multi-family and single-family residential buildings across Midway Drive, Schwerin Street, and Martin Street, with the closest receptors being about 64 feet from the project site.

Existing Ambient Noise Levels

The existing noise environment in a project area is characterized by the area’s general level of development because the level of development and ambient noise levels tend to be closely correlated. Areas that are not urbanized are relatively quiet, while areas that are more urbanized are noisier as a result of roadway traffic, industrial activities, and other human activities.

The City is exposed to noise generated by traffic on I-280, Highway 1, and Highway 35 and to a lesser extent, along major arterial roads such as Geneva Avenue, Guadalupe Canyon Parkway, and Bayshore Boulevard. Traffic noise depends primarily on traffic speed (tire noise increases with speed) and the proportion of truck traffic (trucks generate engine, exhaust, and wind noise in addition to tire noise). Changes in traffic volumes can also have an impact on overall traffic noise levels. For example, it takes 25 percent more traffic volume to produce an increase of only 1 dBA in the ambient noise level. For roads already heavy with traffic volume, an increase in traffic numbers could even reduce noise because the heavier volumes could slow down the average speed of the vehicles. A doubling of traffic volume results in a 3 dBA increase in noise levels.

Existing roadway noise contours are depicted in Figure 4.13-1. The project site is not located in an existing noise contour zone (City of Daly City 2013). Geneva Avenue, a major arterial road, runs close to but not adjacent to the proposed project; however, the project site is buffered from traffic noise along Geneva Avenue by existing buildings. Therefore, ambient noise levels at the project site are expected to be below 60 dBA CNEL and should be in the “Normally Acceptable” category for both residential and commercial uses according to the General Plan Land Use Compatibility Matrix.

Impact NOI-1 Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Analysis

Exterior Traffic Noise at Existing Sensitive Receptors

To describe future noise levels due to traffic added from the proposed project, AM and PM peak hour traffic counts (with and without the proposed project) listed in Figures 6 and 8 in the November 21, 2019 "45 Midway Drive Affordable Housing Transportation Impact Analysis" report were used to determine the percentage increase of traffic on the roads adjacent to the project site and adjacent sensitive receivers.

Table 4.13-4 shows the peak hour counts associated with traffic on the local roadway network under baseline and baseline plus proposed project traffic conditions. The last columns in the table show the overall percentage change and the estimated difference in peak hour noise level.

Table 4.13-4: Traffic Peak Hour Counts and Estimated Noise Increase

Roadway	Baseline Peak Hour Traffic Count	Peak Hour Traffic Count with Project	Percentage Change	Estimated dB Change
Martin Street at Schwerin Street	130 (149)	135 (149)	4% (0%)	0.2 (0)
Schwerin Street at Martin Street	190 (188)	195 (188)	3% (0%)	0.1 (0)
Main Street at Bayshore Blvd	93 (125)	135 (176)	45% (41%)	1.8 (1.6)
Bayshore Blvd at Main Street	1,621 (1,665)	1,663 (1,716)	3% (3%)	0.1 (0.1)
Geneva Ave at Schwerin Street	1,769 (1,928)	1,880 (2,037)	6% (6%)	0.2 (0.2)

Notes:
dB = Decibel
Numbers in parenthesis are PM peak hour traffic volumes.

The proposed project is expected to minimally increase traffic counts along Martin Street, Schwerin Street, Bayshore Blvd, and Geneva Avenue. There would be no noticeable change in traffic noise expected along these streets. Peak traffic counts are expected to increase approximately 41 to 45 percent along Main Street at Bayshore Boulevard. Traffic increases of 45 percent increase noise levels approximately 1.8 dB, which is barely perceptible to imperceptible and represents a minimum impact. For reference, an increase in 3 dB represents a doubling of loudness according to Federal Highway Administration Guidance, and the increase in noise levels by 1.8 dB would below this amount (Federal Highway Administration 2011a). Therefore, the proposed project would not cause increased traffic noise levels over the baseline conditions at the neighboring sensitive receivers and this would be a less than significant impact relative to this topic.

Interior Traffic Noise at New Sensitive Receptors – Residential

The CBC and the City states that the interior noise levels attributable to exterior sources shall not exceed 45 dBA in any habitable room, including residential units. The needed sound isolation requirements of a building's exterior façade system will be dependent on the following conditions:

- The dimension of the rooms with exterior windows;
- The finishes within the rooms;

- The ratio of clear glass to solid wall in the exterior wall assembly; and
- The exterior solid wall construction.

Modern construction with punch windows typically provides a 25 dBA exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dBA L_{dn}/CNEL or less will typically comply with the code-required interior noise level standard. Modern construction using window walls, curtainwalls, or a high ratio of exterior clear glass would provide less reduction with the windows closed. Buildings using a high amount of glass would typically comply with the code-required interior noise level standard if exposed to exterior noise levels of 67 dBA L_{dn}/CNEL or less.

Based on the existing noise level contours (Figure 4.13-1) listed in the General Plan Noise Element, noise levels at the project site are expected to be below 60 dBA CNEL. With a maximum exterior noise level of 60 dBA CNEL, interior noise levels within the residential units would comply with code requirements with standard exterior façade constructions and would have a less than significant impact.

Interior Traffic Noise at New Sensitive Receptors – Commercial

CALGreen states if an occupied non-guestroom space is exposed to a noise level of 65 dBA L_{eq} 1-hour during any hour of operation, the exterior façade design shall incorporate features to reduce noise inside the spaces to a maximum of 50 dBA L_{eq} 1-hour. Given that the project site would be exposed to noise levels up to 60 dBA CNEL, a one-hour noise level of 65 dBA or greater is unlikely, and the building would not be subject to the CALGreen requirements. Therefore, standard construction should be acceptable for the commercial spaces to achieve the CALGreen code requirements, and traffic noise levels would have a less than significant impact.

Proposed Project Fixed-Source Noise

Typical multi-family residential/commercial building construction would commonly involve new rooftop mechanical equipment, such as air-handling units, condensing units, make-up air units, and exhaust fans. This equipment would generate noise that would radiate to neighboring properties, which could result in a potentially significant impact prior to mitigation. The noise from this equipment would be required to comply with Section 9.22 “Disturbing the Peace” of the Daly City Municipal Code, Section 1207.4 of the CBC, and Mitigation Measure NOI-1 (PBA EIR MM 2.6-5) at the neighboring residential receptors. Thus, Mitigation Measure NOI-1 (PBA EIR MM 2.6-5) and Mitigation Measure NOI-2 would be required to ensure that the onsite equipment would be designed incorporating measures such as shielding and/or appropriate attenuators to reduce noise levels that may affect nearby properties. With Mitigation Measure NOI-1 (PBA EIR MM 2.6-5) and Mitigation Measure NOI-2, the impact of fixed-source noise to the neighboring properties would be less than significant.

Proposed Project Operational Noise

As part of the proposed project, several outdoor recreational areas and a park would be introduced or relocated on the site. The recreational areas and park would provide opportunities to foster community and interaction with open space throughout the project area. The specific recreational areas would include the following:

- **The Garden:** Including a community garden and an exercise deck. Located internal to the site near Building E. Shielded from Schwerin and Martin streets.

- **The Family Room:** Including a multi-use lawn, a tot play area, and an outdoor dining area. Located internal to the site in the Building D courtyard. Shielded from Schwerin and Martin streets.

- **The Residents Park:** Including an outdoor dining area, a multi-use lawn, a plaza, terrace seating, and a play area. Located internal to the site near the community center. Shielded from Schwerin and Martin streets.
- **The Residents Garden:** Including a meditation garden and an outdoor dining area. Located internal to the site in the Building B courtyard. Shielded from Schwerin and Martin streets.
- **The Family Court:** Including a picnic area and a play area. Located internal to the site in the Building A2 courtyard. Shielded from Schwerin and Martin streets.
- **Bayshore Park:** Bayshore Park is an existing City park adjacent to the existing Midway Village area. This park would maintain its existing purpose; however, it would be relocated within the new Midway Village Redevelopment to the northern most portion of the project site, closer to Schwerin Street. The development of the park would be the responsibility of the City. Future improvements at the park may contain elements such as a soccer field, tennis court, a playground, a 10-foot wide jogging path with workout stations around the perimeter of the park, restrooms, and additional parking spaces.

The existing play area associated with the child-care facility would also be relocated to Building B2, which brings the play area closer to the residential receptors along Schwerin Street. The child-care area would be set back within the building such that Building B2 would provide shielding between the play area and Schwerin Street.

All activities taking place within the recreational areas, park, and the child-care play area would take place during daytime hours, and the final design and development of these areas would be subject to the noise level restrictions set in the Daly City Noise Compatibility Guidelines in the General Plan. Therefore, the impact of noise from the recreational areas, park, and child-care play area to the closet residential receptors would be less than significant.

Short-Term Construction Noise Impacts

Two types of short-term noise impacts could occur during construction of the proposed project. First, construction crew commutes and the transport of construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the project site. This increased traffic would be comprised of vehicles, medium trucks, and heavy trucks.

Workers would access the project site from the city streets and U.S. 101. Construction materials and equipment would be delivered using trucks during the daytime hours (7 AM and 9 PM). Construction workers required for each phase of the proposed project and would fluctuate between 15 and 75 workers per day with an average of 35 workers per day.

The associated short-term noise from construction vehicles along city streets, such as Schwerin Street would be perceptible, however, such a noise increase would be instantaneous and short term. The Federal Transit Administration (FTA) offers construction mitigation measures listed in Section 12.1.3 “Mitigation of Construction Noise” in the Transit Noise and Vibration Impact Assessment document (FTA 2006), which would be implemented through Mitigation Measure NOI-3. This document recommends rerouting truck traffic away from residential streets, if possible, and to select streets with fewest homes, if no alternatives are available. Mitigation Measure NOI-3 follows the FTA recommendations to limit noise to the closest noise-sensitive receivers. With Mitigation Measure NOI-3, the impact of construction traffic noise to the neighboring properties would be less than significant.

The second type of short-term noise impact is related to noise generated during construction. Construction activities would include excavation activities and grading, foundation work, building construction, and paving. Each construction stage has its own mix of equipment and consequently, its own noise characteristics. These various construction operations would change the character of the noise generated at the project site and therefore, the ambient noise level as construction progresses. The loudest phases of construction typically include excavation, building construction, and grading phases as the noisiest construction equipment is earthmoving and grading equipment. Table 4.13-5 lists types of construction equipment that may be used throughout construction and the maximum and average operational noise level as measured at 64 feet from the operating equipment. The 64-foot distance represents the approximate distance between the project site and the closest residential receptors across Martin Street. Appendix H shows the noise calculations and inputs that were used from the Roadway Construction Noise Model (RCNM).

Table 4.13-5: Summary of Federal Highway Administration Roadway Construction Noise Model

Construction Equipment Source at the Phase 1 Residential Building	Distance to Nearest Sensitive Receptor	Sound Level at Residence		
		L_{max}	Acoustical Use Factor (%)	L_{eq}
Backhoe	64 feet	75.4	40	71.4
Crane	64 feet	78.4	16	70.4
Concrete Mixer Truck	64 feet	76.7	40	72.7
Concrete Saw	64 feet	87.4	20	80.4
Compressor (air)	64 feet	75.5	40	71.5
Bulldozer	64 feet	79.5	40	75.5
Excavator	64 feet	78.6	40	74.6
Front End Loader	64 feet	77.0	40	73.0
Grader	64 feet	82.9	40	78.9
Paver	64 feet	75.1	50	72.1
Roller	64 feet	77.9	20	70.9
Tractor	64 feet	81.9	40	77.9

Notes:
L_{eq} = equivalent sound level
L_{max} = maximum sound level
Source: Federal Highway Administration 2006

The construction of the entire proposed project would be conducted in four sequential phases. Each phase would consist of six separate stages, and each stage would use different pieces of construction equipment. The main noise-producing equipment for each construction stage and the approximate distance to the closest noise-sensitive receiver are shown in Table 4.13-6:

Table 4.13-6: Construction Phases Equipment and Distance to Closest Receiver

Construction Stage	Distance to Nearest Sensitive Receptor	Planned Equipment
Stage 1: Demolition	64 feet	Concrete Saw Excavator Rubber-Tired Dozer Tractor Loader Backhoe
Stage 2: Site Preparation	64 feet	Grader Tractor Loader Backhoe Excavator
Stage 3: Grading	64 feet	Concrete Saw Grader Rubber-Tired Dozer Tractor Loader Backhoe
Stage 4: Building Construction	64 feet	Crane Forklift[1] Tractor Loader Backhoe
Stage 5: Paving	64 feet	Cement Mixer Truck Paving Equipment[2] Paver Roller Tractor Loader Backhoe
Stage 6: Architectural Coating	64 feet	Air Compressor

Notes:

1. Noise from a forklift is not included in the RCNM program. Therefore, the forklift was assumed to have the same noise signature as a tractor for this analysis.
2. Noise from paving equipment is not included in the RCNM program. Therefore, paving equipment was assumed to have the same noise signature as a paver for this analysis.

RCNM = Roadway Construction Noise Model

A worst-case condition for construction activity would assume all noise-generating equipment were operating at the same time and at the same distance away from the closest noise-sensitive receiver. Using this assumption, the RCNM program calculated the following combined L_{eq} and L_{max} noise levels from each phase and stage of construction as shown in Table 4.13-7.

Table 4.13-7: Calculated Noise Level from Each Construction Stage

Construction Stage	Distance to Nearest Sensitive Receptor	Calculated L_{eq}	Calculated L_{max}
Stage 1: Demolition	64 feet	84.3 dBA	89.8 dBA
Stage 2: Site Preparation	64 feet	83.0 dBA	87.1 dBA
Stage 3: Grading	64 feet	85.0 dBA	90.3 dBA
Stage 4: Building Construction	64 feet	82.2 dBA	86.6 dBA
Stage 5: Paving	64 feet	82.0 dBA	86.2 dBA
Stage 6: Architectural Coating	64 feet	71.5 dBA	75.5 dBA

Notes:
dBA = A-weighted decibel
L_{eq} = equivalent sound level
L_{max} = maximum sound level

Although noise levels could range into the “clearly unacceptable” range as defined in Figure 4.13-2, increases in noise levels from construction activities would be temporary. The proposed project would also be in compliance with the applicable policies/regulations contained within Mitigation Measure NOI-4 (PBA EIR MM 2.6-1[a]). Implementation of Mitigation Measure NOI-4 (PBA EIR MM 2.6-1[a]) would provide substantial reduction in day and night construction noise and vibration levels by ensuring proper equipment use: locating equipment away from sensitive land uses; and requiring the use of enclosures, shields, and noise curtains (noise curtains typically can reduce noise by up to 10 dB. To the extent that an individual project adopts and implements all feasible mitigation measures described above, construction-noise levels could be reduced by 10 dB, bringing sound levels to acceptable levels. In addition, Mitigation Measure NOI-5 would be required to ensure that a construction site notice that includes pertinent information for the public to stay informed of proposed project construction activities would be required. This construction site notice would include a phone number for the public to call where violations for noise in excess of City standards could be reported. With the implementation of Mitigation Measure NOI-4 (PBA EIR MM 2.6-1[a]) and Mitigation Measure NOI-5, this impact would therefore be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure NOI-1 (PBA EIR MM 2.6-5), Mitigation Measure NOI-2, Mitigation Measure NOI-3, Mitigation Measure NOI-4 (PBA EIR MM 2.6-1[a]), and Mitigation Measure NOI-5 are required.

MM NOI-2: **Project Fixed-Source Noise. The** noise from all mechanical equipment associated with the proposed project shall comply with Section 1207.4 of the CBC at the neighboring residential receptors. Compliance with this Code would include incorporation of shielding and/or appropriate attenuators to reduce noise from mechanical equipment.

MM NOI-3: **Construction Traffic.** Develop a construction plan to route trucks into the sites avoiding City streets with dense residential populations as much as possible, as approved by the City's Engineering Division. Do not vary the construction traffic route to keep noise levels consistent throughout the construction process as much as possible. Avoiding residential streets keeps construction traffic removed from the sensitive residential receptors.

MM NOI-5: **Construction Activity**. In addition to the Plan Bay Area EIR Mitigation Measure 2.6-(a), post a construction site notice that includes the following information: job site address, permit number, name and phone number of the contractor and owner or owner's agent, hours of construction allowed by code or any discretionary approval for the Site, and City telephone numbers where violations can be reported. The notice shall be posted and maintained at the construction site prior to the start of construction and displayed in a location that is readily visible to the public and approved by the City.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact NOI-2 Generation of excessive groundborne vibration or groundborne noise levels?

Impact Analysis

During construction of the proposed project, equipment such as cranes, excavators, graders, loaders, backhoes, and bulldozers may be used as close as 64 feet from the nearest sensitive receptor across Martin Street. Construction equipment that would be used during proposed project construction would generate vibration levels between 0.001 PPV and 0.051 PPV at 64 feet, as shown in Table 4.13-8. All the groundbourne vibration levels are below the FTA vibration threshold at which human annoyance could occur of 0.10 PPV. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. As such, implementation of the proposed project would have a less than significant impact related to vibration.

Table 4.13-8: Vibration Source Levels for Construction Equipment

Type of Equipment	Peak Particle Velocity at 25 Feet	Peak Particle Velocity at 64 Feet	Peak Particle Velocity at 100 Feet	Threshold at which Human Annoyance Could Occur	Potential for Proposed Project to Exceed Threshold
Large Bulldozer	0.089	0.022	0.011	0.10	None
Loaded Trucks	0.076	0.019	0.010	0.10	None
Small Bulldozer	0.003	0.001	0.000	0.10	None
Vibratory Compactor/Roller	0.210	0.051	0.026	0.10	None

Source: FTA, Transit Noise and Vibration Impact Assessment Guidelines, May 2006

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact NOI-3	For a project located within the vicinity of a private airstrip or airport land use plan or, where such a plan has not been adopted, within two miles of a public airport of public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Impact Analysis

The project site is not located near an existing airport and is not within an area covered by an existing airport land use plan. The nearest airport is the San Francisco International Airport (SFO), which is located approximately 5.4 miles south of the project site. According to the General Plan, the project site is located outside of the SFO noise contour of 60 dB. Although aircraft-related noise could occasionally be audible at the project site, noise would be extremely minimal. Exterior and interior noise levels resulting from aircraft would be compatible with the proposed project. Therefore, no impact would occur.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

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4.14 POPULATION AND HOUSING

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

4.14.1 Environmental Setting

The City has experienced significant growth in the decades immediately following World War II. The City's population quadrupled between 1950 and 1970 with the construction of the Westlake and Serramonte subdivisions. By 1990 the population was approximately 90,000. The United States census reported the City's population as 101,123 in 2010. Although population growth is anticipated to continue, it is anticipated to do so at a modest rate, reflecting the fact that the City is largely built out (City of Daly City 2013, 2015).

According to the General Plan growth estimates, the City can expect to add about 5,265 more residents between 2010 and 2030. Based on past development trends, regional growth forecasts, and assumptions about future growth, the City will accommodate approximately 106,388 residents at buildout and increase of about 5.2 percent over the 2010 Census-determined population of 101,123. Over a 20-year period, this represents an annual growth rate of 0.3 percent (City of Daly City 2013, 2015).

The City's housing stock composition largely mirrors that of San Mateo County, with single-family homes being the majority at 65 percent. Multi-family housing represents all but 2 percent of the remaining housing stock, which is comprised of mobile homes.

The residential growth rate in the City has decreased significantly since the 1980s and 1990s, when 10-year growth rates were 8.5 percent and 7 percent, respectively. The growth rate between 2000 and 2010 was 1.5 percent. Comparatively, this is half the growth rate of San Mateo County as a whole, and the smallest growth rate in the Bay Area. The primary reason for the limited growth rate in the City, as described in the General Plan Housing Element, is the relatively limited supply of developable land, given the lack of parcels that are large enough for substantial development projects (City of Daly City 2013, 2015).

4.14.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.9 of the General Plan EIR evaluated the potential impacts related to population and housing. According to the General Plan EIR, the General Plan will increase the number of housing units as well as non-residential square footage, and subsequently jobs, within the City. Removal of existing housing units is not anticipated, and any housing removed would be replaced through additional housing within the City. Therefore, the General Plan EIR determined impacts related to population and housing would be less than significant.

The following General Plan policies are applicable to the proposed project:

Policy LU-1: Maintain and, where possible, create larger housing sites throughout the City.

Policy HE-20: Encourage voluntary housing rehabilitation and reconstruction.

Plan Bay Area EIR Summary

The following summarizes the potential impacts related to population and housing discussed in Chapter 2.3 of the Plan Bay Area EIR.

Impact 2.3-1: Displacement of Communities. The Plan Bay Area EIR analyzed the potential impacts related to residential or business disruption or displacement of existing population and housing and determined that implementation of the Plan Bay Area may result in displacement of existing residential units, necessitating construction of replacement housing. With the implementation of Mitigation Measure 2.3-1 the impact would be less than significant. Mitigation Measure 2.3-1 is not applicable to the proposed project because mitigation is being implemented throughout this SCEA to reduce potential impacts to a less than significant level.

4.14.3 Project-Specific Analysis

Impact POP-1 Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact Analysis

This analysis assesses the proposed project's potential to induce substantial population growth. There are two types of population growth: direct and indirect. Direct population growth can occur from the development of new residential units. Indirect population growth can occur from the creation of new employment opportunities or the removal of a barrier to growth (e.g., the extension of urban infrastructure to an undeveloped area). The proposed project would not significantly directly or indirectly induce population growth, as explained below.

Direct Population Growth

The proposed project would result in the construction of affordable mixed-use development project comprised of 555 residential units, 726 parking spaces, a community center, and common areas/recreation areas. Currently, the Midway Village area includes approximately 150 residential units and 477 existing residents onsite. The proposed project would redevelop the Midway Village area to include 555 residential units. Consistent with the General Plan EIR assumptions, the proposed project assumed an average of 3.3 residents per household, with each household representing 95 percent of total housing units with a 5 percent vacancy rate (City of Daly City 2012). However, as a more conservative analysis, 100 percent occupancy was used. Accordingly, 555 units would result in 1,832 total residents. Since the Midway Village area includes 477 existing residents, the proposed project would result in 1,355 new residents.

As discussed above, the General Plan buildout estimates an increase from 101,123 to 106,388 residents by 2030 (or an increase in 5,265 residents by 2030). The residential portion of the proposed project would contribute 1,355 new residents, which would represent approximately 26 percent of the City's growth anticipated by 2030. However, because the proposed project zoning is planned for in the General Plan, this would not represent a substantial increase in unplanned population growth. Additionally, the proposed project would not create new roads or extend utilities beyond those required for the proposed project. Therefore, implementation of the proposed project would not induce substantial growth in the area. Impacts would be less than significant.

Indirect Population Growth

The proposed project does not include any commercial space and therefore would not increase the number of employees or jobs from commercial uses. Currently, there are 31 staff members associated with the child-care and office facilities associated with the Midway Village area. Under the proposed project, approximately 15 to 20 additional staff would be needed onsite, depending on the type of special needs populations ultimately served (i.e., formerly homeless, veterans, senior citizens, or transition-aged youth). These staff members would support the child-care facility, community center, and provide property management services for the residential units in the redevelopment. It is anticipated that these 15 to 20 additional staff members would come from the local work force in the area and would not require relocation of substantial people to the area. Additionally, employees required for maintenance of the new Bayshore Park would be City employees and are not included in the estimated 15 to 20 additional staff for the remainder of the project site. Therefore, any new jobs provided by the proposed project would reasonably be expected to be filled by the existing workforce in the City and would not induce substantial indirect population growth. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact POP-2 Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis

Relocation of the existing 477 residents living onsite would be required to demolish and redevelop the Midway Village area. Relocation of the existing 477 residents would occur as new residences are constructed in each phase, until all of the existing residents are relocated into the new development. Relocation of existing residents during each phase would only occur once during redevelopment, ensuring the least amount of disruption of these residents' daily lives. Construction of the new child-care facility would occur early in the development process (Phase 2) to ensure that the students are relocated and settled as early as possible in the process. As such, although the proposed project would require relocation of the existing residents onsite, this relocation would occur within the existing project site and would not require the construction of replacement housing elsewhere. Therefore, the impact would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

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4.15 PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☒	☐	☐
Police protection?	☐	☒	☐	☐
Schools?	☐	☒	☐	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

4.15.1 Environmental Setting

Fire Protection

The City is served by the North County Fire Authority (NCFA), a Joint Powers Authority that serves the cities of Brisbane, Daly City, and Pacifica. The NCFA has eight stations, five of which are located in the City. The station located closest to the project site is Station 93 at 464 Martin Street located approximately 0.2 mile west of the project site.

The NCFA and its personnel provide emergency and non-emergency service to an area approximately 60 square miles with a population of more than 185,000 citizens. These services are managed through three sectors of the NCFA, including an Operations Bureau, Support Services Bureau, and the Fire Prevention and Administrative Services Bureau.

In 2017, the NCFA responded to more than 14,000 emergency and non-emergency incidents and achieved an overall 90 percent total reflex time; from receipt of call, dispatch, turnout, and travel to arrival in 7 minutes or less by a single fire company for all emergency incidents, which met the goal set by the City of a 90 percent reflex time (NCFA 2017).

Police Protection

The City of Daly City Police Department (DCPD), the largest police department in San Mateo County, provides police protection services in the City. The DCPD offices are located at 333 90th Street. The DCPD is structured into two Bureaus, including a Field Operations Bureau and Operations Support Bureau. DCPD is San Mateo County's largest police department with 111 sworn, and 43 non-sworn personnel (City of Daly City 2012). The Field Operations Bureau includes standard field operations divided into two divisions, Division A and Division B, a Bicycle Patrol Unit, a Canine Program, Gang Task Force, Police Cadet Program, and a Special Weapons and Tactics (SWAT) team. The Operations Support Bureau includes an Investigations Division and a Technical Services Division. The Investigations

Division includes Violent Crimes, Homicide, Cold Cases, Robbery, Fraud, Sex Crimes, Property Crimes, Narcotics Task Force, and Gang Intelligence Unit. The Technical Services Division includes a Communications Unit, Records Unit, and Property and Evidence Unit.

Schools

The City is served by 5 public school districts comprised of 15 elementary schools, 4 middle schools, and 6 high schools. The five districts are as follows:

- Jefferson Elementary School District serves K-8 students in the City, except for the Bayshore, Southern Hills, and Serramonte neighborhoods.
- Jefferson Union High School District serves grades 9-12 in all of the City, except for the Serramonte neighborhood.
- Bayshore Elementary School District provides K-8 services in the Bayshore Neighborhood and is comprised of one school (Garnet J. Robertson Intermediate School recently combined with Bayshore Elementary School).
- Brisbane Elementary School District serves K-8 students in the Southern Hills Neighborhood and is comprised of three schools.
- South San Francisco Unified School District serves K-12 in the Serramonte Neighborhood south of Hickey Boulevard.

Bayshore Elementary School District reported enrollment of 378 students at the Bayshore School with a total capacity for 568 students (Per Comms. Audra Pittman). This school would serve the project area. According to the California Department of Finance, overall school enrollment in San Mateo County is expected to increase by 783 students over the next decade, with approximately 70 students attributed to growth in the City (City of Daly City 2012, California Department of Finance 2018). The estimated growth rate of school-aged children between 2010 and 2030 is 0.8 percent (City of Daly City 2012).

Parks

The City is comprised of 13 municipal parks and 12 tot lots, resulting in approximately 83 acres of developed public recreational park space. In addition to City parks, the San Bruno Mountain State and County Park provides an additional 2,063 acres of recreational open space southwest of the City's Bayshore neighborhood. Although the San Bruno Mountain Park is comprised of state- and county-owned lands, it is managed by the San Mateo County Division of Parks and Recreation. The City also includes three private parks consisting of golf and country clubs located in the northwestern portion of the City. These private parks are the Lake Merced Golf and Country Club and portions of the Olympic and San Francisco Golf and Country Clubs. These parks are reserved for member access only and therefore are not open to the general public or residents of the City.

The City has six recreational facilities dispersed throughout the City, and although the City has approximately 0.26 acre of parkland per 100 du, it is below the State Recreation Commission standard of 2.6 acres of parkland per 100 du. Further, the City has 0.76 acre of parkland per 1,000 residents, which is below the National Park and Recreation Commission Standard of approximately 4 acres per 1,000 persons. To meet the minimum standard, the City would need to provide several hundred acres of additional parkland. The City's Municipal Code identifies a goal of 3 acres per 1,000 residents, which would mean the City would need to provide 15.8 acres of parkland to meet future need based on population.

Other Facilities

The City of Daly City Public Library is a member of the Peninsula Library System, which offers four locations within the City. The design, inspection and maintenance of municipal parks in the City are the responsibility of the Public Works Department, while the programming of park activities and recreation services are the responsibility of the Department of Library and Recreation Services.

4.15.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.11 of the General Plan EIR evaluated the potential impacts of future development under the General Plan on various public services including fire, police, schools, and parks. The General Plan EIR identified potentially significant impacts on public services. However, policies contained in the proposed General Plan would reduce these potential impacts on public services to less than significant levels.

The following General Plan policies are applicable to the proposed project:

Policy SE-3.2: Provide for a 7-minute total reflex time for arrival of a first due company to 90 percent of all emergency incidents.

Policy SE-3.3: Provide for an 11-minute total reflex time for arrival of multiple companies to 90 percent of all structure fires.

Policy RME-12: Encourage a diverse, equitable, and integrated system of park facilities throughout Daly City that are accessible to all age, social, and economic groups and all geographic areas of the City.

Policy RME-13: Require the dedication of parkland or the payment of an in-lieu fee in accordance with the Subdivision Map Act.

Policy RME-14: Prioritize the dispersal of park in-lieu fees collected from the development of new subdivisions to ensure that the fees are spent in the appropriate areas.

Plan Bay Area EIR Summary

The following summarizes the potential impacts related to public services discussed in Chapter 2.14 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.14-1. Public Services. The Plan Bay Area EIR analyzed the potential impacts related to the need for expanding facilities to maintain adequate schools and emergency, police, fire, and park and recreation services, and determined that with the implementation of Mitigation Measure 2.14-1, the impact would be less than significant (Refer to Impact PUB-1 in Section 4.15.3, Project-Specific Analysis).

PBA EIR MM 2.14-1: *Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include but are not limited to:*

- *Prior to approval of new development projects, local agencies shall ensure that adequate public services, and related infrastructure and utilities, will be available to meet or satisfy levels identified in the applicable* *local general plan or service master plan, through compliance with existing local policies related to minimum levels of service for schools, police protection, fire protection, medical emergency services, and other government services (e.g., libraries, prisons, social services). Compliance may include requiring projects to either provide the additional services required to meet service levels, or pay fees towards the project's fair share portion of the required services pursuant to adopted fee programs and State law.*

Impact 2.14-2: Park Facilities. The Plan Bay Area EIR analyzed the potential impacts related to increased use of existing parks or recreational facilities and determined that the impact would be less than significant. No mitigation measures were identified.

4.15.3 Project-Specific Analysis

Impact PUB-1 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire Protection?
Police Protection?
Schools?
Parks?
Other Public Facilities?

Impact Analysis

Fire Protection

Implementation of the proposed project could potentially induce population growth, as the proposed project would include a residential use, as well as require both a temporary construction and permanent operational workforce. While the proposed project's temporary and operation workforce requirements would not induce substantial population growth in the project area or region, the proposed project would include residential housing for low income families. As addressed in Section 2, Project Description, the facility would consist of up to 555 units and is estimated to house approximately 1,832 total residents (or 1,355 new residents). As such, by generating up to 1,355 new residents, the proposed project would likely result in more service calls to the NCFA. The other proposed non-residential land uses on the project site are also anticipated to result in more service calls as well; however, these uses are consistent with the current operation and nature of the project site. Additionally, the number and type of service calls are expected to be consistent with other residential uses located elsewhere in the City.

The project site is located within the service area of Fire Station Number 93, which is approximately 0.2 mile west of the project site. Although the NCFA is not currently meeting its primary response time objective, based on the relatively shorter distance to the project site, it is anticipated that NCFA would be able to respond to the site within the NCFA response goal without the need for new or expanded facilities. Given the infill nature of the proposed project and its location to existing stations, the proposed project would not indirectly result in future environmental impacts from construction or expansion of facilities as confirmed during consultation with NCFA (Per comms. Shane Lauderdale). In addition, the proposed project zoning is planned for within the General Plan, and this would not represent a substantial increase in unplanned population growth. However, the high number of service calls typically associated with low income housing facilities could still impact NCFA response times to other emergencies within its service area.

Generally, the risk of structural fires on the project site would be low, as the buildings, structures, and facilities developed on the project site would be constructed with newer, flame retardant building materials using modern construction methods. All structural improvements constructed on the site would comply with the standards contained in the current California Fire and Building Codes. In addition, the NCFA Fire Prevention Bureau would review the proposed project's development plans during the proposed project's planning and design phase and would inspect the project site during the construction phase to ensure that all new improvements meet state and local Building and Fire Code requirements. Further, once operational, the proposed project would be subject to the NCFA building inspection program, which would ensure compliance with applicable state and local standards, including requirements for emergency access. Finally, the project site is not located in a high-risk area for wildfires.

To help offset the construction of facilities, the procurement of equipment, and the hiring of additional personnel, the NCFA collects mandatory fees on new development projects, which would be implemented through Mitigation Measure PUB-1 (PBA EIR MM 2.14-1). As part of the proposed project's entitlement process, the proposed project would be responsible for paying its fair share of these impact fees required by the NCFA and Mitigation Measure PUB-1 (PBA EIR MM 2.14-1); therefore, the proposed project would have a less than significant impact on fire protection services with mitigation incorporated.

Police Protection

The proposed project would potentially induce population growth, as the proposed project would include a residential use, as well as require both a temporary construction and permanent operational workforce. While the proposed project's temporary and operational workforce requirements would not induce substantial population growth in the project area or region, the proposed project would include residential units for low income families and would generate approximately 1,355 new residents. In addition, the proposed project zoning is planned for within the General Plan, and this would not represent a substantial increase in unplanned population growth. As such, by generating up to 1,355 new residents, the proposed project would likely result in more service calls to the DCPD, although possibly not to the same extent as traditional single-family residential units. The other proposed non-residential land uses on the project site are also anticipated to result in more service calls; however, these uses are consistent with the current operation and nature of the project site. Additionally, the number and type of service calls are expected to be consistent with other commercial uses located elsewhere in the City.

The project site is already located within the DCPD's service area and is currently served by the Police Station located at 333 90th Street, approximately 3.3 miles southwest of the project site. DCPD's average response time for priority-one calls was 7 minutes from the time the dispatcher received the call to when the police arrived. The average response time between the police receiving notice from the dispatcher to police arrival was 4 minutes, though the Department does not have a formally adopted response time standard (City of Daly City 2012). Given that the proposed project is promoting infill development along transit corridors in the City, this will lead to shorter response times; the existing project area is currently patrolled by the DCPD. Since the Department is already meeting its response time goal, DCPD would be capable of continuing to respond to the site within its established response time standard without the need for new or expanded facilities.

As part of proposed project approval, the DCPD would review and comment on the site plan as it relates to access and egress that are designed to enhance safety on the project site and reduce crime, and Mitigation Measure PUB-1 (PBA EIR MM 2.14-1) would ensure that, prior to the approval of the proposed project, sufficient police protection services would be available to meet or satisfy service level ratios, or payment of fees towards police protection services would be required. Therefore, impacts associated with DCPD facilities would be less than significant with mitigation incorporated.

Schools

The Bayshore School currently has an existing enrollment of approximately 378 students and can serve up to 568 students (Per Comms. Audra Pittman 2018). Based on the General Plan estimated growth rate of students of 0.8 percent between 2010 and 2030, even if the student population were to increase by 0.8 percent (presumably coming from the proposed project) that would equal approximately 39 additional students. These 39 students would not exceed the capacity of 190 additional students. Additionally, the proposed project would be required to pay statutory developer fees under SB 50 and as further required through Plan Bay Area Mitigation Measure 2.14-1. The payment of SB 50 impact fees is full mitigation for school facilities under CEQA, and levels of Applicant fee contribution are determined by the State Allocation Board and increase annually. Currently, SB 50 requires developers to pay $2.97 per sf of new residential development. Therefore, because the proposed project would pay the required SB 50 developer fees, also required through Mitigation Measure 2.14-1, a less than significant impact with mitigation would occur regarding school facilities and services.

Additionally, the other proposed non-residential land uses on the project site are not anticipated to trigger a substantial increase in the school population because it is anticipated that the temporary and permanent employees required by the proposed project could come from the City and county without the need for relocation of employees and their families. Thus, the proposed project would not result in the construction of new or the expansion of existing school facilities.

Parks

The City's Municipal Code requires parkland dedication at a ratio of three acres per 1,000 residents. There are 13 municipal parks and 12 tot lots in the City, totaling 82.95 acres of developed public recreational space, which works out to only approximately 0.82 acre per 1,000 residents. School playgrounds provide additional recreational open space opportunities; however, they are not included in the acreage because they are owned and regulated by their respective school districts and are only available during limited periods of time.

This parkland to population ratio also does not take into account the numerous regional park facilities accessible to residents. San Bruno Mountain State and County Park, a 2,063-acre park located in the Hillside Planning Area, includes multiple recreational facilities and trails. The largest regional park near the project area is the John McLaren park which is located approximately 0.68-mile northwest. The abundance of regional open space around the City indicates that residents have access to more open space than shown in the above ratio, although these facilities are trail oriented, rather than active facilities (such as those that include playfields).

Based on the City's current parkland dedication ratio of three acres per 1,000 residents in the Municipal Code, the City would need to provide 15.8 acres of parkland to meet future need resulting from the additional population (without ameliorating existing deficiencies). The residential component of the proposed project would accommodate approximately 1,832 residents (1,355 new residents). To meet this demand, the General Plan policies have been adopted to ensure that adequate parks and recreational facilities are provided to accommodate the increase in new residents. During the proposed project's entitlement process, the Applicant would coordinate with the City regarding the collection of fees in accordance with AB 1600 prior to operation of the proposed project and occupancy of the facility. Because the proposed project would increase the number of residents in the area, increase the demand on park facilities, and temporarily remove the existing Bayshore Park from operation, a potentially significant impact would occur. Bayshore Park would be relocated within the proposed project area and is estimated to include up to 3.5 acres. According to the City's Comprehensive Biennial Operating and Capital Budget, the Bayshore Park Rehabilitation is included in the City's future capital improvement plans for redevelopment. Approximately $500,000 in funds for the Park is included in this capital improvement plan in 2021, and $2,000,000 in funds is included in 2022

(City of Daly City 2019). Thus, the funds for the rehabilitation of Bayshore Park are included in the City's planning documents, and the rehabilitation of the Park would likely be after construction of the residential portion of the proposed project is complete. However, even with the rehabilitation of Bayshore Park, the City's parkland dedication ratio would not be met, and the addition of approximately 1,355 new residents to the area would further increase the demand on parkland facilities in the area. To adhere to the City's code requirement, the Applicant would be required to pay in-lieu impact fees for the procurement and development of new parklands. Therefore, because Bayshore Park would be restored according to the City's capital improvement plan, with payment of in-lieu impact fees, impacts related to parkland ratios would be less than significant.

Other Public Facilities

The design, inspection and maintenance of municipal parks in the City are the responsibility of the City of Daly City's Public Works Department, while the programming of park activities and recreation services are the responsibility of the Department of Library and Recreation Services. The Daly City Public Library is a member of the Peninsula Library System, which offers four locations within the City. The closest location is the Bayshore Branch located at 460 Martin Street, approximately 0.18 mile west of the project site. The proposed project's generation of approximately 1,355 new residents would not affect the City's ability to provide library space. Thus, the proposed project would not result in the construction of new library branches or the expansion of existing branches. Therefore, impacts associated with other public facilities such as public libraries would be less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure PUB-1 (PBA EIR MM 2.14-1) is required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

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4.16 RECREATION

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

4.16.1 Environmental Setting

The parklands of the City include 13 municipal parks and 12 tot lots, resulting in approximately 83 acres of developed public recreational park space. In addition to City parks, San Bruno Mountain State and County Park provides an additional 2,063 acres of recreational open space southwest of the City's Bayshore neighborhood. Although San Bruno Mountain Park is state- and county-owned land, it is managed by the San Mateo County Division of Parks and Recreation. Further, Thornton Beach State Park also provides an overlook near Highway 1 at the end of John Daly Boulevard; however, this park has largely been inaccessible due to landslides.

The City also includes three private parks consisting of golf and country clubs located in the northwestern portion of the City. These private parks are the Lake Merced Golf and Country Club and portions of the Olympic and San Francisco Golf and Country Clubs. These parks are reserved for member access only; therefore, they are not open to the general public or residents of the City.

The City has six recreational facilities dispersed throughout the City, and, although the City has approximately 0.26 acre of parkland per 100 du, it is below the State Recreation Commission standard of 2.60 acres of parkland per 100 du. Further, the City has 0.76 acre of parkland per 1,000 residents, which is below the National Park and Recreation Commission Standard of approximately 4.00 acres per 1,000 persons.

To meet the minimum standard, the City would need to provide several hundred acres of additional parkland. The City's Municipal Code identifies a goal of 3.0 acres per 1,000 residents, which would mean that the City would need to provide 15.8 acres of parkland to meet future needs, based on population growth.

4.16.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.11 of the General Plan EIR evaluated the potential impacts of future development under the General Plan on recreational resources. The General Plan EIR identified potentially significant impacts on recreation. However, existing federal, state, and local laws, as well as policies contained in the proposed General Plan, would reduce potential impacts on recreational resources to less than significant levels.

The following General Plan policies are applicable to the proposed project:

Policy RME-12: Encourage a diverse, equitable, and integrated system of park facilities throughout Daly City that are accessible to all age, social, and economic groups and all geographic areas of the City.

Policy RME-13: Require the dedication of parkland or the payment of an in-lieu fee in accordance with the Subdivision Map Act.

Policy RME-14: Prioritize the dispersal of park in-lieu fees collected from the development of new subdivisions to ensure that the fees are spent in the appropriate.

Plan Bay Area EIR Summary

Chapter 2.14 of the Plan Bay Area EIR discusses potential impacts on recreation resources. As discussed in the Plan Bay Area EIR, while land use development projects could increase demand on recreational services, land use and public parks development is managed at the local level. Projects would be required to comply with local General Plan elements, which regulate recreational resources. Therefore, the Plan Bay Area EIR determined impacts to recreational resources would be less than significant and no mitigation measures were identified.

4.16.3 Project-Specific Analysis

Impact REC-1	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Impact Analysis

The City's Municipal Code identifies a goal of 3.0 acres per 1,000 residents and is currently not meeting this goal. The proposed project's generation of up to 1,355 new residents would potentially further adversely affect the City's ability to maintain its parkland standard because these additional residents would require an additional 3.47 acres of parkland in order to meet the City's Municipal Code goal.

The proposed project would include onsite passive recreation and open space amenities for use by residents and tenants. These onsite amenities would include passive recreation areas, including pedestrian paths and sidewalks that would connect the project site to the City's sidewalk system. Approximately 26,404 sf of common open space would be dedicated to providing open outdoor space. The proposed project open space would consist of a mixture of outdoor dining areas, courtyards, gardens, exercise decks, and multi-use lawns, and play areas. These onsite recreational areas would help alleviate the strain on recreational resources and parklands within the City; however, even with these additional recreational and open space areas, the City's parkland standard would not be met. To meet the City's parkland standard, the General Plan policies have been adopted to ensure adequate parks and recreational facilities are provided to accommodate the increase in new residents. During the proposed project's entitlement process, the Applicant would coordinate with the City regarding the collection of fees in accordance with AB 1600 prior to operation of the proposed project and occupancy of the facility.

Further, the existing Bayshore Park would be relocated within the project area. As such, Bayshore Park would be temporarily taken out of service and would not be available to the public during park construction activities, thus further exacerbating the City's parkland goal of 3.0 acres per 1,000 residents. As discussed under Section 3.14, Public Services, according to the City's Comprehensive Biennial Operating and Capital Budget, the Bayshore Park rehabilitation is included in the City's future capital improvement plans for redevelopment in 2021 and 2022, the exact timing of which will be adjusted based on the availability of the new Park location, but nevertheless is being planned for redevelopment after the residential portion of the proposed project is complete. Therefore, it is unlikely that

Bayshore Park would remain out of service for extended periods of time and would be restored to an existing public park in the area. This would be a temporary impact that would be resolved over time.

Therefore, with adherence to applicable City Codes and regulations, General Plan policies, and payment of in-lieu fees related to parklands, the proposed project impacts associated the physical deterioration of existing parks or other recreational facilities would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact REC-2 Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Impact Analysis

The proposed project would include passive recreation and open space totaling approximately 26,404 sf of common areas in addition to the relocated Bayshore Park within the project site. These passive areas and open space would be accessible to onsite users, and Bayshore Park would continue to operate as a public park once redeveloped by the City. The potential environmental effects of the planning, construction, and operation of the proposed project, as a whole, including these recreational facilities, are being identified and evaluated as part of the SCEA. This SCEA addresses the potential adverse environmental impacts that could occur as a result of implementation of the proposed project, and where applicable and feasible, identifies recommended mitigation measures that would reduce impacts to acceptable levels of significance. No additional environmental effects would occur beyond those that have already been identified as part of this proposed project analysis, and no additional mitigation is required as a result of the proposed project's inclusion of passive recreational and open space areas on the project site. Therefore, impacts associated with adverse environmental impacts of recreational facilities would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

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4.17 TRANSPORTATION

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☒	☐	☐
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
d) Result in inadequate emergency access?	☐	☐	☐	☒

4.17.1 Environmental Setting

This section of the SCEA is based on the Final Transportation Impact Analysis prepared for the proposed project by Hexagon Transportation Consultants, Inc., dated October 8, 2019 (see Appendix I).

Study Area

This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the project site, including the roadway network, bicycle and pedestrian facilities, and transit service.

Existing Roadway Network

The existing roadways in the project site vicinity are U.S. 101, Geneva Avenue, Bayshore Boulevard, Guadalupe Canyon Parkway, Carter Street, Martin Street, Linda Vista Drive, Schwerin Street, and Partridge Street. These roadways are described below.

U.S. Highway 101 (U.S. 101) near the project site is a limited-access 8- to 10-lane freeway that connects Brisbane and the Peninsula with San Francisco and Marin Counties to the north and San Jose to the south. U.S. 101 provides direct access to the project site to and from the north at the Bayshore Boulevard interchange located approximately 1 mile north of the site. Access to and from the south is provided via interchanges at Beatty Avenue and Lagoon Road, and via ramps at Sierra Point Parkway and Bayshore Boulevard/Airport Parkway approximately 3 miles south of the site.

Geneva Avenue is a four-lane, east-west primary arterial in the vicinity of the project site. It begins at Bayshore Boulevard and ends at Ocean Avenue in San Francisco. It has a center left-turn lane and parking on both sides between Schwerin Street and Bayshore Boulevard in the vicinity of the project site. It provides direct access for various commercial uses and surrounding residential properties. Access to Geneva Avenue from the project site is provided primarily via Schwerin Street. There’s a mix of Class II and Class III bike facilities on Geneva Avenue between Ocean Avenue and Bayshore Boulevard.

Bayshore Boulevard is a four-lane, north-south primary arterial with Class II bike lanes on both sides in the vicinity of the project site. It parallels U.S. 101 between Caesar Chavez Boulevard in San Francisco and South San Francisco, where it becomes Airport Boulevard. It provides a direct connection to the Third Street corridor in San

Francisco and also serves the surrounding light industrial and residential uses. Access to Bayshore Boulevard from the project site is provided via Geneva Avenue, Linda Vista Drive, and Main Street.

Guadalupe Canyon Parkway is a four-lane, east-west secondary arterial in the vicinity of the project site. It begins at Bayshore Boulevard and runs westerly through the San Bruno Mountains where it connects with East Market Street to the east. Access to the site would be provided via Carter Street and Martin Street. It also provides access to some office and residential land uses in the City of Brisbane.

Carter Street is a two-lane, north-south collector street in the vicinity of the project site. It begins at Geneva Avenue in the north and ends at Guadalupe Canyon Parkway in the south. It provides direct access to the surrounding residential properties. Access to Carter Street from the project site would be provided via Martin Street.

Martin Street is a two-lane, east-west local roadway that directly borders the site at its southern end. It begins in the east near the eastern boundary of the project site and ends at Carter Street in the west, where it becomes Martin Trail. It would provide direct access to the site via a new driveway. As part of the City's planned improvements, Martin Street would be extended easterly from its current eastern end to intersect with Linda Vista Drive, providing project site access to Bayshore Boulevard.

Linda Vista Drive is a two-lane local roadway with parking on both sides in the vicinity of the project site. It extends from Main Street at the east end to Schwerin Street at its west end, where it becomes Bay Ridge Drive. It provides direct access to the surrounding land uses.

Schwerin Street is a two-lane, north-south local street with parking on both sides in the vicinity of the project site. Schwerin Street borders the western boundary of the site and would provide direct access to the site via the extension of Partridge Street and a new driveway between Partridge Street and Martin Street.

Partridge Street is a two-lane, east-west local street with parking on both sides in the vicinity of the project site. Partridge Street is proposed to be extended eastward to connect to the site via a new driveway; this portion of Partridge Street will be privately maintained.

Alternative Transportation Modes

Existing Bicycle and Pedestrian Facilities

There are existing Class II bicycle lanes on Geneva Avenue and Bayshore Boulevard in the vicinity of the project site. Carter Street between Geneva Avenue and Guadalupe Canyon Parkway, Martin Street between Carter Street and Schwerin Street, and Schwerin Street along the site frontage between Martin Street and Geneva Avenue, are all existing Class III bike routes. The City of Brisbane has "unclassified On-Street" improvements planned for Guadalupe Canyon Parkway. Class II bicycle lanes are also planned along the planned Geneva Avenue extension east of Bayshore Boulevard. Pedestrian facilities in the area include sidewalks along streets, curb ramps and crosswalks at intersections, pedestrian signals at controlled locations, and pedestrian paths. Direct pedestrian access to the site is provided by sidewalks along the site frontage on Schwerin Street and Martin Street. Pedestrian facilities in the project area consist of sidewalks along Geneva Avenue, Schwerin Street, Partridge Street, and Martin Street. Bayshore Boulevard has no sidewalks south of Geneva Avenue, nor on the east side north of Geneva Avenue. According to the Daly City Pedestrian Master Plan, pedestrian access improvements are proposed at various crossings along Geneva Avenue.

Existing Transit Services

Existing transit service to the study area is provided by the MUNI, SamTrans, Caltrain, and BART.

MUNI

MUNI provides bus service near the project site via Route 9, which travels between Daly City and San Francisco. The closest MUNI bus stop to the project site is located on Schwerin Street at MacDonalds Avenue, approximately 0.30 mile north of the site.

SamTrans

SamTrans provides bus service on school days near the project site on Geneva Avenue via Routes 24 and 29. Route 29 has one daily eastbound AM departure and one daily westbound PM departure. The closest bus stop from the project site is located on Geneva Avenue at the intersection with Schwerin Street, approximately 0.25 mile from the site. Route 292, and express route, runs on Bayshore Boulevard, located approximately 1.5 mile away. SamTrans Route 397 provides limited overnight “night owl” service between downtown San Francisco and the Palo Alto transit center, with service to San Francisco International Airport. Connections are provided to AC Transit and Golden Gate Transit from the San Francisco terminus. From the Palo Alto transit center, connections are provided to VTA. The route serves Daly City, with the stop at the intersection of Bayshore Boulevard and Geneva Avenue, located approximately 0.65 miles away.

The Daly City Bayshore Shuttle operated by SamTrans provides free shuttle service between the Daly City BART station and Bayshore Boulevard/Geneva Avenue, with a connection to the Balboa BART station on weekdays. The shuttle has a stop immediately fronting the site, at the Schwerin Street/Martin Street intersection. The Bayshore/Brisbane Commuter Shuttle is a free service that runs between the Bayshore Caltrain Station and the Brisbane–Crocker Industrial Park area during commute hours on weekdays. The closest stop for the shuttle is on Bayshore Boulevard near Geneva Avenue.

The Bayshore/Brisbane Senior Shuttle is operated by SamTrans and the San Mateo County Transportation Authority. It operates similar to a paratransit service except that it circles on a fixed route between Bayshore Caltrain Station and South San Francisco (with connections to other SamTrans bus routes) until it receives a call to book a trip.

Caltrain

The Caltrain station nearest to the project site is the Bayshore Station, which is located approximately 1.5 miles from the project site, on Tunnel Avenue at the border of Brisbane and San Francisco.

BART

The nearest BART station is the Balboa BART station, located approximately 2.25 miles northwest of the project site. Trains run on approximately 15-minute headways during commute hours.

Analysis Scenarios

Traffic conditions at the study locations were analyzed for the weekday AM and PM peak hours that are typically between 7:00 AM and 9:00 AM for the AM peak hours and between 4:00 PM and 6:00 PM for the PM peak hours. These periods represent the most congested traffic conditions on the surrounding street network during a typical weekday. The following scenarios were analyzed:

- Existing Conditions.

- Existing Plus Project Conditions.
- Cumulative No Project Conditions.
- Cumulative Plus Project Conditions.

Existing Levels of Service and Signal Warrants

Existing Levels of Service

Table 4.17-1 identifies existing levels of service at the intersections surrounding the project area for both signalized and unsignalized intersections. As shown in the table, measured against the City of Daly City, City of Brisbane and San Mateo County Congestion Management Program (CMP) LOS standards, all of the signalized study intersections currently operate at an acceptable LOS during the AM and PM peak hours. All of the unsignalized study intersections currently operate at LOS B or better during the AM and PM peak hours.

Table 4.17-1: Existing Intersection Level of Service

No.	Study Intersection	Traffic Control	Peak Hour	LOS Standard[1]	Average Delay[2]	LOS[3]
City of Daly City Intersections						
1	Carter Street and Martin Street	Signal	AM PM	D D	6.7 4.6	A A
2	Carter Street and Guadalupe Canyon Parkway	Signal	AM PM	D D	15.5 13.2	B B
3	Schwerin Street and Geneva Avenue	Signal	AM PM	D D	8.3 10.5	A B
4	Schwerin Street and Ottilia Street	AWSC	AM PM	D D	8.1 7.6	A A
5	Schwerin Street and Partridge Street/Project Driveway	AWSC	AM PM	D D	7.6 7.6	A A
6	Schwerin Street and Martin Street	AWSC	AM PM	D D	7.4 7.4	A A
8	Bayshore Boulevard and Geneva Avenue[4]	Signal	AM PM	D D	13.1 15.5	B B
11	Schwerin Street and Project Driveway (New Street A)	SSSC	AM PM	D D	- -	- -
12	Project Driveway (New Street B) and Martin Street	SSSC	AM PM	D D	- -	- -
13	Linda Vista Drive and Martin Street (planned)[5]	SSSC	AM PM	D D	- -	- -
City of San Francisco Intersections						
7	U.S. 1010 southbound off-ramp and Bayshore Boulevard	Signal	AM PM	n/a[6] n/a[6]	22.7 20.3	C C
City of Brisbane Intersections						
9	Bayshore Boulevard and Main Street	SSSC	AM PM	D D	0.6 / 13.3 0.6 / 13.3	A / B A / B

No.	Study Intersection	Traffic Control	Peak Hour	LOS Standard[1]	Average Delay[2]	LOS[3]
10	Bayshore Boulevard and Guadalupe Canyon Parkway	Signal	AM PM	D D	25.3 15.1	C B

Notes:

AWSC= All Way Stop Control

CMP = Congestion Management Program

HCM = Highway Capacity Manual

LOS = level of service

U.S. 101 = U.S. Highway 101

SSSC= Side Street Stop Control

[1] There is no official LOS standard for unsignalized (AWSC and SSSC) intersections except in the City of Brisbane, which uses standard LOS D for unsignalized intersections.

[2] Signalized intersection LOS and delays reported are for average control delay per vehicle. The intersection LOS and delays reported for the AWSC intersections pertain to overall average delay. SSSC intersection LOS and delays are reported for both the overall average delay/the approach with highest delay.

[3] LOS was calculated based on the HCM methodology using Synchro software.

[4] The Bayshore Boulevard and Geneva Avenue intersection operates under jurisdictions of The cities of Daly City and Brisbane and San Mateo County (CMP). The CMP LOS standard at the intersection is LOS E.

[5] The planned intersection is assumed as SSSC, per the assumption in the Martin Street Residential Traffic Impact Analysis.

[6] The intersection of U.S. 101 southbound ramps and Bayshore Boulevard is exempt from the City and County CMP LOS standard because of its location within an Infill Opportunity Zone.

Source: Hexagon Transportation Consultants 2019

4.17.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.12 of the General Plan EIR discusses potential impacts related to traffic and circulation. The General Plan EIR determined that future development would increase regional traffic and affect the LOS of certain intersections, resulting in a significant and unavoidable impact. Future development would not conflict with the standards of the San Mateo and San Francisco CMP or other adopted transportation-related plans, ordinances, programs, and policies; therefore, impacts would be less than significant.

The following General Plan policies would be applicable to the proposed project:

Policy CE-16: Strengthen pedestrian access between and within residential areas and schools, commercial areas, recreational facilities, transit centers, and major activity centers in the City.

Policy CE-18: Continue to install bicycle facilities throughout the City in accordance with the Bicycle Master Plan.

Policy CE-20: Integrate Complete Streets infrastructure and design features into street design and private construction to create safe and inviting environments for people to walk, bicycle, and use public transportation.

Plan Bay Area EIR Summary

The following summarizes the potential impacts related to transportation discussed in Chapter 2.1 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.1-1: Commute Travel Time. The Plan Bay Area EIR analyzed the potential impacts related to per-trip travel time for commute travel and determined that the impact would be less than significant. No mitigation measures were identified.

Impact 2.1-2: Non-Commute Travel Time. The Plan Bay Area EIR analyzed the potential impacts related to per-trip travel time for non-commute travel and determined that the impact would be less than significant. No mitigation measures were identified.

Impact 2.1-3: Increase in Vehicle Miles Traveled (VMT) and LOS. The Plan Bay Area EIR analyzed the potential impacts related to a substantial increase in per capita vehicle miles traveled (VMT) on facilities experiencing LOS F compared to existing conditions during AM peak periods, PM peak periods, or during the day as a whole, and determined with the implementation of Mitigation Measures 2.1-3-3(a) and 2.1-3-3(b) impacts would be less than significant. These mitigation measures are not applicable to the proposed project because the proposed project would not substantially increase VMT or degrade LOS.

Impact 2.1-4: Increase in VMT. The Plan Bay Area EIR analyzed the potential impacts related to a substantial increase in per capita VMT compared to existing conditions and determined that the impact would be less than significant. No mitigation measures were identified.

Impact 2.1-5: Regional Transit. The Plan Bay Area EIR analyzed the potential impacts related to an increased percent utilization of regional transit supply resulting in an exceedance of transit capacity at AM peak hours, at PM peak hours, or for the day, and determined that the impact would be less than significant. No mitigation measures were identified.

Impact 2.1-6: Movement of Goods through the Bay Area Region. The Plan Bay Area EIR analyzed potential impacts related to the movement of goods in the Bay Area Region and determined future development would not cause significant disruption of goods movement into or through the Bay Area region, and impacts would be less than significant. No mitigation measures were identified.

Impact 2.1-7: Construction Traffic. The Plan Bay Area EIR analyzed the potential impact related to disruption from the ongoing operations of the applicable regional or local area transportation system because of construction activities and determined that with the implementation of Mitigation Measure 2.1-7 impacts would be less than significant (Refer to Impact TRANS-1 in Section 4.17.3, Project-Specific Analysis).

PBA EIR MM 2.1-7: *Implementing agencies shall require implementation of best practice strategies regarding construction activities on the transportation system and apply recommended applicable mitigation measures as defined by state and federal agencies. Examples of mitigation measures include, but are not limited to, the following:*

- *prepare a transportation construction plan for all phases of construction;*
- *establish construction phasing/staging schedule and sequence that minimizes impacts of a work zone on traffic by using operationally-sensitive phasing and staging throughout the life of the project;*
- *identify arrival/departure times for trucks and construction workers to avoid peak periods of adjacent street traffic and minimize traffic affects;*
- *identify optimal delivery and haul routes to and from the site to minimize impacts to traffic, transit, pedestrians, and bicyclists;*

- *identify appropriate detour routes for bicycles and pedestrians in areas affected by construction;*
- *coordinate with local transit agencies and provide for relocation of bus stops and ensure adequate wayfinding and signage to notify transit users;*
- *preserve emergency vehicle access;*
- *implement public awareness strategies to educate and reach out to the public, businesses, and the community concerning the project and work zone (e.g., brochures and mailers, press releases/media alerts);*
- *provide a point of contact for residents, employees, property owners, and visitors to obtain construction information, and provide comments and questions;*
- *provide current and/or real-time information to road users regarding the project work zone (e.g., changeable message sign to notify road users of lane and road closures and work activities, temporary conventional signs to guide motorists through the work zone); and*
- *encourage construction workers to use transit, carpool, and other sustainable transportation modes when commuting to and from the site.*

4.17.3 Project-Specific Analysis

Impact TRANS-1 Conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impact Analysis

The proposed project would require demolition, site preparation, and construction in phases, with each of these activities occurring in each phase. Tables 2.4-1 through 2.4-4 show the anticipated phased construction schedule based on the assumption that construction would begin in 2021, and it is estimated all phases would be completed by 2026 (6 years of construction are anticipated); however, construction may extend up to 15 years due to market conditions. The proposed project would generate traffic through the transport of workers, equipment, and materials to and from the project site. Demolition, grading, and construction workers required for each phase of the proposed project would fluctuate between 15 and 75 workers per day with an average of 35 workers per day. Construction equipment and materials would be stored onsite. Typically, project demolition, grading, and construction activities would be limited to the daytime hours between 7 AM and 9 PM; however, some nighttime work and work on the weekends may occur. The project construction activities would be compliant with the City's Municipal Code Section 9.22.030, which states that between the hours of 10 PM and 6 AM, no person shall cause, create, or permit any noise that may be heard beyond the confines of the property of origin. Implementation of Mitigation Measure TRANS-1 (PBA EIR MM 2.1-7) would be required to reduce potential impacts during construction.

The proposed project's operational trip generation during the weekday AM and PM peak hours are presented in Table 4.17-2. Trip generation estimates were based on the net increase in development, which is an increase of 416 du and 15 daycare center students. While the proposed project would add 405 additional units (proposed unit count is 555 and existing is 150 units), the traffic analysis conservatively analyzed 416 units which is greater than the proposed increase in units. Accordingly, based on the Institute of Transportation Engineers (ITE's) trip generation rates, the proposed project would generate 3,106 net new daily vehicle trips, with 203 net new trips occurring during the AM peak hour and 245 net new trips occurring during the PM peak hour.

Table 4.17-2: Proposed Project Trip Generation

ITE Code	Description	Quantity	Daily Rate	Trips						
				Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
220	Residential	416 units	7.32	3,045	44	147	191	147	86	233
565	Child-Care Center	15 students	4.09	61	6	6	12	6	6	12
			Total	**3,106**	**50**	**153**	**203**	**153**	**92**	**245**

Note:
ITE = Institute of Transportation Engineers
Source: Hexagon Transportation Consultants 2019

Existing Plus Project Impacts

Intersection Levels of Service

This analysis assumes that the roadway network and the study intersection lane configurations under existing plus proposed project conditions would be the same as those described under existing conditions, with the exception of inclusion of the planned extension of Martin Street to Linda Vista Drive. Table 4.17-3 compares existing LOS at both the signalized and unsignalized intersections surrounding the project area. As shown in the table, all of the signalized study intersections would operate at an acceptable LOS under existing plus proposed project conditions during the AM and PM peak hours. Similarly, all of the unsignalized study intersections would operate at overall LOS A under existing plus proposed project conditions during the AM and PM peak hours. All of the side-street-stop-controlled intersections would operate at LOS B or better on the worst approach in all cases. Therefore, the proposed project would result in a less than significant impact.

Table 4.17-3: Existing Plus Proposed Project Intersection Levels of Service

No.	Study Intersection	Traffic Control	Peak Hour	LOS Standard[1]	Existing		Existing + Proposed Project		
					Average Delay[2]	LOS[3]	Average Delay[2]	LOS[3]	Increase in Average Delay
City of Daly City Intersections									
1	Carter Street and Martin Street	Signal	AM PM	D D	6.7 4.6	A A	6.8 4.7	A A	0.1 0.1
2	Carter Street and Guadalupe Canyon Parkway	Signal	AM PM	D D	15.5 13.2	B B	15.8 13.3	B B	0.3 0.1
3	Schwerin Street and Geneva Avenue	Signal	AM PM	D D	8.3 10.5	A B	9.0 11.4	A B	0.7 0.9
4	Schwerin Street and Ottilia Street	AWSC	AM PM	D D	8.1 7.6	A A	9.0 8.2	A A	0.9 0.6
5	Schwerin Street and Partridge	AWSC	AM PM	D D	7.6 7.6	A A	8.3 9.3	A A	0.7 1.7

No.	Study Intersection	Traffic Control	Peak Hour	LOS Standard[1]	Existing Average Delay[2]	Existing LOS[3]	Existing + Proposed Project Average Delay[2]	Existing + Proposed Project LOS[3]	Existing + Proposed Project Increase in Average Delay
	Street/Project Driveway								
6	Schwerin Street and Martin Street	AWSC	AM PM	D D	7.4 7.4	A A	7.4 7.4	A A	0.0 0.0
8	Bayshore Boulevard and Geneva Avenue[4]	Signal	AM PM	D D	13.1 15.5	B B	13.8 15.9	B B	0.7 0.4
11	Schwerin Street and Project Driveway (New Street A)	SSSC	AM PM	D D	- -	- -	0.5 / 9.6 0.5 / 9.7	A / A A / A	- -
12	Project Driveway (New Street B) and Martin Street	SSSC	AM PM	D D	- -	- -	4.4 / 8.9 1.9 / 8.9	A / A A / A	- -
13	Linda Vista Drive and Martin Street (planned)[5]	SSSC	AM PM	D D	- -	- -	2.4 / 9.3 1.0 / 9.6	A / A A / A	- -
City of San Francisco Intersections									
7	U.S. 1010 southbound off-ramp and Bayshore Boulevard	Signal	AM PM	n/a[6] n/a[6]	22.7 20.3	C C	23.5 20.5	C C	0.8 0.2
City of Brisbane Intersections									
9	Bayshore Boulevard and Main Street	SSSC	AM PM	D D	0.6 / 13.3 0.6 / 13.3	A / B A / B	1.0 / 14.1 0.8 / 10.4	A / B A / B	0.4 / 0.8 0.2 / 0.1
10	Bayshore Boulevard and Guadalupe Canyon Parkway	Signal	AM PM	D D	25.3 15.1	C B	25.7 15.1	C B	0.4 0.0

Notes:
AWSC= All Way Stop Control
CMP = Congestion Management Program
LOS = level of service
SSSC = Side Street Stop Control
U.S. 101 = U.S. Highway 101

1. There is no official LOS standard for unsignalized (AWSC and SSSC) intersections, except in the City of Brisbane, which uses standard LOS D for unsignalized intersections.
2. Signalized intersection LOS and delays reported are fir average control delay per vehicle. The intersection LOS and delays reported for the AWSC intersections pertain to overall average delay. SSSC intersection levels of service and delays are reported for both the overall average delay/the approach with highest delay.
3. LOS was calculated based on the HCM methodology using Synchro software.
4. The Bayshore Boulevard and Geneva Avenue intersection operates under jurisdictions of Daly City, Brisbane and County (CMP). The CMP LOS standard at the intersection is LOS E.
5. The planned intersection is assumed as SSSC, per the assumption in the Martin Street Residential Traffic Impact Analysis.
6. The intersection of U.S. 101 southbound ramps and Bayshore Boulevard is exempt from the City and County CMP LOS standard because of its location within an Infill Opportunity Zone.

Source: Hexagon Transportation Consultants 2019

Traffic Signal Warrant Analysis

The City and San Mateo County CMP do not have a LOS threshold of significance for unsignalized intersections. The City of Brisbane does have a LOS threshold of significance for unsignalized intersections. However, the only unsignalized study intersection located in Brisbane is the side-street-yield-controlled intersection at Bayshore Boulevard and Main Street, which would operate at LOS A overall and LOS B on the minor street approach under both existing conditions and existing conditions plus proposed project conditions. Based on the signal warrant analysis, none of the study intersections currently meet or would meet the peak-hour volume signal warrant under any scenarios in both the AM and PM peak hours. Therefore, the impact would be less than significant.

Vehicle Queuing Analysis

There are no established thresholds under CEQA or policy adopted by the City for determining significance impacts for vehicle queuing. However, vehicle queuing was evaluated for the westbound left turn movement at the intersection of Schwerin Street and Geneva Avenue. Based on the analysis, under existing and existing plus proposed project conditions, the estimated maximum westbound left-turn vehicle queues of 100 feet in the AM peak hour and 150 feet in the PM peak hour would not exceed the 160-foot vehicle storage capacity. The qualitative evaluation concluded that due to the low ambient traffic volumes on Schwerin Street and Martin Street, estimated maximum inbound and outbound vehicle queues at the site driveways would rarely exceed one or two vehicles. Therefore, this impact would be less than significant.

Pedestrian and Cyclists Analysis

Development of the proposed project may incrementally contribute to increased demand for facilities to serve pedestrians, cyclists and transit riders in the City. The project site is located within a Priority Development Area as identified by ABAG (Bayshore [Daly City]), and the project site is located within a Transportation Priority Area as identified by ABAG and Daly City with accessibility being a key defining factor for these areas.

Existing pedestrian activity at the project site can be described as moderate to heavy. Pedestrian volume at the Schwerin Street/Geneva Avenue intersection is 100 or more pedestrian crossings per hour. Pedestrian volumes at the Schwerin Street/Ottilia Street intersection range between 30 and 90 pedestrian crossings per hour, with the higher number occurring during the morning at the start of school at the Bayshore School. The proposed project would include a high-visibility crosswalk on every approach. The east-west fire lane on Midway Drive would also serve as a pedestrian path.

According to the General Plan, approximately 1 percent of the proposed project’s users could be expected to commute to and from the project site via bike. For the proposed project, this would equate to approximately one or two new bike trips during each of the AM and PM peak hours. The low volume of bicycle trips generated by the proposed project would not exceed the bicycle-carrying capacity of the streets surrounding the site, and the increase in bicycle trips would not, by itself, require new offsite bicycle facilities. In addition, the proposed project would include bicycle storage and types of bicycle parking spaces (e.g. short-term vs. long-term, racks vs. lockers) to meet the City’s Municipal Code requirements, at a minimum.

The nearest bus service is provided by SamTrans Routes 24 and 29, with bus stops located about 0.25 mile from the project site. According to the U.S. Census, bus trips comprise approximately 11 percent of the total commute mode share in the City. For the proposed project, this would equate to 22 new transit trips during the AM peak hour and 27 new transit trips during the PM peak commute hour. This volume of riders would not exceed the carrying capacity of the existing bus service near the project site. While the proposed project would not create a significant impact to transit operations, as part of the proposed project’s enhancement to the site’s frontage along Schwerin Street, the proposed project may consider installing a bus shelter or bench. Providing an upgrade to the shuttle stop, be it a bench or shelter, would encourage transit usage.

According to the CEQA Guidelines, a project would create an impact to bicycle, transit or pedestrians on the transportation system if it: (1) conflicts with a program, plan, ordinance or policy addressing the circulation system, including transit, bicycle and pedestrian facilities; or (2) substantially increases hazards due to a geometric design feature; or (3) would create demand in excess of capacity. The proposed project would not alter any existing or planned offsite bicycle, pedestrian, or transit facilities, nor would it create demand in excess of capacity. Therefore, the proposed project would result in a less than significant impact to bicycle, pedestrian, or transit operations in the study area.

Travel Demand Management (TDM) Plan

In accordance with the CMP requirements, the proposed project is proposing to implement Travel Demand Management (TDM) measures to reduce the demand for net new peak-hour trips generated by the proposed project. Note that the trip credits applied were part of City/County Association of Governments (C/CAG) scoring system and does not imply that after all the TDM measures are in place, the proposed project would generate zero net traffic. The total number of trip credits earned through the proposed project’s TDM plan are required to total, if not exceed, the number of net new AM or PM peak-hour trips (whichever is greater) generated by the proposed project. Based on the trip generation estimates, the proposed project is expected to generate 203 AM peak hour trips and 245 PM peak hour trips. The proposed project’s TDM plan would therefore be required to provide at least 245 C/CAG trip credits. Mitigation Measure TRANS-2 would ensure that the proposed project would implement San Mateo County CMP-approved TDM measures in order to meet the CMP TDM requirement of 245 trip credits.

Level of Significance Before Mitigation
Potentially Significant Impact.

Mitigation Measure TRANS-1 (PBA EIR MM 2.1-7) and Mitigation Measure TRANS-2 are required.

MM TRANS-2: **Travel Demand Management Plan.** Prior to the issuance of building permits, the Applicant shall submit a final Congestion Management Program (CMP)-approved Travel Demand Management (TDM) Plan that would include measures to meet the CMP TDM requirement of 245 trip credits. Measures would be identified, pursuant to City’s approval, the Applicant shall include these measures to meet the CMP TDM requirement. The final TDM plan shall be approved as part of the Disposition and Development Agreement (DDA).

Level of Significance After Mitigation
Less Than Significant Impact With Mitigation.

Impact TRANS-2 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Analysis
According to the December 2018 Technical Advisory from the State of California Governor’s Office of Planning and Research on Evaluating Transportation Impacts in CEQA, affordable housing projects are exempt from VMT analysis and are assumed to have a less than significant impact. The MTC provides data on trip lengths for employment and residential uses within the nine-county Bay Area. According to the MTC ArcGIS VMT tool, the Bay Area has an average VMT per capita of 15 miles. Using the same tool, the traffic analysis zone where the proposed project is

located shows a residential VMT per capita of 11.5 miles. Thus, the proposed project VMT would be 23 percent lower than the regional average, and no impact would occur.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact TRANS-3	Substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis

The project site would be accessible by four new driveways. Three driveways would be located on Schwerin Street, and one driveway would be located on Martin Street. The driveway located on Schwerin Street at the location of the existing Midway Drive would provide access exclusively to Garage D. The entry to Garage D would be located approximately 80 feet east of Schwerin Street. Eastward from there, the Midway Drive right-of-way is to be closed to vehicular traffic and serve as a fire lane and onsite pedestrian walkway.

Both Schwerin Street and Martin Street are two-lane local streets with low traffic volumes. Parking is permitted on both sides of Schwerin Street along the site frontage. Parking is currently permitted on the north side of Martin Street along a 400-foot segment of the site frontage between Schwerin Street and Brandon Court. Parking is currently prohibited elsewhere on Martin Street east of Schwerin Street. However, there is a housing development under construction along the south side of this segment of Martin Street.

<u>Site Access Operations</u>

Site Driveway Study Intersections

As discussed under Impact TRANS-1, all three site driveway intersections would operate under satisfactory conditions, as unsignalized intersections, both near-term and far-term, without and with the proposed project. Proposed project traffic volumes on Martin Street are expected to be relatively low in the near term, since there is currently no direct Martin Street connection to Bayshore Boulevard and U.S. 101. Under cumulative conditions, with direct project site access to Bayshore Boulevard via the Martin Street extension, proposed project traffic patterns would shift slightly, resulting in an increase in trips on Martin Street.

All approaches to the site driveway intersections, including the approaches on Schwerin Street and Martin Street, are single lane, requiring that all movements share the same lane. Without turn pockets or separate turn lanes, all vehicles would back up behind left-turning vehicles and would be subject to the corresponding delays. However, traffic volumes on Schwerin Street and Martin Streets are low, creating lengthy gaps in traffic that provide ample time and opportunity for left turns.

Midway Drive to Garage D

A qualitative analysis was conducted for traffic conditions at the Midway Drive driveway to Garage D. Under existing conditions, the total volume of vehicles on Schwerin Street along the site frontage, in both directions, is only 211 peak hour trips during the AM peak hour and 195 peak hour trips during the PM peak hour. This equates to an average headway of 17 seconds per vehicle in the AM peak hour and 18 seconds per vehicle in the PM peak hour. Thus, there would be a gap in traffic nearly every time a vehicle exits from the Midway Drive driveway. With there being sufficient gaps in traffic on Schwerin Street, there would be minimal average delay at the driveway both inbound and outbound. Accordingly, vehicle queues on southbound Schwerin Street at the driveway would be infrequent and typically be no more than one vehicle. Similarly, for outbound traffic from the Midway Drive driveway, there would generally be no more than one vehicle in the queue. It can therefore be expected that the maximum vehicle queues at all four site driveways would generally not exceed one vehicle, and the delays would be relatively short. In addition, most of the stop-controlled intersections in the area operate at LOS A, so the Midway Drive driveway would not be expected to operate any differently with the anticipated traffic.

Sight Distance

Field observations did not show any impediments to lines of sight (such as horizontal or vertical curves, trees or signs) for vehicles exiting the existing site driveways, other than cars parked on the street. The site frontage is designed with recessed, on-street parking and curb extensions (bulb-outs) where the main site driveways meet Schwerin Street or, in the case of New Street 'B', where it meets Martin Street. The on-street parking along the site frontage, adjacent to the main site driveways would thereby be set back from the curb line. This would provide adequate sight distance, looking both left and right down Schwerin Street and Martin Street, for vehicles exiting the three main site driveways.

The Midway Drive driveway to Garage D entry on Schwerin Street does not have curb extensions. In addition, the adjacent on-street parking is not recessed relative to this driveway. The driver's view when exiting the site would, to some extent, be obstructed by vehicles parked on the street on either side of the driveway. Adequate sight distance would be provided by construction curb extensions at driveway, subject to review and approval by the City which would be required through Mitigation Measure TRANS-3. In addition, landscaping near the driveway would need to be maintained such that adequate sight distance is provided. Mitigation Measure TRANS-3 would reduce potential impacts related to sight from implementation of the proposed project to a less than significant level.

Onsite Circulation

The project site layout provides a circulation pattern with no dead-end aisles, curb radii of 8 feet at all intersecting streets onsite and adequate lines of sight at corners due to building setbacks of at least 17 feet along all streets. The jog in New Street 'B' at the intersection with Midway Drive requires two sharp turns in a relatively narrow space with 8-foot turning radii. It is uncertain whether two vehicles approaching the intersection from opposite directions could comfortably pass through the intersection simultaneously. However, the final site plan would be reviewed by the City and Fire Department to ensure that the garage ingress/egress, internal circulation, ramp design, and other relevant design features meet the City Municipal Code requirements or otherwise accord with industry standards.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure TRANS-3 is required.

MM TRANS-3: **Driveway Distance. T**o provide adequate sight distance, the project would provide curb extensions at the Midway driveway to Garage D, subject to review and approval by the City. In addition, the proposed project shall maintain the landscaping near the driveway such that it doesn't obstruct the line of sight down Schwerin Street. Placement of any monument signs or other permanent fixtures would need to be located out of the line of sight of existing drivers. The final site plan will need to be reviewed by city staff.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact TRANS-4 Result in inadequate emergency access?

Impact Analysis

The proposed project would not result in inadequate emergency access during construction and/or operation. Both Schwerin and Martin streets are connected to adjacent connecter streets providing adequate access in the event of an emergency. Therefore, the proposed project would have no impact.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

4.18 TRIBAL CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size, or object with cultural value to the California Native American tribe and that is:				
i. listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

4.18.1 Environmental Setting

The Ohlone Tribe primarily occupied the coastline in the San Francisco Bay Area, stretching from San Francisco to Monterey Bay. The Ohlone concentrated near inland villages located on the Colma and San Bruno Creeks, as well as a seasonal village on the coast at Mussel Rock. The Ohlone were known to hunt deer, rabbits, fish, wild geese, and ducks in addition to gathering food such as nuts, roots, berries, and shellfish such as mussels and clams. Most of the fishing was done on the inland bay areas, while the coast provided sea otters and seals.

No Tribal Cultural resources were identified within the proposed project area, and pursuant to the Assembly Bill (AB) 52 process completed by the City, no tribes have requested consultation.

4.18.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

The General Plan EIR not address the issue of “tribal cultural resources” because its publication in 2013 preceded the passage of California AB 52 of 2014, which expanded CEQA by defining this issue area as a new resource category.

Plan Bay Area EIR Summary

The following summarizes the potential impacts related to tribal cultural resources discussed in Chapter 2.11 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.11-5: Tribal Cultural Resources. The Plan Bay Area EIR analyzed the potential impact related to substantial adverse change to the significance of a Tribal Cultural Resource (TCR) as defined in PRC Section 21074 and determined that with the implementation of Mitigation Measure 2.11-5, the impact would be less than significant (Refer to Impact TRIB-1 in Section 4.18.3, Project-Specific Analysis).

PBA EIR MM 2.11-5: *If the implementing agency determines that a project may cause a substantial adverse change to a TCR, and measures are not otherwise identified in the consultation process required under PRC Section 21080.3.2, implementing agencies and/or project sponsors shall implement the following measures where feasible and necessary to address site-specific impacts to avoid or minimize the significant adverse impacts:*

- *Within 14 days of determining that a project application is complete, or to undertake a project, the lead agency must provide formal notification, in writing, to the tribes that have requested notification of proposed projects in the lead agency's jurisdiction. If it wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. The lead agency must begin the consultation process with the tribes that have requested consultation within 30 days of receiving the request for consultation. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.*
- *Public agencies shall, when feasible, avoid damaging effects to any TCR (PRC Section 21084.3 (a)). If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, new provisions in the PRC describe mitigation measures that, if determined by the lead agency to be feasible, may avoid or minimize the significant adverse impacts (PRC Section 21084.3 (b)). Examples include:*
    - *(1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.*
    - *(2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:*
        - *(A) Protecting the cultural character and integrity of the resource*
        - *(B) Protecting the traditional use of the resource*
        - *(C) Protecting the confidentiality of the resource.*
    - *(3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.*

- *(4) Protecting the resource.*

4.18.3 Project-Specific Analysis

Impact TRIB-1 Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 es either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact Analysis

No known tribal cultural resources were identified at the project site or within 0.25 mile of the project site during the archival records search and literature review performed as part of the cultural resources inventory, and no tribes have requested consultation regarding the proposed project. A field survey of the project area did not identify any archaeological tribal resources at the project site and noted that the project site has been disturbed by grading, construction, and tilling for vegetation management.

The project site is currently developed, and portions are capped. Though very unlikely, subsurface construction activities associated with the proposed project could potentially damage or destroy previously undiscovered unique tribal cultural resources. Therefore, the proposed project would incorporate Mitigation Measure CUL-1 (PBA EIR MM 2.2-2) and Mitigation Measure TRIB-1 (PBA EIR MM 2.11-5), which requires implementation of standard inadvertent discovery procedures and worker awareness training to reduce potential impacts to previously undiscovered subsurface unique tribal cultural resources. With implementation of these mitigation measures, potential impacts would be reduced to a less than significant level.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure CUL-1 (PBA EIR MM 2.2-2) and Mitigation Measure TRIB-1 (PBA EIR MM 2.11-5) are required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

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4.19 UTILITIES AND SERVICE SYSTEMS

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☒	☐	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the proposed project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☒	☐	☐
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☒	☐	☐
e) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

4.19.1 Environmental Setting

Water Supply

The project site is served by the City's DWWR. A large portion of the City's water supply is received from the SFPUC, which provides water primarily from Hetch Hetchy Reservoir. Recycled water from the North San Mateo County Sanitation District wastewater treatment plant is always provided to the City whenever feasible.

The Urban Water Management Plan (UWMP) for the City addresses the water system operated by the DWWR and describes the water supply sources; magnitudes of historical and projected water use; and a comparison of water supply to demands during normal, single-dry, and multiple-dry years. The UWMP, prepared in accordance with the Urban Water Management Planning Act (AB 797 as amended), is required for every urban water supplier that provides water for municipal purposes to more than 3,000 connections or supplying more than 3,000 acre-feet per year (AFY) of water to adopt and submit UWMPs every five years to the DWR.

According to the 2015 UWMP, the total water supply (from groundwater, purchased water [i.e., from SFPUC], and from recycled water) during normal water years from 2020 to 2035 would be 5,068 million gallons per year (or 15,553 AFY) (UWMP 2015).

Wastewater Treatment

According to the General Plan EIR, wastewater collection and pumping for the City is largely managed by the North San Mateo County Sanitation District (NSMCSD), which is a subsidiary of the City. However, wastewater collection and pumping for the project area is provided by the Bayshore Sanitary District, while wastewater treatment is provided by the SFPUC.

The SFPUC owns and operates three treatment plants including the Oceanside Plant, the Southeast Plant, and the North Point Facility. The Oceanside Plant and Southeast Plant operate 24-hours a day, 365 days a year, while the North Point Plant operates only when it rains (SFPUC 2020). On an average day the Oceanside Plant can treat 15 million gallons per day (mgd) of wastewater and the Southeast Plant can treat 60 mgd of wastewater (SFPUC 2014).

Stormwater Management

Municipalities are required to proactively control and regulate pollution from their municipal storm sewer systems in order to mitigate the potential detrimental impacts of urban runoff.

Stormwater management in the City is subject to the Municipal Regional Stormwater NPDES Permit for the San Francisco Bay Region, adopted in 2009. The City’s Municipal Code contains regulations related to stormwater management in Title 14 of the Municipal Code. In addition, the State of California's Porter-Cologne Water Quality Control Act of 1969, and other state legislation require municipalities to protect water quality.

The intent of these various laws and permits is to mitigate potentially detrimental effects of urban runoff through proper site design and source control early in the development review process, and to provide guidance in the selection of appropriate BMPs. BMPs are defined as methods, activities, maintenance procedures, or other management practices for reducing the amount of pollution entering a water body.

Solid Waste

Solid waste services within the City are provided by Allied Waste Services. Waste collected from homes and businesses within the City is processed at the Mussel Rock Transfer Station. Material that cannot be recycled or composted is transferred to the Ox Mountain Sanitary Landfill near Half Moon Bay. The current permitted disposal acreage is 173 acres, with a closure date of the facility scheduled for 2034, with a longer period of operation allowed; pending renewal of the landfill’s permit (CalRecycle 2019a). The landfill has a remaining capacity of 22,180,000 CY and has a maximum permitted capacity of 3,598 tons/day.

4.19.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

Chapter 3.13 of the General Plan EIR discusses the potential impacts on utilities and service systems. The General Plan EIR identified potentially significant impacts on utilities and service systems. However, existing local laws, as well as policies contained in the proposed General Plan, would reduce potential impacts on utilities and service systems to less than significant levels.

The following General Plan policies are applicable to the proposed project:

Policy RME-2: Require drought-resistant landscaping and water conserving irrigation methods in new developments, and encourage the replacement of existing water-intensive landscaping.

Policy RME-4: For development projects that will create water demand exceeding a pre-defined amount, require that developers provide a water supply analysis for the proposed project to demonstrate water availability to adequately serve the project.

Policy RME-8: Through the development of a Stormwater Management Program, ensure that all new development complies with the applicable municipal stormwater Municipal Regional Stormwater NPDES Permit by incorporating controls that reduce water quality impacts over the life of the proposed project in way that is both technically and economically feasible, and reduce pollutants in stormwater discharges to the maximum extent practicable.

Policy RME-9: Balance stormwater mitigation measures with the other inherent benefits of higher density development that is in close proximity to public transit (i.e., reduction of VMT on local and regional roadways to the extent permitted under the Municipal Regional Stormwater Permit).

Policy SE-4.4: Promote measures aimed at significantly decreasing solid waste generation, including community recycling. Require recycled materials storage and collection areas in accordance with requirements of the Recycling Ordinance.

Plan Bay Area EIR Summary

The following summarizes the potential impacts related to public utilities and facilities discussed in Chapter 2.12 of the Plan Bay Area EIR and includes the complete text of mitigation measures previously identified by the Plan Bay Area EIR that are applicable to the proposed project.

Impact 2.12-1: Water Supply Entitlements and Resources. The Plan Bay Area EIR analyzed the potential impacts related to insufficient water supplies from existing entitlements and resources to serve expected development and determined that with the implementation of Mitigation Measures 2.12-1(a), 2.12-1(b), and 2.12-1(c), the impact would be less than significant. The proposed project is not considered a transportation project; therefore, Mitigation Measures 2.12-1(b) and 2.12-1(c) are not applicable (Refer to Impact UTIL-1 in Section 4.19.3, Project-Specific Analysis).

> ***PBA EIR MM 2.12-1(a):*** *Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:*
>
> - *For projects that could increase demand for water, project sponsors shall coordinate with the relevant water service provider to ensure that the provider has adequate supplies and infrastructure to accommodate the increase in demand. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements shall be identified in each project's CEQA documentation.*
> - *Implement water conservation measures which result in reduced demand for potable water. This could include reducing the use of potable water for landscape irrigation (such as through drought-tolerant plantings, water-efficient irrigation systems, the capture and use of rainwater) and the use of water conserving fixtures (such as dual-flush toilets, waterless urinals, reduced flow faucets).*
> - *Coordinate with the water provider to identify an appropriate water consumption budget for the size and type of project, and designing and operating the project accordingly.*
> - *For projects located in an area with existing reclaimed water conveyance infrastructure and excess reclaimed water capacity, use reclaimed water for non-potable uses, especially landscape irrigation. For*

projects in a location planned for future reclaimed water service, projects should install dual plumbing systems in anticipation of future use. Large developments could treat wastewater onsite to tertiary standards and use it for non-potable uses onsite.

Impact 2.12-2: Wastewater Treatment Capacity. The Plan Bay Area EIR analyzed the potential impacts related to inadequate wastewater treatment capacity to serve new development and determined that with the implementation of Plan Bay Area Mitigation Measure 2.12-2 the impact would be less than significant (Refer to Impact UTIL-3 in Section 4.19.3, Project-Specific Analysis).

PBA EIR MM 2.12-2: *Implementing agencies and/or project sponsors shall implement mitigation measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:*

- *During the design and CEQA review of individual future projects, implementing agencies and project sponsors shall determine whether sufficient wastewater treatment capacity exists for a proposed project. These CEQA determinations must ensure that the proposed development can be served by its existing or planned treatment capacity. If adequate capacity does not exist, project sponsors shall coordinate with the relevant service provider to ensure that adequate public services and utilities could accommodate the increased demand, and if not, infrastructure improvements for the appropriate public service or utility shall be identified in each project's CEQA documentation. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.*
- *Implementing agencies and/or project sponsors shall also require compliance with Mitigation Measure 2.12(a), and MTC shall require implementation of Mitigation Measures 2.12(b), and/or 2.12(c) listed under Impact 2.12-1, as feasible based on project- and site-specific considerations to reduce water usage and, subsequently, wastewater flows.*

Impact 2.12-3: Construction of New or Expanded Stormwater Drainage Facilities. The Plan Bay Area EIR analyzed the potential impacts related to construction of new or expanded stormwater drainage facilities, which could cause significant environmental impacts, and determined that with the implementation of Mitigation Measures 2.12-3(a), 2.12-3(b), and 2.12-3(c) the impact would be less than significant. The proposed project is not considered a transportation project, and therefore Mitigation Measures 2.12-3(b) and 2.12-3(c) are not applicable (Refer to Impact UTIL-1 in Section 4.19.3, Project-Specific Analysis).

PBA EIR MM 2.12-3(a): *Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project-and site-specific considerations that include, but are not limited to:*

- *During the design and CEQA review of individual future projects, implementing agencies and project sponsors shall determine whether sufficient stormwater drainage facilities exist for a proposed project. These CEQA determinations must ensure that the proposed development can be served by its existing or planned drainage capacity. If adequate stormwater drainage facilities do not exist, project sponsors shall coordinate with the appropriate utility and service provider to ensure that adequate facilities could accommodate the increased demand, and if not, infrastructure and facility improvements shall be identified in each project's CEQA determination. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.*
- *For projects of greater than 1 acre in size, reduce stormwater runoff caused by construction by implementing stormwater control best practices, based on those required for a SWPPP.*

- *Model and implement a stormwater management plan or site design that prevents the post-development peak discharge rate and quantity from exceeding pre-development rates.*

Impact 2.12-4: Construction of New or Expanded Water and Wastewater Treatment Facilities. The Plan Bay Area EIR analyzed the potential impacts related to construction of new or expanded water and wastewater treatment facilities, which could cause significant environmental impacts, and determined with the implementation of Mitigation Measure 2.12-4 the impacts would be less than significant (Refer to Impact UTIL-1 in Section 4.19.3, Project-Specific Analysis).

PBA EIR MM 2.12-4*: Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:*

- *For projects that could increase demand on water and wastewater treatment facilities, project sponsors shall coordinate with the relevant service provider to ensure that the existing public services and utilities could accommodate the increase in demand. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements for the appropriate public service or utility shall be identified in each project's CEQA documentation. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.*

Impact 2.12-5: Insufficient Landfill Capacity. The Plan Bay Area EIR analyzed the potential impacts related to insufficient landfill capacity to serve new development while complying with applicable regulations and determined that with the implementation of Mitigation Measures 2.12-5 the impact would be less than significant (Refer to Impact UTIL-4 in Section 4.19.3, Project-Specific Analysis).

PBA EIR MM 2.12-5: *Implementing agencies and/or project sponsors shall implement measures, where feasible and necessary based on project- and site-specific considerations that include, but are not limited to:*

- *providing an easily accessible area that is dedicated to the collection and storage of non-hazardous recycling materials*
- *maintaining or re-using existing building structures and materials during building renovations and redevelopment*
- *using salvaged, refurbished or reused materials, to help divert such items from landfills*
- *for transportation projects, diverting construction waste from landfills, where feasible, through means such as:*
  - *the submission and implementation of a construction waste management plan that identifies materials to be diverted from disposal*
  - *establishing diversion targets, possibly with different targets for different types and scales of development*
  - *helping developments share information on available materials with one another, to aid in the transfer and use of salvaged materials; and*
  - *applying the specifications developed by the Construction Materials Recycling Association (CMRA) to assist contractors and developers in diverting materials from construction and demolition projects, where feasible.*

4.19.3 Project-Specific Analysis

Impact UTIL-1 Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

AND

Impact UTIL-3 Result in a determination by the wastewater treatment provider, which serves or may serve the proposed project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact Analysis

Water

The proposed project would have a water demand of 114,000 gpd (approximately 128 AFY) for the residential, community center, Bayshore Park irrigation, and office space uses. Water would be provided by the existing pipelines on Schwerin Street, which has adequate capacity to serve this increase in daily water capacity. According to the water supply assessment (Appendix A), there would be sufficient water capacity to serve the proposed project.

Water supplies would be provided by the City's DWWR and SFPUC. According to the water supply assessment the total water supply available to the City (including from groundwater, purchased water, and recycled water) is estimated to be approximately 10,625 and 14,433 AFY between 2020 and 2040. The increase in water needed to support the proposed project would therefore represent a less than 1 percent increase in the total capacity estimated. Although the increase in water would result in a less than one percent increase in the estimated water capacity of the City, Mitigation Measure UTIL-1 (PBA EIR MM 2.12-1[a]) and Mitigation Measure UTIL-4 (PBA EIR MM 2.12-4) would be required to ensure that coordination with the City's DWWR and SFPUC occurs to confirm that there would be sufficient capacity available to serve the proposed project. Therefore, impacts would be less than significant with mitigation incorporated.

Wastewater

The proposed project would be served by the BSD for wastewater collection and by the SFPUC for treatment. Based on available wastewater generation factors, the proposed project would generate a combined 114,126 gpd of wastewater, which would be an 82,966 gpd increase from existing conditions. This increase would represent approximately 0.0055 percent of the 15 mgd dry weather flow design capacity for the Oceanside Plant and 0.0014 percent of the 60 mgd dry weather flow design capacity for the Southeast Plant. Actual generation rates would likely be lower due to water conservation measures such as the 2019 California Green Building Standards Code, Title 24 of the CCR. Although the proposed project would result in a less than 1 percent increase in the wastewater treatment capacity of the SFPUC, Mitigation Measure UTIL-1 (PBA EIR MM 2.12-2), Mitigation Measure UTIL-2 (PBA EIR MM 2.12-4), and Mitigation Measure UTIL-3 (PBA EIR MM 2.12-3[a]) would be required to ensure that coordination with the SFPUC and BSD occurs and that there would be sufficient collection and treatment capacity available to serve the proposed project. Additionally, the increase in wastewater generated from the proposed project would flow to the existing 18-inch sewer line located beneath Midway Drive that runs from the intersection of Schwerin Street and Midway Drive to the Carlyle Pump Station located on 96 Industrial Way. No upgrades or capacity increase are anticipated for this sewer line or pump station. Therefore, impacts would be less than significant with mitigation incorporated.

Stormwater

During construction, the proposed project would be designed to meet the City's requirements to limit stormwater discharge volumes and runoff rates to the pre-project condition during each phase of construction. Due to the phased construction for the proposed project, each phase alone would have some potential to increase the rate or amount of surface runoff which may result in flooding or contribute runoff water which would exceed the capacity of existing stormwater drainage systems. In order to prevent this, each phase of construction would be designed to meet the City's requirements to limit stormwater discharge volumes and runoff rates to the pre-project condition, both overall and upon completion of each phase. This would prevent the need for additional stormwater drainage facilities to be constructed as a result of the proposed project (C. Gaumnitz, personal communication, March 24, 2020). Therefore, construction related impacts would be less than significant.

The project site design includes landscaped areas and permeable pavers that would retain and treat their own runoff. Treated runoff would be directly discharged from these features to the northeastern edge of the proposed project site via a 60-inch storm main. The 60-inch storm main ultimately outfalls into the Bayshore Channel in a siphon condition. Due to the stormwater treatment and retention measures incorporated into proposed project design in combination with the highly permeable site soils, the proposed project would not require the construction new stormwater drainage facilities offsite. The proposed project would require relocation of portions of the City's stormwater drainage system due to the placement of new structures during the phased development of the site. Any relocations would be required to be designed to accommodate a 100-year storm within the relocated sections to ensure that such relocations do not alter the City's existing system capacity. According to calculations in Appendix C, there would be sufficient stormwater capacity to serve the proposed project. Therefore, operational impacts would be less than significant.

Electricity, Natural Gas, and Telecommunications

The proposed project would include extension of the underground electricity and natural gas lines from existing facilities in Schwerin Street. The proposed project would include energy conservation features including homes that are energy efficient with a goal to exceed the state's current Title 24 requirements, by meeting current Tier 2 Energy Efficiency standards. Energy supplies would come from PG&E, which would have sufficient capacity to serve the proposed project. Telecommunication facilities currently exist via overhead power lines. No relocation or expansion of existing electricity capacity, natural gas capacity, or telecommunications facilities would be required for the proposed project, therefore there would be a less than significant impact.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure UTIL-1 (PBA EIR MM 2.12-1[a]), Mitigation Measure UTIL-2 (PBA EIR MM 2.12-2), Mitigation Measure UTIL-3 (PBA EIR MM 2.12-3[a]), and Mitigation Measure UTIL-4 (PBA EIR MM 2.12-4) are required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact UTIL-2 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact Analysis

Water supplies would be provided by the City's DWWR and SFPUC. According to the water supply assessment, the total water supply available to the City (including from groundwater, purchased water, and recycled water) is estimated to be approximately 10,625 to 14,433 AFY between 2020 and 2040 during normal water years. The increase in water needed to support the proposed project would therefore represent a less than 1 percent increase in the total capacity estimated during normal, single dry years, and multiple dry years. Therefore, the incremental increase in water consumption from the proposed project would be able to be served by existing and projected future supplies during normal, single dry years, and multiple dry years, and the impact would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact UTIL-4 Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Impact Analysis

Solid waste from the project site would be transferred to the Ox Mountain Landfill in Half Moon Bay. As described above, the Ox Mountain landfill is permitted to receive up to 3,598 tons of waste per day. Remaining capacity is approximately 22 million CY. The proposed project would increase the current 150 residential units to 555 residential units (and increase on 405 residential units). Using the waste generation factor for residential use of 12.23 pounds per unit (CalRecycle 2019b), the residential component of the proposed project would be expected to generate a total of 1,237 tons of waste disposal per year, or 3.39 tons of waste per day. In addition to the residential component, the child-care, community center, and office space components would employ an estimated 51 total employees. Using the waste disposal generation estimate for employee uses of 10.53 pounds per employee per day, the child-care, community center, and office space components would generate 1,335.55 tons per year, or 3.66 tons per day, as shown in Table 4.19-1.

Table 4.19-1: Estimated Proposed Project Solid Waste Generation

Project Component	Quantity (Existing/ Proposed)	Generation Rate (lbs/day)	Pounds Per Day		Tons Per Day		Tons Per Year	
			Existing	Proposed	Existing	Proposed	Existing	Proposed
Residential Units (proposed)	150, 555	12.23	1834.5	6,787.65	0.92	3.39	336	1,237
Employees (proposed)	31. 51	10.53	326.43	537.03	0.16	0.27	58.4	98.55
Totals:	-	-	**2,160.93**	**7,324.68**	**1.08**	**3.66**	**394.4**	**1,335.55**

Note: lbs/day = pounds per day
Source: CalRecycle 2019b

Total waste generated for residential, child-care, community center, and office uses, based on the CalRecycle usage factors, is anticipated to be 1,335.55 tons per year, or, 3.66 tons per day. Based on the Ox Mountain permitted intake of 3,598 tons per day, project-generated waste would represent approximately 0.001 percent of daily capacity. The actual percentage would probably be less as all employees would not likely work 365 days per year.

Additionally, during construction of the proposed project, Mitigation Measure UTIL-5 (PBA EIR MM 2.12-5) would be required and would ensure that any current onsite materials that can be reused for the redevelopment are used. Mitigation Measure UTIL-3 also includes provisions for providing easily accessible areas that are dedicated to the collection and storage of non-hazardous recycling materials on the project site during construction and establishing diversion targets with different targets for different scales of development (operationally). Therefore, the proposed project contribution to solid waste facilities would be less than significant with mitigation incorporated.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure UTIL-5 (PBA EIR MM 2.15-5) is required.

Level of Significance After Mitigation

Less Than Significant Impact With Mitigation.

Impact UTIL-5 Comply with federal, state, and local statutes and regulations related to solid waste?

Impact Analysis

As the City continues to promote additional diversion, there is expected to be no adverse impact on meeting waste diversion goals as a result of implementation of the proposed project. Additional waste generated by the proposed project would likely be further offset by increased diversion, though even at existing rates it is expected that there is sufficient landfill capacity to meet demand.

In accordance with state mandates, cities and counties must reduce per capita waste disposal through source reduction, recycling, and composting activities. The proposed project would include onsite recycling, which would comply with federal, state, and local statutes. Therefore, impacts are anticipated to be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

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4.20 WILDFIRE

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones would the project;				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
c) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

4.20.1 Environmental Setting

Climate change is expected to increase the frequency and severity of wildfires in California by altering precipitation and wind patterns, changing the timing of snowmelt, and inducing longer periods of drought. In California, responsibility for wildfire prevention and suppression is shared by federal, state, and local agencies. Federal agencies are responsible for federal lands in Federal Responsibility Areas. The State of California has determined that some non-federal lands in unincorporated areas with watershed value are of statewide interest and have classified those lands as SRAs, which are managed by CAL FIRE. All incorporated areas and other unincorporated lands are classified as Local Responsibility Areas (LRAs).

While all of California is subject to some degree of wildfire hazard, there are specific features that make certain areas more hazardous. CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors (PRC 4201-4204 and Government Code 51175-89). Factors that increase an area’s susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. CAL FIRE has identified two types of wildland fire risk areas: 1) wildland areas that may contain substantial forest fire risks and hazards, and 2) very high fire hazard severity zones. Each risk area carries with it code requirements to reduce the potential risk of wildland fires. Under state regulations, areas within very high fire hazard risk zones must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life within these areas.

There are no wildlands located within the City. According to CAL FIRE, there are not any very high fire hazard severity zones within the LRA in proximity to the project site. Likewise, there are no moderate, high, or very high fire hazard severity zones in the SRAs in the vicinity of the project site (CAL FIRE 2008).

4.20.2 Previous Environmental Analysis

City of Daly City General Plan EIR Summary

The General Plan EIR did not address the issue of "wildfire" because it's publication in 2013 preceded adoption of the 2019 CEQA Appendix G Checklist Questions. Issues related to wildland fires are discussed in Chapter 3.7 of the General Plan EIR. According to the General Plan EIR, no portions of the City are classified as having a "Very High" fire threat. Though wildfire threat is present, implementation of General Plan policies would ensure adequate service from the NCFA. Therefore, the threat of fire hazard (in particular wildland fire) is less than significant.

Plan Bay Area EIR Summary

Although the Plan Bay Area EIR does not contain a separate section for analyzing impacts related to wildfires, Chapter 2.13 of the Plan Bay Area EIR evaluated the potential impacts related to hazards (including wildfire risk) that may result from future development. The Plan Bay Area EIR determined that impacts related to wildfire would be less than significant because there are existing state and local regulations and oversight in place that would effectively reduce the inherent hazard associated with development of areas with a high wildfire hazard risk to an acceptable level. No mitigation measures were identified.

4.20.3 Project-Specific Analysis

Impact WF-1 If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: that is:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact Analysis

The proposed project is not located in an SRA or a very high fire hazard severity zone (CAL FIRE 2008). The project area is located in an urban area surrounded by existing development, including buildings, roadways, and associated infrastructure. Although the area does contain some landscaping and a few street trees, these are not considered wildland areas and would not pose a significant wildfire risk. The nearest wildland area is the San Bruno Mountain State and County Park, which is located approximately 0.36 mile southwest of the project site. Existing residences and roadways separate this park from the project site. Additionally, the proposed project would be constructed to meet all safety standards related to potential fires contained in the CBC and the California Fire Code, including placement of new fire hydrants throughout the site. Therefore, the proposed project would have a less than significant impact related to wildfire risk.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

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4.21 MANDATORY FINDINGS OF SIGNIFICANCE

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the Project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?	☐	☒	☐	☐
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact MFS-1 Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

AND

Impact MFS-3 Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Impact Analysis

The preceding analysis does not reveal any significant immitigable impacts to the environment. The project site is located within a highly urbanized area and is currently developed with the existing Midway Village area and Bayshore Park. As described in Section 4.4, Biological Resources, and Section 4.5, Cultural Resources, impacts related to the substantial degradation of the environment would be less than significant with mitigation incorporated, as necessary.

Additionally, the proposed project would not have significant environmental effects on human beings, either directly or indirectly. Any potentially significant impacts would be reduced to less than significant levels through the implementation of the applicable mitigation measures identified in Sections 4.3, Air Quality; 4.7, Geology and Soils; 4.9, Hazards and Hazardous Materials; 4.10, Hydrology and Water Quality; 4.11, Land Use; 4.13, Noise; 4.15 Public

Services; 4.17, Transportation; 4.18, Tribal Cultural Resources; and 4.19, Utilities and Service Systems. Therefore, the impact would be less than significant with mitigation.

Impact MFS-2	**Does the Project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?**

Impact Analysis

The proposed project was anticipated by and would be consistent with the General Plan EIR and General Plan, and Plan Bay Area EIR. As such, buildout of the proposed project zoning was anticipated and has been analyzed. As presented throughout this SCEA, all potential impacts associated with the proposed project would be reduced to less than significant levels with implementation of the identified mitigation measures. Adherence to applicable regulations, the Plan Bay Area 2040 (RTP/SCS) mitigation measures, and project-specific mitigation measures incorporated into the proposed project, the proposed project would not be expected to result in a considerable cumulative contribution to impacts on the environment. As such, the proposed project would also result in a less than significant cumulative impact.

5.0 REFERENCES

Multi-Section

City of Daly City. 2012. Daly City 2030 General Plan Draft Environmental Impact Report. Website: http://www.dalycity.org/Assets/Departments/Economic+and+Community+Development/planning/DEIR/DC+EIR+Cover+Volume+I.pdf. Accessed September 16, 2019

City of Daly City. 2013. Daly City 2030 General Plan. Website: http://www.dalycity.org/Assets/Departments/Economic+and+Community+Development/planning/General+Plan/Daly+City+General+Plan+-+amended+through+March+2015.pdf. Accessed July 2019.

Plan Bay Area. 2017a. Plan Bay Area 2040 Draft Environmental Impact Report. Website: http://2040.planbayarea.org/cdn/ff/7o-LQGKXLGa8uqHTI_p4iHxhXXhKIYSVDYHeBD6j6js/1499352691/public/2017-07/PBA%202040%20DEIR_0_1.pdf. Accessed September 2019.

Plan Bay Area. 2017b. Plan Bay Area 2040 Final. Website: http://2040.planbayarea.org/cdn/ff/buje2Q801oUV3Vpib-FoJ6mkOfWC9S9sgrSgJrwFBgo/1510696833/public/2017-11/Final_Plan_Bay_Area_2040.pdf. Accessed September 2019.

SCS Engineers. 2017. Phase I Environmental Site Assessment- Midway Village 45 and 47 Midway Drive Daly City, California. April 14, 2017. Accessed on July 29, 2019.

United States Census Bureau (USCB). 2019. Average Household Size of Occupied Housing Units by Tenure. Available: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk. Accessed November 14, 2019.

Section 3.0: SCEA Criteria and Transit Priority Project Consistency

California Air Resources Board (CARB). 2017. Executive Order G-18-047, CARB Acceptance of Greenhouse Gas Quantification Determination. Available https://ww3.arb.ca.gov/cc/sb375/mtc_eo_g_18_047.pdf. Accessed November 7, 2019.

Section 4.1: Aesthetics

None

Section 4.2: Agricultural and Forestry Resources

California Department of Conservation (DOC). 2016. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed July 26, 2019.

Section 4.3: Air Quality

Bay Area Air Quality Management District (BAAQMD). 2009. Revised Draft Options and Justification Report, CEQA Thresholds of Significance. https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justification-report-oct-2009.pdf?la=en. Accessed March 23, 2020, BAAQMD. 2017. California Environmental Quality Guidelines. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed August 1, 2019.

BAAQMD. 2019. Current Rules. Website: http://www.baaqmd.gov/rules-and-compliance/current-rules. Accessed August 1, 2019.

CARB. 2017a. Review of the Ambient Air Quality Standard for Ozone. Website: http://www.arb.ca.gov/research/aaqs/ozone-rs/ozone-rs.htm. Accessed July 31, 2019.

CARB. 2018. Area Designations Maps / State and National. Website: http://www.arb.ca.gov/desig/adm/adm.htm. Accessed August 1, 2019.

CARB 2019a. Overview: Diesel Exhaust & Health. Website: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed July 31, 2019.

CARB 2019b. California State Implementation Plans. Website: http://www.arb.ca.gov/planning/sip/sip.htm. Accessed July 31, 2019.

USGS. 2011. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Occurrences of Asbestos in California. Website: https://www.conservation.ca.gov/cgs/minerals/mineral-hazards/asbestos. Accessed August 1, 2019.

Section 4.4: Biological Resources

California Department of Fish and Wildlife (CDFW). 2014. CDFW California Wildlife Habitat Relationships System. Available online at: https://www.wildlife.ca.gov/Data/CWHR. Accessed October 29, 2019.

California Department of Fish and Wildlife (CDFW). 2019a. RAREFIND database ed.5. Electronic database managed by the California Natural Diversity Data Base, Wildlife Data and Habitat Analysis Branch, California Department of Fish and Wildlife. Sacramento, CA.

California Department of Fish and Wildlife (CDFW). 2019b. Special Plant and Animals Lists. Available online at: https://www.dfg.ca.gov/wildlife/nongame/list.html. Accessed October 29, 2019.

California Department of Fish and Wildlife (CDFW). 2019c. California Natural Diversity Data Base List of California Sensitive Natural Terrestrial Communities. https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities. Accessed October 29, 2019.

California Native Plant Society (CNPS). 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org. Accessed October 29, 2019.

Google Earth. 2019. https://earth.google.com/web/ Accessed October 29, 2019.

HortScience | Bartlett Consulting. 2019. Preliminary Arborist Report. Midway Village Project. September 24, 2019.

Mayer, K.E., and W.F. Laudenslayer, Jr., eds. 1988. A guide to wildlife habitats of California. Sacramento: California Department of Forestry and Fire Protection. Available online at: https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats. Accessed October 29, 2019.

Sawyer, J.O., T. Keeler-Wolf and J.M. Evens. 2009. Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.

Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration. Available online at: https://www.wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC. Accessed October 30, 2019.

United States Fish and Wildlife Service (USFWS). 2019a. Information for Planning and Consultation. Available online at: https://ecos.fws.gov/ipac/. Accessed October 29, 2019.

United States Fish and Wildlife Service (USFWS). 2019b. Wetland Mapper. National Wetlands Inventory. Washington, D.C.: USFWS. https://www.fws.gov/wetlands/data/mapper.html. Accessed October 29, 2019.

Western Regional Climate Center. 2019. San Francisco International Airport Station (047769) monthly climate summary, period of record: 7/1/1945 to 6/9/2016. Available at https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7769ca7304 Accessed October 30, 2019.

Section 4.5: Cultural Resources

None

Section 4.6: Energy

California Energy Commission. 2019. 2019 Building Energy Efficiency Standards. Website: https://ww2.energy.ca.gov/2018publications/CEC-400-2018-020/CEC-400-2018-020-CMF.pdf. Accessed July 31, 2019.

California Commercial End-Use Survey, CEC. March 2006. Energy Information Administration, U.S. Department of Energy. Website: https://ww2.energy.ca.gov/2006publications/CEC-400-2006-005/CEC-400-2006-005.PDF. Accessed July 31, 2019.

Section 4.7: Geology and Soils

California Department of Conservation (DOC). 2010. Fault Activity Map of California. Website: http://maps.conservation.ca.gov/cgs/fam/. Accessed September 2019.

California Geologic Service. 2020. CGS Information Warehouse: Landslides. Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/landslides/. Accessed February 19, 2020.

Rockridge Geotechnical. 2020. Preliminary Geotechnical Investigation, Proposed Residential Redevelopment Midway Village Daly, City, California. Accessed February 19, 2020.

Section 4.8: Greenhouse Gases

Environmental Protection Agency (EPA). 2014. Climate Change Indicators in the United States. https://www.epa.gov/sites/production/files/2016-07/documents/climateindicators-full-2014.pdf. Accessed January 2020.

California Air Resources Board (CARB). 2017b. Executive Order G-18-047, CARB Acceptance of Greenhouse Gas Quantification Determination. Available https://ww3.arb.ca.gov/cc/sb375/mtc_eo_g_18_047.pdf. Accessed November 7, 2019.

Section 4.9: Hazards and Hazardous Materials

CAL FIRE. 2008. Very High Fire Hazard Severity Zones in LRA- San Mateo County. Website: https://osfm.fire.ca.gov/media/6800/fhszl_map41.pdf. Accessed July 2019.

Department of Toxic Substances Control. 2019a. EnviroStor Database. Website: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=daly+city. Accessed July 26, 2019.

Department of Toxic Substances Control. 2019b. Bayshore Park (41990001). Website: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=41990001. Accessed July 29, 2019.

Engineering/Remediation Resources Group, Inc. (ERRG). Sepember 6, 2002. Midway Village/Bayshore Park Removal Action Completion Report.

Jacobs Consultancy Clarion Associates. 2012. Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport. Website: https://www.gsweventcenter.com/Draft_SEIR_References/2012_0701_CCAG.pdf. Accessed July 2019.

Langan Engineering and Environmental Services, Inc. 2019. Draft Indoor Air and Sub Slab Sampling Results. Midway-Bayshore Village Redevelopment, Daly City, California. August 2019.

Langan Engineering and Environmental Services, Inc. 2020. Draft Human Health Risk Assessment. Midway-Bayshore Village Redevelopment, Daly City, California. March 2020.

State Water Resources Control Board (SWRCB). 2019. GeoTracker Database. Website: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=daly+city. Accessed July 26, 2019.

Section 4.10: Hydrology and Water Quality

California Department of Water Resources (DWR). 2004a. San Francisco Bay Hydrologic Region Islais Valley Groundwater Basin- California's Groundwater Bulletin 118. Website: https://www.smcsustainability.org/download/energy-water/groundwater/2-33.pdf. Accessed July 31, 2019.

California Department of Water Resources (DWR). 2004b. San Francisco Bay Hydrologic Region Visitacion Valley Groundwater Basin- California's Groundwater Bulletin 118. Website: https://www.smcsustainability.org/download/energy-water/groundwater/2-32.pdf. Accessed July 31, 2019.

California Office of Emergency Services (Cal OES). 2019. Dam Breach Inundation Map Web Publisher. Website: https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2. Accessed July 31, 2019.

Federal Emergency management Agency (FEMA). 2019. FEMA Flood Map Service Center. Website: https://msc.fema.gov/portal/search?AddressQuery=Daly%20City%2C%20California#searchresultsanchor. Accessed July 31, 2019.

National Oceanic and Atmospheric Administration (NOAA). 2019. Sea Level Rise Viewer. Website: https://coast.noaa.gov/slr/#/layer/slr/0/-13631036.720012493/4535336.68988616/14/satellite/none/0.8/2050/interHigh/midAccretion. Accessed July 31, 2019.

Regional Water Quality Control Board (RWQCB). 2015. San Francisco Bay Region Municipal Regional Stormwater NPDES Permit. Website: https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2009/R2-2009-0074.pdf. Accessed November 11, 2019.

San Francisco Public Utilities Commission (SFPUC). 2015. Notice of Intent to Become a Groundwater Sustainability Agency (GSA) and to Prepare a Groundwater Sustainability Plan for the North Westside Basin. Accessed July 31, 2019.

Schlocker, Julius. 1974. Geology of the San Francisco North Quadrangle, California. Website: https://pubs.usgs.gov/pp/0782/report.pdf. Accessed July 31, 2019.

State of California. 2009. Tsunami Inundation Map for Emergency Planning san Francisco. Website: https://www.conservation.ca.gov/cgs/Documents/Tsunami/Maps/Tsunami_Inundation_SF_Overview_SanFrancisco.pdf. Accessed July 31, 2019.

United States Geologic Survey (USGS). 1993. Geohydrology, Water Quality, and Estimation of Ground-water Recharge in San Francisco, California, 1987-92. Website: https://pubs.usgs.gov/wri/1993/4019/report.pdf. Accessed July 31, 2019.

Urban Water Management Plan (UWMP). 2015. 2015 Urban Water management Plan. Website: http://www.dalycity.org/Assets/Departments/Water+and+Wastewater/pdf/City+of+Daly+City+2015+UWMP_Public+Review+Draft_Full+Report.pdf. Accessed November 11, 2019.

Section 4.11: Land Use and Planning

City of Daly City. 2015. Daly City 2030 General Plan. Adopted March 25, 2013, Housing Element Revised March 9, 2015. Website: http://www.dalycity.org/Assets/Departments/Economic+and+Community+Development/planning/General+Plan/Daly+City+General+Plan+-+amended+through+March+2015.pdf. Accessed July 1, 2019.

Section 4.12: Mineral Resources

None

Section 4.13: Noise

California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. Website: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf. Last Accessed November 6, 2019

California Department of Transportation (Caltrans). 2004. Transportation-and Construction-Induced Vibration Guidance Manual. 2004. Website: http://www.dot.ca.gov/hq/env/noise/pub/vibrationmanFINAL.pdf. Last Accessed November 6, 2019.

Egan, David M. Architectural Acoustics. J. Ross Pub., Pub 2007.

Federal Highway Administration. 2011a. Analysis and Abatement Guidance. https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/ Last Accessed November 6, 2019.

Federal Highway Administration. 2011b. Highway Traffic Noise. Website: http://www.fhwa.dot.gov/environment/noise/noise_barriers/design_construction/keepdown.cfm. Last Accessed November 6, 2019.

Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. Website: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf. Accessed November 6, 2019.

Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment. Website: http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf. Accessed November 6, 2019.

Section 4.14: Population and Housing

City of Daly City. 2015. Daly City 2030 General Plan Housing Element 2014-2022. Website: http://www.dalycity.org/Assets/Departments/Economic+and+Community+Development/planning/DEIR/DC+EIR+Cover+Volume+I.pdf. Accessed September 16, 2019.

Section 4.15: Public Services

California Department of Finance. 2018. California Public K-12 Graded Enrollment and High School Graduate Projections by County – 2018 Series. Available: http://www.dof.ca.gov/Forecasting/Demographics/Projections/Public_K-12_Graded_Enrollment/. Accessed November 14, 2019.

City of Daly City. 2019. Comprehensive Biennial Operating and Capital Budget For Fiscal Years 2019 and 2020. Website: http://www.dalycity.org/Assets/Departments/Finance+and+Administration/Operating+Budget+2019-2020.pdf. Accessed September 16, 2019.

North County Fire Authority (NCFA). 2017. 2017 Annual Report North County Fire Authority. Website: https://northcountyfire.org/wp-content/uploads/2019/03/Annual-Report-2017.pdf. Accessed July 29, 2019.

Per Communications with Audra Pittman, Bayshore School District. April 17, 2018.

Per Communications with Shane Lauderdale, North County Fire Authority. January 10, 2020.

Section 4.16: Recreation

None

Section 4.17: Transportation

Hexagon Transportation Consultants, Inc. 2019. 45 Midway Drive Affordable Housing Traffic Impact Analysis.

Section 4.18: Tribal Resources

None

Section 4.19: Utilities and Service Systems

CalRecycle. 2019a. SWIS Facility Detail – Corinda Los Trancos landfill (Ox Mtn) (41-AA-0002). Website: https://www2.calrecycle.ca.gov/swfacilities/Directory/41-AA-0002. Accessed July 31, 2019.

CalRecycle. 2019b. Estimated Solid Waste Generation Rates. Website: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates. Accessed September 17, 2019.

San Francisco Public Utilities Commission (SFPUC). 2014. San Francisco's Wastewater Treatment Facilities. Website: https://sfwater.org/modules/showdocument.aspx?documentid=5801. Accessed January 31, 2020.

SFPUC. 2020. Treating the Liquid Flows. Website: https://sfwater.org/index.aspx?page=400. Accessed January 31, 2020.

Urban Water Management Plan (UWMP). 2015. 2015 Urban Water management Plan. Website: http://www.dalycity.org/Assets/Departments/Water+and+Wastewater/pdf/City+of+Daly+City+2015+UWMP_Public+Review+Draft_Full+Report.pdf. Accessed November 11, 2019.

Section 4.20: Wildfire

CAL FIRE. 2008. Very High Fire Hazard Severity Zones in LRA- San Mateo County. Website: https://osfm.fire.ca.gov/media/6800/fhszl_map41.pdf. Accessed July 2019.

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APPENDIX A

2020 Water Supply Assessment

FINAL

Water Supply Assessment for Midway Village Redevelopment

Prepared for
City of Daly City
Daly City, California
January 2020

FINAL

Water Supply Assessment for Midway Village Redevelopment

Prepared for
City of Daly City
Daly City, California
January 2020

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List of Abbreviations

ABAG	Association of Bay Area Governments
ACWD	Alameda County Water District
AF	acre-feet
AFY	acre-feet per year
amsl	above mean sea level
BAWSCA	Bay Area Water Supply and Conservation Agency
BC	Brown and Caldwell
CCWD	Contra Costa Water District
CIMIS	California Irrigation Management Information System
CWS	California Water Service
Daly City	City of Daly City
DWR	Department of Water Resources
EBMUD	East Bay Municipal Utility District
ETo	evapotranspiration
ft^2.	square foot/feet
°F	degrees Fahrenheit
gpd	gallons per day
gpm	gallons per minute
GMP	groundwater management plant
GSP	Groundwater Sustainability Plan
GSR	groundwater storage and recovery
HTWTP	Harry Tracy Water Treatment Plant
I-280	Interstate 280
in.	inch/inches
ISA	Interim Supply Allocation
ISG	Interim Supply GuaranteeISL Interim Supply Limitation
LOS	level of service
mgd	million gallons per day
NPDES	National Pollutant Discharge Elimination System
NSMCSD	North San Mateo County Sanitation District
O&M	operations and maintenance
PS	pump station
RWS	Regional Water System
SCVWD	Santa Clara Valley Water District
SFPUC	San Francisco Public Utilities Commission
SGMA	Sustainable Groundwater Management Act
SSF	South San Francisco
SVWTP	Sunol Valley Water Treatment Plant
SWRCB	State Water Resources Control Board
USD	Union Sanitary District
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
WCIP	Water Conservation Implementation Plan
WSA	Water Supply Assessment
WSAg	Water Supply Agreement
WSAP	Water Shortage Allocation Plan
WSIP	Water System Improvement Program
WWTP	wastewater treatment plant

Executive Summary

On behalf of the City of Daly City (Daly City), Brown and Caldwell (BC) prepared this Water Supply Assessment (WSA) for the proposed Midway Village Redevelopment. BC has prepared the WSA in accordance with the requirements of Senate Bill 610, now Water Code Sections 10910 and 10911.

The projected available potable water supplies under non-drought conditions for the Daly City water system in 2040 are 8,645 acre-feet (AF), and the estimated potable demand including this proposed development project is 7,397 acre-feet per year (AFY). Including recycled water supplies and demand, Daly City's total projected available water supplies are 15,553 AFY, and the estimated total demand including the proposed development project is 9,085 AFY. Thus, BC has determined that sufficient Daly City water supplies are available to serve the proposed Midway Village Redevelopment in normal conditions.

However, due to environmental concerns and pending legislation, this report identifies some uncertainty regarding future dry year supplies. BC based this determination on the following pertinent information:

- This WSA uses the 20-year water demand projections prepared and published in the 2015 Daly City Urban Water Management Plan (UWMP) (BC, 2016). The demands are based on the 2013 Association of Bay Area Governments (ABAG) demographic projections and include projected passive (plumbing and buildout code) and active conservation savings.
- As available, both groundwater and surface water supplies would provide water supplies needed to serve the proposed project. Currently, Daly City purchases treated surface water supplies from the San Francisco Public Utilities Commission (SFPUC). Historically, SFPUC has delivered sufficient surface water supplies. This analysis incorporates reductions in surface water supplies from SFPUC of up to 20 percent of average in dry years per the 2015 UWMP; however, per the letter from SFPUC to Bay Area Water Supply and Conservation Agency (BAWSCA) that includes WSA Language for BAWSCA (with corrections) dated July 31, 2019 (Appendix A), SFPUC faces potential for further reductions of its supply due to scenarios associated with the Bay-Delta Plan Amendment.
- Daly City has limited ability to increase groundwater pumping to enhance water supply reliability and address added demands. Daly City currently has a maximum groundwater safe yield of 3,839 AFY anticipated through 2040.
- Recycled water currently serves irrigation demands within Daly City and to nearby golf courses, which lowers the estimated demands for potable water and further enhances overall water supply reliability. Based on current practices, this recycled water supply is not expected to increase or further enhance potable water supply availability.

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Section 1

Introduction

This section discusses the purpose and scope of the Water Supply Assessment (WSA) and describes both the proposed Midway Village Redevelopment and the existing City of Daly City (Daly City) water system.

1.1 Purpose and Scope of Water Supply Assessment

Senate Bill 610, now codified as California Water Code sections 10910 and 10911, requires land use planning entities, when evaluating certain large development projects, to request an assessment of the availability of water supplies from the water supply entity that will provide water for the project. Such a WSA is performed in conjunction with a project's land-use approval process and must evaluate the sufficiency of the water supplies available to the water supplier to meet existing and anticipated future demands. The WSA must include the project's demand over a 20-year horizon that recognizes normal years, a single-dry water year, and multiple-dry years.

The WSA must identify any existing water supply entitlements, water rights, or water service contracts held by the water supplier or relevant to the identified water supply for the proposed project. The WSA also must document water quantities received in prior years by the public water system.

If the public water supplier relies on groundwater supplies, the WSA must describe all groundwater basins that will supply the proposed project. For each unadjudicated basin, the WSA should indicate whether the Department of Water Resources (DWR) has identified the basin as overdrafted or has projected that the basin will become overdrafted if present management conditions continue. Furthermore, the WSA should provide a detailed description of the efforts undertaken in the basin to eliminate the long-term overdraft condition.

1.2 Proposed Midway Village Redevelopment

The proposed Midway Village Redevelopment project will modify an existing 15-acre site, zoned Residential Low Density and Recreation per Figure LUE-1, Existing Land Use, in the Daly City 2030 General Plan (Appendix B). As shown in Figure 1-1, the site is bounded by Cypress Lane to the north, Schwerin Street to the west, Martin Street to the south, and the Toll Brothers site to the east. As shown on the drawings prepared by BKF Engineers and David Baker Architects and provided to BC on July 11, 2019 (Appendix C), the proposed project will have four phases plus buildout. It will remove 150 existing dwelling units and construct 555 new units, a childcare center, two parking garages (A with 407 spaces and B with 254 spaces), and a park. Per Figure LUE-3, Future Land Use, in the Daly City 2030 General Plan (Appendix B), the future land use will consist of medium density and public park.

Figure 1-1. Midway Village Redevelopment project site

Table 1-1 summarizes the proposed (buildout) land uses and size of the proposed Midway Village Redevelopment.

Table 1-1 Midway Village Redevelopment Land Uses at Buildout

Land Use	No. of Units	Approximate Area[a] ft^2
Demolition of existing apartments	–155	-
Demolition of existing recreational area	-	–145,000
Multi-family residential	535	-
Single-family residential	20	-
Public park	-	145,000
Total increase	400	0

a. Approximate total building areas of all floor levels within the exterior walls as provided by the developer.
ft^2 = square foot/feet

1.3 Existing Daly City Service Area

This section describes the existing Daly City service area, location, climate, water system, and demographics.

1.3.1 Service Area Location

Daly City serves water to all residents and businesses within its City limits. Daly City does not serve two unincorporated pockets, surrounded generally by the Daly City boundaries. Figure 1-2 presents the location of the Midway Village Redevelopment project within the Daly City service area.

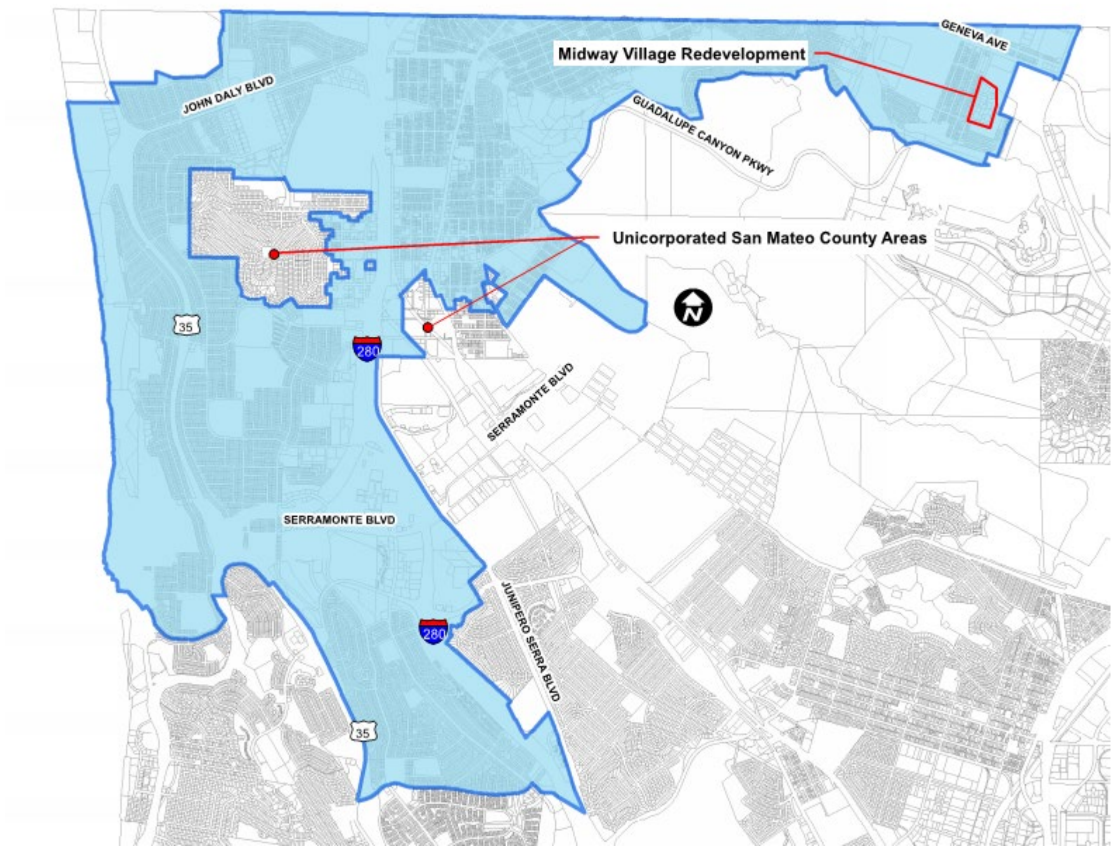


Figure 1-2. Daly City water service area and project location

Located in the northern part of San Mateo County, adjacent to the southern boundary of Daly City and County of San Francisco, Daly City is bounded on the east by the cities of South San Francisco (SSF), Colma, and Brisbane, San Bruno Mountain, and state and county parks; on the south by the cities of Pacifica and SSF; and on the west by the Pacific Ocean. Topography of the area is typical of the northern California coast. Near Daly City, the coast range rises to an elevation of 600 feet above mean sea level (amsl). A 2-mile-wide valley separates the coast range from San Bruno Mountain, which rises to a peak elevation of 1,300 feet amsl.

1.3.2 Service Area Climate

The Pacific Ocean moderates the Daly City climate. Precipitation typically occurs from October through April. BC found no direct-measured precipitation and evapotranspiration (ET_o) data for Daly City proper; however, Daly City's standard average ET_o can be assumed to be relatively close to the data from a California Irrigation

Management Information System (CIMIS) station located in Castroville. The Castroville CIMIS Station is located in the Monterey Bay Region, about 100 miles from Daly City, and is representative of the Daly City climate from the ocean side of San Francisco. BC obtained rainfall and temperature data from the Western Regional Climate Center station for the San Francisco Oceanside Station, which lies just north of Daly City. Coastal fog during the summer months and relatively mild winter temperatures produce monthly average minimum temperatures between 44 and 55 degrees Fahrenheit (°F) and monthly average maximum temperatures between 57°F and 66°F. The annual average precipitation is approximately 20 inches (in.). Normal monthly precipitation during the winter months is about 3 to 4 in.

Table 1-2 summarizes the standard average ET_o, rainfall, and monthly average minimum and maximum temperatures for Daly City.

Table 1-2. Daly City Climate

Month	Standard Average ETo in.[a]	Average Rainfall in.[b]	Average Minimum Temperature °F[b]	Average Maximum Temperature °F[b]
January	1.60	3.99	44.2	57.6
February	1.90	3.55	45.9	59.4
March	3.13	2.81	46.5	59.8
April	4.20	1.23	47.6	60.4
May	4.77	0.49	49.6	60.6
June	4.82	0.15	51.5	62
July	4.05	0.02	53.4	62.7
August	3.61	0.08	54.6	64
September	3.15	0.16	54.2	65.6
October	2.66	1.08	52.2	65.7
November	1.81	2.66	48.2	62.2
December	1.47	3.77	44.5	57.6
Annual	37.17	19.99	49.4	61.5

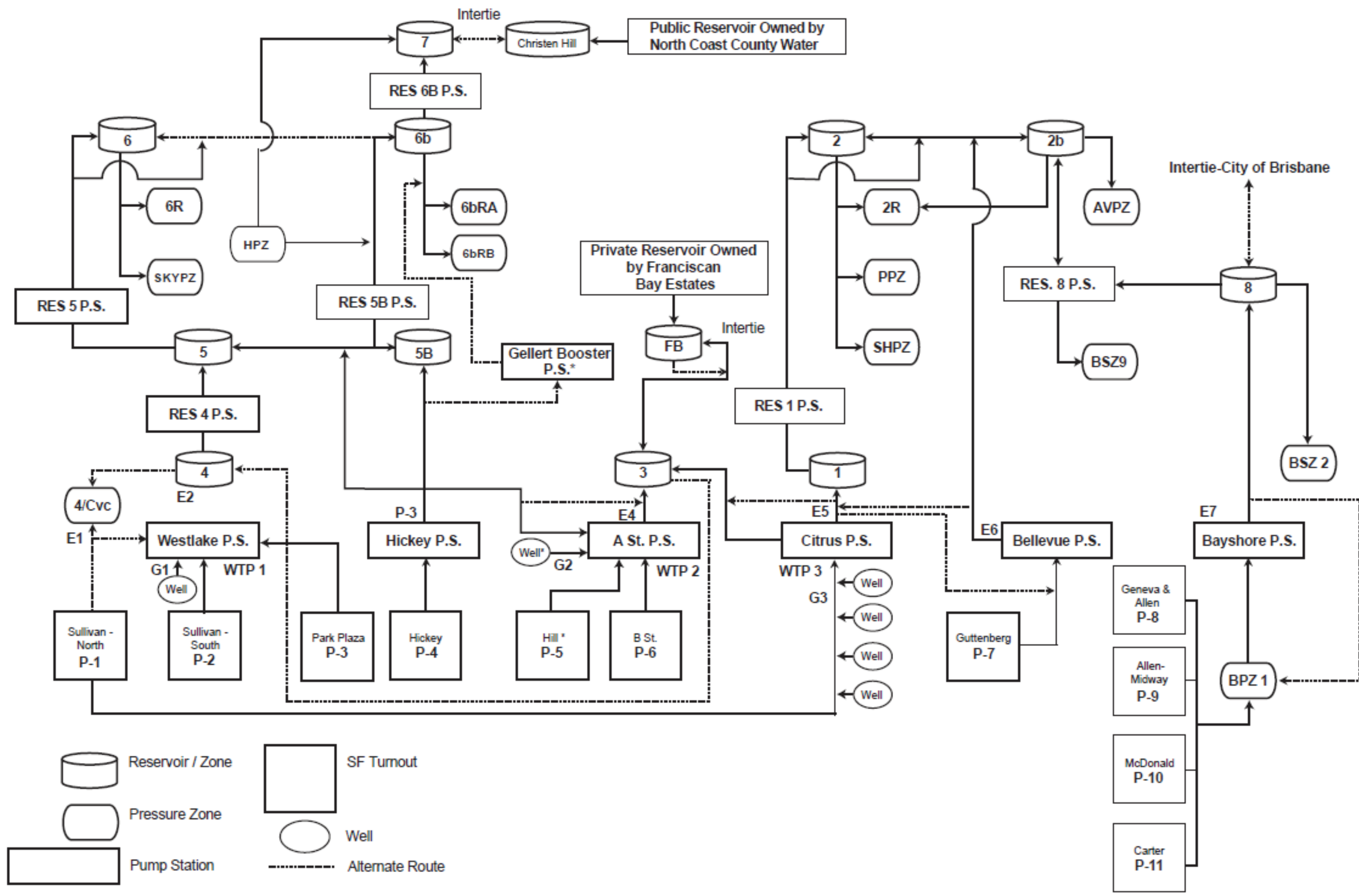
a. *Reference ET_o data for the 1982 to 2019 period were obtained from the CIMIS website for Station 19 (Castroville) http://www.cimis.water.ca.gov/cimis/frontMonthlyEToReport.do).*

b. *Data from Western Regional Climate Center, San Francisco Oceanside Station (047767), period of record for monthly climate summary: 07/01/48 to 05/19/16.*

1.3.3 Daly City Water System

Daly City receives a large portion of its water supply from SFPUC and supplements supply with groundwater pumped from seven local wells. During dry periods, groundwater makes up a larger proportion (up to 45 percent) of Daly City's supply. Daly City also uses tertiary recycled water from the North San Mateo County Sanitation District (NSMCSD) Wastewater Treatment Plant (WWTP) wherever feasible to offset potable/aquifer water demands.

Daly City's water distribution system is divided into six zones across two defined geographical areas— the Westside System and the Eastside System, shown in Figure 1-3. The Westside System consists of the Westlake Pump Station (PS) and Hickey PS; the Eastside System consists of the Bayshore PS, Citrus PS, A Street Well Booster Zones (currently not in operation because of nitrates), and Reservoir 8 Booster PS.



* Not in operation. Standby or emergency use only.

Figure 1-3. Daly City water distribution schematic.

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On the Eastside System, water from the Citrus PS pumps to both Reservoir 1 and Reservoir 3. To facilitate equalization of system demand, the system has an intertie between these two reservoirs. Reservoirs 2, 2b, and 8 also store water for the Eastside System. On the Westside System, the Westlake PS pumps water to Reservoir 4. Reservoirs 5, 5b, 6, 6b, and 7 also store water for the Westside System.

1.3.4 Existing and Projected Demographics

This section describes the existing and projected Daly City population, housing, and employment based on information from the 2015 UWMP.

Daly City is the most populous city in San Mateo County and is projected to be the most populous through 2038, according to the Daly City 2030 General Plan (General Plan) (Daly City, 2013). Table 1-3 shows the historical and projected population, households, and employees based on the ABAG data used in the 2015 UWMP. The change in population from approximately 105,810 in 2015 to 124,159 in 2040 is about a 0.7 percent average annual growth rate.

Table 1-3. Historical and Projected Population, Households, and Employees

	2010	2015	2020	2025	2030	2035	2040
Population	101,123	105,810	109,249	112,799	116,465	120,251	124,159
Households[a]	31,090	31,275	33,615	34,005	34,390	34,415	35,775

a. Households projections are based on ABAG data for occupied housing units that assumes a 4 percent vacancy rate.

Source: 2015 UWMP (population data 2015-2040) and Bay Area Census (2010 data)

According to Daly City's General Plan, Daly City's predominant land use remains as lower-density residential development. Although this land use will remain true for quite some time, the density of new Daly City-approved development has increased markedly. Increasing development pressures and regional land use policies intended to promote more Bay Area residents living closer to where they work will place additional pressures on Daly City to allow private redevelopment of older buildings and increases in residential densities, all with fewer regulatory hurdles.

Daly City is a center for retail trades, primarily home furnishings and appliances, apparel, general merchandise, and eating and drinking establishments. Major shopping areas include Serramonte Shopping Center, Westlake Shopping Center, Pacific Plaza, and the Mission Street retail corridor.

Interstate 280 (I-280), running north and south, divides Daly City into two geographically distinct areas with different development characteristics. Older neighborhoods of medium-density, single-family housing are located east of I-280. Small corner markets and strip developments characterize businesses in this area. West of I-280 development is newer, primarily built after 1949. In this area, lower-density, single-family homes are concentrated around shopping centers often dedicated to serving a region rather than a local population. Daly City's limited manufacturing enterprises are located near the Cow Palace in the Bayshore neighborhood east of I-280.

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Section 2

Existing and Projected Water Demands

This section describes historical and projected water demand for Daly City with and without the Midway Village Redevelopment.

Per Water Code 10910, the information included in a WSA is dependent on whether the proposed development under question was accounted for in the most recently adopted UWMP. In this case, it is uncertain whether the 2015 UWMP demand projections for 2020-2040 included the Midway Village Redevelopment.

The basis of the 2015 UWMP demand projections is as follows:

- BC prepared the 2015 UWMP using demand projections from the previously completed WSA for the Serramonte Center Expansion Project (BC, 2015) as it included the most recent demand projections prepared for the City at that time.
- The WSA for the Serramonte Center Expansion Project referenced demand projections from the 2014 Bay Area Water Supply and Conservation Agency (BAWSCA) Demand and Conservation Projection (Maddaus Water Management, 2014).
- The 2014 BAWSCA report referenced the 2013 ABAG demographic projections, which include projected passive (plumbing and buildout code) and active conservation savings.

It is unclear whether the population-based 2013 ABAG demand projections account for redevelopment or densification of existing sites, such as Midway Village, in its analysis.

For the purposes of this WSA, we added projected demands for the Midway Village Redevelopment to the projected demands included in the 2015 UWMP. As the existing site is planned to be demolished prior to construction of the redevelopment, we subtracted demands for the existing site from these projections before adding the projected demands for the redeveloped site.

2.1 Historical Water Demand

Table 2-1 presents Daly City's historical water demand in 5-year increments. Water use has decreased substantially since 2010 due to voluntary water conservation during the drought period. Although drought conditions have improved recently, water use has not returned to pre-drought levels. Water conservation during drought periods has resulted in some permanent changes in customers' water use patterns.

Table 2-1. Daly City Historical Water Demand

Water Use Sector	Historical Water Demand AFY			
	2005[a]	2010[a]	2015[b]	2019[c]
Single-family	4,401	3,908	3,416	3,408
Multi-family	1,933	1,708	1,574	1,665
Commercial	892	976	945	438
Industrial	127	-	0.3	399
Institutional/governmental	239	223	172	109
Landscape	244	131	138	134
Agricultural irrigation	0	0	0	0
Billed use subtotal	7,836	6,946	6,245	6,154
Conjunctive use pilot	3,071	2,204	-	-
Other uses[d]	40	40	-	-
Water losses[e, f]	405	365	486	N/A
Potable water production subtotal	11,352	9,555	6,731	6,154
Recycled water	476	547	853	134
Total	11,828	10,102	7,584	6,288

a. *Data reference: WSA for Serramonte Center Expansion*

b. *Data reference: 2015 UWMP*

c. *Billing use data for Daly City from 9/25/2018 to 9/24/2019, provided by City staff.*

d. *Other uses include sewer flushing, hydrant flushing, and traveling meter (contractor).*

e. *Water losses not provided for 2019 but likely have not change percentage-wise from prior periods, i.e., less than 7 percent.*

f. *Adding a reasonable allowance for water losses would increase the 2019 usage to about 6,700 AF.*

2.2 Projected Water Demand

This section describes the projected water demands for the existing Daly City water system and for the proposed Midway Village Redevelopment.

2.2.1 Daly City Water System Projected Water Demands

The projected demands presented in this document are from Daly City's 2015 UWMP.

Table 2-2 shows the projected water demand for the existing Daly City water system by water use sector. Table 2-2 does not include demands from the proposed Midway Village Redevelopment, only demands for the existing Midway site.

Table 2-2. Daly City System Projected Water Demands by Water Use Sector (without Midway Village Redevelopment)					
	Projected Water Demand, AFY				
Water Use Sector	2020	2025	2030	2035	2040
Single-family	3,842	3,818	3,784	3,778	4,005
Multi-family	1,679	1,669	1,654	1,651	1,823
Commercial	961	954	945	942	804
Industrial	0	0	0	0	0
Institutional/governmental	218	218	215	215	178
Landscape irrigation	129	129	126	126	126
Agriculture	-	-	-	-	-
Billed use subtotal	6,828	6,788	6,724	6,712	6,936
Other uses[a]	-	-	-	-	-
Water losses	359	356	353	353	365
Potable water production subtotal	7,187	7,144	7,077	7,065	7,301
Recycled water[b]	1,688	1,688	1,688	1,688	1,688
Total	8,875	8,832	8,765	8,752	8,989

a. *Other uses include sewer flushing, hydrant flushing, and traveling meter (contractor)*

b. *The current tertiary facilities' maximum production capacity is 3,100 AFY. Most of the recycled water distributed does not replace a potable water supply. Increase in future years is contingent on an additional recycled water facility being constructed and rated at 3.4 million gallons per day (mgd) for watering cemeteries in Colma and/or for groundwater regeneration. Per SFPUC letter to BAWSCA including WSA language for BAWSCA (with corrections), dated July 31, 2019 (Appendix A), this project is anticipated to be in operation by 2027.*

Source: 2015 UWMP

Note: Midway Village Redevelopment water demands are not included in this summary.

It is important to note that due to projected passive and active conservation savings accounted for in the 2015 UWMP, projected water demands for existing customers likely will decrease slightly through 2035. Additionally, as water use has decreased substantially since the drought period, demand projections from the 2015 UWMP may now be overestimated. Daly City is currently preparing a Water System Master Plan that will include an updated water demand analysis to account for this decrease.

2.2.2 Proposed Midway Village Redevelopment Projected Water Demands

BC estimated the Midway Village Redevelopment water demands by combining unit water demand factors for each land use type with the square footage or dwelling units proposed for each land use as shown in Table 2-3.

Table 2-3. Midway Village Redevelopment Projected Water Demand and Allowance for Water Losses						
Proposed Projects	No. of Units	Approximate Area[a] ft²	Approximate Number of Occupants[b]	Land Use Classifications	Unit Water Demands[b,c]	Average Day Demands[d] AFY
Phase 1						
Building A/parking garage A	78	234,000 (86,000/148,000)	3.12	multiple-family residential	60 gpcd	16.4
Building A2	70	71,000	3.12	multiple-family residential	60 gpcd	14.7
Subtotal	148	305,000				31.0
Phase 2						
Building B	58	69,000	3.12	multiple-family residential	60 gpcd	12.2
Building B2 (childcare center)	36	50,500	3.12	multiple-family residential	60 gpcd	7.5
Building C	34	29,000	3.12	multiple-family residential	60 gpcd	7.1
Townhomes	22	27,000	3.12	multiple-family residential	60 gpcd	4.6
Subtotal	150	175,500				31.5
Phase 3						
Building D/parking garage D	95	192000 (103,500/88,500)	3.12	multiple-family residential	60 gpcd	19.9
Community center	-	5,500	-	multiple-family residential	0.135 gpsfpd	0.8
Townhomes	22	46,000	3.12	multiple-family residential	60 gpcd	4.6
Subtotal	117	51,500				25.4
Phase 4						
Building E	65	60,000	3.12	multiple-family residential	60 gpcd	13.6
Building F	40	45,000	3.12	multiple-family residential	60 gpcd	8.4
Townhomes	15	12,600	3.12	multiple-family residential	60 gpcd	3.1
Townhomes (ownership)	20	39,000	3.12	single-family residential	60 gpcd	4.2
Subtotal	140	156,600				29.4
Buildout						
Park[e]	-	145,000 (72,500)	-	public park	0.135 gpsfpd	11.0
Proposed project total		761,100				128.2

a. *Approximate total building areas of all floor levels within the exterior walls provided by developer*

b. *Approximate number of occupants and unit water demands are from Near- and Long-Term Water Resources Planning (BC, 2012). Hotel: 60 gallons per day (gpd) per room. Theater/Restaurant/Gym: 0.135 gpsfpd*

c. *gpcd = gallons per capita per day; gpsfpd = gallons per square foot per day; gps = gallons per minute per sprinkler; gpd/rm = gallons per day per room*

d. *Average day demands converted to AFY*

e. *Water use for the proposed Bayshore Park is uncertain. BC assumed 50% of total area as landscaping and applied a demand factor of 0.135 gpsfpd*

The total projected demand for the Midway Redevelopment is approximately 128 AFY or about 114,000 gpd.

2.2.3 Other Projected Water Demands

In 2012, BC prepared a Near- and Long-Term Water Resources Planning report for Daly City (BC, 2012), evaluating future water demands for future projects in Daly City. Although a WSA is not required by DWR guidelines (DWR, 2003) to consider other future developments (i.e. water supply is first come first served for new developments. In this case, Midway Village Development is included, but other potential future developments are not included), it is important to note that though Daly City has available water sources to supply the Midway Village Development, it may have issues supplying others in dry years. Per the study BC prepared in 2012, it was concluded that to meet future demands of projects planned to be constructed after 2018, Daly City would need to take one of two approaches:

1. Consider options for additional supply – Some options may include, but are not limited to, water transfers from other SFPUC wholesale customers, further groundwater exploration/development outside the existing developed groundwater basin, increased recycled water use, and/or increased conservation.
2. Decline projects seeking development approval – An obvious solution to the increasing supply deficit is to not approve further future development unless the developer clearly demonstrates a secured water right apart from Daly City's supplies that said developer can deliver to Daly City as a right in perpetuity.

The 2012 Water Resources Planning report anticipates a total estimated demand ranging from 732 AFY to 819 AFY (low to high range) to be needed for projects planned to be constructed after 2018. Note that the Midway Village was originally included in this estimate, with total estimated demands ranging from 80 to 84 AFY, which has since been revised. This section of the report is provided only for informational purposes and is not included in demand projections for Midway Village Redevelopment. Note also that the 2012 TM demands did not reflect the further reductions in Daly City water use flowing from additional conservation and decreased use in response to several water rate increases.

2.3 Total Projected Water Demand

Table 2-4 presents the projected demand for Daly City, including the proposed Midway Village Redevelopment project. As per an email provided to Daly City by the developer's engineer dated October 11, 2019, the developer expects to complete Phases 1 and 2 by 2025 and anticipates full buildout by 2030.

Table 2-4. Total Projected Water Production

	Projected Water Demand, AFY				
	2020	2025	2030	2035	2040
Existing system (projected potable production)[a]	7,187	7,144	7,077	7,065	7,301
Demolition of existing Midway Village site[b]	0	–32	–32	–32	–32
Midway Village redevelopment (projected potable production)[c]	-	62	117	128	128
Subtotal (potable)	7,187	7,175	7,162	7,161	7,397
Recycled water	1,688	1,688	1,688	1,688	1,688
Total	8,875	8,863	8,850	8,849	9,085

a. *Source: Projected potable production includes water losses and other uses from 2015 UWMP*

b. *Source: Projected potable production for Midway Village Redevelopment is from Table 2-3. Dates shown in table are based on email from the developer's engineer dated October 11, 2019.*

c. *Source: Demands for existing Midway Apartments were provided for 2018 by City staff. These demands are considered to be negative once the existing site is demolished.*

Daly City billing usage data show demands for the existing Midway Village apartment complex of 32 AFY and 33 AFY, for 2017 and 2018, respectively. Since Tables 2-1 and 2-2 incorporate demands for the existing site and new construction will demolish the existing site, we subtracted these demands from projected demands (from 2015 UWMP) and replaced them with proposed demands for the Midway Village Redevelopment.

Section 3

Water Supplies

Daly City has three sources of water supply consisting of purchased surface water, groundwater, and recycled water. This section describes existing and projected water supply and water supply reliability.

3.1 Surface Water

Daly City receives water from the City and County of San Francisco's Regional Water System (RWS), operated by SFPUC. This supply is predominantly from the Sierra Nevada delivered through the Hetch Hetchy aqueducts, but also includes treated water produced by SFPUC from its local watersheds in Alameda and San Mateo counties (see Figure 3-1 for major system components).

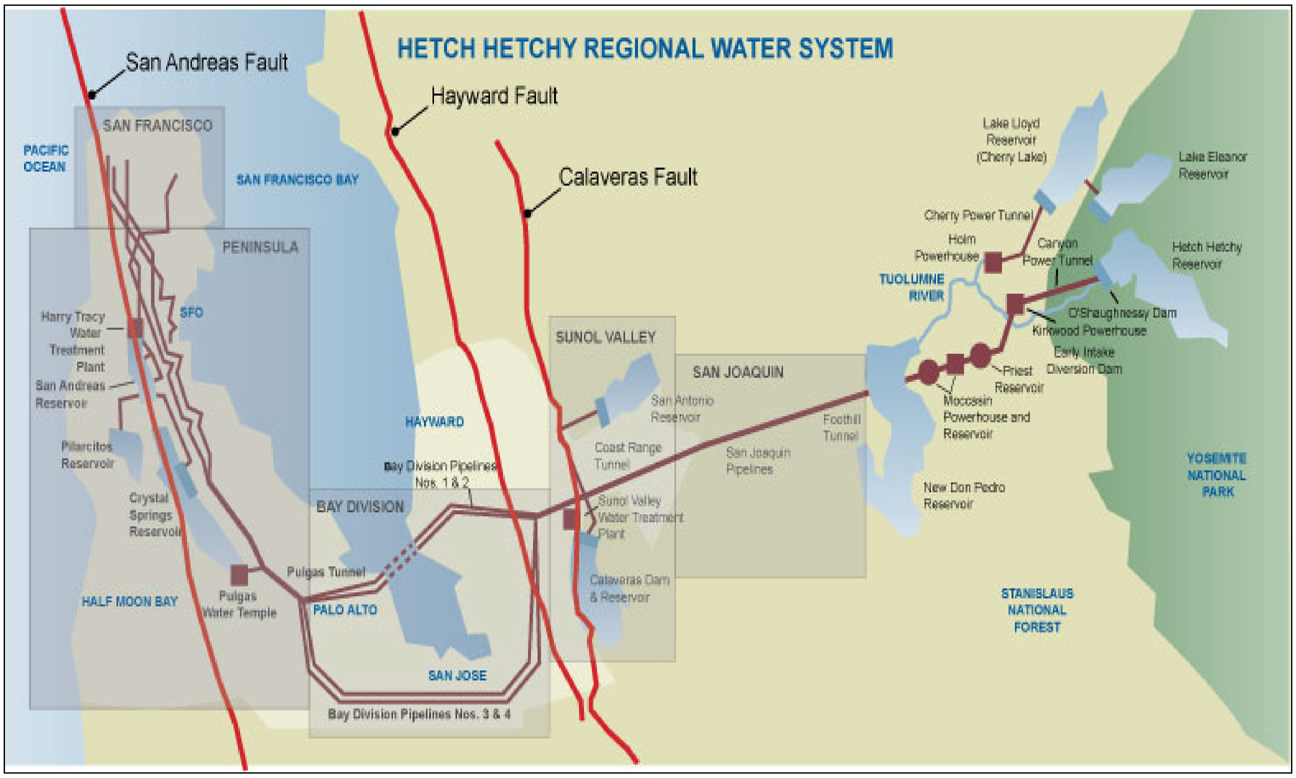

Figure 3-1. Diagram of City and County of San Francisco's RWS

Source: www.sfwater.org

3.1.1 Description

Hydrology, physical facilities, and the institutional parameters that allocate the water supply from the Tuolumne River constrain the amount of imported water available to SFPUC's retail and wholesale customers. Due to these constraints, SFPUC depends highly on reservoir storage to increase reliability of its water supplies.

SFPUC serves its retail and wholesale water demands with an integrated operation of local Bay Area water production and imported water from Hetch Hetchy, which accounts for 85 percent of the RWS supply. In practice, the local watershed facilities operate to capture local runoff from parts of Alameda, Santa Clara and San Mateo (Peninsula) counties.

The Alameda and Peninsula watersheds provide the remaining 15 percent of SFPUC's water system. The Alameda watershed, located in the East Bay, represents about half of the local watershed supplies, with water captured and stored in two reservoirs—Calaveras and San Antonio. The Peninsula watershed captures runoff in three reservoirs—Crystal Springs, San Andreas and Pilarcitos—and represents the remaining half of SFPUC's supply.

SFPUC treats these local supplies at the Sunol Valley Water Treatment Plant (SVWTP) in Alameda County and the Harry Tracy Water Treatment Plant (HTWTP) in San Mateo County, which contribute 60 to 65 mgd and 40 to 45 mgd, respectively.

3.1.2 SFPUC Physical Constraints and Possible Limitations on Delivery Capacity

SFPUC has identified 265 mgd as the operational amount of water that can be delivered to the service area. From this amount, San Francisco reserves 81 mgd, and the remaining 184 mgd becomes the contractual supply guarantee provided to wholesale customers. The City and County of San Francisco uses about 32 percent of this supply, and the remaining 68 percent serves cities, water districts, and other private water companies located in Alameda, Santa Clara, and San Mateo counties.

Daly City previously had 12 SFPUC pipeline connections called turnouts. In March 2014, Daly City had three turnout meters disconnected (501 and 503 Carter and D Street) and flanged off. If needed, SFPUC can reconnect these connections quickly. This adjustment brings the total to nine. The remaining nine turnouts can theoretically supply approximately 31 mgd at a rate of about 21,800 gpm. Daly City has never drawn water from SFPUC aqueducts at this rate and never expects to do so. During normal well operation, the purchases from SFPUC contribute up to 50 percent of Daly City's annual water supply. Daly City also has emergency interconnections with the following water agencies:

- Westborough Water District
- California Water Service (CWS)
- North Coast County Water District
- Brisbane/Guadalupe Valley Municipal Improvement District

Note that all four of these agencies depend on SFPUC for most, if not all, of their water supply. Daly City can draw upon supply from these entities to cover a loss of supply for an emergency local to the Daly City water system, but these supplies will be unavailable if a SFPUC systemwide emergency should occur. SFPUC faces several limitations on its water facilities that now or in the near future will limit its ability to deliver water fully to its wholesale customers, including Daly City, such as during dry periods and/or peak demand periods.

Physical limitations during wet and average conditions. During wet and average conditions, the RWS may have enough water available from rainfall and the Sierra snowpack, but physical limitations may prevent SFPUC from fully delivering such water to its customers in the City of San Francisco as well as its wholesale customers during peak demand periods. These limitations result from hydraulic bottlenecks in its pipelines and tunnels, as well as fixed water treatment plant capacity at SVWTP and HTWTP. To relieve these bottlenecks, SFPUC plans to replace existing pipelines or tunnels with larger-diameter conduits or build new, parallel conduits. These facilities are generally critical during periods of peak demand (i.e., a series of hot summer or fall days). To enhance SFPUC's water supply system's ability to meet identified service goals for water quality, seismic reliability, delivery reliability, and water supply, SFPUC has undertaken the Water System Improvement Program (WSIP), approved October 31, 2008. Section 3.1.3 includes a recent update on SFPUC's WSIP.

Physical limitations during drought conditions. During drought conditions, the hydraulic limitations in SFPUC's delivery system will be a lesser concern and the problem will instead be relative supply. In most years, the system can meet required deliveries. If local runoff is low and Bay Area storage reservoirs are low, then SFPUC must bring more Sierra water than normal into the Bay Area to augment local supplies. During such periods, the existing conveyance capacity across the San Joaquin Valley could be limiting.

3.1.3 SFPUC Water System Improvement Program

The WSIP will deliver capital improvements aimed at enhancing SFPUC's ability to meet its water service mission of providing high-quality water to customers in a reliable, affordable and environmentally sustainable manner.

The $4.6 billion WSIP consists of 87 projects—35 local projects located within San Francisco and 52 regional projects spread over seven counties between the Central Valley and San Francisco along the RWS. SFPUC is mandated by the state Wholesale RWS Security and Reliability Act to report on the Regional program annually (SFPUC, 2019). As of June 30, 2019 (end of FY2018-19), the regional projects were more than 97 percent complete. Construction is in progress on five regional projects valued at $1.015 billion, while construction had been completed on 43 regional projects valued at $2.715 billion. Besides closeout projects, two projects remain in pre-construction (the Alameda Creek Recapture Project and the Watershed and Environmental Improvement Program). In addition, Phase 2 of the Regional Groundwater Storage and Recovery Project is in design, while Phase 1 is nearing construction completion. The largest project in the program, Calaveras Dam Replacement, finished during FY2018-19 and is on track to be closed out by the end of December 2019. The overall WSIP completion schedule is driven by the closeout completion date for Regional Groundwater Storage and Recovery on December 30, 2021.

3.1.4 Legal Constraints

A number of legal agreements limit the amount of water that Daly City can receive from SFPUC, as described below. Under current agreements with SFPUC, Daly City's supply allocation is 4.292 mgd. Details on specific SFPUC water supply agreements are included below:

2018 Interim Supply Limitation (ISL). As part of its adoption of the WSIP in October 2008, SFPUC Commission adopted an ISL to limit sales from the RWS watersheds to an average annual of 265 mgd through 2018. The wholesale customers' collective allocation under the ISL was 184 mgd, and San Francisco's was 81 mgd. The Water Supply Agreement (WSAg) between the City and County of San Francisco and wholesale customers in Alameda County, San Mateo County and Santa Clara County, provides a framework for administering the ISL (SFPUC, 2009). BAWSCA has developed a strategy to address each of its member agencies' unmet needs flowing from the ISL through its Water Conservation Implementation Plan (WCIP) (Maddaus Water Management, 2009) and the Long-Term Reliable Water Supply Strategy Phase II Final Report (CDM Smith, 2015).

Interim Supply Allocation (ISA). The ISAs refer to each individual wholesale customer's share of the ISL. On December 14, 2010, SFPUC established each agency's ISA through 2018. In general, SFPUC based the allocations on the lesser of the projected fiscal year (FY) 2017–18 purchase projections or ISAs. The ISAs were effective only until December 31, 2018.

San Francisco's ISA was 81 mgd, and the wholesale agencies were 184 mgd. Daly City's ISA was 4.292 mgd through 2018. As stated in the WSAg, the wholesale customers do not concede the legality of SFPUC's establishment of the ISAs and Environmental Enhancement Surcharge, discussed below, and expressly retain the right to challenge either or both, when and if imposed, in a court of competent jurisdiction.

2009 WSAg. SFPUC's business relationship between San Francisco and its wholesale customers is, in large part, defined by the WSAg. The WSAg addresses the rate-making methodology used by SFPUC in setting wholesale water rates for its wholesale customers, in addition to addressing water supply and water shortages for the RWS. The WSAg has a 25-year term with an option to extend its term. In terms of water supply, the WSAg provides for 184 mgd (expressed on an annual average basis) “Supply Guarantees” to SFPUC’s wholesale customers, subject to reduction, to the extent and for the period made necessary by reason of water shortage because of drought, emergencies, or by malfunctioning or rehabilitation of the RWS.

The WSAg does not guarantee that SFPUC will meet peak daily or hourly customer demands when its annual usage exceeds the Supply Guarantees. SFPUC’s wholesale customers have agreed to the allocation of the 184-mgd Supply Guarantees among them, with each entity’s share of the ISA to the WSAg. The ISA survives termination or expiration of the WSAg and Daly City’s Individual Water Sales Contract with San Francisco. The Water Shortage Allocation Plan (WSAP) between SFPUC and its wholesale customers, adopted as part of the WSAg in July 2009, addresses shortages of up to 20 percent of systemwide use. The Tier 1 Shortage Plan allocates water from the RWS between San Francisco retail and wholesale customers during systemwide shortages of 20 percent or less. The WSAg also anticipated a Tier 2 Shortage Plan adopted by the wholesale customers, which would allocate the available water from the RWS among the wholesale customers. Daly City and other member agencies are in Tier 2.

Interim Supply Guarantee (ISG). In 2009, Daly City, along with 25 other Bay Area water suppliers, signed a WSAg with San Francisco, supplemented by an individual Water Supply Contract. These contracts, which expire in 2034, provide for a 184-mgd (expressed on an annual average basis) Supply Assurance to SFPUC’s wholesale customers collectively. Daly City’s ISG is 4.292 mgd. Although the WSAg and accompanying Water Supply Contract expire in 2034, the Supply Assurance (which quantifies San Francisco’s obligation to supply water to its individual wholesale customers) survives their expiration and continues indefinitely.

Tier 1 Drought Allocations. In July 2009, in connection with the WSAg, the wholesale customers and San Francisco adopted a WSAP to allocate water from the RWS to retail and wholesale customers during system-wide shortages of 20 percent or less (the Tier 1 Plan). The Tier 1 Plan replaced the prior Interim WSAP, adopted in 2000, which also allocated water for shortages up to 20 percent. The Tier 1 Plan also allows for voluntary transfers of shortage allocations between SFPUC and any wholesale customer, and between wholesale customers themselves. In addition, wholesale customers who have banked water through usage reductions greater than required may transfer banked water to other wholesale customers. The Tier 1 Plan, which allocates water between San Francisco and the wholesale customers collectively, distributes water based on the level of shortage as shown in Table 3-1.

Table 3-1. SFPUC and Wholesale Purchasers Share of Water

Level of Systemwide Reduction in Water Use Required	Share of Available Water	
	Wholesale Customers Share	SFPUC Share
5% or less	35.5%	64.5%
6–10%	36.0%	64.0%
11–15%	37.0%	63.0%
16–20%	37.5%	62.5%

The Tier 1 Plan will expire at the end of the WSAg term unless extended by San Francisco and the wholesale customers.

Tier 2 Drought Allocations. The wholesale customers have negotiated and adopted the Tier 2 Plan, the second component of the WSAP that allocates the collective wholesale customer share among each of the 26 wholesale customers.

The Tier 2 allocation's formula takes multiple factors for each wholesale customer into account:

- ISG
- Seasonal use of all available water supplies
- Residential per capita use

The water made available to the wholesale customers would be divided among the wholesale customers who have supplies above their needs as determined among the BAWSCA agencies under the Tier 2 Plan. That amount is proportional to each wholesale customer's Allocation Basis, expressed in mgd, which in turn is the weighted average of two components. The first component is the wholesale customer's ISG, as stated in the WSAg, and is fixed. The second component, the Base/Seasonal Component, is variable and is calculated using the monthly water use for three consecutive years prior to the onset of the drought for each of the wholesale customers for all available water supplies. The second component is based on twice the weight of the first, fixed component in calculating the Allocation Basis. Minor adjustments to the Allocation Basis then are made to ensure a minimum cutback level, a maximum cutback level, and a sufficient supply provided for all wholesale customers. The Allocation Basis is used in a fraction, as numerator, over the sum of all wholesale customers' Allocation Bases to determine each wholesale customer's Allocation Factor.

The final shortage allocation for each wholesale customer is determined by multiplying the amount of water available to the wholesale customers collectively under the Tier 1 Plan by the wholesale customer's Allocation Factor. The Tier 2 Plan requires that BAWSCA calculate the Allocation Factors each year in preparation for a potential water shortage emergency. As the wholesale customers change their water use characteristics (e.g., increase or decrease SFPUC water purchases and use of other water sources, changes in monthly water use patterns, or changes in residential per capita water use), the Allocation Factor for each wholesale customer also will change; however, for long-term planning purposes, each wholesale customer must use as its Allocation Factor the value identified in the adopted Tier 2 Plan, when adopted.

The Tier 2 Plan was originally set to expire in 2018 unless extended by the wholesale customers. Per BAWSCA's October 9, 2019 meeting minutes, in light of uncertainties surrounding new statewide water use efficiency requirements, it was recommended that the Board extend the present Tier 2 Plan for one more calendar year to December 31, 2020 (BAWSCA, 2019).

3.1.5 2018 Bay-Delta Plan Amendment[1]

The Bay-Delta Plan Amendment is another policy impacting SFPUC's future supply during dry years. In December 2018, the State Water Resources Control Board (SWRCB) adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) to establish water quality objectives that maintain the health of the Bay-Delta ecosystem. By law, SWRCB regularly reviews this plan. SWRCB developed the adopted Bay-Delta Plan Amendment with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 40 percent of the "unimpaired flow"[2] on the three tributaries from February through June in every year type, whether wet, normal, dry, or critically dry.

If SWRCB implements the Bay-Delta Plan Amendment, SFPUC will be able to meet its contractual obligations to its wholesale customers as presented in SFPUC's 2015 UWMP in *normal years*. SFPUC's 2015 UWMP already assumes shortages in single and multiple-dry years through 2040, but implementation of the Bay-Delta Plan Amendment will result in *greater shortages*. SWRCB has stated that it intends to implement the

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[1] Text from this section is copied from BAWSCA's Water Supply Reliability Information for BAWSCA Member Agencies' Water Supply Assessments (with Corrections). (SFPUC, 2019).

[2] Unimpaired flow represents the water production of a river basin, unaltered by upstream diversions, storage, or export or import of water to or from other watersheds. (SFPUC, 2019).

Bay-Delta Plan Amendment on the Tuolumne River by the year 2022, assuming it obtains all required approvals by that time. Implementation of the Plan Amendment is uncertain for several reasons.

First, under the Clean Water Act, the United States Environmental Protection Agency (USEPA) must approve the water quality standards identified in the Plan Amendment within 90 days from the date the approval request is received. By letter dated June 11, 2019, USEPA rejected the SWRCB's two-page submittal as inadequate under the requirements of the Clean Water Act. Pursuant to USEPA's letter, SWRCB has 90 days to respond with a submittal that complies with the law. Currently, USEPA has neither approved nor disapproved of any of the revised water quality objectives. It is uncertain whether the USEPA will approve or disapprove the water quality standards in the future. Furthermore, the determination could result in litigation.

Second, since adoption of the Bay-Delta Plan Amendment, over a dozen lawsuits have been filed in both state and federal court challenging the SWRCB's adoption of the Bay-Delta Plan Amendment, including two legal challenges filed by the federal government at the request of the U.S. Department of Interior, Bureau of Reclamation, in state and federal courts. These cases are in the early stage and the courts have made no dispositive rulings yet.

Third, the Bay-Delta Plan Amendment is not self-implementing and does not allocate responsibility for meeting its new flow requirements to SFPUC or any other water rights holders. Rather, the Plan Amendment merely provides a regulatory framework for flow allocation, which must be accomplished by other regulatory and/or adjudicatory proceedings, such as a comprehensive water rights adjudication or, in the case of the Tuolumne River, the 401 certification process in the Federal Energy Regulatory Commission's relicensing proceeding for Don Pedro Dam. Currently the license amendment process should finish in the 2022-23 timeframe. This process and the other regulatory and/or adjudicatory proceedings likely would face legal challenges and have lengthy timelines, and quite possibly could result in a different assignment of flow responsibility (and therefore a different water supply impact on SFPUC).

Fourth, in recognition of the obstacles to implementing the Bay-Delta Plan Amendment, SWRCB Resolution No. 2018-0059 adopting the Bay-Delta Plan Amendment directed staff to help complete a "Delta watershed-wide agreement, including potential flow measures for the Tuolumne River" by March 1, 2019, and to incorporate such agreements as an "alternative" for a future amendment to the Bay-Delta Plan to be presented to the SWRCB "as early as possible after December 1, 2019." In accordance with the SWRCB's instruction, on March 1, 2019, SFPUC, in partnership with other key stakeholders, submitted a proposed project description for the Tuolumne River that could serve as the basis for a voluntary substitute agreement with the SWRCB (March 1st Proposed Voluntary Agreement). On March 26, 2019, SFPUC adopted Resolution No. 19-0057 to support SFPUC's participation in the Voluntary Agreement negotiation process. To date, those negotiations are ongoing under the California Natural Resources Agency and the leadership of the Newsom administration. The negotiations for a voluntary agreement have made significant progress since the Department of Fish and Wildlife and DWR presented the initial framework to the SWRCB on December 12, 2018. The package submitted on March 1, 2019, is the product of renewed discussions since Governor Newsom took office. While significant work remains, the package represents an important step forward in bringing together diverse California water interests.

For all these reasons, whether and when SWRCB will implement the Bay-Delta Plan Amendment and how those amendments, if implemented, will affect SFPUC's water supply currently are uncertain and possibly speculative. Given this uncertainty, SFPUC has analyzed water supply and demand through 2040 under three scenarios:

1. No implementation of the Bay-Delta Plan Amendment or the March 1st Proposed Voluntary Agreement (Scenario 1)
2. Implementation of the March 1st Proposed Voluntary Agreement (Scenario 2)
3. Implementation of the Bay-Delta Plan Amendment (Scenario 3)

3.1.6 Dry Year Water Supplies[3]

As discussed in Section 3.1.3, SFPUC is nearing completion of its WSIP. Since adoption of SFPUC's UWMP and the 2015 Daly City UWMP, the following milestones have occurred, which improve dry year water supplies:

- Calaveras Dam Replacement Project – Construction of the new dam was completed in September 2018, and the overall project was completed in June 2019.
- Regional Groundwater Storage and Recovery Project – Construction of this project is still underway. Phase 1, consisting of installing 13 production wells. Since May/June 2016, the project has been in a storage phase through periodic deliveries of RWS surface water in lieu of groundwater pumping by Daly City, San Bruno, and the California Water Service Company.

3.1.7 Additional Water Supplies[4]

In light of the adoption of the Bay-Delta Plan Amendment and the resulting potential limitations to RWS supply during dry years, SFPUC is increasing and accelerating its efforts to acquire additional water supplies and exploring other projects that would increase overall water supply resilience. Developing these additional supplies would reduce water supply shortfalls and reduce rationing associated with such shortfalls. In addition to the Daly City Recycled Water Expansion project, which was a potential project identified in the 2015 UWMP and had committed funding at that time, SFPUC has taken action to fund the study of potential additional water supply projects. Capital projects under consideration to develop additional water supplies include surface water storage expansion, recycled water expansion, water transfers, desalination, and potable reuse. SFPUC also is considering developing related policies and ordinances, such as funding for innovative water supply and efficiency technologies, and requiring potable water offsets for new developments. Appendix A presents a more detailed list and descriptions of these efforts.

The capital projects that are under consideration would have significant cost and are still in the early feasibility or conceptual planning stages. Because many of these water supply projects would take 10 to 30 or more years to implement, and because required environmental permitting negotiations may reduce the amount of water that can be developed, aside from the Daly City Recycled Water Expansion SFPUC does not incorporate the yield from these projects now into SFPUC supply projections included in this WSA.

Even if all the capital projects above are implemented, the total amount of water and storage yielded would not be enough to make up for the dry year shortfall that may result from implementing the Bay-Delta Plan Amendment as adopted, and would occur years after such shortfalls begin. Thus, SFPUC continues to proactively explore opportunities for reuse and innovation.

3.1.8 Projected SFPUC Supply[5]

Sections 3.1.4 through 3.1.7 include text from SFPUC's Water Supply Reliability Information for BAWSCA Member Agencies' WSA (Appendix A); however, supply and demand projections included in Appendix A only apply to Tier 1 of SFPUC's WSAP.

As shown in Table 1 of Appendix A, under Scenario 1 without implementation of the Bay-Delta Plan Amendment, RWS supplies would meet wholesale demands (i.e., contractual obligations) in all normal years, single-dry water years, and the first year of the 8.5-year design drought. During subsequent drought years,

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[3] Text from this section is copied from BAWSCA's Water Supply Reliability Information for BAWSCA Member Agencies' Water Supply Assessments (with Corrections). (SFPUC, 2019).

[4] Text from this section is copied from BAWSCA's Water Supply Reliability Information for BAWSCA Member Agencies' Water Supply Assessments (with Corrections). (SFPUC, 2019).

[5] Text from this section is copied from BAWSCA's Water Supply Reliability Information for BAWSCA Member Agencies' Water Supply Assessments (with Corrections). (SFPUC, 2019).

shortfalls would range from 31 to 60 mgd, or 17-33 percent, and increase into the outer years of the design drought.

Per discussions with BAWSCA, procedures for determining RWS supply availability for each Tier 2 wholesale customer are still unclear due to uncertainties with the Bay-Delta Plan Amendment.

Scenario 1: No Implementation of the Bay-Delta Plan Amendment or the Voluntary Agreement

Under Scenario 1, there is no change to wholesale allocation under the WSAP, but in multiple-dry years, Year 2 and Year 3 wholesale customers will require Tier 2 of the WSAP. During Years 2 and 3, wholesale customers will be limited to 64 percent of the Supply Assurance, or 152.6 mgd.

Scenario 2: Implementation of the Voluntary Agreement.

As stated earlier, because SWRCB has not accepted the March 1st Proposed Voluntary Agreement as an alternative to the Bay-Delta Plan Amendment, the shortages that would occur with its implementation are not known with certainty; however, given that the objectives of the Voluntary Agreement are to provide fishery improvements while protecting water supply through flow and non-flow measures, the RWS supply shortfalls under the Voluntary Agreement would be less than those under the Bay-Delta Plan Amendment and, therefore, would require rationing of a lesser degree than that which would occur under Scenario 3. The degree of rationing also would more closely align with SFPUC's RWS level of service (LOS) goal of limiting rationing to no more than 20 percent on a systemwide basis in drought years. In 2008, SFPUC adopted this goal (Resolution No. 08-0200).

Scenario 3: Under implementation of the Bay-Delta Plan Amendment, the RWS is projected to experience significant shortfalls in single-dry and multiple-dry years starting as soon as 2022 and through 2040. If additional water supplies were not acquired before SWRCB implemented the Bay-Delta Plan Amendment, SFPUC would impose wholesale customer rationing to help balance water supply deficits during dry years.

Given the reduction severity in RWS supply with Bay-Delta Plan Amendment implementation, existing and planned dry-year supplies would be insufficient to meet projected wholesale water demand obligations without rationing above SFPUC's RWS LOS goal of limiting rationing to 20 percent on a systemwide basis for all dry years starting as soon as 2022. Although the WSAP does not address implications to supply during systemwide shortages above 20 percent, the WSAP indicates that if a systemwide shortage greater than 20 percent were to occur, RWS supply would be allocated between retail and wholesale customers per the rules corresponding to a 16 percent to 20 percent systemwide reduction, subject to consultation and negotiation between SFPUC and its wholesale customers to modify the allocation rules.

3.2 Groundwater

Groundwater is one of Daly City's two primary water sources. When all components are in full operation, Daly City has six active wells with a combined capacity of about 2,950 gpm (4.25 mgd or 4,760 AFY); Daly City will use no more than five wells simultaneously because the sixth well serves as a backup well. Daly City has one additional well, the A Street Well, that presently is out of service because of elevated nitrate and hexavalent chromium concentrations in the pumped water.

In December 2014, Daly City, along with SFPUC, City of San Bruno, and CWS entered into a comprehensive Groundwater Storage and Recovery (GSR) Agreement among the municipal pumpers within the South Westside Basin Aquifer to self-limit pumping within the aquifer at no more than 6.90 mgd, from which Daly City's aggregated designated quantity is an annual average rate of 3.43 mgd (3,839 AFY).

This section describes Daly City's groundwater supply/capacity, current use, water rights, and projected use.

3.2.1 Description

The aquifer that underlies most of Daly City is within the Westside Groundwater Basin (Westside Basin, Basin 5-35 as defined by DWR). The Westside Basin underlies parts of San Francisco and northern San Mateo county. The basin extends from Golden Gate Park in the north past the San Francisco Airport in the south. The basin extends to the west beneath the Pacific Ocean, at least as far as the San Andreas Fault in the north, the Serra Fault further south, and to the east an unknown distance beneath San Francisco Bay. The cities of San Francisco, Daly City, SSF, Colma, San Bruno, Millbrae and parts of Burlingame and Hillsborough lie above the basin.

The Westside Basin is a buried valley, with the walls and valley floor formed by rock with a mixture of coarse and fine-grained sediments as much as 3,700 feet thick in parts of the basin that fill this rock-bordered valley. The coarse-grained sediments consist of sand and gravel, and the fine-grained sediments consist of silt and clay. Sand and gravel can transmit substantial water quantities to wells, whereas silt and clay impede groundwater movement. Silt and clay deposits that form semi-continuous beds can effectively isolate the water table from the underlying aquifer. Groundwater in the shallow water table aquifer is referred to as "unconfined"; underlying aquifer, separated from the water table by continuous and semi-continuous fine-grained beds, are referred to as "confined". Both unconfined and confined conditions occur in the Westside Basin.

The Westside Basin has been a primary and reliable source of municipal and irrigation water supply for more than a century. Groundwater pumping currently supplies approximately 30 percent of the total water used in the basin. Groundwater pumping supplies water for the communities of Colma, SSF, San Bruno, and Daly City. Groundwater can supply as much as 60 to 70 percent of Daly City's supply during an emergency or drought scenario, with the exception of recycled water currently pumping for irrigation to four golf courses (Olympic Club [two courses], San Francisco, Harding Park, and Lake Merced), two city parks (Westlake and Marchbank) and median strips along John Daly Boulevard, Junipero Serra Boulevard, and the Westlake off ramp.

In 2014, the California Legislature enacted the Sustainable Groundwater Management Act (SGMA), with subsequent amendments in 2015. The SGMA requires groundwater management in priority groundwater basins, which includes forming Groundwater Sustainability Agencies (GSA) developing Groundwater Sustainability Plans (GSP) for groundwater basins or subbasins designated by DWR as medium or high priority. DWR identified such basins in Bulletin-118, 1980, and Bulletin 118, Update 2003 (DWR, 2003); DWR did not identify the Westside Basin (DWR, 2003). In August 2015, DWR issued an updated final list of critically over-drafted basins, which did not include Westside Basin (DWR, 2016c).

In 1992, the California Legislature passed Assembly Bill 3030, which declared that groundwater is a valuable natural resource, and authorized local agencies to develop groundwater management plans (GMP) voluntarily to ensure water quality and maximize supply. Each of the municipal and private agencies that have a direct stake in the Westside Basin has participated in an ongoing bi-annual testing program that measures well levels and groundwater quality. The agencies also participated in an intensive review of groundwater usage and conditions as part of developing a regional groundwater model. Daly City acted as lead agency in developing a unified groundwater model. This model serves as the basis for providing a meaningful tool for decision makers on the Westside Basin management, including pursuit of a formalized basin management program.

Without management plans and changes to current operations, increasing competition for water in California may negatively affect groundwater basins and could result in saltwater intrusion, groundwater contamination, or land subsidence. In 1997, to respond to the benefits of managing the basin and ensure local control of the process, SFPUC and the cities of San Bruno and Daly City, together with CWS, formed a partnership to develop a groundwater master plan for the Westside Basin that includes:

- Groundwater storage and quality monitoring
- Saltwater intrusion control
- Conjunctive use
- Recycled water
- Source water protection

3.2.2 Conjunctive Use

Daly City entered into a pilot conjunctive use program with SFPUC with the goal of enhancing regional water resource management. The project's first phase, which concluded in November 2003, took advantage of the availability of surplus SFPUC system water at a reduced cost. In the exchange, Daly City agreed to use more SFPUC system water and reduce pumping groundwater from the Westside Basin. This action provided the opportunity to observe basin response from recharge that takes place because of the reduced groundwater pumping. The second phase of conjunctive use began in March 2004 and continued into 2011, and had promising results. The demonstration project assessed, in part, the feasibility of a permanent program. As tentatively outlined, the program would:

- Increase groundwater levels in the Westside Basin
- Reduce the potential for seawater intrusion
- Develop increased SFPUC system yield from the overall surface and groundwater system
- Potentially improve conditions at Lake Merced

Initial results from this project showed that groundwater levels increased within the basin. Daly City has an added benefit of saving its local resource, resulting in enhanced emergency and drought protection. With the promising results of the pilot conjunctive use program, the WSIP and GSR Project proceeded with the construction of up to 16 new recovery wells and associated facilities, such as pumping systems, pipelines, and chemical treatment equipment. Phase 2 of the project is in design, while Phase 1 is nearing construction completion. The project anticipates completion in 2021 (SFPUC, 2019).

During the pilot program, SFPUC determined that a theoretical storage of about 61,000 AF of additional water is available in the Westside Basin. An assessment of the available groundwater yield for extended periods on the South Westside Basin was completed. As it currently does, Daly City plans to adjust the output of its wells and the flow rate of water it purchased from SFPUC to create a blend of water that consistently meets all water quality standards. For further detail, see Brown and Caldwell's (BC) Permit Amendment to Domestic Water Supply System Number 4110013 (BC, 2016). The WSA describes "put" and "take" concepts associated with conjunctive water use. SFPUC is installing new wells as a systemwide asset of SFPUC (thereby becoming a joint asset), the terms for which can be found in the 2009 WSA, Section 3.17. Under this section, Daly City would defer payment of stored conjunctive use system water until actual extraction of that water occurs; Daly City would pay SFPUC at the then-applicable wholesale rate of SFPUC system surface water.

3.2.3 Groundwater Reliability

Table 3-2 shows that Daly City historically has pumped less than the designated annual average rate of 3.43 mgd (3,839 AFY), even with increased groundwater from 2012 through 2014.

Due to the conjunctive use program's implementation, Daly City did not use any water from its groundwater wells from June 2016 through 2019 (see Table 3-2). In the prior 5-year period (2010 through 2015), groundwater was, on average, 40 percent of the water supply. In dry years, Daly City extracts groundwater from the basin. Daly City anticipates continued groundwater reliability as part of its ongoing efforts.

Table 3-2. Groundwater Volume Pumped

Basin name	Volume Pumped, AFY[a]							
	2012	2013	2014	2015	2016	2017	2018	2019
Westside basin	3,778	3,351	3,452	1,979	876	0	0	0
Total	3,778	3,351	3,452	1,979	876	0	0	0
Groundwater as a percent of total water supply[b]	43%	38%	N/A	26%	11%	0%	0%	0%

a. *Does not include groundwater pumped for conjunctive use pilot study*

b. *Total supply data is presented in Table 3-5*

Source: 2015 UWMP and data provided by City staff for 2016-2019.

Table 3-3 is summary of projected groundwater supplies per the 2015 UWMP.

Table 3-3. Reasonably Available Groundwater Volume

Basin Name	Volume, AFY				
	2020	2025	2030	2035	2040
Westside basin	3,839	3,839	3,839	3,839	3,839
Total	3,839	3,839	3,839	3,839	3,839
Groundwater as a percent of total water supply[a]	33%	33%	25%	25%	25%

a. Total supply data is presented in Table 3-5

Source: 2015 UWMP

3.3 Recycled Water

NSMCSD manages wastewater collection and treatment for a majority of Daly City. Daly City collects all wastewater flows from Daly City (excluding storm water runoff and a small part of Daly City that is tributary to the City of San Francisco sewers) and treats it at the NSMCSD WWTP.

In 2004, Daly City completed a $7.5 million tertiary treatment project at the WWTP. The upgrades provided Daly City with an unrestricted tertiary recycled water capacity of approximately 3,100 AFY. Daly City currently uses approximately 1,200 AFY of its unrestricted tertiary recycled water. The recycled water program currently pumps recycled water to irrigate four golf courses (Olympic Club—two courses, San Francisco, and Lake Merced), two city parks (Westlake and Marchbank) and median strips along John Daly Boulevard, Junipero Serra Boulevard and Westlake off ramp.

Daly City/NSMCSD are currently evaluating the remaining unrestricted recycled water potential. NSMCSD, in conjunction with SFPUC, is conducting a feasibility study to identify and evaluate alternatives and feasibility that would result in adding recycled water irrigation at Colma's cemeteries and Daly City facilities and schools.

Along with other SFPUC wholesale customers and members of the Westside Basin Partners, Daly City has participated in discussions around an expanded recycled water plant as discussed in Section 3.17. The Daly City recycled water expansion project includes a 2.89-mgd expansion of the existing Daly City recycled water treatment, transmission, and distribution system to serve irrigation customers within the Town of Colma. The expanded recycled water capacity could potentially contribute to irrigating cemeteries, more city parks, schools, and a golf course in Colma and/or groundwater recharge, with a recycled water use of up to 3.4 mgd (6,908 AFY) by 2027.

3.4 Summary of Water Supplies and Water Supply Reliability

Table 3-4 shows the breakdown of historical surface water, groundwater, and recycled water for 2005, and 2009 through June 2019.

Table 3-4. Historical Water Production by Source

Year	Water Production, AFY[a]				
	City Wells	SFPUC	Potable Subtotal	Recycled Water	Total
2005	3,797[b]	7,380	11,174	476	11,653
2009	1,667	6,132	7,799	586	8,385
2010	4,007[b]	5,560	9,567	547	10,114
2011	2,700	4,461	7,161	451	7,612
2012	3,778	4,456	8,234	583	8,817
2013	3,351	4,330	7,681	1,146	8,827
2014	3,452	N/A [c]	3,452	N/A	N/A
2015	1,979	4751	6,730	853	7,583
2016	876	6,018	6,895	1,242	8,137
2017	0	8,946	8,946	1,599	10,544
2018	0	7,585	7,585	572	8,158
2019 (1st half)	0	3,315	3,315	134	3,449

a. *Source: WSA for Serramonte Center Expansion and 2016-2019 data from City staff*

b. *Conjunctive use volumes from were added to groundwater well production from Daly City UWMP*

c. *N/A = Not available*

Table 3-5 summarizes the projected annual water supply for the normal climate years. As mentioned in Section 3.1, because there is still uncertainty regarding how the Bay-Delta Plan Amendment will impact future SFPUC supplies, this WSA analyzes water supply and demand through 2040 based on the Tier 2 SFPUC allocations. Total supply is anticipated to increase in 2027 due to implementation of the Daly City Recycled Water Expansion.

Table 3-5. Projected Normal Water Year Water Supply					
Water Supply	Projected Normal Water Year Water Supply, AFY				
	2020	2025	2030	2035	2040
Potable Supply					
SFPUC	4,806	4,806	4,806	4,806	4,806
Groundwater	3,839	3,839	3,839	3,839	3,839
Subtotal (potable)	8,645	8,645	8,645	8,645	8,645
Recycled water[a]	3,100	3,100	6,908	6,908	6,908
Total	11,745	11,745	15,553	15,553	15,553

a. *The recycled water supply from 2027 onward is contingent on an additional recycled water facility being constructed and rated at 3.4 mgd for irrigating cemeteries in Colma and/or for groundwater recharge.*

Source: 2015 UWMP

Table 3-6 summarizes the projected annual water supply for a single-dry water year using the information available. It is important to note that there is still uncertainty associated with the Bay Delta Plan Amendment scenarios. Daly City is currently evaluating its alternate water sources (groundwater, etc.), to prepare for further reduction of SFPUC supplies. Based on the water supply agreements discussed in Section 3.1 and the 2015 UWMP Tier 2 Allocation Scenarios (BAWSCA, 2016), 90 percent of average supply is projected to be available during single-dry water years.

Table 3-6. Projected Single-Dry Water Year Water Supply					
Water Supply	Projected Single-Dry Water Year Water Supply, AFY				
	2020	2025	2030	2035	2040
Potable Supply					
SFPUC	4,324	4,324	4,324	4,324	4,324
Groundwater	3,839	3,839	3,839	3,839	3,839
Subtotal (potable)	8,163	8,163	8,163	8,163	8,163
Recycled water[a]	3,100	3,100	6,908	6,908	6,908
Total	11,263	11,263	15,071	15,071	15,071

a. *The recycled water supply from 2027 onward is contingent upon an additional recycled water facility being constructed and rated at 3.4 mgd for irrigating cemeteries in Colma and/or for groundwater recharge.*

Source: 2015 UWMP

Table 3-7 summarizes the projected annual water supply in multiple-dry water years. Based on the water supply agreements discussed in Section 3.1 and the 2015 UWMP Tier 2 Allocation Scenarios (BAWSCA, 2016), 90 percent, 88 percent, and 88 percent of average supply is projected to be available during the first, second, and third multiple-dry years, respectively.

Table 3-7. Projected Multiple-Dry Water Year Water Supply

Water Supply	Projected Multiple-Dry Water Year Water Supply, AFY				
	2020	2025	2030	2035	2040
First Year Potable Supply					
SFPUC	4,324	4,324	4,324	4,324	4,324
Groundwater	3,839	3,839	3,839	3,839	3,839
Subtotal (potable)	8,163	8,163	8,163	8,163	8,163
Recycled water	3,100	3,100	6,908	6,908	6,908
Total	11,263	11,263	15,071	15,071	15,071
Second Year Potable Supply					
SFPUC	3,686	3,686	3,686	3,686	3,686
Groundwater	3,839	3,839	3,839	3,839	3,839
Subtotal (potable)	7,525	7,525	7,525	7,525	7,525
Recycled water	3,100	3,100	6,908	6,908	6,908
Total	10,625	10,625	14,433	14,433	14,433
Third Year Potable Supply					
SFPUC	3,686	3,686	3,686	3,686	3,686
Groundwater	3,839	3,839	3,839	3,839	3,839
Subtotal (potable)	7,525	7,525	7,525	7,525	7,525
Recycled water	3,100	3,100	6,908	6,908	6,908
Total	10,625	10,625	14,433	14,433	14,433

a. The recycled water supply from 2027 onward is contingent upon an additional recycled water facility being constructed and rated at 3.4 mgd for irrigating cemeteries in Colma and/or for groundwater recharge.

Source: 2015 UWMP

Section 4

Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies

This section compares projected water supplies, demand, and water shortage expectations.

4.1 Water Supply and Demand Comparison

In this WSA, Section 2 addresses water demands and Section 3, water supply. Table 4-1 compares the current and projected normal year water supplies to the demand for all of Daly City. Table 4-1 data projects a sufficient supply during normal years that will meet projected demands through 2040.

Table 4-1. Normal Year Water Supply and Demand Comparison, AFY

	2020	2025	2030	2035	2040
Demand[a]					
Potable demand	7,187	7,175	7,162	7,161	7,397
Recycled water	1,688	1,688	1,688	1,688	1,688
Supply[b]					
Potable supply	8,645	8,645	8,645	8,645	8,645
Recycled water	3,100	3,100	6,908	6,908	6,908
Supply Minus Demand					
Potable, surplus/(deficit)	1,458	1,470	1,483	1,484	1,248
Recycled water, surplus/(deficit)	1,412	1,412	5,220	5,220	5,220

a. *Projected demands are from Table 2-4*

b. *Projected supply is from Table 3-5*

Table 4-2 provides a water supply and demand reliability comparison for single-dry years through the year 2040. Sufficient supply is projected during single-dry water years to meet projected demands through 2040. Daly City is currently evaluating options for increased water supply and/or water conservation to reduce demands.

Table 4-2. Single-Dry Water Year Water Supply and Demand Comparison, AFY					
	2020	2025	2030	2035	2040
Demand[a]					
Potable demand	7,187	7,175	7,162	7,161	7,397
Recycled water	1,688	1,688	1,688	1,688	1,688
Supply[b]					
Potable supply	8,163	8,163	8,163	8,163	8,163
Recycled water	3,100	3,100	6,908	6,908	6,908
Supply Minus Demand					
Potable, surplus/(deficit)	976	988	1,001	1,002	766
Recycled water, surplus/(deficit)	1,412	1,412	5,220	5,220	5,220

a. *Projected demands are from Table 2-4*

b. *Projected supply is from Table 3-6*

Table 4-3 provides a water supply and demand reliability comparison for multiple-dry years through 2040. Because Daly City's future recycled water supply does not offset future potable demands, BC only compared the potable demands to the potable supply. Figure 4-1 illustrates the supply and demand comparison. Sufficient supply is projected during multiple-dry years to meet projected demands. Daly City is currently evaluating options for increased water supply and/or water conservation to reduce demands.

Table 4-3. Multiple-Dry Year Water Supply and Demand Comparison, AFY					
	2020	2025	2030	2035	2040
Year 1 Demand[a]					
Potable demand	7,187	7,175	7,162	7,161	7,397
Recycled water	1,688	1,688	1,688	1,688	1,688
Supply[b]					
Potable supply	8,163	8,163	8,163	8,163	8,163
Recycled water	3,100	3,100	6,908	6,908	6,908
Supply Minus Demand[a]					
Potable, surplus/(deficit)	976	988	1,001	1,002	766
Recycled water, surplus/(deficit)	1,412	1,412	5,220	5,220	5,220
Year 2 Demand[a]					
Potable demand	7,187	7,175	7,162	7,161	7,397
Recycled water	1,688	1,688	1,688	1,688	1,688
Supply					
Potable supply	7,525	7,525	7,525	7,525	7,525
Recycled water	3,100	3,100	6,908	6,908	6,908
Supply Minus Demand[a]					
Potable, surplus/(deficit)	338	350	363	364	128
Recycled water, surplus/(deficit)	1,412	1,412	5,220	5,220	5,220

Table 4-3. Multiple-Dry Year Water Supply and Demand Comparison, AFY					
	2020	2025	2030	2035	2040
Year 3 Demand[a]					
Potable demand	7,187	7,175	7,162	7,161	7,397
Recycled water	1,688	1,688	1,688	1,688	1,688
Supply[b]					
Potable supply	7,525	7,525	7,525	7,525	7,525
Recycled water	3,100	3,100	6,908	6,908	6,908
Supply Minus Demand[a]					
Potable, surplus/(deficit)	338	350	363	364	128
Recycled water, surplus/(deficit)	1,412	1,412	5,220	5,220	5,220

a. *Projected demands are from Table 2-4*

b. *Projected supply is from Table 3-8*

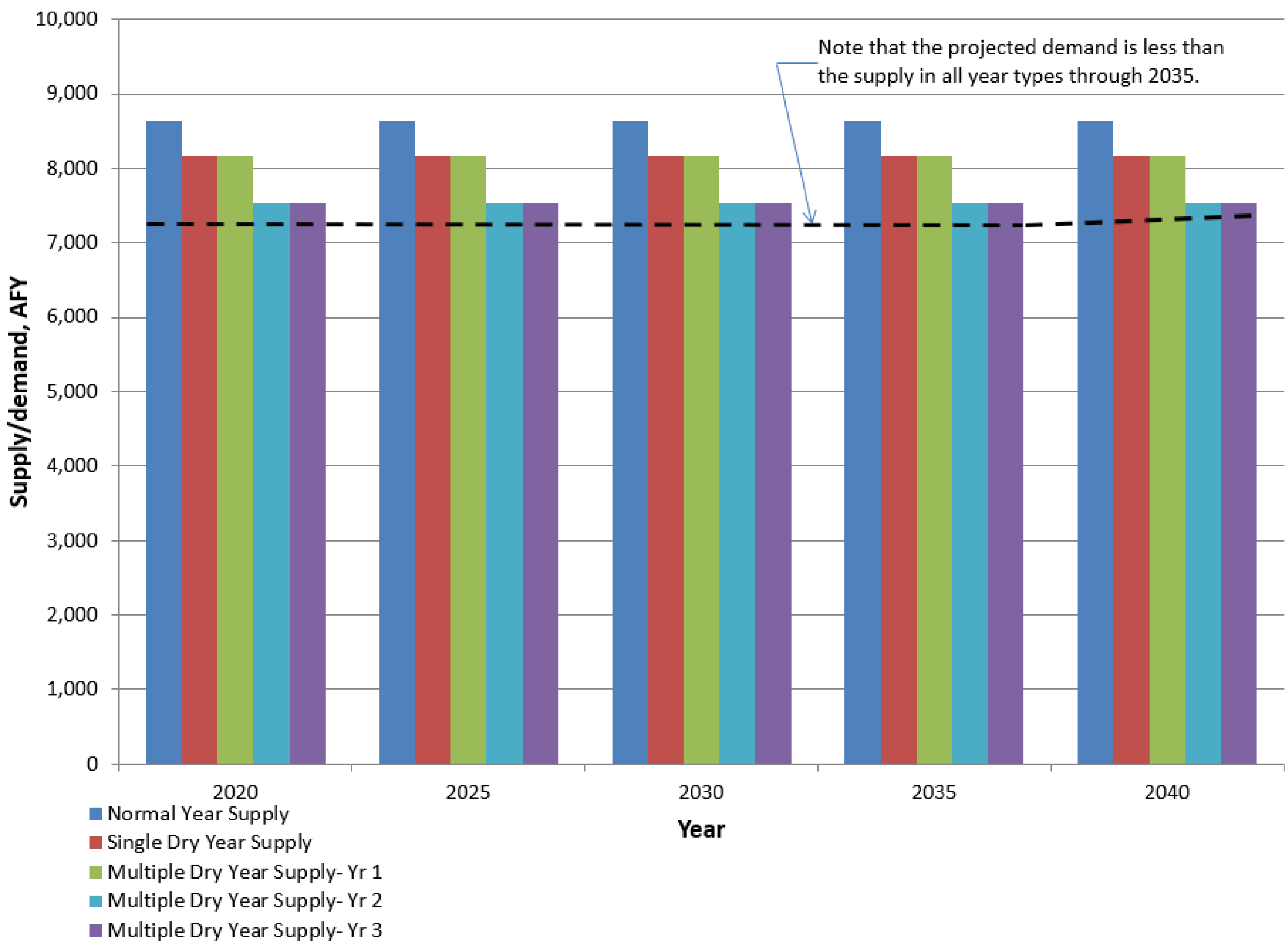

Figure 4-1. Supply and demand comparison

4.2 Water Shortage Expectations

As summarized above, no shortages are anticipated to occur in Daly City if the Midway Village Redevelopment occurs; however, as there are still uncertainties associated with the Bay-Delta Plan Amendment, Daly City is currently evaluating sources for increased water supply and/or conservation to reduce customer demand in dry years.

Section 5

Conclusions

In accordance with the requirements of Senate Bill 610, now Water Code Sections 10910 and 10911, it has been determined that sufficient water supplies are available to serve the proposed Midway Village Redevelopment. The availability of water supply for the proposed project is based primarily on the following findings:

- This WSA uses the 20-year water demand projections prepared and published in the 2015 Daly City UWMP (BC, 2016). The demands are based on the 2013 ABAG demographic projections and include projected passive (plumbing and buildout code) and active conservation savings.
- As available, both groundwater and surface water supplies would provide water supplies needed to serve the proposed project. Currently, Daly City purchases treated surface water supplies from SFPUC. Historically, SFPUC has delivered sufficient surface water supplies. Reductions in surface water supplies from SFPUC of up to 20 percent of average in dry years are incorporated into this analysis per the 2015 UWMP; however, per the letter from SFPUC to BAWSCA including WSA Language for BAWSCA (with Corrections), dated July 31, 2019 (Appendix A), SFPUC faces potential for further supply reductions due to scenarios associated with the Bay-Delta Plan Amendment.
- Daly City has limited ability to increase groundwater pumping to enhance water supply reliability and address added demands. Daly City currently has a maximum groundwater safe yield of 3,839 AFY anticipated through 2040.
- Recycled water currently serves irrigation demands within Daly City as well as to nearby golf courses, thus lowering the estimated demands for potable water and further enhancing overall water supply reliability. Based on current practices, this recycled water supply is not expected to increase or further enhance potable water supply availability.

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Section 6

References

Alameda County, San Mateo County and Santa Clara County. July 2009.

BAWSCA. Board Policy Committee Meeting Minutes. October 2019.

BAWSCA. UWMP Tier 2 Allocation Scenarios, January 2016.

Brown and Caldwell. City of Daly City 2015 Urban Water Management Plan. June 2016.

Brown and Caldwell. Near- and Long-Term Water Resources Planning. City of Daly City. July 2012.

Brown and Caldwell. Permit Amendment to Domestic Water Supply System Number 4110013, January 2016.

Brown and Caldwell. Water Supply Assessment for Serramonte Center Expansion. City of Daly City. January 2015.

California Department of Water Resources. California's Groundwater Bulletin 118 – Update 2003. October. Accessed at: http://www.water.ca.gov/pubs/groundwater/bulletin_118/california's_groundwater__bulletin_118_-_update_2003_/bulletin118_entire.pdf 2003.

California Department of Water Resources. Draft Bulletin 118. March. 2003.

California Department of Water Resources. Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001. October 8, 2003.

CDM Smith. Long-Term Reliable Water Supply Strategy, Strategy Phase II Final Report. BAWSCA. February 2015.

City of Daly City. Daly City 2030 General Plan. Adopted March 25, 2013. Housing Element Revised March 9, 2015.

DWR. 2016c. Final List of Critically Overdrafted Groundwater Basins, January. http://www.water.ca.gov/groundwater/sgm/pdfs/COD_BasinsTable.pdf Accessed February 2016.

Maddaus Water Management and Brown and Caldwell. BAWSCA Regional Water Demand and Conservation Projections. August 2014.

Maddaus Water Management et al. BAWSCA Water Conservation Implementation Plan. September 2009.

SFPUC and Daly City. Wholesale Customer Contingency Plan, Daly City- Draft. June 2000.

SFPUC, Regional Groundwater Storage and Recovery. https://sfwater.org/index.aspx?page=982. Accessed October 30, 2019.

SFPUC. Fiscal Year 2018-19 Annual Report Water System Improvement Program. San Francisco Public Utilities Commission. August 2019.

SFPUC. Water Supply Agreement (WSA) between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo County and Santa Clara County. July 2009.

SFPUC. WSA Language for BAWSCA (with corrections). San Francisco Public Utilities Commission. July 2019.

SFPUC. WSIP Overview. https://sfwater.org/index.aspx?page=115. Accessed October 9, 2019.

Western Regional Climate Center. Western U.S. Climate Historical Summaries, Climatological Data Summaries. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7767. Accessed October 30, 2019.

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Appendix A: Letter from SFPUC to BAWSCA including WSA Language for BAWSCA (with corrections)

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San Francisco
Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

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July 31, 2019

Tom Francis, Water Resources Manager
Bay Area Water Supply and Conservation Agency
155 Bovet Road, Suite 650
San Mateo, CA 94402

Dear Mr. Francis,

This letter is a follow-up to our letter dated June 27, 2019, which provided information you requested on impacts to the Regional Water System under implementation of the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment). Three errors in the attachment to that letter were recently identified: (1) a typo in the narrative describing the range of shortfalls anticipated under Scenario 1, (2) typos in the table note numbering in Table 1, and (3) incorrect projections for the year 2020 under Scenario 3 because if the Bay-Delta Plan Amendment were to be implemented, such implementation is not anticipated to occur until after 2020. Corrections to these errors are provided in the attachment to this letter.

It is our understanding that you will pass this information on to the Wholesale Customers. It also should be repeated that the information regarding anticipated shortages in the attachment only apply to Tier 1 of the Shortage Allocation Plan, the shortages for the individual wholesale customers will require the application of Tier 2 of the Shortage Allocation Plan. We assume BAWSCA can provide the necessary support to the Wholesale Customers in applying Tier 2.

If you have any questions or need additional information, please do not hesitate to contact me at (415) 554-0792.

Sincerely,

Julie Ortiz for Paula Kehoe

Paula Kehoe
Director of Water Resources

Enclosure: ATTACHMENT - Water Supply Reliability Information for BAWSCA Member Agencies' Water Supply Assessments (with Corrections)

ATTACHMENT

Water Supply Reliability Information for BAWSCA Member Agencies' Water Supply Assessments (with Corrections)

2018 Bay-Delta Plan Amendment

In December 2018, the State Water Resources Control Board (SWRCB) adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) to establish water quality objectives to maintain the health of the Bay-Delta ecosystem. The SWRCB is required by law to regularly review this plan. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 40% of the "unimpaired flow"[1] on the three tributaries from February through June in every year type, whether wet, normal, dry, or critically dry.

If the Bay-Delta Plan Amendment is implemented, the SFPUC will be able to meet its contractual obligations to its Wholesale Customers as presented in the SFPUC's 2015 UWMP in normal years. The SFPUC's 2015 UWMP already assumes shortages in single and multiple dry years through 2040, but implementation of the Bay-Delta Plan Amendment will result in greater shortages.

The SWRCB has stated that it intends to implement the Bay-Delta Plan Amendment on the Tuolumne River by the year 2022, assuming all required approvals are obtained by that time. But implementation of the Plan Amendment is uncertain for several reasons. First, under the Clean Water Act, the United States Environmental Protection Agency (U.S. EPA) must approve the water quality standards identified in the Plan Amendment within 90 days from the date the approval request is received. By letter dated June 11, 2019, EPA rejected the SWRCB's two-page submittal as inadequate under the requirements of the Clean Water Act. Pursuant to EPA's letter, the Board has 90 days to respond with a submittal that complies with the law. At this point, EPA has neither approved, nor disapproved, any of the revised water quality objectives. It is uncertain whether the U.S. EPA will approve or disapprove the water quality standards in the future. Furthermore, the determination could result in litigation.

Second, since adoption of the Bay-Delta Plan Amendment, over a dozen lawsuits have been filed in both state and federal court, challenging the SWRCB's adoption of the Bay-Delta Plan Amendment, including two legal challenges filed by the federal government, at the request of the U.S. Department of Interior, Bureau of Reclamation in state and federal courts. These cases are in the early stage and there have been no dispositive court rulings to date.

Third, the Bay-Delta Plan Amendment is not self-implementing and does not allocate responsibility for meeting its new flow requirements to the SFPUC or any other water rights holders. Rather, the Plan Amendment merely provides a regulatory framework for flow allocation, which must be accomplished by other regulatory and/or adjudicatory proceedings, such as a comprehensive water rights adjudication or, in the case of the Tuolumne River, the 401 certification process in the Federal Energy Regulatory Commission's relicensing proceeding for Don Pedro Dam. The license amendment process is currently expected to be

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[1] Unimpaired flow represents the water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. Bay-Delta Plan Amendment, Introduction, p.1-8.

completed in the 2022-23 timeframe. This process and the other regulatory and/or adjudicatory proceedings would likely face legal challenges and have lengthy timelines, and quite possibly could result in a different assignment of flow responsibility (and therefore a different water supply impact on the SFPUC).

Fourth, in recognition of the obstacles to implementation of the Bay-Delta Plan Amendment, SWRCB Resolution No. 2018-0059 adopting the Bay-Delta Plan Amendment directed staff to help complete a “Delta watershed-wide agreement, including potential flow measures for the Tuolumne River” by March 1, 2019, and to incorporate such agreements as an “alternative” for a future amendment to the Bay-Delta Plan to be presented to the SWRCB “as early as possible after December 1, 2019.” In accordance with the SWRCB’s instruction, on March 1, 2019, SFPUC, in partnership with other key stakeholders, submitted a proposed project description for the Tuolumne River that could be the basis for a voluntary substitute agreement with the SWRCB (“March 1st Proposed Voluntary Agreement”). On March 26, 2019, the Commission adopted Resolution No. 19-0057 to support SFPUC’s participation in the Voluntary Agreement negotiation process. To date, those negotiations are ongoing under the California Natural Resources Agency and the leadership of the Newsom administration. The negotiations for a voluntary agreement have made significant progress since an initial framework was presented to the SWRCB on December 12, 2018. The package submitted on March 1, 2019 is the product of renewed discussions since Governor Newsom took office. While significant work remains, the package represents an important step forward in bringing together diverse California water interests.

For all these reasons, whether and when the Bay-Delta Plan Amendment will be implemented, and how those amendments if implemented will affect the SFPUC’s water supply is currently uncertain and possibly speculative. Given this uncertainty, this WSA analyzes water supply and demand through 2040 under three scenarios: (1) No implementation of the Bay-Delta Plan Amendment or the March 1st Proposed Voluntary Agreement (“Scenario 1”), (2) Implementation of the March 1st Proposed Voluntary Agreement (“Scenario 2”), and (3) Implementation of the Bay-Delta Plan Amendment (“Scenario 3”).

Dry Year Water Supplies

Since adoption of the UWMP, the following milestones have occurred:

- Calaveras Dam Replacement Project – Construction of the new dam was completed in September 2018, and the overall project was completed in June 2019.

- Regional Groundwater Storage and Recovery Project – Construction of this project is still underway. Phase 1 of the project, consisting of installation of 13 production wells, will be completed in 2019. Since May/June 2016, the project has been in a storage phase through periodic deliveries of RWS surface water in lieu of groundwater pumping by Daly City, San Bruno, and the California Water Service Company.

Additional Water Supplies

In light of the adoption of the Bay-Delta Plan Amendment and the resulting potential limitations to RWS supply during dry years, the SFPUC is increasing and accelerating its efforts to acquire additional water supplies and explore other projects that would increase overall water supply resilience. Developing these additional supplies would reduce water supply shortfalls and reduce rationing associated with such shortfalls. In addition to the Daly

City Recycled Water Expansion project, which was a potential project identified in the 2015 UWMP and had committed funding at that time, the SFPUC has taken action to fund the study of potential additional water supply projects. Capital projects under consideration to develop additional water supplies include surface water storage expansion, recycled water expansion, water transfers, desalination, and potable reuse. The SFPUC is also considering developing related policies and ordinances, such as funding for innovative water supply and efficiency technologies and requiring potable water offsets for new developments. A more detailed list and descriptions of these efforts are provided below.

The capital projects that are under consideration would be costly and are still in the early feasibility or conceptual planning stages. Because these water supply projects would take 10 to 30 or more years to implement, and because required environmental permitting negotiations may reduce the amount of water that can be developed, the yield from these projects are not currently incorporated into SFPUC's supply projections. Capital projects would be funded through rates from both Wholesale and Retail Customers based on mutual agreement, as the additional supplies would benefit all customers of the RWS, unless otherwise noted. State and federal grants and other financing opportunities would also be pursued for eligible projects, to the extent feasible, to offset costs borne by ratepayers.

1. **Daly City Recycled Water Expansion** (Regional, Normal- and Dry-Year Supply, 3 mgd)

   Project Description: The SFPUC and North San Mateo County Sanitation District (NSMCSD, or Daly City) have been exploring ways to increase the recycled water treatment capacity in Daly City to serve additional customers and decrease irrigation water withdrawals from the Westside Groundwater Basin, both in San Francisco and further south of Daly City. The majority of the irrigation demand met by groundwater withdrawals, approximately 2 mgd, serves cemeteries in Colma. An initial feasibility study completed in 2010 identified the capital requirements that would be needed to produce additional capacity at the existing treatment plant location. The study demonstrated that a new tertiary treatment facility would be required onsite to produce additional capacity of up to 3.4 mgd. Currently, flows that exceed the capacity of the existing treatment plant are discharged into the Pacific Ocean. With this project, some of that discharge may be treated and used for irrigation. New facilities would include a treatment facility, pump station, distribution pipelines, and storage.

   Estimated Costs and Financing: The capital cost is estimated to be $85 million, which is budgeted for in the SFPUC's 10-year capital planning horizon. The annual operations and maintenance (O&M) cost is estimated to be $3 million. This project may present regional benefits that would result in cost-sharing with Wholesale Customers because the replacement of groundwater used for irrigation with recycled water will result in a greater volume of groundwater storage that can be used in dry years as part of the SFPUC's existing Groundwater Storage and Recovery project, approved by the SFPUC in 2014 in Resolution no. 14-0127.

   Permits and Approvals: Daly City adopted a Final Initial Study/Mitigated Negative Declaration (IS/MND) and Mitigation Monitoring and Reporting Program (MMRP) for the proposed project in September 2017. The SFPUC has not yet approved its participation in the project. Other permits and/or approvals that may be needed for this project include: BART, CAL/OSHA, San Francisco Bay RWQCB, and encroachment permits from Caltrans, Daly City, South San Francisco, SFPUC, San Mateo County, and Colma to construct distribution and storage facilities. Institutional agreements between the project partners for project construction and operation, as well as with the customers whose supplies will change from groundwater to recycled water, will also need to be developed.

Estimated Acquisition: Construction may occur as soon as 2023 with operation beginning in 2027.

2. **Alameda County Water District Transfer Partnership** (Regional, Normal- and Dry-Year Supply, 5 mgd)

   Project Description: Water would be acquired from Contra Costa Water District (CCWD) for delivery to Alameda County Water District (ACWD) through the South Bay Aqueduct utilizing a planned expansion of the Los Vaqueros Reservoir.

   Estimated Costs and Financing: The capital cost is estimated to be $50-150 million, with an annual O&M cost of $2.5 million.

   Permits and Approvals: Planning and environmental review of the Los Vaqueros Reservoir Expansion is underway by CCWD, and has several objectives beyond water deliveries to the SFPUC. CCWD has identified over 15 permits, approvals and consultations that will be necessary such as Dredge and Fill, National Pollutant Discharge Elimination System (NPDES), Streambed Alteration, and Encroachment permits. These permits and approvals will be obtained by CCWD and/or its contractor. To enable a water supply transfer between ACWD and the SFPUC, water right modifications may be necessary and if additional infrastructure is needed, additional permits will be required. As this project is in the conceptual stage, permitting details have not yet been identified.

   Estimated Acquisition: Construction may occur as soon as 2028 with operation beginning in 2032.

3. **Brackish Water Desalination in Contra Costa County** (Regional, Normal- and Dry-Year Supply, 9+ mgd)

   Project Description: The Bay Area Brackish Water Treatment (Regional Desalination) Project is a partnership between CCWD, East Bay Municipal Utility District (EBMUD), SFPUC, Santa Clara Valley Water District (SCVWD) and Zone 7 to turn brackish water into a reliable, drought-proof drinking water supply, delivering a total of up to 10-20 mgd in drought and non-drought years (i.e., dry and normal years), throughout the region. A new brackish water treatment plant would be constructed in East Contra Costa and tie into the existing CCWD system for delivery through Los Vaqueros Reservoir and the South Bay Aqueduct, or delivery via a connection with EBMUD.

   The SFPUC would rely on existing infrastructure and institutional agreements to receive water transfers from partner agencies. For planning and cost estimation purposes, it was assumed that the SFPUC's share of the regional water supply would be 9 mgd in all year types; however, if additional capacity is available, the SFPUC may secure additional water supply, based on negotiations with partner agencies.

   Estimated Costs and Financing: The capital cost is estimated to be $200-800 million, with an annual O&M cost of $12-20 million.

Permits and Approvals: To proceed, this concept would require extensive institutional agreements, permitting, and environmental review. Construction of a new desalination plant will require construction and operating permits such as NPDES, Dredge and Fill, consultations with federal and state agencies, and others. In addition, water rights will need to be secured and/or modified. In California, permitting and regulatory approvals of desalination projects has typically taken 10-18 years. In addition, institutional agreements among partner agencies will be needed.

Estimated Acquisition: Construction may occur as soon as 2032 and be phased so that 5-9 mgd would be available to the region by 2035 and a total of 5-11 mgd would be available after 2040.

4. **ACWD-USD Purified Water Partnership** (Regional, Normal- and Dry-Year Supply, 5 mgd)

   Project Description: This may be an indirect or direct potable reuse project that would inject highly-treated water from Union Sanitary District (USD) for groundwater recharge, then recover the water through the ACWD Brackish Groundwater Desalination Plant. How the water is transferred to the SFPUC remains to be determined.

   Estimated Costs and Financing: The capital cost is estimated to be $200-400 million, with an annual O&M cost of $2.5 million.

   Permits and Approvals: An initial assessment will be underway in 2019, which will identify potential project scenarios. Permitting and approvals for a project will depend on its design and nature, which have not yet been identified.

   Estimated Acquisition: Construction may occur as soon as 2038 with operation beginning in 2045.

5. **Crystal Springs Purified Water** (Regional, Normal- and Dry-Year Supply, 6+ mgd)

   Project Description: This is an indirect potable reuse project that would blend wastewater from Silicon Valley Clean Water and possibly San Mateo into Crystal Springs Reservoir and treat the blended water at Harry Tracy Water Treatment Plant for potable reuse.

   Estimated Costs and Financing: The capital cost is estimated to be $400-700 million, with an annual O&M cost of $18-25 million.

   Permits and Approvals: Construction and operating permits would be required for this project. They would likely include NPDES, Encroachment, consultations with state and federal agencies, and others. Surface water augmentation is regulated by the SWRCB, and consultations and public hearings would be required.

   Estimated Acquisition: Construction may occur as soon as 2034 and be phased so that 3-5 mgd would be available to the region by 2035 and a total of 3-7 mgd would be available after 2040.

6. **Additional Storage Capacity in Los Vaqueros Reservoir from Expansion** (Regional)

    Project Description: Expansion of storage capacity in Los Vaqueros is to allow the ACWD Transfer Partnership and Brackish Water Desalination in Contra Costa County to be optimized.

    Estimated Costs and Financing: The capital cost is estimated to be $20-50 million. SFPUC's portion of the project yield and cost share are not yet known. The annual O&M cost is yet to be estimated.

    Permits and Approvals: Planning and review of the Los Vaqueros Reservoir Expansion is underway by CCWD, and has several objectives beyond water deliveries to the SFPUC. CCWD has identified over 15 permits, approvals and consultations that will be necessary such as Dredge and Fill, NPDES, Streambed Alteration, and Encroachment permits. These permits and approvals will be obtained by CCWD and/or its contractor. To enable a water supply transfer between ACWD and the SFPUC, water rights modifications may be necessary and if additional infrastructure is needed, additional permits will be required. As this project is in the conceptual stage, permitting details have not yet been identified.

    Estimated Acquisition: Construction may occur as soon as 2021 with operation beginning in 2027.

7. **Calaveras Reservoir Expansion (Regional)**

    Project Description: Calaveras Reservoir would be expanded to create 289,000 AF additional capacity to store excess Regional Water System supplies or other source water in wet and normal years. In addition to reservoir enlargement, the project would involve infrastructure to pump water to the reservoir, such as pump stations and transmission facilities.

    Estimated Costs and Financing: The costs of this project is yet to be determined.

    Permits and Approvals: Similar to Los Vaqueros Reservoir Expansion, this project would require numerous permits, approvals and consultations, such as Dredge and Fill, NPDES, Streambed Alteration, Encroachment, possible water right modifications, etc. These permits and approvals will be obtained by SFPUC and/or its contractor. As this project is in the conceptual stage, permitting details have not yet been identified.

    Estimated Acquisition: Construction may occur as soon as the early 2040s with operation beginning around 2050.

Even if all the capital projects above are implemented, the total amount of water and storage yielded would not be enough to make up for the dry year shortfall that may result from implementation of the Bay-Delta Plan Amendment as adopted, and would occur years after such shortfalls begin. Thus, the SFPUC continues to proactively explore opportunities for reuse and innovation, such as the following policy:

- **Evaluation of Recycled Water Throughout Service Area**
  Wastewater treatment plants throughout the SFPUC service area would be surveyed to identify potential non-potable, indirect potable, and direct potable projects.

Comparison of Projected Supply and Demand

The following sections provide a supply and demand comparison for the three scenarios described above. Procedures for determining RWS supply availability are provided in the Water Supply Allocation Plan (WSAP) between the SFPUC's Retail and Wholesale Customers. It also should be noted that the information regarding anticipated shortages in the tables provided below only apply to Tier 1 of the WSAP, the shortages for the individual wholesale customers will require the application of Tier 2 of the WSAP to derive available supply for each wholesale customer. In addition, wholesale customers will need to include the availability of other supplies in addition to SFPUC supplies to drive their total water supply shortages under each scenario.

Scenario 1: No Implementation of the Bay-Delta Plan Amendment or the Voluntary Agreement

Table 1 below compares the SFPUC's wholesale water supplies and demands through 2040 during normal year, single dry-, and multiple dry-year periods under Scenario 1.

The RWS supply projections shown in Table 1 differ from those provided previously for use in the 2015 UWMP. First, Table 1 reflects SFPUC's full 8.5-year design drought sequence instead of the minimum 3-year sequence required to be provided in the 2015 UWMP. Under legislation adopted in 2018 (S.B. 606) future UWMPs will be required to project water supply availability during a minimum of 5 years of continuous drought (Water Code section 10631(b)(1)). Second, the SFPUC water supply system model includes the following assumptions, which differ from those used for the 2015 UWMP projections:

- In-stream flow releases from Crystal Springs Reservoir to San Mateo Creek were included in this simulation. The average volume of these releases is approximately 3,900 acre-feet per year.
- Annual water supply transfers from the irrigation districts that operate New Don Pedro Reservoir (Districts) to SFPUC were not included in this analysis. An annual transfer of 2,300 acre-feet was assumed from the Districts to the SFPUC Water Bank Account in the WSIP 2018 simulation.

As shown in Table 1, under Scenario 1 without implementation of the Bay-Delta Plan Amendment, RWS supplies would meet wholesale demands (i.e., contractual obligations) in all normal years, single dry years, and the first year of the 8.5-year design drought. During subsequent drought years, shortfalls would range from 31 to 60 mgd, or 17-~~36~~33%, increasing into the outer years of the design drought.

Table 1: Projected Supply and Demand Comparison Under Scenario 1
(No Implementation of the Bay-Delta Plan Amendment or the Voluntary Agreement) (mgd)

		Normal Year	Single Dry Year~~[1]~~	Multiple Dry Years							
				Year 1~~[1]~~	Year 2~~[2]~~[1]	Year 3~~[2]~~[1]	Year 4[2]	Year 5[2]	Year 6[2]	Year 7[3]	Year 8[3]
2020	Total Wholesale Demand[4]	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
	Total Wholesale RWS Supply[5]	184.0	184.0	184.0	152.6	152.6	132.5	132.5	132.5	124.2	124.2
	Shortfall	0.0	0.0	0.0	31.4	31.4	51.5	51.5	51.5	59.8	59.8
	Shortfall as % of Demand	0.0%	0.0%	0.0%	17.1%	17.1%	28.0%	28.0%	28.0%	32.5%	32.5%
2025	Total Wholesale Demand[4]	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
	Total Wholesale RWS Supply[5]	184.0	184.0	184.0	152.6	152.6	132.5	132.5	132.5	124.2	124.2
	Shortfall	0.0	0.0	0.0	31.4	31.4	51.5	51.5	51.5	59.8	59.8
	Shortfall as % of Demand	0.0%	0.0%	0.0%	17.1%	17.1%	28.0%	28.0%	28.0%	32.5%	32.5%
2030	Total Wholesale Demand[4]	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
	Total Wholesale RWS Supply[5]	184.0	184.0	184.0	152.6	152.6	132.5	132.5	132.5	124.2	124.2
	Shortfall	0.0	0.0	0.0	31.4	31.4	51.5	51.5	51.5	59.8	59.8
	Shortfall as % of Demand	0.0%	0.0%	0.0%	17.1%	17.1%	28.0%	28.0%	28.0%	32.5%	32.5%
2035	Total Wholesale Demand[4]	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
	Total Wholesale RWS Supply[5]	184.0	184.0	184.0	152.6	152.6	132.5	132.5	132.5	124.2	124.2
	Shortfall	0.0	0.0	0.0	31.4	31.4	51.5	51.5	51.5	59.8	59.8
	Shortfall as % of Demand	0.0%	0.0%	0.0%	17.1%	17.1%	28.0%	28.0%	28.0%	32.5%	32.5%
2040	Total Wholesale Demand[4]	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
	Total Wholesale RWS Supply[5]	184.0	184.0	184.0	152.6	152.6	132.5	132.5	132.5	124.2	124.2
	Shortfall	0.0	0.0	0.0	31.4	31.4	51.5	51.5	51.5	59.8	59.8
	Shortfall as % of Demand	0.0%	0.0%	0.0%	17.1%	17.1%	28.0%	28.0%	28.0%	32.5%	32.5%

Notes:
1. During multiple dry years 2-3 (years 3-4 of SFPUC's design drought sequence), the wholesale allocation under the WSAP is 64.0% of available RWS supply, or 152.6 mgd.
2. During multiple dry years 4-6 (years 5-7 of SFPUC's design drought sequence), the wholesale allocation under the WSAP is 62.5% of available RWS supply, or 132.5 mgd.
3. During multiple dry years 7 and 8 (years 8 and 8.5 of SFPUC's design drought sequence), the wholesale allocation under the WSAP is 62.5% of available RWS supply, or 124.2 mgd.
4. It is assumed that wholesale demands will continue to be limited to the Supply Assurance of 184 mgd. The 184 mgd assumes that San Jose and Santa Clara remain temporary, interruptible customers.
5. Procedures for RWS allocations are provided in the WSAP.

Scenario 2: Implementation of the Voluntary Agreement

As stated earlier, the March 1st Proposed Voluntary Agreement has yet to be accepted by SWRCB as an alternative to the Bay-Delta Plan Amendment and thus the shortages that would occur with its implementation are not known with certainty. However, given that the objectives of the Voluntary Agreement are to provide fishery improvements while protecting water supply through flow and non-flow measures, the RWS supply shortfalls under the Voluntary Agreement would be less than those under the Bay-Delta Plan Amendment, and therefore would require rationing of a lesser degree than that which would occur under Scenario 3. The degree of rationing would also more closely align with the SFPUC's RWS LOS goal of limiting rationing to no more than 20% on a system-wide basis in drought years. This goal was adopted in 2008 by the Commission (Resolution No. 08-0200).

Scenario 3: Implementation of the Bay-Delta Plan Amendment

Table 2 below provides projected supplies and demands under Scenario 3. The RWS is projected to experience significant shortfalls in single dry and multiple dry years ~~starting as soon as 2022 and~~ through 2040, regardless of whether the proposed project is constructed. The 2020 projections in Table 2 are based on the assumption that the Bay Delta Plan Amendment will not be implemented until after 2020. These significant shortfalls are a result of implementation of the Bay-Delta Plan Amendment and not attributed to the incremental retail demand associated with the proposed project. *[Note to Wholesale Customers: This statement will need to be tailored to reflect your own water supply planning (e.g., you may already be showing significant shortfalls regardless of the Bay-Delta Plan Amendment].*

If additional water supplies were not acquired before the Bay-Delta Plan Amendment were implemented, the SFPUC would impose Wholesale Customer rationing to help balance water supply deficits during dry years.

Given the severity of the reduction in RWS supply with implementation of the Bay-Delta Plan Amendment, existing and planned dry-year supplies would not be enough to meet projected wholesale water demand obligations without rationing above the SFPUC's RWS LOS goal of limiting rationing to 20% on a system-wide basis for all dry years starting as soon as 2022. Although the WSAP does not address implications to supply during system-wide shortages above 20%, the WSAP indicates that if system-wide shortage greater than 20% were to occur, RWS supply would be allocated between retail and Wholesale Customers per the rules corresponding to a 16-20% system-wide reduction, subject to consultation and negotiation between the SFPUC and its Wholesale Customers to modify the allocation rules. The allocation rules corresponding to the 16-20% system-wide reduction are reflected in Table 2 above for Scenario 3. These allocation rules result in shortfalls of 85 to 124 mgd, or 46-68%, across the wholesale service area under Scenario 3.

Table 2: Projected Supply and Demand Comparison Under Scenario 3 (Implementation of the Bay-Delta Plan Amendment) (mgd)

		Normal Year	Single Dry Year[1]	Multiple Dry Years							
				Year 1[1]	Year 2[2]	Year 3[2]	Year 4[2]	Year 5[2]	Year 6[2]	Year 7[3]	Year 8[3]
2020	Total Wholesale Demand[4]	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
	Total Wholesale RWS Supply[5,6]	184.0	~~99.4~~ 184.0	~~99.4~~ 184.0	~~76.2~~ 152.6	~~76.2~~ 152.6	~~76.2~~ 132.5	~~76.2~~ 132.5	~~76.2~~ 132.5	~~59.6~~ 124.2	~~59.6~~ 124.2
	Shortfall	0.0	~~84.6~~ 0.0	~~84.6~~ 0.0	~~107.8~~ 31.4	~~107.8~~ 31.4	~~107.8~~ 51.5	~~107.8~~ 51.5	~~107.8~~ 51.5	~~124.4~~ 59.8	~~124.4~~ 59.8
	Shortfall as % of Demand	0.0%	~~46.0%~~ 0.0%	~~46.0%~~ 0.0%	~~58.6%~~ 17.1%	~~58.6%~~ 17.1%	~~58.6%~~ 28.0%	~~58.6%~~ 28.0%	~~58.6%~~ 28.0%	~~67.6%~~ 32.5%	~~67.6%~~ 32.5%
2025	Total Wholesale Demand[4]	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
	Total Wholesale RWS Supply[~~5~~6]	184.0	99.4	99.4	76.2	76.2	76.2	76.2	76.2	59.6	59.6
	Shortfall	0.0	84.6	84.6	107.8	107.8	107.8	107.8	107.8	124.4	124.4
	Shortfall as % of Demand	0.0%	46.0%	46.0%	58.6%	58.6%	58.6%	58.6%	58.6%	67.6%	67.6%
2030	Total Wholesale Demand[4]	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
	Total Wholesale RWS Supply[~~5~~6]	184.0	99.4	99.4	76.2	76.2	76.2	76.2	76.2	59.6	59.6
	Shortfall	0.0	84.6	84.6	107.8	107.8	107.8	107.8	107.8	124.4	124.4
	Shortfall as % of Demand	0.0%	46.0%	46.0%	58.6%	58.6%	58.6%	58.6%	58.6%	67.6%	67.6%
2035	Total Wholesale Demand[4]	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
	Total Wholesale RWS Supply[~~5~~6]	184.0	99.4	99.4	76.2	76.2	76.2	76.2	76.2	59.6	59.6
	Shortfall	0.0	84.6	84.6	107.8	107.8	107.8	107.8	107.8	124.4	124.4
	Shortfall as % of Demand	0.0%	46.0%	46.0%	58.6%	58.6%	58.6%	58.6%	58.6%	67.6%	67.6%
2040	Total Wholesale Demand[4]	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0
	Total Wholesale RWS Supply[~~5~~6]	184.0	99.4	99.4	76.2	76.2	76.2	76.2	76.2	59.6	59.6
	Shortfall	0.0	84.6	84.6	107.8	107.8	107.8	107.8	107.8	124.4	124.4
	Shortfall as % of Demand	0.0%	46.0%	46.0%	58.6%	58.6%	58.6%	58.6%	58.6%	67.6%	67.6%

Notes:

1. During a single dry year and multiple dry year 1 (year 2 of SFPUC's design drought sequence), the wholesale allocation under the WSAP is 62.5% of available RWS supply, or 99.4 mgd.
2. During multiple dry years 2-6 (years 3-7 of SFPUC's design drought sequence), the wholesale allocation under the WSAP is 62.5% of available RWS supply, or 76.2 mgd.
3. During multiple dry years 7 and 8 (years 8 and 8.5 of SFPUC's design drought sequence), the wholesale allocation under the WSAP is 62.5% of available RWS supply, or 59.6 mgd.
4. It is assumed that wholesale demands will continue to be limited to the Supply Assurance of 184 mgd. The 184 mgd assumes that San Jose and Santa Clara remain temporary, interruptible customers.

~~4.~~5. Implementation of the Bay-Delta Plan Amendment is assumed to occur after 2020 and by 2022.

~~5.~~6. Procedures for RWS allocations are provided in the WSAP.

Appendix B: Figure LUE-1, Existing Land Use and Figure LUE-3, Future Land Use, in the Daly City 2030 General Plan

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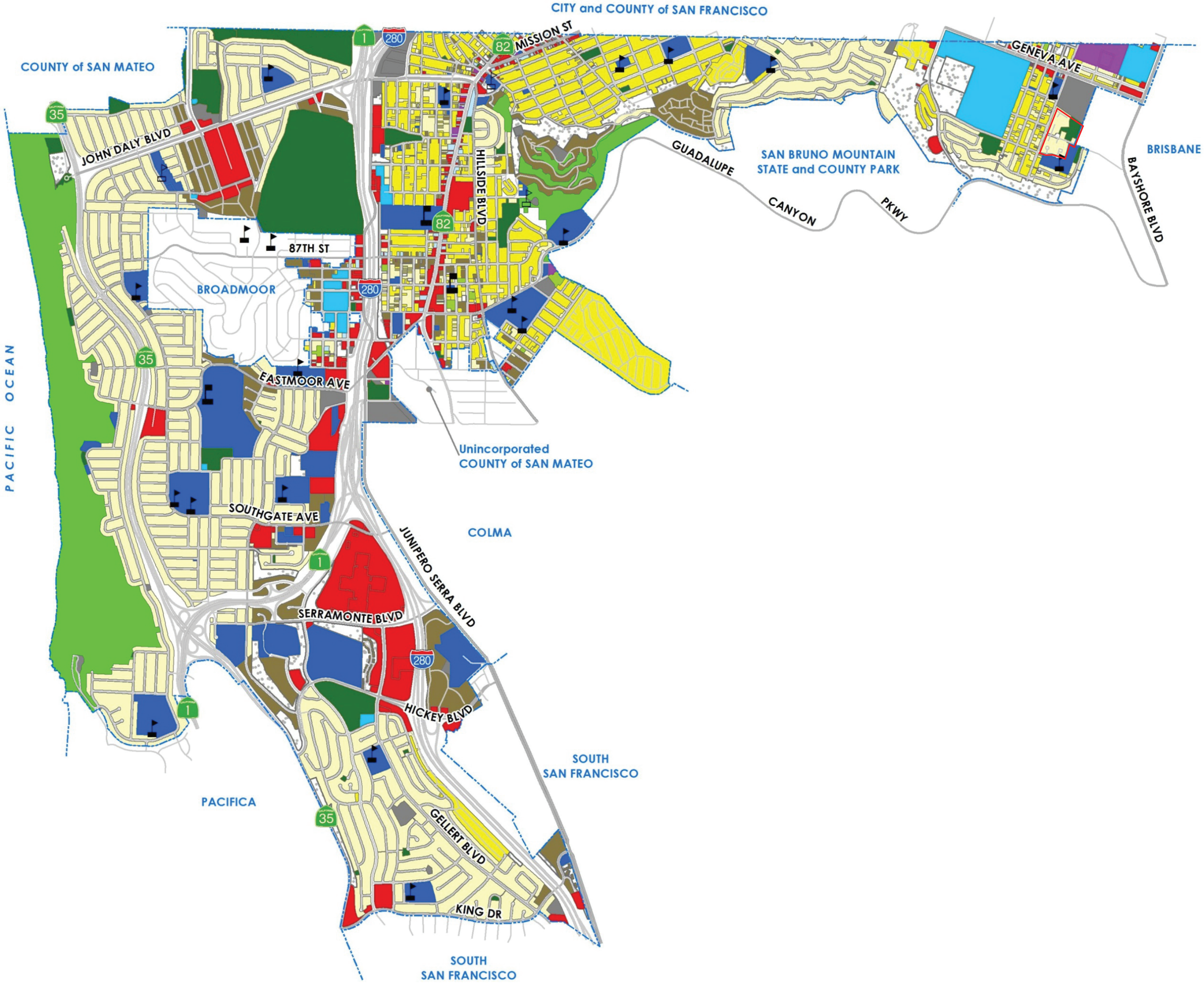
Figure LUE-1
EXISTING LAND USE



- Residential Low Density
- Residential Medium Density
- Residential High Density
- Agriculture
- Industrial
- Commercial
- Public
- Institutional
- Public Utilities
- Recreation
- Open Space
- Mixed Use
- Neighborhood
- Other

CITY OF DALY CITY
LAND USE ELEMENT

NORTH

0 0.5 1 1.5 miles

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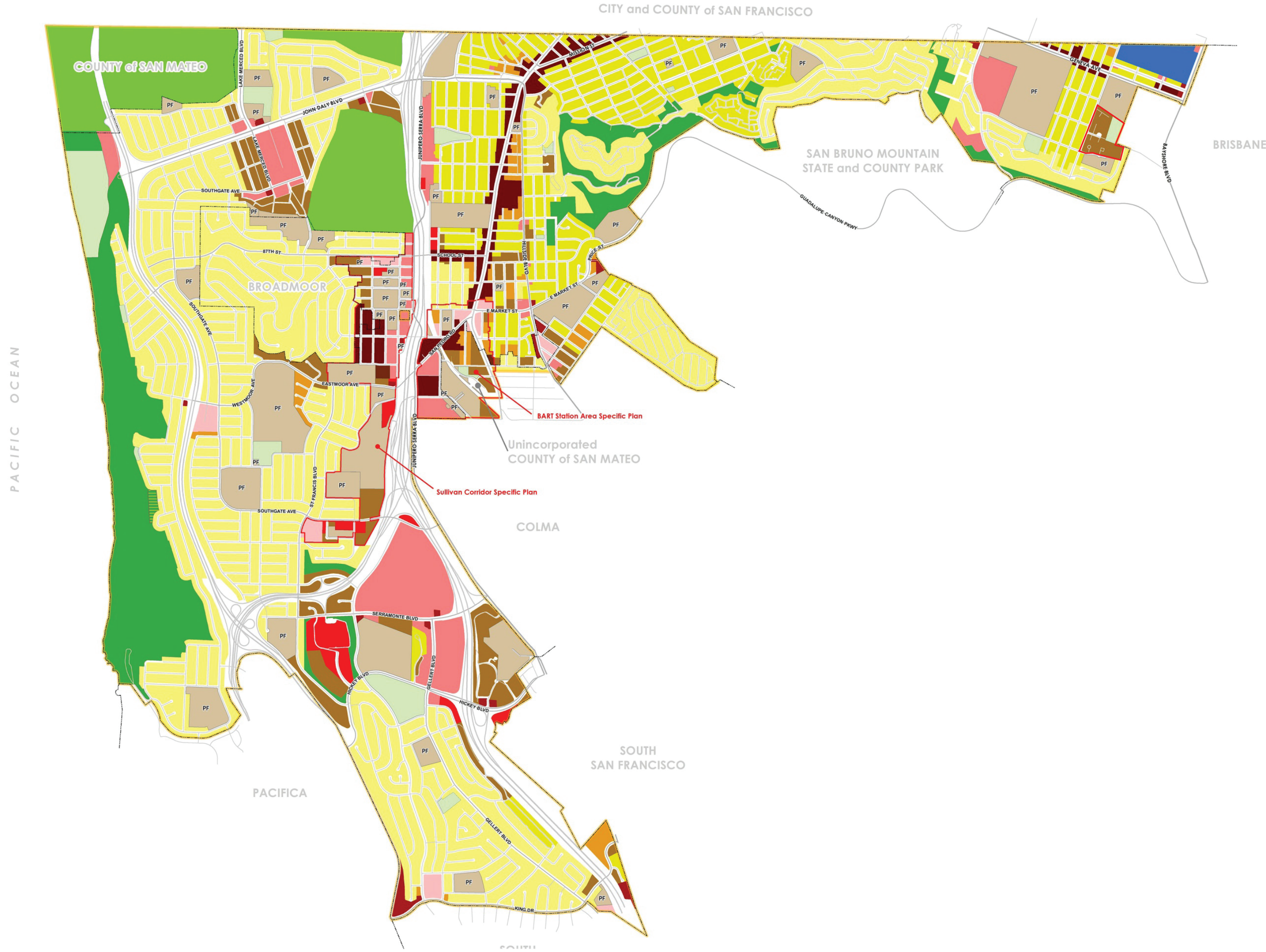
Figure LUE-3
FUTURE LAND USE



Residential
- Residential Open Space (R-OS)
- Low Density (R-LD)
- Medium-Low Density (R-MLD)
- Medium Density (R-MD)
- High Density (R-HD)
- Very High Density (R-VHD)

Recreation and Open Space
- Public Park (PP)
- Private Recreation (PR)
- Open Space Preservation (OSP)

Commercial
- Neighborhood (C-N)
- Retail and Office (C-RO)
- Office (C-O)
- Service (C-S)
- Mixed Use (C-MU)

- Industrial (I)

Public & Institutional Facilities
- B BART (BART)
- CEM Cemeteries (CEM)
- PF Public Facilities (PF)
- H Hospitals (H)

- Sphere of Influence

CITY OF DALY CITY
LAND USE ELEMENT

Residential Low Density
Residential Medium Densit
Residential High Density
Agriculture
Industrial
Commercial
Public
Institutional
Public Utilities
Recreation
Open Space
Mixed Use
Neighborhood
Other

Appendix C: Midway Village Phasing Plan

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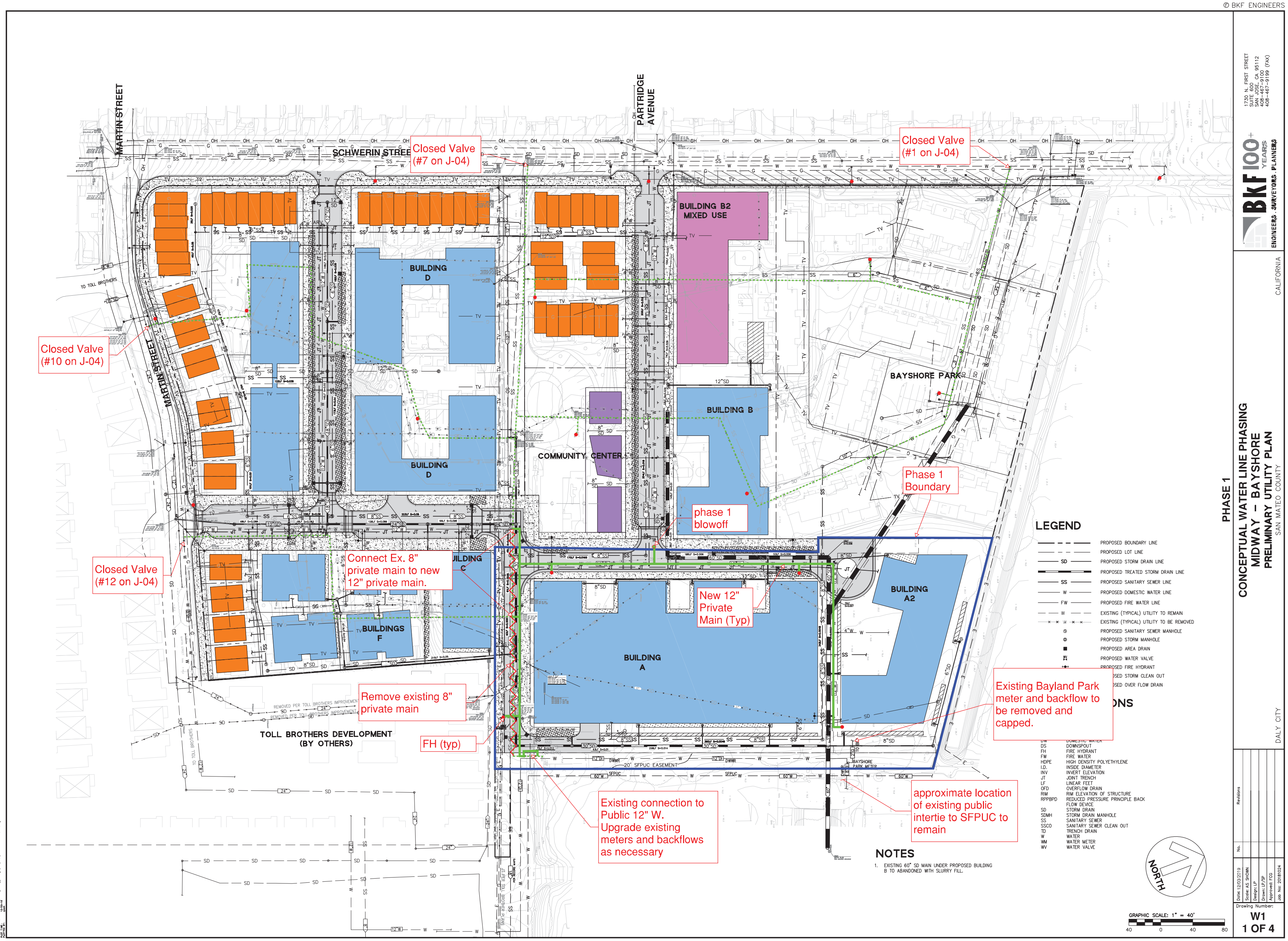

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CONCEPTUAL WATER LINE PHASING
MIDWAY - BAYSHORE
PRELIMINARY UTILITY PLAN
SAN MATEO COUNTY
CALIFORNIA
DALY CITY
PHASE 1
BKF 100+ YEARS
ENGINEERS . SURVEYORS . PLANNERS
1730 N. FIRST STREET
SUITE 600
SAN JOSE, CA 95112
408-467-9100
408-467-9199 (FAX)
Date: 12/03/2019
Scale: AS SHOWN
Design: LP
Drawn: LP/SP
Approved: FCG
Job No: 20181024
No.
Revisions
Drawing Number:
W1
1 OF 4
GRAPHIC SCALE: 1" = 40'
40
0
40
80
NORTH
LEGEND
PROPOSED BOUNDARY LINE
PROPOSED LOT LINE
PROPOSED STORM DRAIN LINE
PROPOSED TREATED STORM DRAIN LINE
PROPOSED SANITARY SEWER LINE
PROPOSED DOMESTIC WATER LINE
PROPOSED FIRE WATER LINE
EXISTING (TYPICAL) UTILITY TO REMAIN
EXISTING (TYPICAL) UTILITY TO BE REMOVED
PROPOSED SANITARY SEWER MANHOLE
PROPOSED STORM MANHOLE
PROPOSED AREA DRAIN
PROPOSED WATER VALVE
PROPOSED FIRE HYDRANT
DS DOWNSPOUT
FH FIRE HYDRANT
FW FIRE WATER
HDPE HIGH DENSITY POLYETHYLENE
I.D. INSIDE DIAMETER
INV INVERT ELEVATION
JT JOINT TRENCH
LF LINEAR FEET
OFD OVERFLOW DRAIN
RIM RIM ELEVATION OF STRUCTURE
RPPBPD REDUCED PRESSURE PRINCIPLE BACK FLOW DEVICE
SD STORM DRAIN
SDMH STORM DRAIN MANHOLE
SS SANITARY SEWER
SSCO SANITARY SEWER CLEAN OUT
TD TRENCH DRAIN
W WATER
WM WATER METER
WV WATER VALVE
NOTES
1. EXISTING 60" SD MAIN UNDER PROPOSED BUILDING B TO ABANDONED WITH SLURRY FILL.
MARTIN STREET
SCHWERIN STREET
PARTRIDGE AVENUE
BAYSHORE PARK
BUILDING B2 MIXED USE
BUILDING B
BUILDING D
BUILDING D
COMMUNITY CENTER
BUILDING A
BUILDING A2
BUILDING C
BUILDINGS F
TOLL BROTHERS DEVELOPMENT (BY OTHERS)
20' SFPUC EASEMENT
Closed Valve (#7 on J-04)
Closed Valve (#1 on J-04)
Closed Valve (#10 on J-04)
Closed Valve (#12 on J-04)
Phase 1 Boundary
phase 1 blowoff
Connect Ex. 8" private main to new 12" private main.
New 12" Private Main (Typ)
Remove existing 8" private main
FH (typ)
Existing connection to Public 12" W. Upgrade existing meters and backflows as necessary
approximate location of existing public intertie to SFPUC to remain
Existing Bayland Park meter and backflow to be removed and capped.

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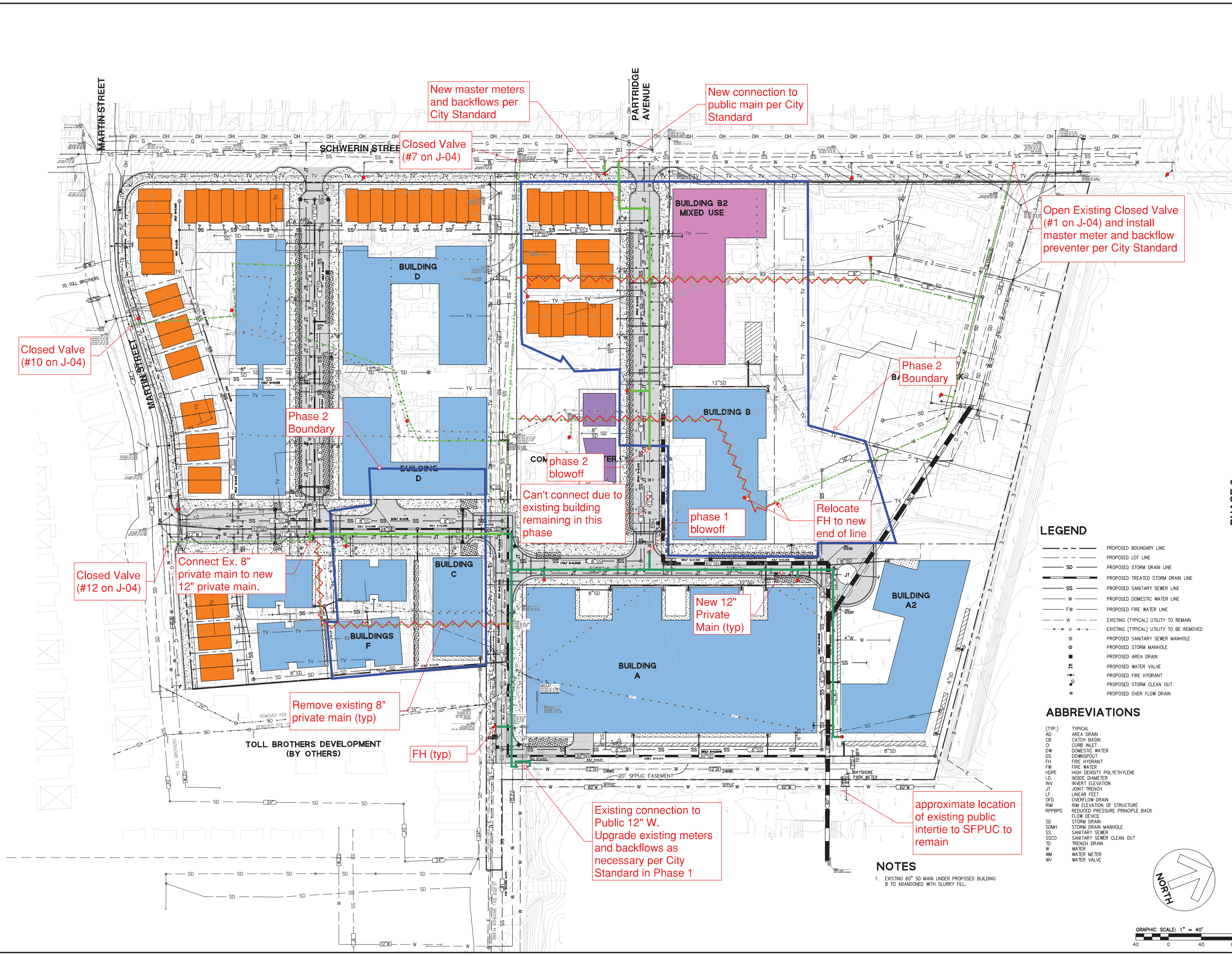

PHASE 2

CONCEPTUAL WATER LINE PHASING
MIDWAY – BAYSHORE
PRELIMINARY UTILITY PLAN

SAN MATEO COUNTY

DALY CITY

CALIFORNIA

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SAN JOSE, CA 95112
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Job No: 20181024

Drawing Number:
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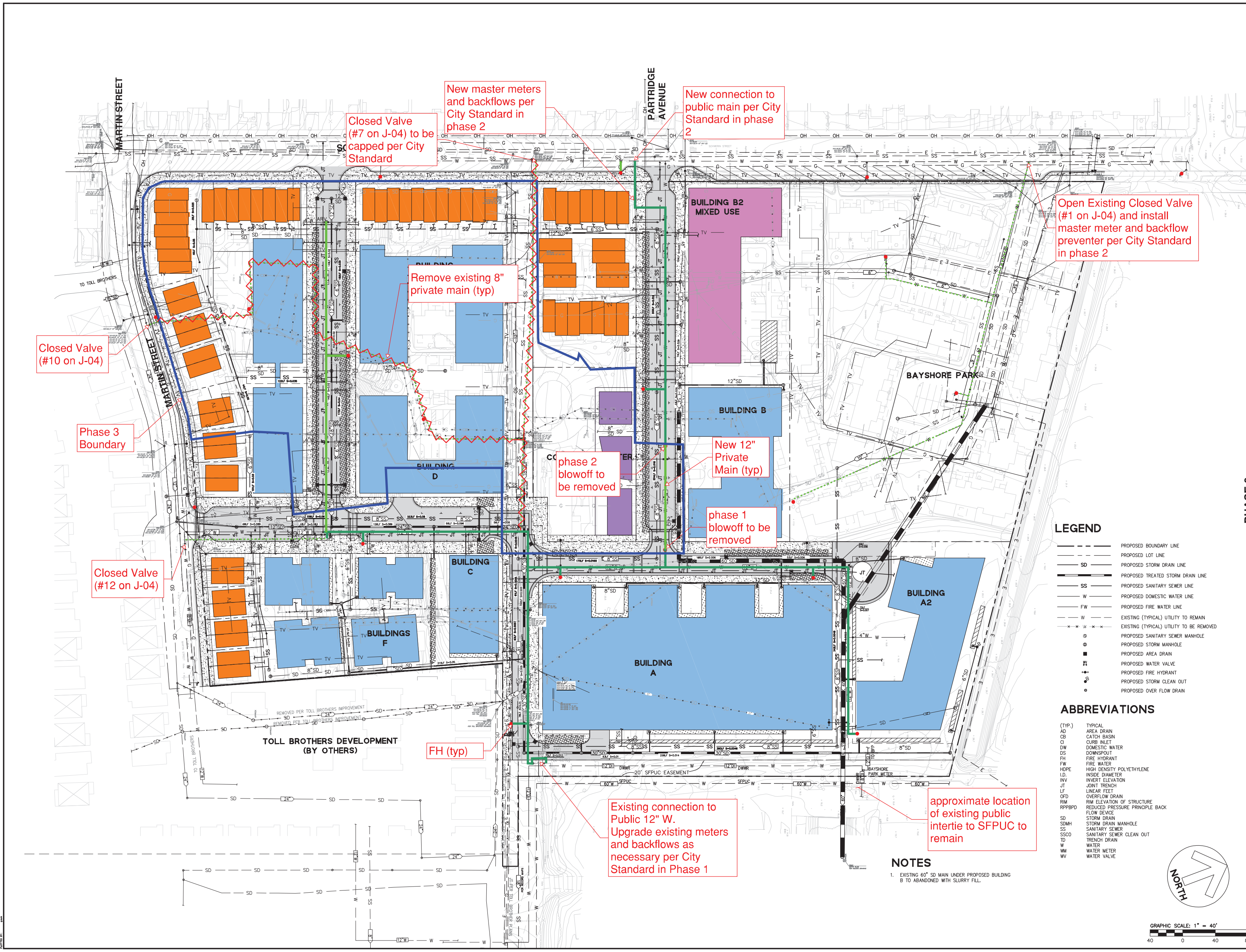
2 OF 4



PHASE 3

CONCEPTUAL WATER LINE PHASING
MIDWAY – BAYSHORE
PRELIMINARY UTILITY PLAN

SAN MATEO COUNTY

DALY CITY

CALIFORNIA

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Approved: FCG
Job No: 20181024

No. | Revisions

Drawing Number:
W3
3 OF 4

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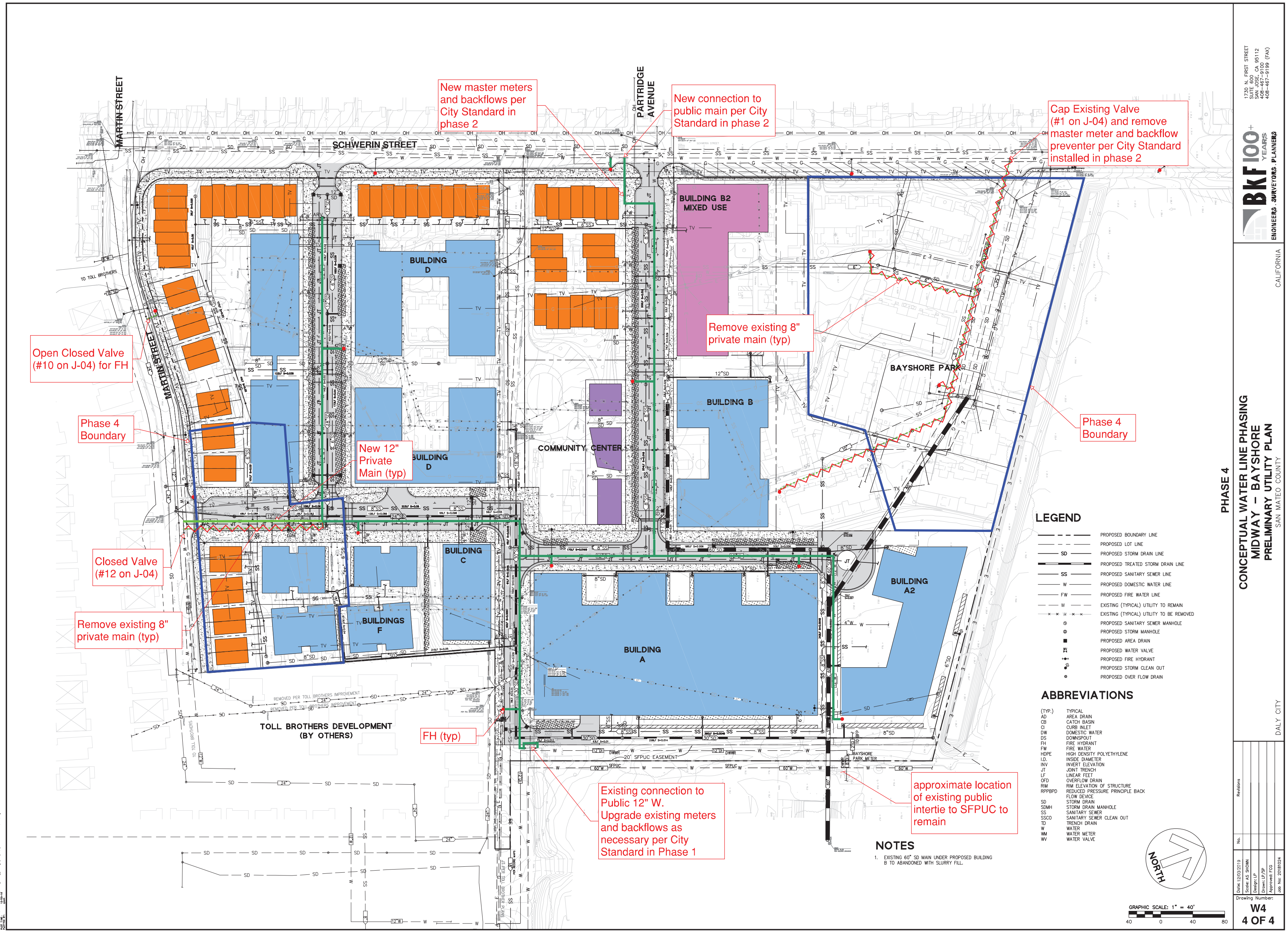

© BKF ENGINEERS
New master meters and backflows per City Standard in phase 2
New connection to public main per City Standard in phase 2
Cap Existing Valve (#1 on J-04) and remove master meter and backflow preventer per City Standard installed in phase 2
MARTIN STREET
SCHWERIN STREET
PARTRIDGE AVENUE
BUILDING B2 MIXED USE
BUILDING D
BUILDING B
BAYSHORE PARK
COMMUNITY CENTER
Remove existing 8" private main (typ)
Open Closed Valve (#10 on J-04) for FH
Phase 4 Boundary
New 12" Private Main (typ)
Closed Valve (#12 on J-04)
BUILDING C
BUILDINGS F
BUILDING A
BUILDING A2
Remove existing 8" private main (typ)
TOLL BROTHERS DEVELOPMENT (BY OTHERS)
FH (typ)
Existing connection to Public 12" W. Upgrade existing meters and backflows as necessary per City Standard in Phase 1
approximate location of existing public intertie to SFPUC to remain
20" SFPUC EASEMENT
LEGEND
PROPOSED BOUNDARY LINE
PROPOSED LOT LINE
PROPOSED STORM DRAIN LINE
PROPOSED TREATED STORM DRAIN LINE
PROPOSED SANITARY SEWER LINE
PROPOSED DOMESTIC WATER LINE
PROPOSED FIRE WATER LINE
EXISTING (TYPICAL) UTILITY TO REMAIN
EXISTING (TYPICAL) UTILITY TO BE REMOVED
PROPOSED SANITARY SEWER MANHOLE
PROPOSED STORM MANHOLE
PROPOSED AREA DRAIN
PROPOSED WATER VALVE
PROPOSED FIRE HYDRANT
PROPOSED STORM CLEAN OUT
PROPOSED OVER FLOW DRAIN
ABBREVIATIONS
(TYP.) TYPICAL
AD AREA DRAIN
CB CATCH BASIN
CI CURB INLET
DW DOMESTIC WATER
DS DOWNSPOUT
FH FIRE HYDRANT
FW FIRE WATER
HDPE HIGH DENSITY POLYETHYLENE
I.D. INSIDE DIAMETER
INV INVERT ELEVATION
JT JOINT TRENCH
LF LINEAR FEET
OFD OVERFLOW DRAIN
RIM RIM ELEVATION OF STRUCTURE
RPPBPD REDUCED PRESSURE PRINCIPLE BACK FLOW DEVICE
SD STORM DRAIN
SDMH STORM DRAIN MANHOLE
SS SANITARY SEWER
SSCO SANITARY SEWER CLEAN OUT
TD TRENCH DRAIN
W WATER
WM WATER METER
WV WATER VALVE
NOTES
1. EXISTING 60" SD MAIN UNDER PROPOSED BUILDING B TO ABANDONED WITH SLURRY FILL.
NORTH
GRAPHIC SCALE: 1" = 40'
PHASE 4
CONCEPTUAL WATER LINE PHASING
MIDWAY - BAYSHORE
PRELIMINARY UTILITY PLAN
SAN MATEO COUNTY
CALIFORNIA
DALY CITY
BKF 100+ YEARS
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Scale: AS SHOWN
Drawn: LP/JP
Approved: FCG
Job No: 20181024
Drawing Number:
W4
4 OF 4

APPENDIX B

2020 Sanitary Sewer Analysis

Midway Village

Sanitary Sewer Analyses

Technical Memorandum

Daly City, California

February 20, 2020

Prepared for:
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Foster City, CA 94404
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BKF Engineers
255 Shoreline Drive, Suite 200
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Jake Taylor, P.E., Design Engineer
Sravan Paladugu, P.E., Project Manager
BKF Project Number – 20181024-11

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Delivering Inspired Infrastructure

A. Introduction

The Midway Village area is being proposed for redevelopment as part of the Midway Village Redevelopment Project (proposed project). Currently the Midway Village area contains 150 residential units, 223 parking spaces, a child-care facility, open space, an existing street system, and office space for the San Mateo County Housing Authority (SMCHA). Additionally, an existing park, David R. Rowe/Bayshore Park (Bayshore Park), is currently located directly north and east of the Midway Village area.

The proposed project area is located within Daly City, California in San Mateo County (See Figure A, Vicinity Map). Specifically, the project site is bound by Schwerin Street to the West and Martin Street to the South, with Midway Drive running directly through the center of the project area. The project site is approximately 15 acres and is comprised of 39 San Mateo County parcels.

The proposed project involves redevelopment of this site and include mixed-use development consisting of 555 residential units, 725 parking spaces, a child-care facility, a community center, office space for property management and other ancillary services, a revised street system, and recreation facilities. Additionally, Bayshore Park will be relocated and redeveloped as part of the proposed project. SMCHA currently administers the Public Housing Program throughout San Mateo County, which includes the existing Midway Village area. These homes are restricted for low and very low-income households and would remain as such under the proposed project. Other improvements as part of the proposed project include landscaping, water and wastewater line improvements, and pedestrian walkways.

B. Project Background

The Midway Village area is listed as an active cleanup site on the state “Cortese” list pursuant to Government Code Section 65962.5. A Phase I Environmental Site Assessment (ESA) was prepared for the project site. The site history from this Phase I ESA is summarized below:

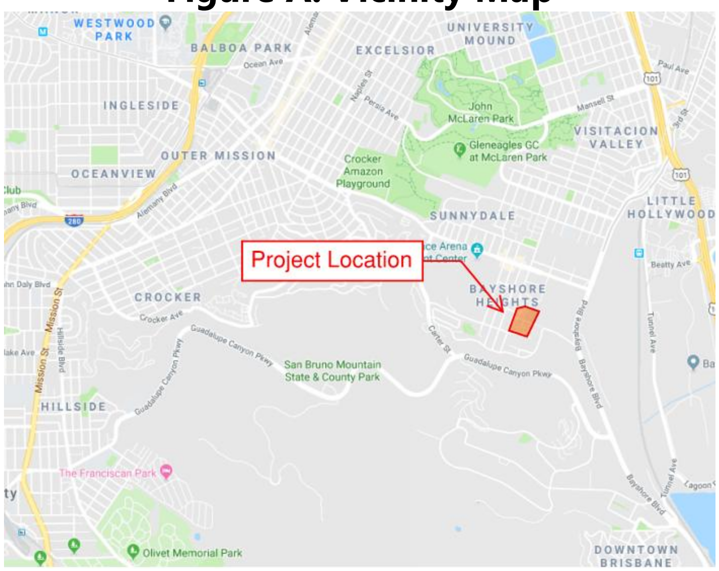
From approximately 1906 to 1916 a manufactured gas plan (MGP) operated on what is today the Pacific Gas and Electric Company (PG&E) Martin Service Center property, located directly north of project site. This plant used crude oil to create gas used for lighting. This process produced a waste material called lampblack containing polycyclic aromatic hydrocarbon (PAH) which impacted soils where the plant existed. In 1944, the Federal Government obtained parts of the PG&E property, including the project site, to build Navy housing. When land for this housing was graded, contaminated soils containing PAHs were unknowingly used to fill low-lying areas prior to construction of the housing. The volume of PAH-containing fill material used in this manner has been estimated at approximately 20,000 cubic yards (CY).

In 1976, the Navy housing was demolished, and the Midway Village Housing Complex was built and a year later (Midway Village area), in 1977, the City of Daly City created Bayshore Park on the property immediately adjacent to and northeast of the Midway Village area. It wasn’t until 1990 that the Department of Toxic Substance Control (DTSC) became aware of the contamination in and around the Midway Village area, as well as the Bayshore Park area, and the childcare facility.

Various site investigations including testing of the soils and groundwater in and around the Midway Village area occurred in the early 90s. In 1993 the DTSC approved a cleanup and Remedial Action Plan (RAP) for the Midway Village area which included soil removal of the top two to five feet of soils in select areas (approximately 2,983 CY of material) followed by capping of these areas with two to five feet of clean soil, concrete patios, asphalt, or walkways. This work was completed by 1994. Then in 1998, DTSC approved a similar plan for Bayshore Park.

Currently, the Bayshore Park area has land use restrictions which are limited by a "Covenant to Restrict Use of Property" made between the City of Daly City and the DTSC. A Deed Restriction was filed with San Mateo County Clerk on October 17, 2002, which was developed to prevent exposure of humans or biota to the potential contaminants on the site. Any development of the Bayshore Park area would be required to comply with the Deed Restriction, which may need to be modified or lifted to allow for residential use on the site. This is further discussed in Section 2.5.2, Approvals of this SCEA (SCS Engineers 2017).

Figure A: Vicinity Map



C. Existing Sanitary Sewer System

The sanitary sewer collection system that serves the Project site is owned and operated by the Bayshore Sanitary District (District). Sewer flow generated on the project site is conveyed through a series of gravity collection mains to the Carlyle Pump Station. Treatment of the District's wastewater is provided by the San Francisco Public Utilities Commission (SFPUC) at their Southeast Wastewater Treatment Plant.

Carlyle Pump Station (CPS)

The Project site sewer is conveyed to the Carlyle Pump Station, located at 96 Industrial Way. The CPS is fed by an 18-inch gravity sewer line located beneath Midway Drive that runs from the intersection of Schwerin Street and Midway Drive to the CPS on Industrial Way. Several sewer laterals connect the surrounding buildings to this sewer main on Midway Drive.

The existing pump station has four pumps each rated 30 horsepower (hp) in a 10' x 27'-2" wet-well below ground. The Bayshore Sanitary District 2018 Master Plan indicates that the capacity of the CPS with a single pump running is 1,750 gpm, with two pumps running simultaneously is 2,550 gpm, with three pumps running simultaneously is approximately 2,950 gpm, and with four pumps running simultaneously is approximately 3,200 gpm (at the fourth pump on level). These pumps are not variable speed pumps, rather they cycle on and off and are controlled by floats. If one pump will not keep up with the inflow, then additional pumps will turn on. The 14-inch asbestos cement line (AC) that is 3,320 feet long discharges into a City and County of San Francisco (CCSF) manhole at elevation 7.76.

D. Criteria

The design calculations of the proposed system are based on the District's design parameters indicated in Section B of the District's Standard Specifications. Peak flow from the proposed project entering the gravity line cannot reach 100% of the existing line capacity, i.e., depth of flow cannot be greater than or equal to the pipe diameter. Should this occur, additional measures or upsizing of pipes would be needed.

If the project peak flow exceeds the pumping capacity (flow and head) of any existing lift station then additional improvements would be needed to mitigate the project's impact. The project should also mitigate if the velocity in the existing asbestos cement pipe is greater than 10 feet per second which is unlikely to occur in the force main downstream of the lift station.

All pipes must be sized to flow at 2 feet per second at half full in order to achieve cleaning velocities. In order to meet this criteria, the existing pipes must meet the following minimum slope requirements before and after settlement:

- 12-inch = 0.2%
- 15-inch = 0.15%
- 18-inch = 0.12%
- 24-inch = under 0.1%

E. Approach / Methodology

The approach used to evaluate the proposed Project impacts on the existing system included:

1) Using GIS parcel data and the Master Plan Table 2-6 (History of District Customers by Type), BKF identified the number of parcels/units tributary to each of the manholes at the upstream ends of the model. See Table 1 in the Attachments for a breakdown of parcels/units by manhole.

2) BKF then calculated the number of dwelling units tributary to the existing sewer line through the project (MH-34, MH-35 and MH-14A). A majority of the parcels to these manholes include detached single family residential units. As a result, a 1:1 ratio was applied to calculate the number of dwelling units in each parcel. BKF then applied the 200 gpd/residential dwelling unit to calculate flow to these manholes.

3) The total average dry weather flow to CPS, provided by the District (262,874 gpd), was used to calculate the balance of dry weather flow from all other residential and non-residential parcels. The remaining flow was distributed uniformly based on number of parcels tributary to the remaining model inflow manholes (MH-5, MH-17 and MH-24).

4) A peaking factor of 2 was used to estimate the peak dry weather flow to each manhole.

5) To estimate infiltration and inflow, Master Plan Table 6-1 (I/I in Individual Flow Monitoring Basins) was used to estimate average infiltration/inflow flow based on mile-inches of pipe for each model inflow manhole.

6) BKF used the highest infiltration/inflow recorded at CPS (during the 2017 storm event cited in the Master Plan) and the previously determined infiltration/inflow factor derived above to calculate the corresponding flow rate to each manhole. After reviewing the January 10th, 2017 storm against historical rainfall data from the National Oceanic and Atmospheric Administration (NOAA), the rain event corresponds to a 40-year design storm which is higher than the typical design storm used for determining infiltration/inflow (5 or a 10-year design storm).

7) From the corresponding CPS pumped flow recordings (Master Plan Figure 2-4), 2,835gpm (i.e., max pumped flow of 3,200 gpm – peak dry weather flow of 365 gpm) was used to calculate the storm event infiltration/inflow at each manhole.

8) To calculate the infiltration/inflow from the proposed project, BKF calculated the infiltration/inflow for existing pipes on project site and substituted the infiltration/inflow from the proposed project pipelines. The I/I from the proposed project pipes is calculated using the design infiltration rate of 0.2 gpm per inch-diameter per 1000 ft.

9) The resulting net increase in peak wet-weather flow with the proposed project is only 26 gpm. Without any reduction for a new pipe system, the increase in peak wet weather flow is 136 gpm.

10) The CPS pump station performance was reviewed in accordance with the peak flow increases. With either increase in flow, the pump station/forcemain is adequate to serve the project.

F. Projected Sewer Flow

The daily average sewer generation for each building is calculated using the occupancy of the existing or proposed building using sewer demand factors designated in the 2018 Master Plan and supplemented by industry standard demand factors. The sewer flows are estimated using the dwelling units and occupancies, provided by DB Architects in September of 2019, to equate a flow based on the demand factors and occupancies. BKF validated the standard demand factors using historical flow monitoring data at the CPS.

Residential demand estimates were estimated using a generation rate of 200 gallons per day per unit per the Bayshore Sanitary District standards. Office, community, and day care demand estimates are based on a demand factor of 10 gallons per day per person. Park bathroom demand is accounted for using 488 gallons per restroom per day.

Table A below shows the existing, proposed, and the increase (proposed minus existing use) in wastewater generated by the project.

Table A: Post-Project Increases in Wastewater Generation

Project Characteristic	Demand Factor (1) (2)		Existing Consumption (3) (gallons/day)	Proposed Consumption (3) (gallons/day)	Increase in Use
Residential	200	gallons/du/day	30,000	111,000	81,000
Office/Community Center	10	gallons/person/day	70	900	830
Day Care	10	gallons/student/day	1,090	1,250	160
Bayshore Park Restrooms (4)	488	gallons/restroom/day	0	976	976
			Total For Project	**114,126**	**82,966**

Sources:
1. Residential demand is based on Bayshore Sanitary District 2018 Master Plan wastewater design criteria of 200 gallons per day per dwelling unit.
2. Office/Community Center and day care demand factor is based on City of Oakland Sewer flow rate of 10 gallons per day per person.
3. Existing and proposed employees/students counts for office/community center and daycare are provided by DB Architects.
   - Daycare: 109 Existing & 125 Proposed students
   - Office/Community Center: 7 Existing & 90 Proposed students
4. Assumes 20 fixtures per restroom.

The average daily values estimated were then multiplied by a peaking factor of 2 to account for fluctuations in water usage during the day to calculate peak dry weather flow. Table 2 presents the demand factors used and the peak dry weather flows for each building.

G. Additional Inflow & Infiltration (I/I)

The District's collection system is significantly impacted by additional Rainfall-Derived I/I (RDII) spikes during and shortly following rainfall events. Appendix 2 summarizes historical peak daily flows at the inflow pipe to the Carlyle Pump Station during the period 1993 to 2017 provided in the 2018 District Master Plan. I/I derivation is summarized in Tables 1 and 2.

Calculation of RDII

Historical peak daily flows provided in the District's Master Plan were used to estimate the I/I flows in the existing collection system. The largest recorded I/I occurred on January 10, 2017. Approximately 1.4 inches of rainfall occurred over 2 hours, corresponding to a 40-year storm per NOAA Atlas 14. The largest amount of rainfall recorded over a 24-hour period occurred on February 26, 2008 with approximately 3.25 inches of rainfall, corresponding to a 5-year storm. The infiltration and inflow rates for these two storms were applied to model nodes using the basin-specific generation rates noted in Table 6-1 of the 2018 District Master Plan. The 5-year storm was applied to establish a design storm I/I while the 40-year storm was used to evaluate the system during extreme events.

Reduction in I/I Rates

Infiltration and inflow to the project site will be reduced with the removal of the existing pipes. For the 5-year storm, the I/I reduction was calculated using the corresponding generation rate of the existing collection system (length and pipe diameter). Per District standards, I/I rates for the proposed sections of pipe were calculated using the generation rates of 0.2 gpm per inch-diameter per 1,000 feet of pipe.

For the purposes of this analysis, no reduction in I/I was included for the 40-year storm. Although the infiltration and inflow will be reduced, this is a conservative approach for the evaluation during extreme rain events.

Model Scenarios

The calculated peak wet weather conditions reflect the maximum I/I rates and the peak dry weather flows for the proposed collection system. The model was run for both the 5-year flows and the 40-year flows. During the 5-year storm, the main inflow line runs partially full. During the 40-year storm, the sewer flows will still be contained below the existing ground.

H. Hydraulic Analyses

A hydraulic model was setup to, a) analyze the capacity of the existing gravity sewer collection system, and b) to identify improvements necessary to support the Project. The sanitary sewer collection system was analyzed using a computer-modeling software, SewerCAD by Haestad Methods. SewerCAD is a collection system analysis program that evaluates gravity and pressurized sanitary sewer collection systems using Manning's equation. Refer to Figure 1 for Sewer System Model Layout.

Model Setup

The existing gravity sewer system pipe sizes, inverts and rim elevations needed to analyze system capacity were gathered from several sources. These include field survey data, City block-maps, construction drawings, and as-built information. Because gravity sewer lines generally operate under open channel flow conditions, the slope of the line is critical in estimating capacity. The model was built primarily using field survey data. Field survey data from structures immediately upstream of the Carlyle Pump Station (presented in the 2015 Sewer System Management Plan) was supplemented by field survey for the purposes of this analysis. The two field surveys include all structures and pipes downstream of the project to the Carlyle Pump Station. As-builts and City block maps were used to supplement any field survey data that is missing for the remaining lateral structures.

Results

The analyses showed that the depth of flow in the existing gravity sewer system is less than 75-percent of the pipe diameter for all pipe segments from the project site to the Carlyle Pump Station under peak wet weather flow. The existing 18-inch main line is shown to be adequately sized to convey Project sewer flows. See Table 3 in the Attachments for the peak wet weather hydraulic results.

With the highest infiltration and inflow ever recorded (40-year storm event), the existing gravity sewer system can convey peak sewer flows with freeboard throughout the modeled system. No reduction for I/I is considered during this scenario. During this extreme event, the boundary condition is set at the pump station wet well water elevation needed to convey the peak flows (to be discussed in the following section). See Table 4 in the Attachments for the corresponding hydraulic results.

I. Impacts, Mitigations, and Recommendations

The proposed Project will increase peak flow and volume to the existing downstream sanitary sewer collection system, which is made up of two main components, 1) the gravity pipe collection system, and 2) the Carlyle Pump Station.

Gravity System

The analyses showed that the existing gravity collection system is able to convey the increase in sewer flow from the proposed Project and still meet the criteria.

- Impacts and Mitigation – There are no impacts to the gravity system as a result of the proposed Project. As such, the Project is not required to implement mitigation measures.

Carlyle Pump Station

The existing Carlyle Pump Station, to where the proposed Project ultimately discharges to, has four pump. The pumps turn on successively as the water level raises in the wet-well. When the water level reaches elevation of (-)2.5 feet, the fourth pump turns on and the combined flow pumped at this point with all four pumps running simultaneously is 3,200 gpm.

With the proposed project, the peak wet-weather flow is estimated to be 3,336gpm. Since this flow rate is higher than 3,200 gpm pumped at wet-well water level elevation of (-)2.5 feet, the water level raises in the wet-well, which in turn reduces the static head allowing all four pumps to discharge at a higher rate than 3,200gpm. So, the wet-well elevation at which all four pumps can match the inflow of 3,336gpm is 2.3 feet. This increased wet-well elevation of 2.3 feet was used as starting water surface elevation for the gravity pipe system capacity analyses.

Under these conditions and without any reduction in infiltration and inflow from the proposed project, the pump station water level will not exceed elevation 2.3 with all four pumps running and no overflows will occur in the upstream gravity system. Refer to Figure 2 for the Carlyle SSPS Curve.

J. Conclusion

The proposed Project will increase peak flow and volume to the existing sanitary sewer collection. The analyses found that the existing conveyance and pump systems are able to handle the increase in flow without any modifications. As such, there are no impacts as a result of the Project.

Attachments

Appendices

References

i) Bayshore Sanitary District Master Plan, August, 2018.
ii) Bayshore Sanitary District Standard Specifications for Design and Construction of Sanitary Sewer Collection and Conveyance Facilities (rev. 3), March 2018.
iii) California Building Standards Commission, 2010 California Fire Code, January 2011.
iv) City of Oakland Sanitary Sewer Design Standards, August 2008.

ATTACHMENTS

Table 1A - Wastewater Generated: Existing Conditions

Model Node	Existing Sewer Flows				
	Existing Dwelling Units (1)	Average Dry Weather Flow (2)(3) (gpd)	Peak Dry Weather Flow (4) (gpm)	Highest Recorded I/I (5) (gpm)	Highest Recorded Peak Wet Weather Flow (5) (gpm)
MH-34	798	159,600	222	1,286	1,508
MH-35 (Project Flows)	150	30,000	42	429	471
MH-14A	136	27,200	38	389	427
MH-5	486	44,874	62	585	647
MH-17	1	92	0	27	27
MH-24	12	1,108	2	118	120
Total	**1,583**	**262,874**	**365**	**2,835**	**3,200**

Notes:
1. There are 1,742 dwelling units in the entire sewer district according to the 2018 Master Plan. 159 parcels, in predominantly residential zoning areas, do not discharge to the Carlyle Pump Station. BKF has conservatively assumed that 159 dwelling units are not conveyed to the Carlyle Pump Station.
2. Average Dry Weather Flow (ADWF) for residential use is estimated using a demand factor of 200 gallons per day per dwelling unit (per District standards).
3. The total ADWF corresponds to the measured baseline flow at the Carlyle Pump Station (262,874 gallons per day).
4. Peak Dry Weather Flow (PDWF) is calculated using a peaking factor of 2. Flow monitoring at the pump station on 11/03/16 shows a peaking factor of approximately 1.4.
5. On January 11th, 2017, approximately 1.4 inches of rainfall occurred over 2 hours (corresponding to about a 40 year storm). All four pumps were activated with a recorded discharge of 3,200 gallons per minute. The corresponding infiltration and inflow is 2,835 gallons per minute. Infiltration and inflow rates are applied (using length and pipe diameter) to model nodes using the basin specific generation rates noted in Table 6-1 of the 2018 Master Plan. These generation rates (that assess a smaller storm event) are applied using a universal factor to adjust to the highest recorded infiltration and inflow rate to the pump station.

Table 1B - Wastewater Generated: Proposed Conditions

Model Node	Proposed Sewer Flows						
	Proposed Dwelling Units (1)	Average Dry Weather Flow (2) (gpm)	Peak Dry Weather Flow (2) (gpm)	I/I with Proposed Project (3) (gpm)	Peak Wet Weather Flow with Highest Recorded I/I (3) (gpm)	**Peak Wet Weather Flow (gpm) without I/I Reduction**	**Peak Wet Weather Flow (4) (gpm)**
MH-34	798	159,600	222	1,286	1,508	**1,508**	**723**
MH-35 (Project Flows)	555	114,126	159	319	478	**588**	**286**
MH-14A	206	41,200	57	389	446	**446**	**209**
MH-5	486	44,874	62	585	647	**647**	**290**
MH-17	1	92	0	27	27	**27**	**11**
MH-24	12	1,108	2	118	120	**120**	**48**
	2,058	**361,000**	**501**	**2,725**	**3,226**	**3,336**	**1,566**

Notes:
1. An additional 71 units is routed to Node MH-14A for the Robertson School Site.
2. See Table 2 for project flows.
3. Infiltration and inflow from the project site will be reduced with the removal of existing pipes. The reduction is assessed using the corresponding generation rate (using length and pipe diameter) for the pipes to be removed. Infiltration and inflow for proposed pipes is assessed using the generation rate of 0.2 gpm per inch-diameter per 1,000 feet (per District standards).
4. On February 26th, 2008, approximately 3.25 inches of rainfall occurred over 24 hours (corresponding to a 5 year storm) and generated the second highest daily flow recorded. The infiltration and inflow rates for this event are applied (using length and pipe diameter) to model nodes using the basin specific generation rates noted in Table 6-1 of the 2018 Master Plan. These generation rates (that assess a smaller storm event) are applied using a universal factor to adjust to the infiltration and inflow rate for the 5-year, 24-hour storm to the pump station.

Table 2 - Wastewater Generated - Project

Project Characteristic	Demand Factor [1][2]	Proposed Occupancy [3]	Average Dry Weather Flow (gpd)	Peak Dry Weather Flow [4] (gpm)
Residential	200 gallons/du/day	555 du	111,000	154
Office/Community Center	10 gallons/person/day	90 persons	900	1
Day Care	10 gallons/student/day	125 persons	1,250	2
Bayshore Park Restrooms [4]	488 gallons/restroom/day	*N/A*	976	1
		Total For Project	**114,126**	**159**

Notes:

1. Residential demand is based on Bayshore Sanitary District 2018 Master Plan wastewater design criteria of 200 gallons per day per dwelling unit.
2. Office/Community Center and day care demand factor is based on City of Oakland Sewer flow rate of 10 gallons per day per person.
3. Existing and proposed employees/students counts for office/community center and daycare are provided by DBarchitects.
   - Daycare: 109 Existing & 125 Proposed students
   - Office/Community Center: 7 Existing & 90 Proposed students
4. Assumes 20 fixtures per restroom.
5. Peak Dry Weather Flow (PDWF) is calculated using a peaking factor of 2. Flow monitoring at the pump station on 11/03/16 shows a peaking factor of approximately 1.4.

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TABLE 3
SANITARY SEWER FLOW HYDRAULICS, PEAK WET WEATHER FLOW, MODEL OUTPUT
(Analysis performed using Bentley SewerCAD v8i)

Pipe[4] #	Upstream Node	Downstream Node	Total Discharge (gpm) [1]	Capacity @ Constructed Slope (gpm)	Pipe Size [5] (inches)	Length (feet)	Constructed Slope (ft/ft)	Pipe Roughness (Manning's n)	Invert Elevation		Ground/Rim Elevation		HGL[3] Elevation		**Upstream Freeboard [2] (feet)**	Upstream Cover (feet)	**Velocity (ft/s)**	**Depth/Diameter Ratio d/D**
									Upstream	Downstream	Upstream	Downstream	Upstream	Downstream				
P-LL01-3	MH-17	MH-18	**11**	713.8	8.0	23.1	0.017	0.013	2.60	2.20	9.83	9.83	2.67	2.30	**7.2**	6.6	**1.7**	
P-LL01-2	MH-18	MH-19	**11**	360.6	8.0	316.7	0.004	0.013	2.20	.80	9.83	13.63	2.28	1.84	**7.6**	7.0	**1.0**	
P-LL01-1	MH-19	MH-20	**11**	191.7	8.0	80.1	-0.001	0.013	.80	.90	13.63	11.97	1.84	1.84	**11.8**	12.2	**0.1**	
P-L02-4	MH-6	MH-5	**290**	488.6	12.0	321.4	0.001	0.013	5.30	5.60	10.52	10.89	6.30	6.18	**4.2**	4.2	**1.5**	
P-L02-3	MH-6	MH-7	**290**	275.8	12.0	336.2	0.000	0.013	5.30	5.20	10.52	15.92	6.18	6.08	**4.3**	4.2	**0.9**	
P-L02-2	MH-7	MH-8	**290**	0.0	12.0	24.7	0.000	0.013	5.20	5.20	15.92	15.86	5.93	5.92	**10.0**	9.7	**0.8**	
P-L02-1	MH-8	MH-9	**290**	866.8	12.0	81.7	0.003	0.013	5.20	4.96	15.86	18.01	5.90	5.88	**10.0**	9.7	**2.2**	
P-L01-3	MH-23	MH-24	**48**	215.0	6.0	301.7	0.007	0.013	4.50	6.70	9.64	11.77	6.86	4.72	**2.8**	4.6	**2.0**	
P-L01-2	MH-21	MH-23	**48**	178.6	6.0	159.1	0.005	0.013	3.70	4.50	12.51	9.64	4.68	3.92	**7.8**	8.3	**1.7**	
P-L01-1	MH-21	MH-20	**48**	1004.5	8.0	81.6	0.034	0.013	3.70	.90	12.51	11.97	3.85	1.84	**8.7**	8.1	**3.3**	
P-09	MH-34	MH-35	**723**	2517.2	18.0	333.2	0.003	0.013	15.01	14.06	39.09	27.51	15.56	14.69	**23.5**	22.6	**2.7**	**0.37**
P-08	MH-35	MH-36	**1009**	3841.8	18.0	218.3	0.007	0.013	13.91	12.46	27.51	23.92	14.48	13.04	**13.0**	12.1	**4.1**	**0.38**
P-07	MH-36	MH-37	**1009**	2634.1	18.0	92.9	0.003	0.013	12.30	12.01	23.92	25.06	12.94	12.65	**11.0**	10.1	**3.1**	**0.43**
P-06	MH-37	MH-14A	**1009**	3614.1	18.0	388	0.006	0.013	11.76	9.48	25.06	26.50	12.33	10.32	**12.7**	11.8	**3.9**	**0.38**
P-05	MH-14A	MH-15	**1218**	3777.1	18.0	370.8	0.006	0.013	9.45	7.07	26.50	16.97	10.07	7.96	**16.4**	15.6	**4.3**	**0.41**
P-04	MH-15	MH-16	**1218**	2311.9	18.0	299.4	0.002	0.013	7.07	6.35	16.97	16.35	7.85	7.42	**9.1**	8.4	**3.0**	**0.52**
P-03	MH-16	MH-9	**1218**	1509.4	18.0	331.7	0.001	0.013	6.35	6.01	16.35	18.01	7.37	7.03	**9.0**	8.5	**2.1**	**0.68**
P-02	MH-9	MH-20	**1508**	17389.0	24.0	136.7	0.029	0.013	4.91	.90	18.01	11.97	5.55	1.79	**12.5**	11.1	**7.6**	**0.32**
P-01	MH-20	O-1	**1567**	29951.8	24.0	47.7	0.087	0.013	.90	- 3.25	11.97	11.00	1.55	- 2.94	**10.4**	9.1	**11.2**	**0.33**

Notes
(1) ft = feet, cfs = cubic feet per second, ft/s = feet per second
(2) Freeboard is HGL (Hydraulic Grade Line) below Rim of Inlet
(3) Outfall discharges to the Carlyle Pump Station. Outfall tailwater condition is set to the second pump on (elevation -4.0).
(4) See Figure 1 for SewerCAD schematic
(5) Nominal pipe size is assumed to be the inside diameter

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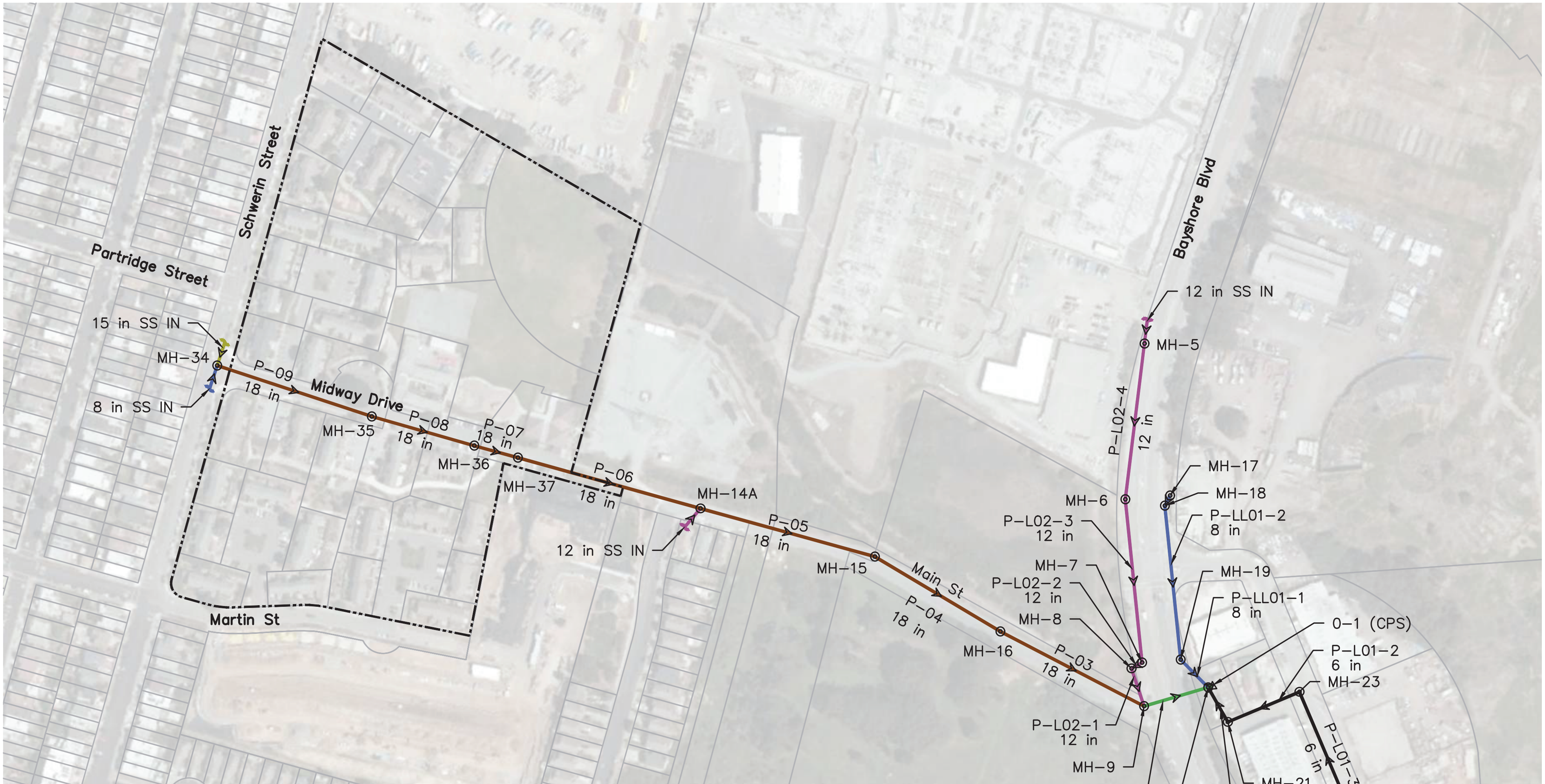
TABLE 4
SANITARY SEWER FLOW HYDRAULICS, PEAK WET WEATHER FLOW, HIGHEST RECORDED I/I, MODEL OUTPUT
(Analysis performed using Bentley SewerCAD v8i)

Pipe[4] #	Upstream Node	Downstream Node	Total Discharge (gpm) [1]	Capacity @ Constructed Slope (gpm)	Pipe Size [5] (inches)	Length (feet)	Constructed Slope (ft/ft)	Pipe Roughness (Manning's n)	Invert Elevation		Ground/Rim Elevation		HGL[3] Elevation		**Upstream Freeboard [2] (feet)**	Upstream Cover (feet)	**Velocity (ft/s)**	**Depth/Diameter Ratio d/D**
									Upstream	Downstream	Upstream	Downstream	Upstream	Downstream				
P-LL01-3	MH-17	MH-18	**27**	713.8	8.0	23.1	0.017	0.013	2.60	2.20	9.83	9.83	2.71	2.48	**7.1**	6.6	**2.2**	
P-LL01-2	MH-18	MH-19	**27**	360.6	8.0	316.7	0.004	0.013	2.20	.80	9.83	13.63	2.48	2.47	**7.4**	7.0	**1.4**	
P-LL01-1	MH-19	MH-20	**27**	191.7	8.0	80.1	-0.001	0.013	.80	.90	13.63	11.97	2.47	2.47	**11.2**	12.2	**0.2**	
P-L02-4	MH-6	MH-5	**647**	488.6	12.0	321.4	0.001	0.013	5.30	5.60	10.52	10.89	7.72	7.20	**2.8**	4.2	**1.8**	
P-L02-3	MH-6	MH-7	**647**	275.8	12.0	336.2	0.000	0.013	5.30	5.20	10.52	15.92	7.17	6.62	**3.4**	4.2	**1.8**	
P-L02-2	MH-7	MH-8	**647**	0.0	12.0	24.7	0.000	0.013	5.20	5.20	15.92	15.86	6.57	6.53	**9.4**	9.7	**1.8**	
P-L02-1	MH-8	MH-9	**647**	866.8	12.0	81.7	0.003	0.013	5.20	4.96	15.86	18.01	6.48	6.34	**9.4**	9.7	**1.8**	
P-L01-3	MH-23	MH-24	**120**	215.0	6.0	301.7	0.007	0.013	4.50	6.70	9.64	11.77	6.97	4.86	**2.7**	4.6	**2.5**	
P-L01-2	MH-21	MH-23	**120**	178.6	6.0	159.1	0.005	0.013	3.70	4.50	12.51	9.64	4.80	4.05	**7.7**	8.3	**2.2**	
P-L01-1	MH-21	MH-20	**120**	1004.5	8.0	81.6	0.034	0.013	3.70	.90	12.51	11.97	3.94	2.47	**8.6**	8.1	**4.3**	
P-09	MH-34	MH-35	**1508**	2517.2	18.0	333.2	0.003	0.013	15.01	14.06	39.09	27.51	15.85	15.11	**23.2**	22.6	**3.3**	**0.56**
P-08	MH-35	MH-36	**2096**	3841.8	18.0	218.3	0.007	0.013	13.91	12.46	27.51	23.92	14.74	13.46	**12.8**	12.1	**5.0**	**0.55**
P-07	MH-36	MH-37	**2096**	2634.1	18.0	92.9	0.003	0.013	12.30	12.01	23.92	25.06	13.31	13.02	**10.6**	10.1	**3.7**	**0.67**
P-06	MH-37	MH-14A	**2096**	3614.1	18.0	388	0.006	0.013	11.76	9.48	25.06	26.50	12.59	10.81	**12.5**	11.8	**4.7**	**0.55**
P-05	MH-14A	MH-15	**2542**	3777.1	18.0	370.8	0.006	0.013	9.45	7.07	26.50	16.97	10.37	9.19	**16.1**	15.6	**5.1**	**0.61**
P-04	MH-15	MH-16	**2542**	2311.9	18.0	299.4	0.002	0.013	7.07	6.35	16.97	16.35	9.10	8.23	**7.9**	8.4	**3.2**	**1.35**
P-03	MH-16	MH-9	**2542**	1509.4	18.0	331.7	0.001	0.013	6.35	6.01	16.35	18.01	8.13	6.93	**8.2**	8.5	**3.2**	**1.19**
P-02	MH-9	MH-20	**3189**	17389.0	24.0	136.7	0.029	0.013	4.91	.90	18.01	11.97	5.86	2.40	**12.2**	11.1	**9.4**	**0.48**
P-01	MH-20	O-1	**3336**	29951.8	24.0	47.7	0.087	0.013	.90	- 3.25	11.97	11.00	2.28	2.30	**9.7**	9.1	**14.0**	**0.69**

Notes
(1) ft = feet, cfs = cubic feet per second, ft/s = feet per second
(2) Freeboard is HGL (Hydraulic Grade Line) below Rim of Inlet
(3) Outfall discharges to the Carlyle Pump Station. Outfall tailwater condition is set to elevation 2.3 which corresponds to the head required for the four pumps to convey the project peak flow in addition to the pump capacity. See Figure 2 for the corresponding pump curves. This pump station analysis does not include any reduction in infiltration and inflow from the project.
(4) See Figure 1 for SewerCAD schematic
(5) Nominal pipe size is assumed to be the inside diameter



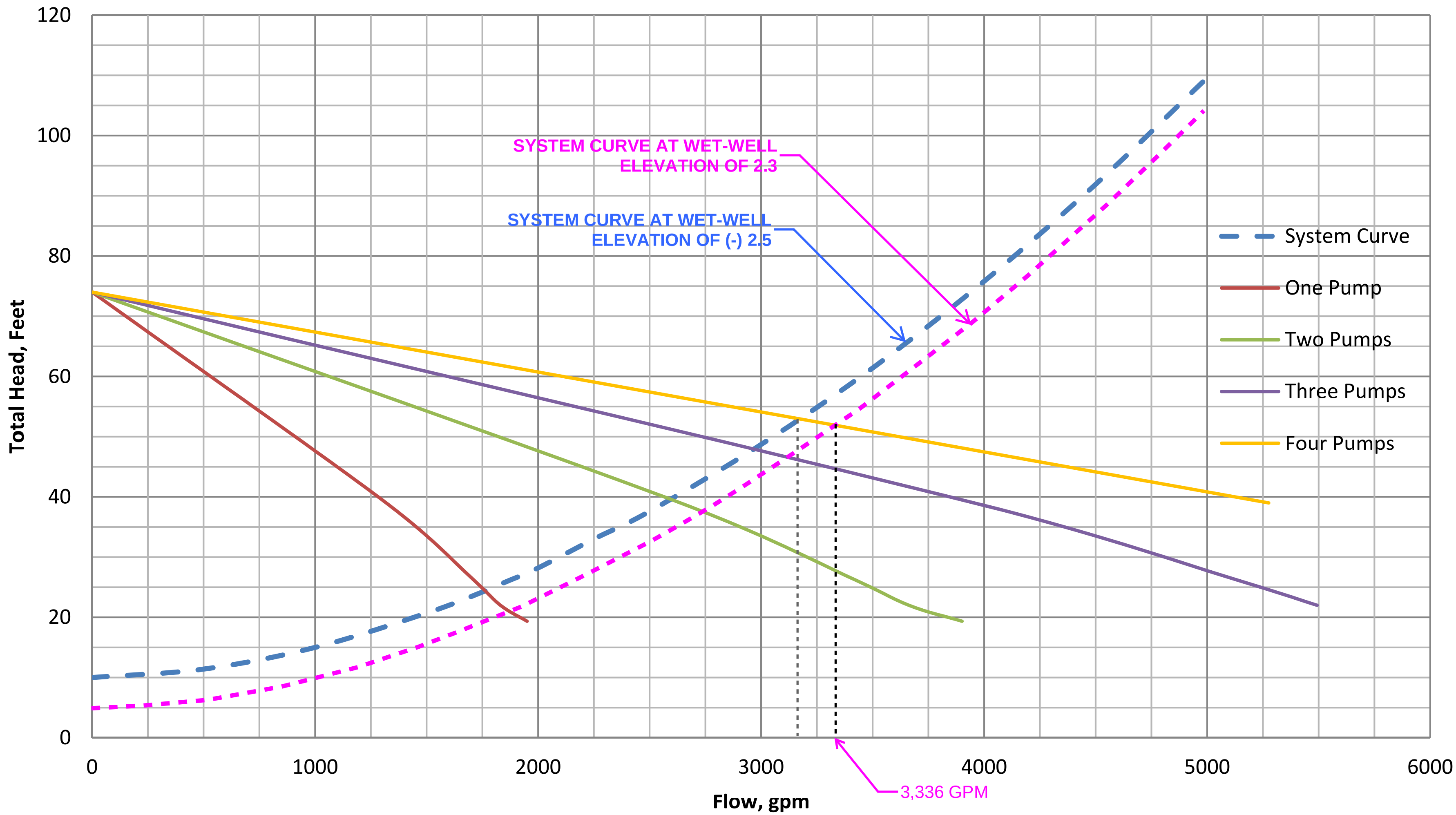
District Node	Parcel from GIS	Peak Dry Weather Flow (%)	Peak Wet Weather Flow (%)
MH-34	798	61%	47%
MH-35 (Project Flows)	39	11%	15%
MH-14A	136	10%	13%
MH-5	329	17%	20%
MH-17	1	0.04%	1%
MH-24	12	0.4%	4%
TOTAL	1,315	100%	100%

FIGURE 1: EXISTING SEWER SYSTEM / MODEL
MIDWAY VILLAGE DEVELOPMENT

DRAWING NAME: \\Bkf-sj\vol4\2018\181024_Midway_Village\DOCS\06-Design\G-Wastewater_System\Report\Figures\Figure 1_System_Layout.dwg
PLOT DATE: 11-27-19 PLOTTED BY: TAYL

BKF 100+ YEARS
ENGINEERS . SURVEYORS . PLANNERS

FIGURE 2 - CARLYLE SEWER PUMP STATION CURVE



APPENDICES

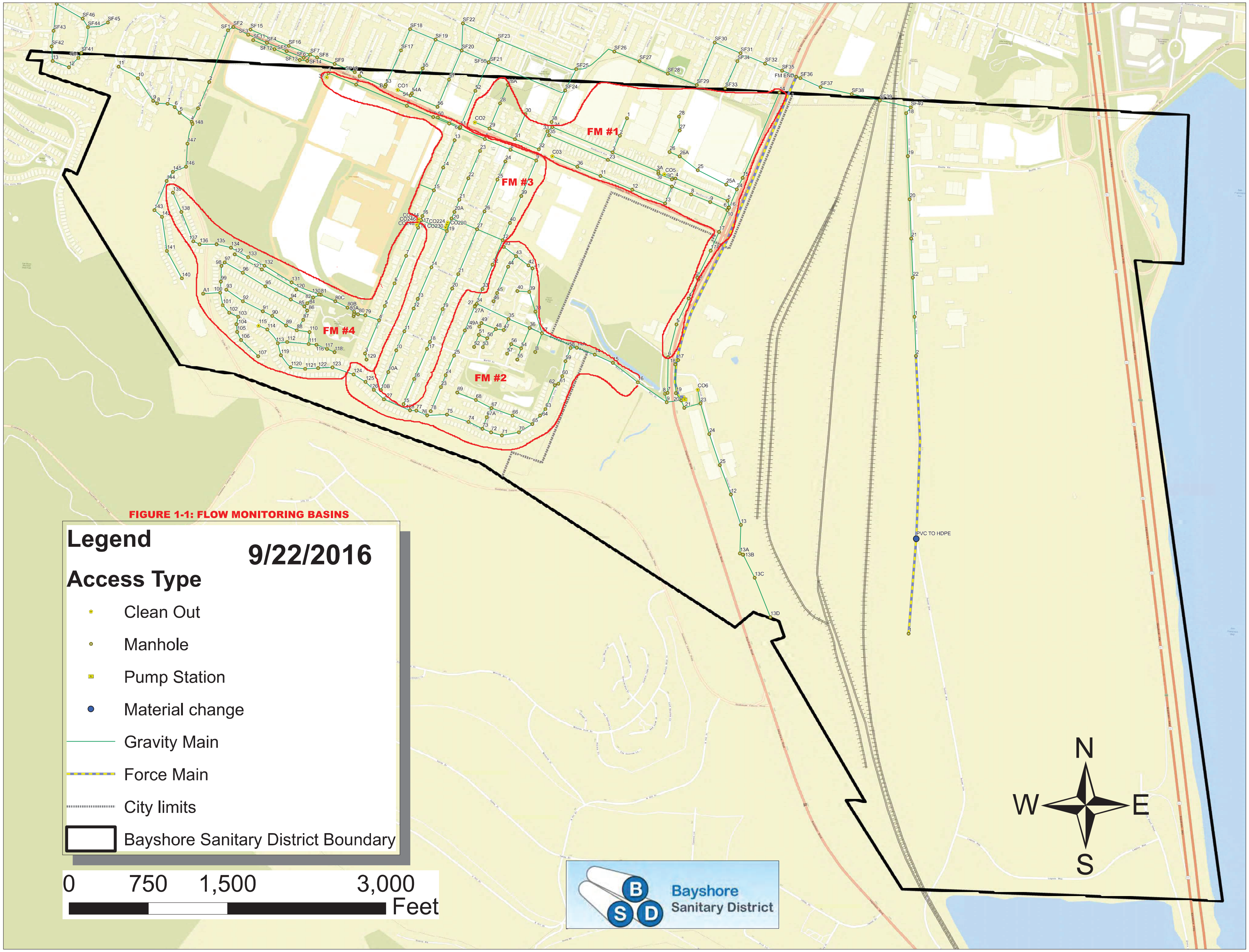


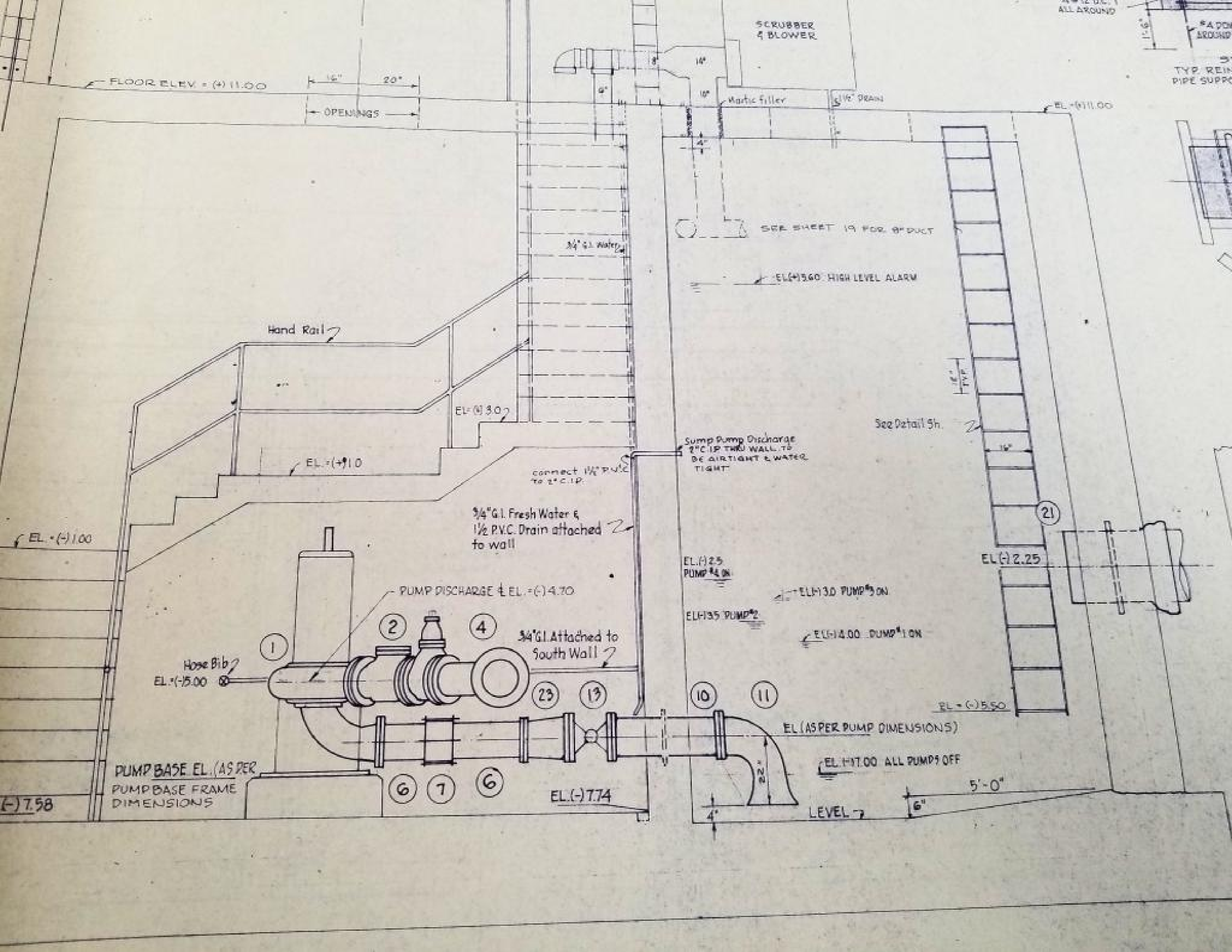
FIGURE 1-1: FLOW MONITORING BASINS

Table 4-2:
Summarized Historical I/I

YEAR	MONTH	DATE	RAIN	FLOW	EST DRY FLOW	EST I/I
2017	Feb.	10	1.10	921,000	262,800	658,200
		11	0.40	1,042,000	262,800	779,200
		12	0.20	748,000	262,800	485,200
		13	0.80	1,040,000	262,800	777,200
	Jan.	4	1.10	655,000	262,800	392,200
		10	0.75	847,000	262,800	584,200
		11	1.40	1,571,000	262,800	1,308,200
		19	1.00	633,000	262,800	370,200
		20	1.00	644,000	262,800	381,200
2016	Jan.	5	0.85	423,000	262,800	160,200
		6	1.25	698,000	262,800	435,200
		19	0.65	683,000	262,800	420,200
		20	0.60	859,000	262,800	596,200
	Dec.	8	1.64	675,000	262,800	412,200
		9	0.50	640,000	262,800	377,200
		16	1.50	979,000	262,800	716,200
2015	Dec.	22	2.60	1,030,000	262,800	767,200
2014	Dec.	3	1.75	1,075,000	262,800	812,200
		4	1.00	795,000	262,800	532,200
		12	1.90	2,247,000	262,800	1,984,200
2012	Mar.	14	1.00	426,000	262,800	163,200
		15	1.50	958,000	262,800	695,200
		28	0.75	536,000	262,800	273,200
	Apr.	10	0.75	460,000	262,800	197,200
	Dec.	5	0.90	445,000	262,800	182,200
2011	Feb.	16	1.00	578,000	262,800	315,200
		25	0.51	462,000	262,800	199,200
	Mar.	23	0.75	530,000	262,800	267,200
		24	0.49	562,000	262,800	299,200
		25	1.49	1,124,000	262,800	861,200
2010	Jan.	19	1.75	780,000	262,800	517,200
		20	1.25	949,000	262,800	686,200
		21	1.00	1,003,000	262,800	740,200
		22	0.75	831,000	262,800	568,200
		26	0.50	523,000	262,800	260,200
	Feb.	24	1.25	671,000	262,800	408,200

YEAR	MONTH	DATE	RAIN	FLOW	EST DRY FLOW	EST I/I
2008	Jan.	22	0.55	457,000	262,800	194,200
	Feb.	13	0.75	408,000	262,800	145,200
		20	0.85	469,000	262,800	206,200
		25	0.40	450,000	262,800	187,200
		26	3.25	1,854,000	262,800	1,591,200
2007	Feb.	24	0.75	427,000	262,800	164,200
		27	0.75	585,000	262,800	322,200
		28	0.65	564,000	262,800	301,200
2006	Feb.	2	0.60	711,000	262,800	448,200
	Mar.	2	0.40	619,600	262,800	356,800
		3	1.00	871,700	262,800	608,900
		14	0.50	560,800	262,800	298,000
		15	0.60	697,100	262,800	434,300
		21	0.75	712,000	262,800	449,200
1995	Jan.	10	2.00	1,087,000	200,000	887,000
		13	0.75	680,200	200,000	480,200
		24	0.75	684,900	200,000	484,900
		27	1.15	757,200	200,000	557,200
1994	Feb.	8	0.40	503,100	200,000	303,100
		17	0.50	396,500	200,000	196,500
		18	0.75	436,000	200,000	236,000
1993	Jan.	7	2.30	1,074,900	200,000	874,900
		8	0.55	680,400	200,000	480,400
		13	2.40	1,048,000	200,000	848,000
		14	1.35	1,110,000	200,000	910,000
		21	1.10	740,600	200,000	540,600

Days with total flow greater than 1MGD highlighted in yellow



SCRUBBER & BLOWER
FLOOR ELEV. = (+) 11.00
16"
20"
OPENINGS
14"
10"
8"
6"
Mastic filler
1½" DRAIN
EL = (+) 11.00
4"
TYP. REIN
PIPE SUPPO
ALL AROUND
SEE SHEET 19 FOR 8" DUCT
3/4" G.I. Water
EL(+)3.60 HIGH LEVEL ALARM
Hand Rail
EL = (+) 3.0
EL. = (+) 1.0
See Detail Sh.
16" TYP.
16"
Sump Pump Discharge 2" C.I.P. THRU WALL TO BE AIRTIGHT & WATER TIGHT
connect 1½" P.V.C. to 2" C.I.P.
3/4" G.I. Fresh Water & 1½ P.V.C. Drain attached to wall
EL. = (-) 1.00
21
EL (-) 2.25
EL (-) 2.5 PUMP #4 ON
EL (-) 3.0 PUMP #3 ON
EL (-) 3.5 PUMP #2
EL (-) 4.00 PUMP #1 ON
PUMP DISCHARGE ℄ EL. = (-) 4.70
3/4" G.I. Attached to South Wall
Hose Bib
EL. = (-) 5.00
1
2
4
23
13
10
11
EL = (-) 5.50
EL (AS PER PUMP DIMENSIONS)
EL (-) 7.00 ALL PUMPS OFF
PUMP BASE EL. (AS PER PUMP BASE FRAME DIMENSIONS
6
7
6
EL. (-) 7.74
(-) 7.58
5'-0"
6"
4"
LEVEL

Gmail

Tom Yeager <teyeagerpe@gmail.com>

pump start levels

Rich <csms1984@aol.com>
To: teyeagerpe@gmail.com

Tue, Nov 12, 2019 at 8:20 AM

Tom,

first pump on level======= 39.28 "
second pump ========== 48.39 "
third pump ============ 52.08 "
fourth pump =========== 68.09 "

APPENDIX C

2020 Drainage Report

San Jose
1730 N. First Street, Suite 600
San Jose, CA 95112
Tel 408.467.9100
Ax .482.6399

DRAINAGE ANALYSIS REPORT

Midway Village Project

Daly City, California
BKF Job No: 20181024

January 2020

Prepared for:

Mid-Peninsula Housing
303 Vintage Park Drive, Suite 250
Foster City, CA 944404
650.356.2900

Prepared By:

Lily Peng, PE
Senior Project Engineer
BKF Engineers

TABLE OF CONTENTS

1.0 INTRODUCTION

The following presents BKF Engineers (BKF) analysis of storm drainage improvements for the proposed redevelopment of Midway Village in Daly City, California (City). The project will replace the existing 150 affordable housing units into a master planned community that will have a mix of high quality townhomes and apartments totaling approximately 555 residential units, a new community center and a new expanded daycare facility. The project will also work with the City on exchanging land with the current city park in order to move that park to the front of the community on a new 3.8 acre parcel to be more present in the community and not hidden away.

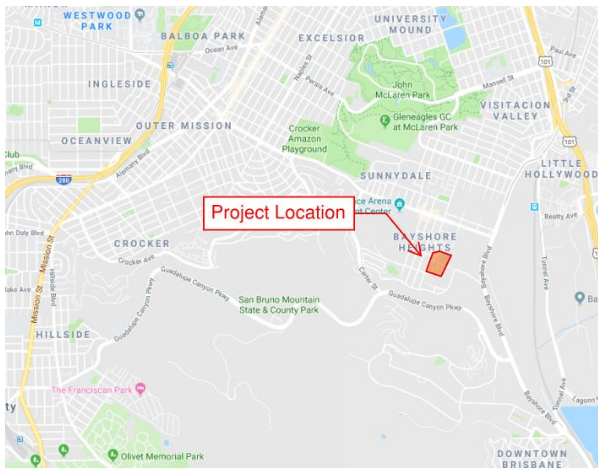


Figure 1. Project Vicinity

The proposed plan connects the new Midway Village community to its surroundings via Partridge Street. By transforming this previous dead-end street into a newly connected main street for Midway Village, the entire site regains access to the larger surrounding neighborhood. The Project further increases ease of travel through the site by creating and connecting new and existing roadways to provide through streets that simplify and manage traffic flow. Several of the streets will have calming devices, such as raised and differentiated pavement that will serve to slow down traffic and create visible pedestrian crossings.

The Project creates a variety of green spaces and open areas for residents to play, walk, and enjoy an active lifestyle. These green spaces are linked via pedestrian connections throughout the site, improving the safety and the quality of the walkable network, which also connects residents to both Schwerin and Martin Streets and to the public transit options along them.

To preserve active, open space and provide secure parking areas, the plan forgoes surface parking lots in favor of two embedded multi-level parking garages reserved for specific users. The four-level garage, within Building A in Phase 1, will provide dedicated spaces for all residents of Phases 1 and 2 as well as dedicated parking for staff of the child care center. A smaller two-level garage in Building C will serve all other residents not assigned street parking. This garage will be lined on all street and resident park edges with residential uses, prioritizing active streetscapes. This strategy allows for a 1.3 to 1 parking ratio for the new Midway neighborhood, which exceeds the City's parking requirements for affordable housing.

Loading zones will also be provided throughout the site plan to give residents easy access to their front doors and families direct access to the childcare center.

1.1 Proposed Land Use – Impervious Pervious Surface Areas

The proposed project will replace and/or create more than 10,000 square feet of impervious area.

Since the Project is in its master planning phase, the programming for the entire site is conceptual. It is assumed on average that 75% of the site (not including the park area) is covered with impervious surfaces (roof, hardscape, asphalt, etc) while the remaining 25% coverage is pervious surfaces (landscaping, pervious pavement, etc).

Site Information	
Total Site Area	710,805 sf
Existing Impervious Area	374,980 sf
Proposed Impervious Area	429,530 sf
Difference	54,550 sf

1.2 Existing Drainage Patterns

The project surface cover is comprised of asphalt concrete (AC), concrete, landscaping, and buildings. The existing topography of the project site slopes from southwest to northeast. Runoff is conveyed as surface flow and collected in various drain inlets throughout the project site. In addition to the existing site's runoff, the existing system also carries the runon from the Sunnydale Watershed which empties at the northeast edge of the site via 60-inch storm main. The 60-inch storm main ultimately outfalls into the Bayshore Channel in a siphon condition as shown per the City's storm block maps in Appendix 2.

There will need to be careful coordination for grading the site and storm water management. The site falls approximately 60 feet from the south west corner at Martin Street and Schwerin Street to the north east corner of the existing park. The project site slopes steepest from Martin Street to Partridge Avenue.

1.3 Proposed Drainage Patterns

The proposed Project drainage is similar to the existing. The proposed surface will be comprised of AC, concrete, landscaping, and buildings. The proposed grade of the project site is similar to the existing topography of the site. There will be a general sloping from the southwest corner to the northeast corner. Runoff is conveyed as surface flow and collected in various drain inlets throughout the project site where it will be treated by LID features before discharge into the local system which will connect to the existing 60-inch main.

It is important to take into account that this is a multi-phase project. There will be four phases to the redevelopment of Midway Village:

1. First Phase: Building A, Building A2
2. Second Phase: Building B and Building B 2

3. Third Phase: Community Center, town homes in Parcel 3, Building D, townhomes in Parcel 5
4. Fourth Phase: Building E, Buildings F, and the for sale units

As the Project progresses, the utilities will be carefully analyzed and reconstructed to suit the needs of each phase.

2.0 DESIGN CRITERIA & ASSUMPTIONS

Calculations included in this report are based on the follow design criteria and assumptions:

1. **Design runoff** for the site are calculated using the Rational Method:

$$Q = CxixA$$

   Where:
   Q=Peak Flow (cfs)
   C=Runoff Coefficient Factor
   i = Design Storm Intensity (in/hr)
   A =Area (acres)

   Assumptions:

   Storm event is based on a 10 year – 2 hour storm which was provided by the City.
   Runoff Coefficient:
   C=0.3 for pervious areas (landscape, etc)
   C=0.9 for impervious areas (sidewalk, roof, street, etc)
   Rainfall Intensity is derived from NOAA Atlas 14, Volume 6, Version 2

2. **Pipe Capacity** for a pipe was determined using Manning's Equation:

$$Q = VA = \left(\frac{1.49}{n}\right) AR^{\frac{2}{3}} \sqrt{S} \quad [\text{U.S.}]$$

   Where:

   Q=Flow Rate (cfs)
   A=Cross Sectional Area of Flow (sf)
   R=Hydraulic Radius (ft)
   S=Slope (ft/ft)
   n=Manning's Roughness Coefficient.

3. It is assumed a manning's roughness coefficient of 0.013 is used for all storm drain lines.

4. Since the project is in its master planning phase, it is assumed that 75% of the proposed site will be impervious and 25% of the site is pervious.

5. **Time of Concentration (Kirpich's Equation)** used is 10 minutes. A 10 minute time-of-concentration is also used where only streets are contributing flow to the inlet. Additional time-of-concentration for sheet flow across hillside and from gutter to the inlet is calculated using Kirpich's equation provided below.

$$T_c = 0.0078\left(\frac{L^{3/2}}{H^{1/2}}\right)^{0.77}$$

Where:
L = the maximum length of travel, in feet.
H = the difference in elevation along the effective slope line, in feet.
Tc = the additional time of concentration from gutter to inlet, in minutes

Note: This is a conservative approach as the time it takes for the stormwater to flow through the treatment measures are not accounted for.

3.0 EXISTING DRAINAGE FACILITIES

Midway Village is located at the downstream end of the Sunnydale Watershed. All site drainage flows into a 60" reinforced concrete pipe (RCP) that outfalls into the Bayshore Channel.

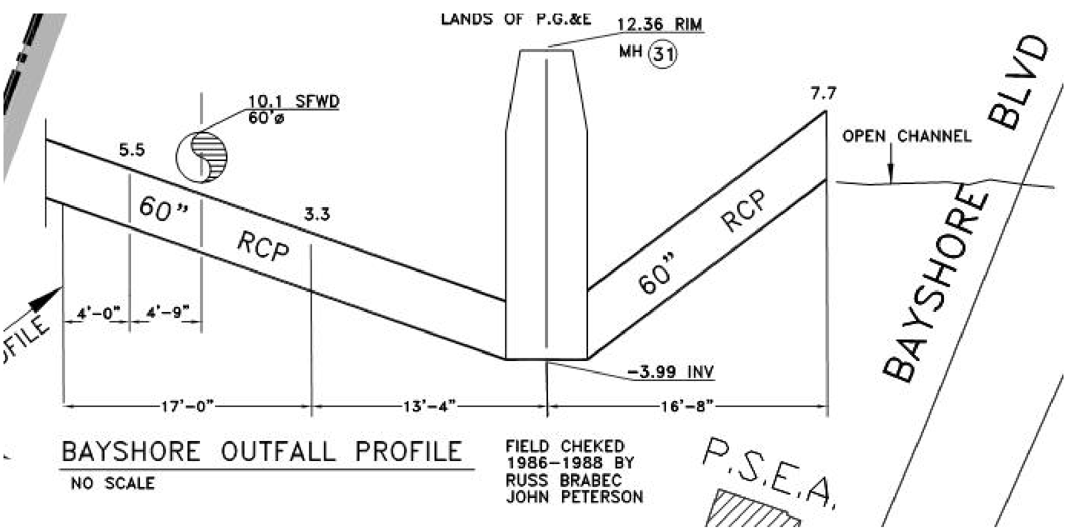


Figure 2 – Existing 60" RCP Profile

4.0 PROPOSED IMPROVEMENTS

The proposed drainage facilities are shown in Appendix 4 Conceptual Utility Plan.

A majority of existing drainage facilities will be removed or abandoned accordingly in conjunction with new improvements.

During Phase 1 of the Project, the 30 inch main in Bayshore Park will be relocated outside of the proposed Building A into Midway Drive. The existing drainage facilities will be removed and abandoned accordingly in preparation for the new building.

The 60-inch storm main in Phase 2 of the Project will be relocated into New Street B. Per the request of the City, the existing 60-inch main under Building B will be slurry filled as part of the abandonment. Segments of the main will be removed accordingly in preparation for the new improvements.

For Phases 3-4, all storm drainage facilities will be removed within the proposed building footprints and reconstructed within the new private streets. Facilities that are not located within the proposed building footprints will be abandoned in place.

5.0 RUN-OFF ANALYSIS

Based on existing conditions, Appendix 5, the existing site is approximately 374,980 sf of impervious surface and 343,350 sf of pervious surface. The Project is conceptually adding 54,550 sf of additional impervious surface. Despite increasing the impervious surfaces, the Project is improving the run off rate by increasing the time of concentration through implementation of flow through planters, bioretention basins, longer pipe runs and other means of low impact development (LID). Based on preliminary calculations shown in Appendix 7, the existing time of concentration is 16.4 minutes while proposed conditions shows a time concentration of 17.4 minutes. As a result, the Project will only create 0.43 cubic feet per second (cfs) of excess run off based on a 10 year – 2 hour storm, see Appendix 7 for calculations.

The City requires that the Project does not increase runoff above the pre-development condition. The Project Team will determine retention methods as each Design Phase develops to mimic pre-development conditions.

6.0 CONCLUSIONS

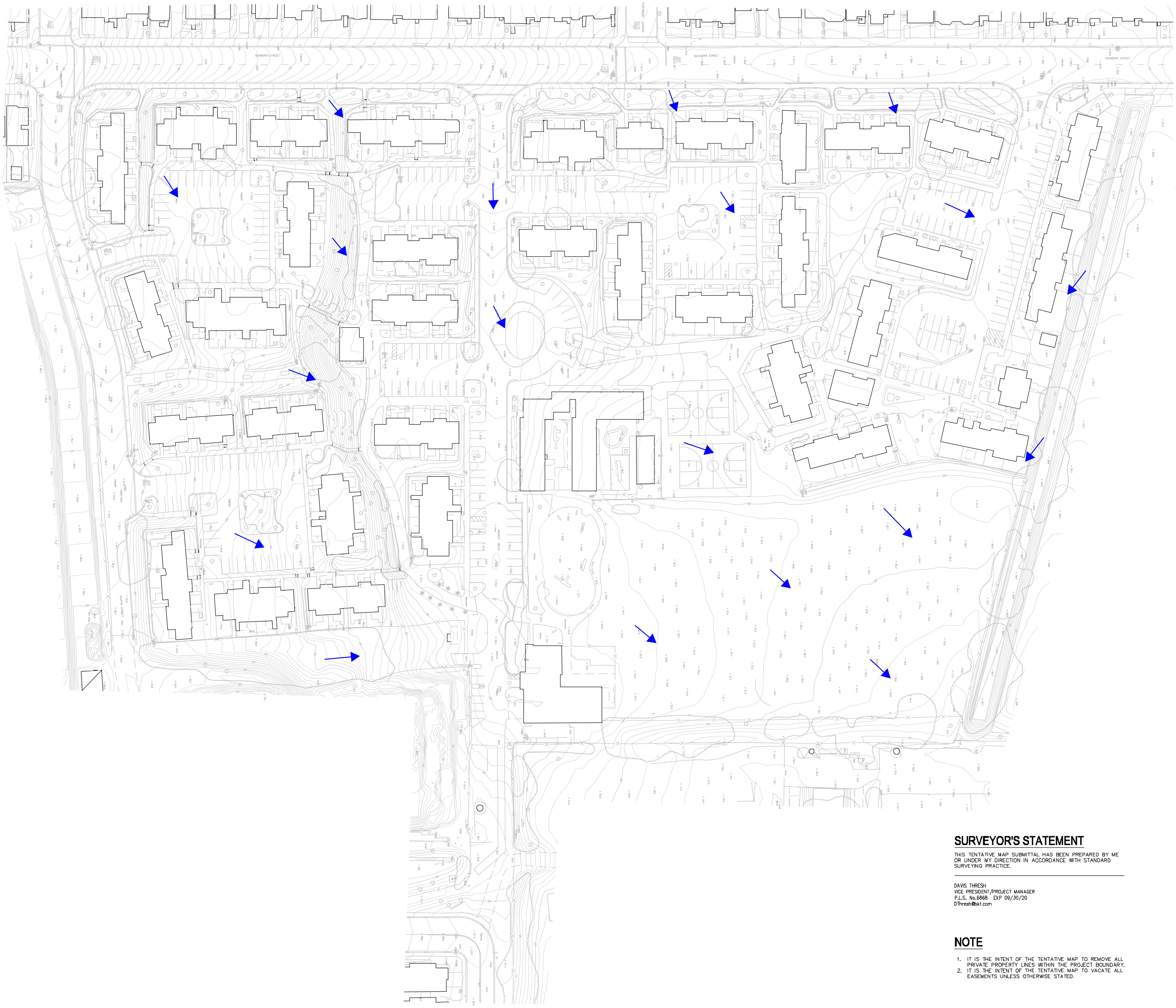
Based on the current Master Plan, the project is anticipated to increase the impervious square footage by 54,550 sf. As the Project Team develops each phase of the design, the impervious surface will be minimized. However, should the runoff exceed predevelopment conditions, the Project Team will evaluate different detention methods and implement such methods on a Phase by Phase basis taking into account future phases as much as possible. It is assumed that the Project will only implement detention methods and not retention methods, because the existing site contains contaminated soils per the geotechnical report. Since the Project is required to not exceed predevelopment runoff conditions, the Project will have negligible impact to the existing 60-inch outfall into Bayshore Channel will have capacity for the new development.

7.0 APPENDICES

Appendix 1	Existing Drainage Conditions Sheet
Appendix 2	Drainage As-Builts
Appendix 3	Project Phasing Map
Appendix 4	Existing Conditions & Conceptual Utility Plan
Appendix 5	Impervious Area Exhibit – Existing & Proposed Conditions
Appendix 6	NOAA Atlas 14, volume 6, Version 2
Appendix 7	Hydrology and Hydraulic Calculations – Existing and Proposed Conditions
Appendix 8	Letter- Storm Runoff to Not Exceed Predevelopment Conditions

APPENDIX 1

Existing Drainage Conditions Sheet



LEGEND

	BUILDING LINE
	BUILDING OVERHANG
	CENTERLINE
	CURB LINE
	EASEMENT LINE
—X—	FENCE LINE
	PROPERTY LINE
—UGE—	UNDERGROUND ELECTRIC LINE
—OHE—	OVERHEAD ELECTRIC LINE
—W—	WATER LINE
—SS—	SANITARY SEWER LINE
—SD—	STORM DRAIN LINE
123.45 DESC	POINT, ELEVATION AND DESCRIPTION
123	CONTOURS (1-FT INTERVALS)
123.45 <SIZE>TYPE	TREE (DIAMETER SIZE IN INCHES)
→	Drainage Pattern

SYMBOLS & ABBREVIATIONS

ACR	ACCESSIBLE CURB RAMP
AD	AREA DRAIN
ANODE	ANODE PULLBOX
BFP	BACK FLOW PREVENTOR
BLDC	BUILDING CORNER
BLDL	BUILDING LINE
BNCH	BENCH
BOL	BOLLARD
BOW	BOTTOM OF WALL
BP	BLUE PAINT MARK
BRICK	BRICK
BS	BOTTOM OF STAIRS
BW	BACK OF WALK
CATV	CABLE TV PULLBOX
CATV-MH	CABLE TV MANHOLE
CB	CATCH BASIN
CEDAR	CEDAR TREE
CLF	CHAINLINK FENCE
COL	COLUMN CENTERLINE
COM-MH	COMMUNICATION MANHOLE
COM-PB	COMMUNICATION PULLBOX
CONC	CONCRETE
DI	DRAIN INLET
DWY	DRIVEWAY
ELEC-MH	ELECTRIC MANHOLE
EP	EDGE OF PAVEMENT
EPB	ELECTRIC PULLBOX
ETW	EDGE OF TRAVELED WAY
FDC	FIRE DEPARTMENT CONNECTION
FF	BUILDING FINISHED FLOOR
FG@DOOR	FINISHED GRADE AT DOOR
FH	FIRE HYDRANT
FL	FLOW LINE
FNC	FENCE
FNCW	WIRE FENCE
G	GROUND
GATE	GATE POLE
GB	GRADE BREAK
GM	GAS METER
GP-SD	GREEN PAINT MARK STORM
GP-SS	GREEN PAINT MARK SEWER
GRATE	GRATE CORNER
GUY	GUY WIRE OR POLE
GV	GAS VALVE
HE	HARDSCAPE ELEC LIGHT
HP	HIGH POINT
H-SYM	ACCESSIBLE SYMBOL
IF	IRON FENCE
IRR	IRRIGATION CONTROL VALVE
JB	JUNCTION BOX
JP	JOINT POLE
LINE	MISCELLANEOUS LINE
LIP	LIP OF GUTTER
L/S	LANDSCAPE
MISC-CO	MISCELLANEOUS CLEANOUT
MISC-MH	MISCELLANEOUS MANHOLE
MISC-PB	MISCELLANEOUS PULLBOX
MISC-SD	MISCELLANEOUS STORM
MISC-V	MISCELLANEOUS VALVE
MISC-VLT	MISCELLANEOUS VAULT
MLBX	MAILBOX
OH	OVERHANG
OHE	OVERHEAD ELECTRIC
OP	ORANGE PAINT MARK
P	PAVEMENT
PAV	PAVERS
PED	PEDESTAL
PIV	POST INDICATOR VALVE
PM	PARKING METER
PNL	ELEC PANEL ON TO WALL
PP	POWER POLE
PP-PNK	PINK PAINT MARK
PP-PUR	PURPLE PAINT MARK
RAIL	RAILING HAND OR GUARD
RP	RED PAINT MARK
SDCO	STORM DRAIN CLEANOUT
SDMH	STORM DRAIN MANHOLE
SIGN	SIGNS
SPV	SPRINKLER VALVE
SSCO	SANITARY CLEANOUT
SSMH	SANITARY MANHOLE
STL	STREET LIGHT LAMP NO ARM
STL-D	STREET LIGHT DOUBLE ARM
STL-S	STREET LIGHT SINGLE ARM
STPB	STREET LIGHT PULLBOX
STRIPE	STRIPING
SW	SIDEWALK
TC	TOP OF CURB
TD	TRENCH DRAIN
TH	THRESHOLD
TOB	CURB TOP OF AC BERM
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE
TOW	TOP OF WALL
TRANS	TRANSFORMER
TREE	TREE SYMBOL
TS	TOP OF STAIRS
VGUT	FLOWLINE VALLEYGUTTER
VLT	ELEC VAULT
WF	WOOD FENCE
WM	WATER METER
WP	WHITE PAINT MARK
WPB	WATER PULLBOX
WV	WATER VALVE
YP	YELLOW PAINT MARK

SURVEYOR'S STATEMENT

THIS TENTATIVE MAP SUBMITTAL HAS BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD SURVEYING PRACTICE.

DAVIS THRESH
VICE PRESIDENT/PROJECT MANAGER
P.L.S. No.6868 EXP 09/30/20
DThresh@bkf.com

NOTE

1. IT IS THE INTENT OF THE TENTATIVE MAP TO REMOVE ALL PRIVATE PROPERTY LINES WITHIN THE PROJECT BOUNDARY.
2. IT IS THE INTENT OF THE TENTATIVE MAP TO VACATE ALL EASEMENTS UNLESS OTHERWISE STATED.

NORTH

GRAPHIC SCALE: 1" = 40' (True for 30x40)

30 0 30 60

1730 N. FIRST STREET
SUITE 600
SAN JOSE, CA 95112
408-467-9100
408-467-9199 (FAX)

BKF 100+ YEARS
ENGINEERS. SURVEYORS. PLANNERS

MIDWAY – BAYSHORE
EXISTING CONDITIONS PLAN

DALY CITY SAN MATEO COUNTY CALIFORNIA

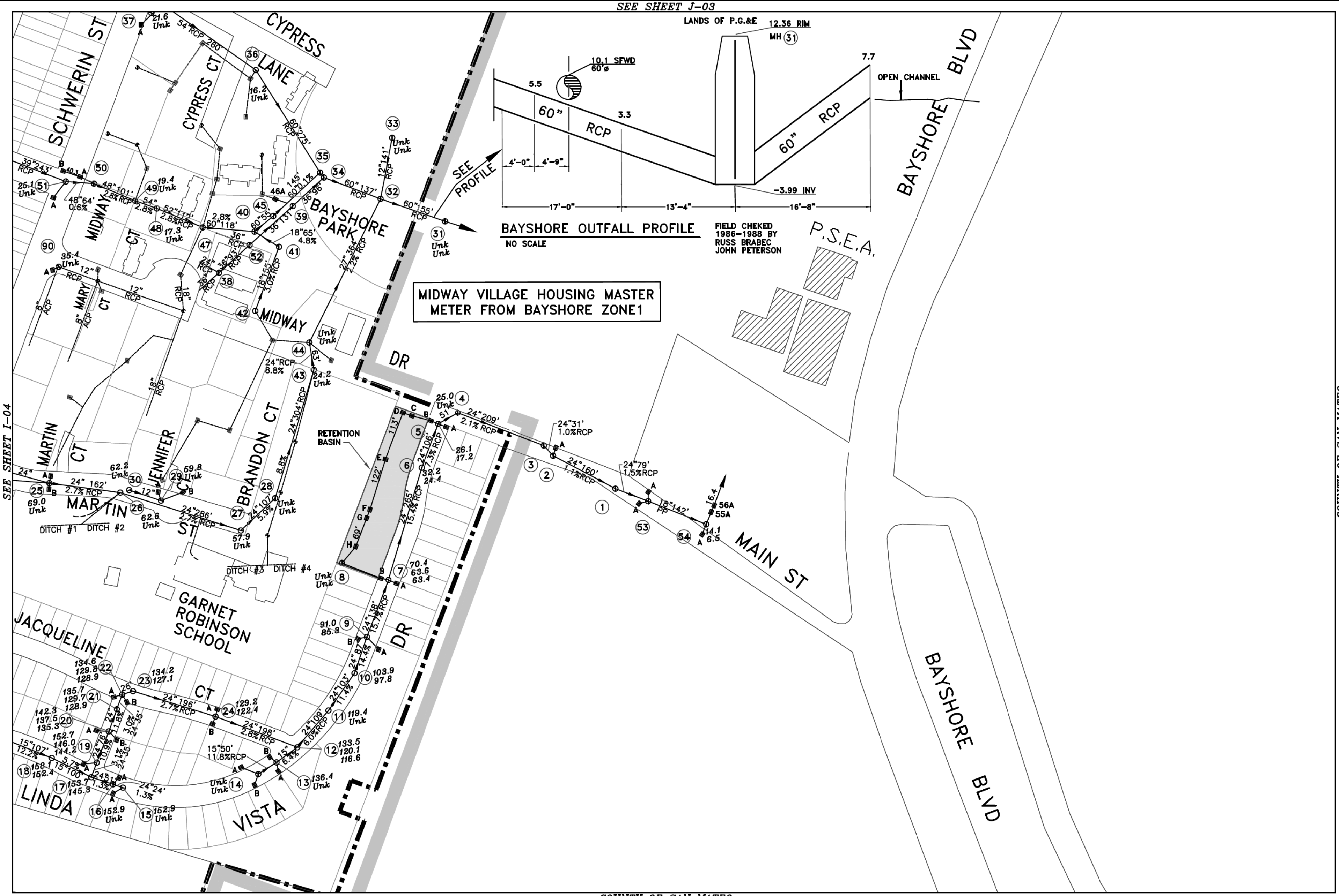
Date:	No.	Revisions
Scale: NONE		
Design:		
Drawn:		
Approved:		
Job No: 20181024		

Drawing Number:
EX1
1 OF 1

APPENDIX 2

Drainage As-Builts

SEE SHEET J-03



SEE SHEET I-04

COUNTY OF SAN MATEO

COUNTY OF SAN MATEO

Revisor: rita kotlyar
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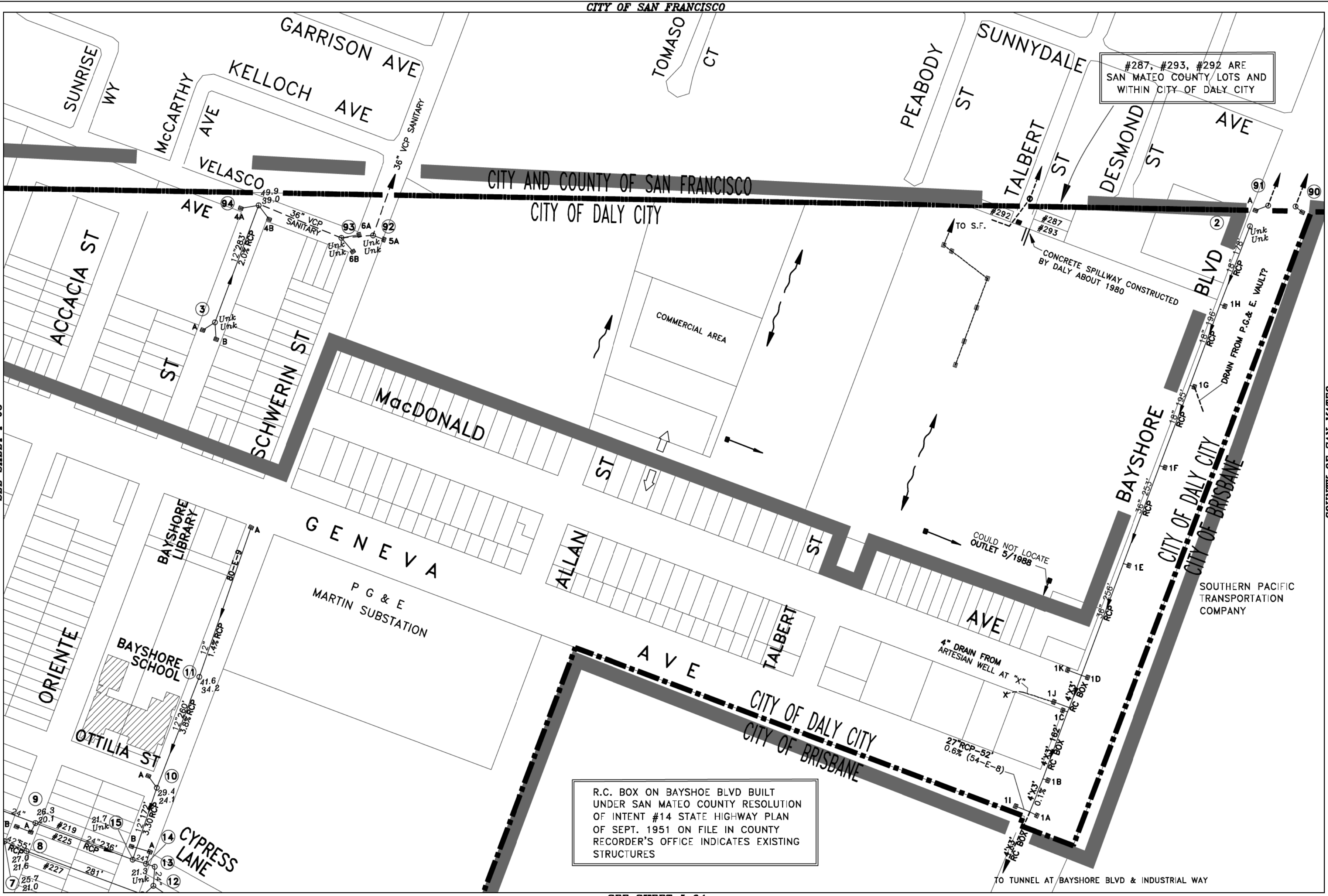
Date: 4/17/2014

NOTE: FOR LEGEND SEE GRID INDEX MAP	SCALE: 1"=200'	DALY CITY STORM DRAIN SYSTEM	FEB. 2000	REVISED APRIL 2014	J-04

CITY OF SAN FRANCISCO



COUNTY OF SAN MATEO

SEE SHEET I-03

SEE SHEET J-04

Reviser: bella vargaft
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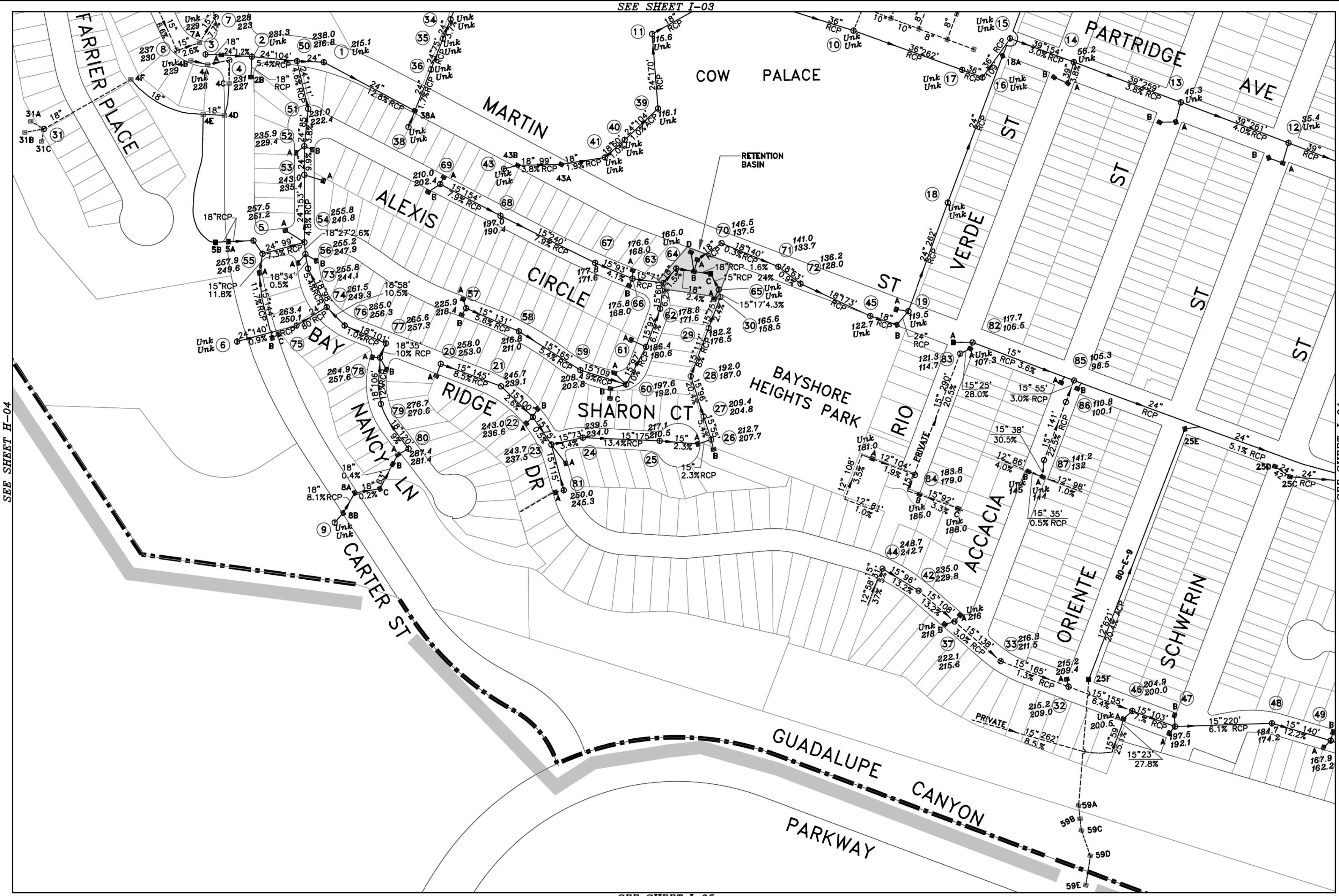

Revisor: rita kotlyar
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Xrefs: CILIMITS, SDMASTER, BMSHARED, DCBASE, BORDER

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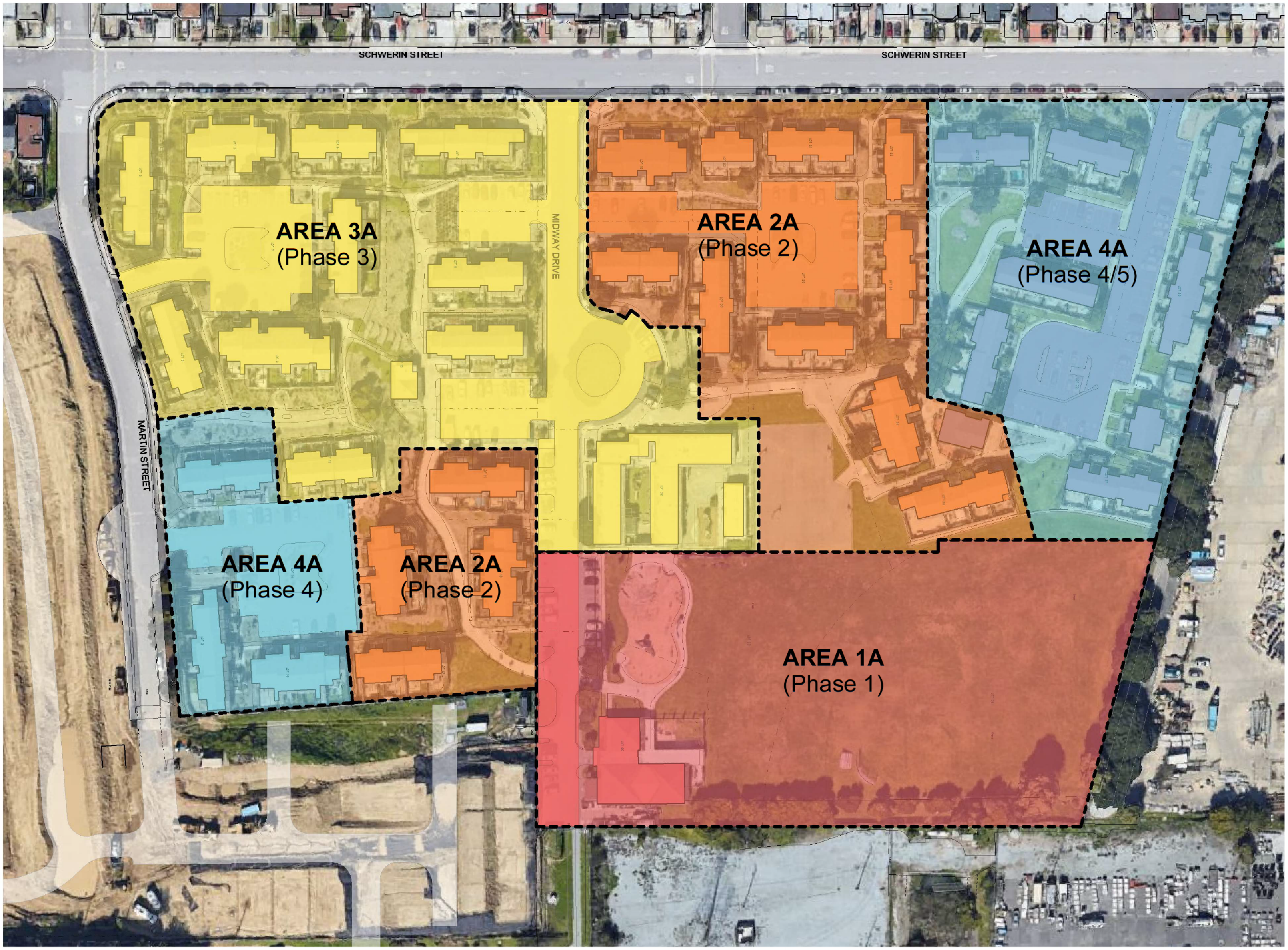
Date: 4/17/2014

NOTE: FOR LEGEND SEE GRID INDEX MAP	SCALE: 1"=200'	DALY CITY STORM DRAIN SYSTEM	FEB. 2000	REVISED APRIL 2014	I-04

APPENDIX 3

Project Phasing Map



DEMOLITION

Non-Res.	Unit Count	Demo Phase
Prop Mgmt		Phase 1
	60	Phase 2
	46	Phase 3
	14	Phase 4
	30	Phase 5
	150	

- Demo Phase 1
- Demo Phase 2
- Demo Phase 3
- Demo Phase 4
- Demo Phase 5

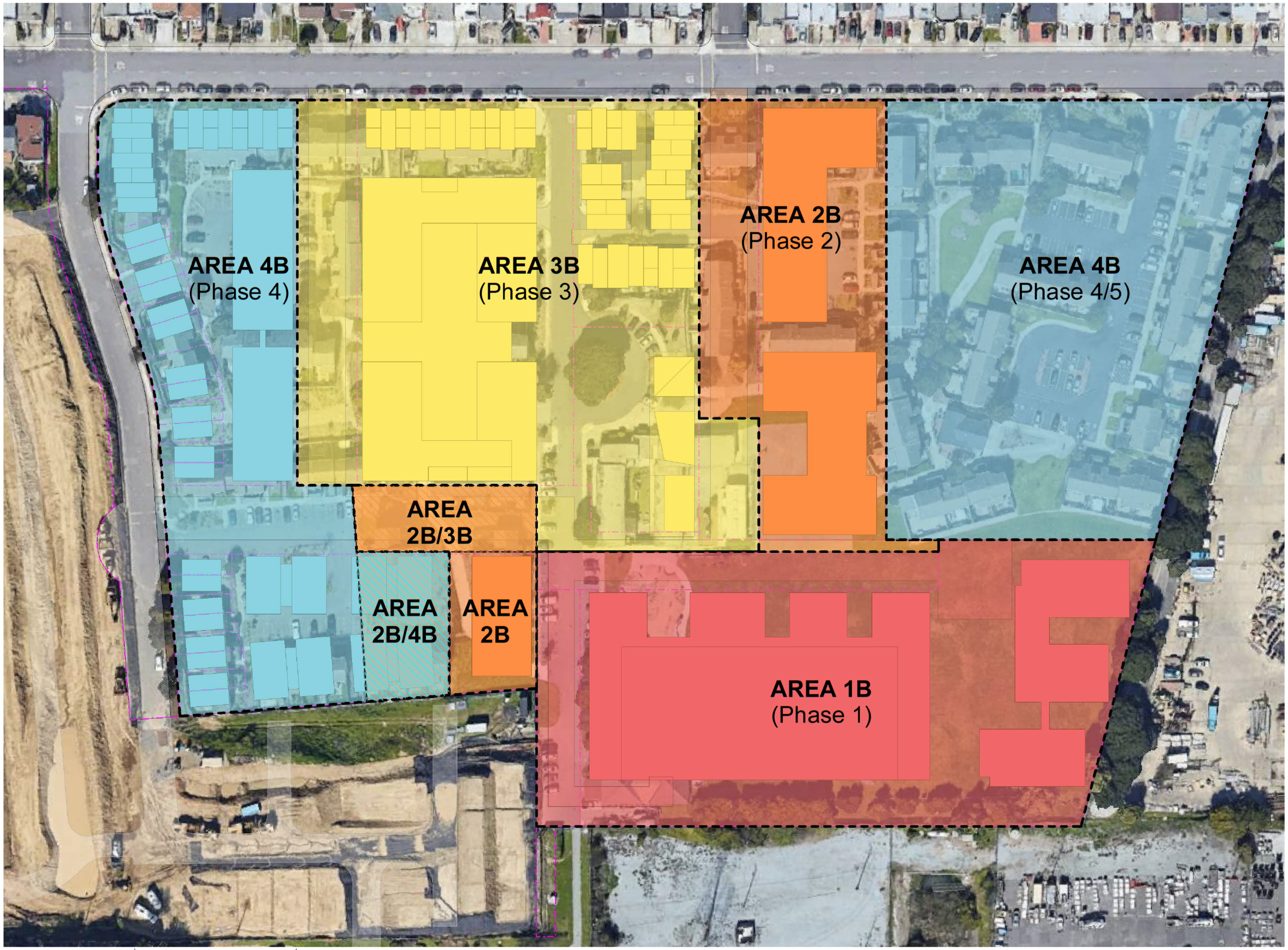
david baker architects | MidPen HOUSING

PHASING - DEMOLITION -HRA MAP

Midway Village Redevelopment

project number: 21803
scale when printed 22 x 34: 1" = 50'-0"
date: 11.25.2019

SK10



NEW CONSTRUCTION

- New Construction Phase 1
- New Construction Phase 2
- New Construction Phase 3
- New Construction Phase 4
- Park Returned to City

Residential Units Total	
Construction Phase	Unit Count
Phase 1	147
Phase 2	128
Phase 3	140
Phase 4	140
Grand total	555

david baker architects

MidPen HOUSING

PHASING - NEW CONSTRUCTION - HRA MAP

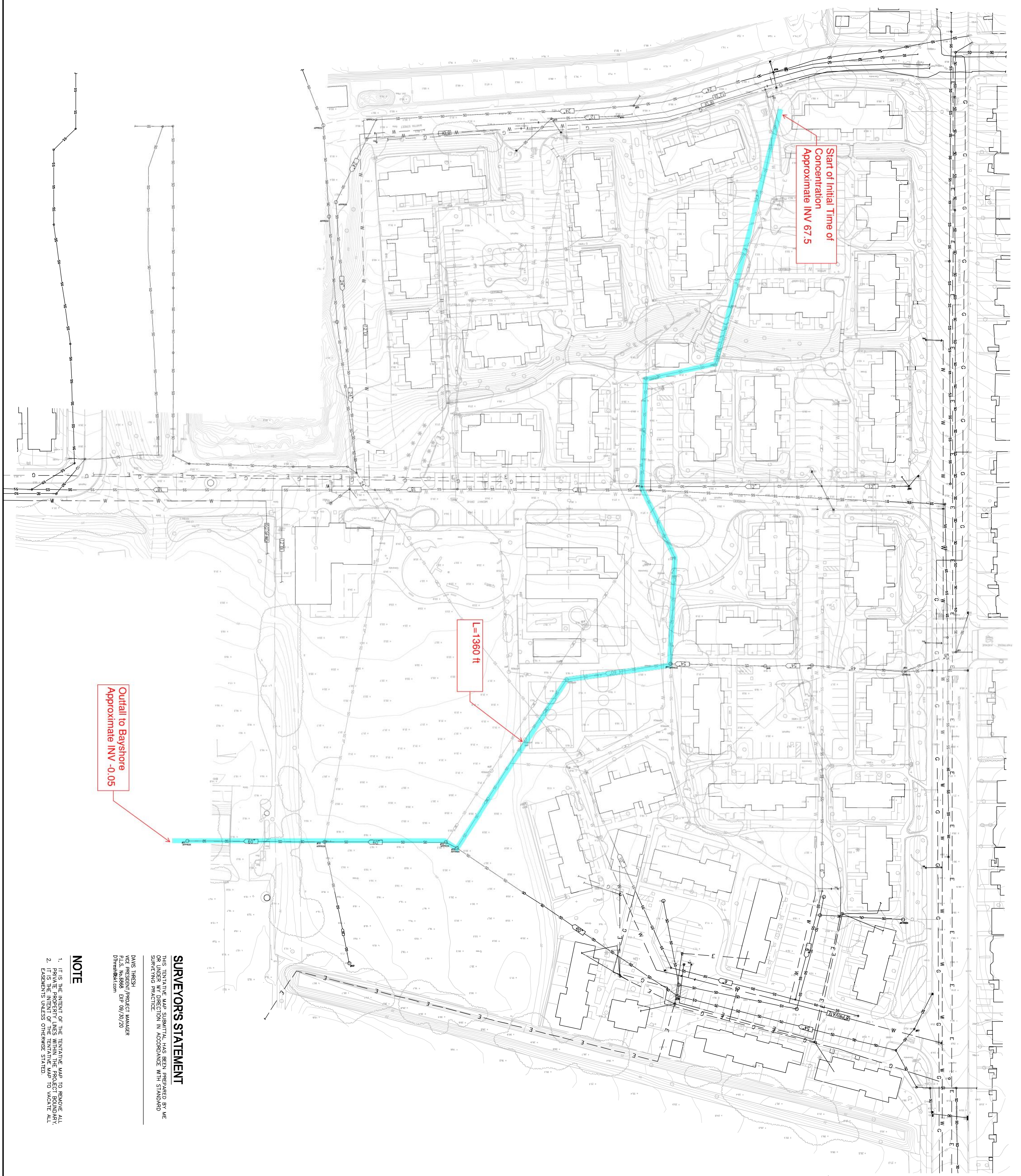
Midway Village Redevelopment

project number: 21803
scale when printed 22 x 34: 1" = 50'-0"
date: 11.25.2019

SK11

APPENDIX 4

Existing Conditions & Conceptual Utility Plan



SURVEYOR'S STATEMENT

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DAVIS THRESH
VICE PRESIDENT/PROJECT MANAGER
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LEGEND

BUILDING LINE
BUILDING OVERHANG
CENTERLINE
CURB LINE
EASEMENT LINE
FENCE LINE
PROPERTY LINE
UNDERGROUND ELECTRIC LINE
OVERHEAD ELECTRIC LINE
WATER LINE
SANITARY SEWER LINE
STORM DRAIN LINE

POINT, ELEVATION AND DESCRIPTION
CONTOURS (1-FT INTERVALS)
TREE (DIAMETER SIZE IN INCHES)

SYMBOLS & ABBREVIATIONS

ACCESSIBLE CURB RAMP
AREA DRAIN
ANODE PULLBOX
BACK FLOW PREVENTOR
BUILDING CORNER
BUILDING LINE
BENCH
BOLLARD
BOTTOM OF WALL
BLUE PAINT MARK
BRICK
BOTTOM OF STAIRS
BACK OF WALK
CABLE TV PULLBOX
CABLE TV MANHOLE
CATCH BASIN
CEDAR TREE
CHAINLINK FENCE
COLUMN CENTERLINE
COMMUNICATION MANHOLE
COMMUNICATION PULLBOX
CONCRETE
DRAIN INLET
DRIVEWAY
ELECTRIC MANHOLE
EDGE OF PAVEMENT
ELECTRIC PULLBOX
EDGE OF TRAVELED WAY
FIRE DEPARTMENT CONNECTION
BUILDING FINISHED FLOOR
FINISHED GRADE AT DOOR
FIRE HYDRANT
FLOW LINE
FENCE
WIRE FENCE
GROUND
GATE POLE
GRADE BREAK
GAS METER
GREEN PAINT MARK SEWER
GREEN PAINT MARK STORM
GRATE CORNER
GUY WIRE OR POLE
GAS VALVE
HARDSCAPE ELEC LIGHT
HIGH POINT
ACCESSIBLE SYMBOL
IRON FENCE
IRRIGATION CONTROL VALVE
JUNCTION BOX
JOINT POLE
MISCELLANEOUS LINE
LIP OF GUTTER
LANDSCAPE
MISCELLANEOUS CLEANOUT
MISCELLANEOUS MANHOLE
MISCELLANEOUS PULLBOX
MISCELLANEOUS STORM
MISCELLANEOUS VALVE
MISCELLANEOUS VAULT
MAILBOX
OVERHANG
OVERHEAD ELECTRIC
ORANGE PAINT MARK
PAVEMENT
PAVERS
PEDESTAL
POST INDICATOR VALVE
PARKING METER
ELEC PANEL ON TO WALL
POWER POLE
PINK PAINT MARK
PURPLE PAINT MARK
RAILING HAND OR GUARD
RED PAINT MARK
STORM DRAIN CLEANOUT
STORM DRAIN MANHOLE
SIGNS
SPRINKLER VALVE
SANITARY CLEANOUT
SANITARY MANHOLE
STREET LIGHT LAMP NO ARM
STREET LIGHT DOUBLE ARM
STREET LIGHT SINGLE ARM
STREET LIGHT PULLBOX
STRIPING
SIDEWALK
TOP OF CURB
TRENCH DRAIN
THRESHOLD
CURB TOP OF AC BERM
TOE OF SLOPE
TOP OF SLOPE
TOP OF WALL
TRANSFORMER
TREE SYMBOL
TOP OF STAIRS
FLOWLINE VALLEYGUTTER
ELEC VAULT
WOOD FENCE
WHITE PAINT MARK
WATER METER
WATER PULLBOX
WATER VALVE
YELLOW PAINT MARK

GRAPHIC SCALE: 1" = 40' (True for 30x40)
0 30 60

NORTH

Date: 09/04/19	No. / Revisions
Scale: NONE	XX/XX/XX City Submittal #XX
Design: LP	
Drawn: LP	
Approved: CFG	
Job No: 20181024	

Drawing Number: C2.0
2 OF 6

TENTATIVE TRACT MAP NO. XXXX
MIDWAY - BAYSHORE
EXISTING CONDITIONS PLAN

DALY CITY SAN MATEO COUNTY CALIFORNIA

BKF 100+ YEARS
ENGINEERS. SURVEYORS. PLANNERS
1730 N. FIRST STREET
SUITE 600
SAN JOSE, CA 95112
408-467-9100
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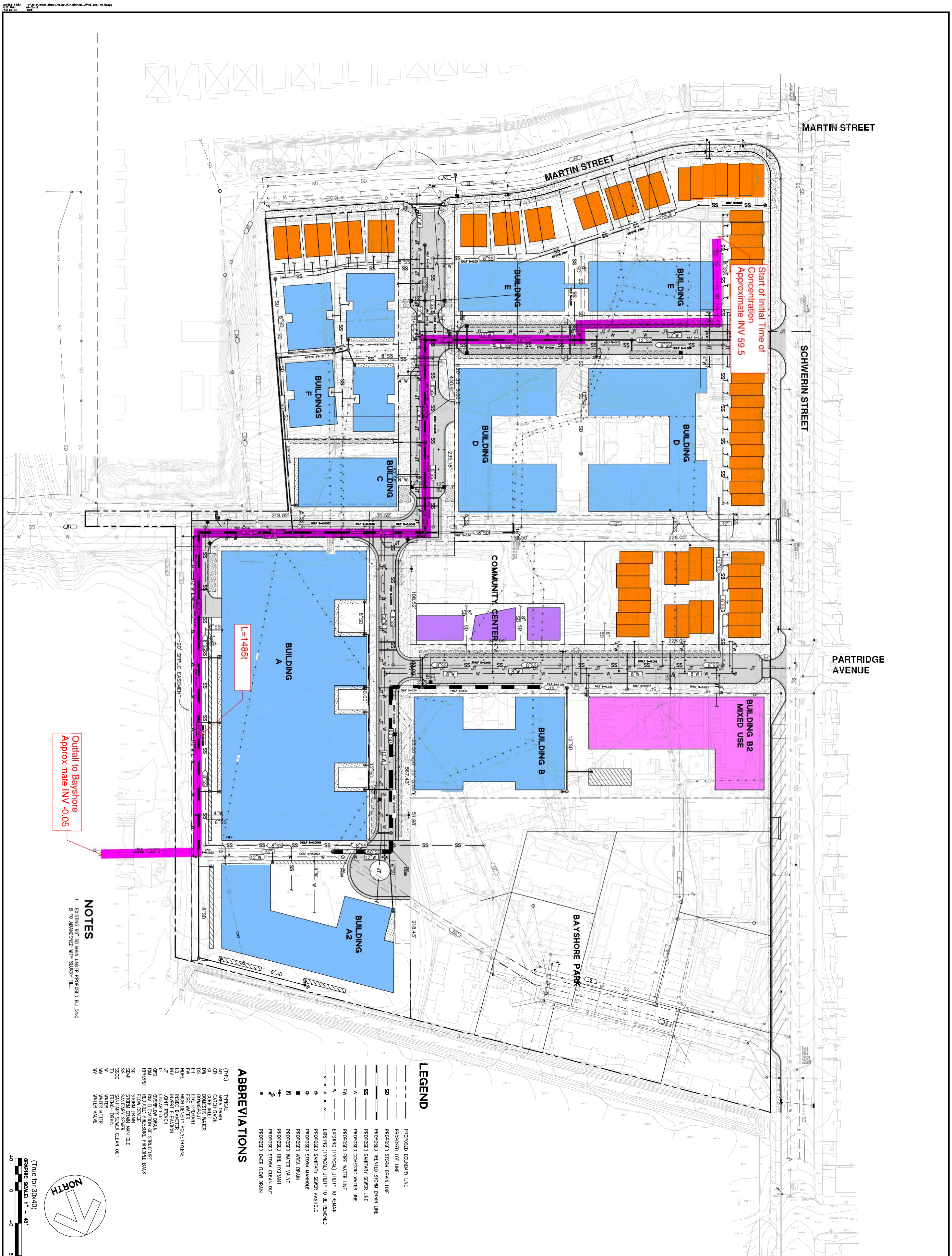

Date: 09/04/19	No. Revisions
Scale: NONE	XX/XX/XX City Submittal #XX
Design: LP	
Drawn: LP	
Approved: CFG	
Job No: 20181024	

Drawing Number: TM4.0
4 of 6

TENTATIVE TRACT MAP NO. XXXX
MIDWAY - BAYSHORE
CONCEPTUAL UTILITY PLAN

DALY CITY — SAN MATEO COUNTY — CALIFORNIA

BKF 100+ YEARS
ENGINEERS . SURVEYORS . PLANNERS
1730 N. FIRST STREET
SUITE 600
SAN JOSE, CA 95112
408-467-9100
408-467-9199 (FAX)

APPENDIX 5

Impervious Area Exhibit – Existing Conditions

TOTAL AREA 710,805 SF
ROOF - 102,780 SF
PAVEMENT - 125,350 SF
CONCRETE WALK - 146,850 SF
PERVIOUS 335,825 SF

LEGEND

BUILDING LINE
BUILDING OVERHANG
CENTERLINE
CURB LINE
EASEMENT LINE
FENCE LINE
PROPERTY LINE
UNDERGROUND ELECTRIC LINE
OVERHEAD ELECTRIC LINE
WATER LINE
SANITARY SEWER LINE
STORM DRAIN LINE

POINT ELEVATION AND DESCRIPTION
CONTOURS (1-FT INTERVALS)
TREE (DIAMETER SIZE IN INCHES)

SYMBOLS & ABBREVIATIONS

NORTH

GRAPHIC SCALE: 1" = 30' (True for 30x40)

0 30 60

Date: 09/04/19	
Scale: NONE	
Design: LP	
Drawn: LP	
Approved: CFG	
Job No: 20181024	

No.	Revisions
	XX/XX/XX City Submittal #XX

TENTATIVE TRACT MAP NO. XXXX
MIDWAY - BAYSHORE
EXISTING CONDITIONS PLAN

DALY CITY SAN MATEO COUNTY CALIFORNIA

BKF 100+ YEARS
ENGINEERS. SURVEYORS. PLANNERS
1730 N. FIRST STREET
SUITE 600
SAN JOSE, CA 95112
408-467-9100
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Drawing Number
C2.0
2 OF 6

APPENDIX 6

NOAA Atlas 14, Volume 6, Version 2

NOAA Atlas 14, Volume 6, Version 2
Location name: Daly City, California, USA*
Latitude: 37.701°, Longitude: -122.4133°
Elevation: 54.45 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)[1]

Duration	Average recurrence interval (years)									
	1	**2**	**5**	**10**	**25**	**50**	**100**	**200**	**500**	**1000**
5-min	**1.68** (1.50-1.91)	**2.03** (1.81-2.30)	**2.51** (2.22-2.86)	**2.90** (2.56-3.35)	**3.47** (2.93-4.16)	**3.92** (3.23-4.82)	**4.39** (3.50-5.57)	**4.90** (3.77-6.42)	**5.60** (4.10-7.73)	**6.18** (4.34-8.87)
10-min	**1.21** (1.07-1.37)	**1.46** (1.30-1.65)	**1.80** (1.60-2.05)	**2.08** (1.83-2.40)	**2.49** (2.10-2.98)	**2.81** (2.31-3.46)	**3.15** (2.51-3.99)	**3.51** (2.71-4.60)	**4.01** (2.94-5.54)	**4.43** (3.11-6.36)
15-min	**0.972** (0.868-1.10)	**1.18** (1.04-1.33)	**1.45** (1.28-1.65)	**1.68** (1.48-1.93)	**2.01** (1.69-2.40)	**2.27** (1.86-2.79)	**2.54** (2.02-3.22)	**2.83** (2.18-3.71)	**3.24** (2.37-4.46)	**3.57** (2.51-5.13)
30-min	**0.668** (0.596-0.758)	**0.808** (0.720-0.916)	**0.998** (0.884-1.14)	**1.16** (1.02-1.33)	**1.38** (1.16-1.66)	**1.56** (1.28-1.92)	**1.75** (1.39-2.21)	**1.95** (1.50-2.55)	**2.23** (1.63-3.07)	**2.46** (1.73-3.53)
60-min	**0.472** (0.421-0.535)	**0.570** (0.508-0.647)	**0.704** (0.625-0.801)	**0.816** (0.717-0.939)	**0.975** (0.822-1.17)	**1.10** (0.904-1.35)	**1.23** (0.983-1.56)	**1.38** (1.06-1.80)	**1.57** (1.15-2.17)	**1.73** (1.22-2.49)
2-hr	**0.343** (0.306-0.388)	**0.412** (0.366-0.467)	**0.504** (0.448-0.574)	**0.582** (0.511-0.669)	**0.690** (0.582-0.827)	**0.776** (0.637-0.954)	**0.865** (0.690-1.10)	**0.960** (0.740-1.26)	**1.09** (0.800-1.51)	**1.20** (0.842-1.72)
3-hr	**0.284** (0.254-0.322)	**0.341** (0.304-0.387)	**0.418** (0.371-0.476)	**0.482** (0.424-0.554)	**0.571** (0.482-0.685)	**0.642** (0.527-0.790)	**0.716** (0.570-0.907)	**0.793** (0.611-1.04)	**0.901** (0.660-1.24)	**0.988** (0.694-1.42)
6-hr	**0.199** (0.177-0.225)	**0.240** (0.214-0.273)	**0.296** (0.263-0.337)	**0.343** (0.301-0.394)	**0.408** (0.344-0.488)	**0.459** (0.377-0.564)	**0.512** (0.408-0.648)	**0.567** (0.437-0.744)	**0.645** (0.472-0.889)	**0.707** (0.497-1.02)
12-hr	**0.127** (0.114-0.144)	**0.158** (0.141-0.179)	**0.199** (0.177-0.227)	**0.233** (0.205-0.269)	**0.281** (0.237-0.337)	**0.319** (0.262-0.392)	**0.358** (0.285-0.454)	**0.399** (0.308-0.524)	**0.457** (0.335-0.630)	**0.503** (0.353-0.722)
24-hr	**0.083** (0.074-0.093)	**0.105** (0.094-0.119)	**0.135** (0.121-0.153)	**0.159** (0.142-0.182)	**0.194** (0.168-0.229)	**0.221** (0.187-0.266)	**0.249** (0.207-0.307)	**0.279** (0.225-0.353)	**0.321** (0.249-0.422)	**0.354** (0.266-0.481)
2-day	**0.053** (0.047-0.060)	**0.066** (0.060-0.075)	**0.084** (0.076-0.096)	**0.100** (0.089-0.114)	**0.120** (0.104-0.142)	**0.137** (0.116-0.165)	**0.154** (0.127-0.189)	**0.171** (0.138-0.217)	**0.196** (0.152-0.257)	**0.215** (0.162-0.292)
3-day	**0.040** (0.036-0.045)	**0.050** (0.045-0.057)	**0.063** (0.057-0.072)	**0.074** (0.066-0.085)	**0.089** (0.077-0.106)	**0.101** (0.086-0.122)	**0.113** (0.094-0.140)	**0.126** (0.102-0.159)	**0.144** (0.111-0.189)	**0.157** (0.118-0.214)
4-day	**0.033** (0.030-0.038)	**0.042** (0.037-0.047)	**0.052** (0.047-0.060)	**0.061** (0.055-0.070)	**0.074** (0.064-0.087)	**0.083** (0.071-0.100)	**0.093** (0.077-0.114)	**0.103** (0.083-0.130)	**0.117** (0.091-0.154)	**0.128** (0.096-0.174)
7-day	**0.024** (0.022-0.027)	**0.030** (0.027-0.034)	**0.038** (0.034-0.043)	**0.044** (0.039-0.050)	**0.052** (0.045-0.062)	**0.059** (0.050-0.071)	**0.065** (0.054-0.081)	**0.072** (0.058-0.091)	**0.081** (0.063-0.107)	**0.089** (0.067-0.120)
10-day	**0.019** (0.017-0.021)	**0.024** (0.021-0.027)	**0.030** (0.027-0.034)	**0.035** (0.031-0.040)	**0.041** (0.036-0.049)	**0.046** (0.039-0.056)	**0.051** (0.043-0.063)	**0.056** (0.046-0.071)	**0.063** (0.049-0.083)	**0.069** (0.052-0.093)
20-day	**0.012** (0.011-0.014)	**0.016** (0.014-0.018)	**0.020** (0.018-0.022)	**0.023** (0.020-0.026)	**0.027** (0.023-0.032)	**0.030** (0.025-0.036)	**0.033** (0.027-0.041)	**0.036** (0.029-0.046)	**0.040** (0.031-0.052)	**0.043** (0.032-0.058)
30-day	**0.010** (0.009-0.011)	**0.013** (0.011-0.014)	**0.016** (0.014-0.018)	**0.019** (0.017-0.021)	**0.022** (0.019-0.026)	**0.024** (0.020-0.029)	**0.026** (0.022-0.032)	**0.029** (0.023-0.036)	**0.031** (0.024-0.041)	**0.033** (0.025-0.045)
45-day	**0.008** (0.007-0.009)	**0.010** (0.009-0.012)	**0.013** (0.012-0.015)	**0.015** (0.013-0.017)	**0.018** (0.015-0.021)	**0.019** (0.016-0.023)	**0.021** (0.017-0.026)	**0.023** (0.018-0.029)	**0.025** (0.019-0.032)	**0.026** (0.020-0.036)
60-day	**0.007** (0.007-0.008)	**0.009** (0.008-0.011)	**0.012** (0.011-0.013)	**0.013** (0.012-0.015)	**0.016** (0.014-0.018)	**0.017** (0.015-0.021)	**0.019** (0.015-0.023)	**0.020** (0.016-0.025)	**0.021** (0.017-0.028)	**0.023** (0.017-0.031)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical

APPENDIX 7

Hydrology and Hydraulic Calculations – Existing and Proposed Conditions

BKF ENGINEERS
1730 N. First Street, Suite 600
San Jose, CA 95112

ENGINEERS . SURVEYORS . PLANNERS

Appendix 7

TABLE 1
HYDROLOGY AND HYDRAULICS CALCULATIONS

Design Runoff - Rational Method

Existing Conditions - Time of Concentration = 16.4 minutes

Surface	Coeff.	Area (sf_1)	C*A (sf)
Existed Building Roof	0.90	102,780	92,502
Sidewalk and Other Hardscape	0.90	146,850	132,165
Uncovered Parking	0.90	125,350	112,815
Landscape Area	0.30	335,825	100,748
	0.62	***710,805***	***438,230***
		C*A (acres) =	**10.06**
		I (in/hr) =	**0.58**
		Q_{Design} (cfs_2)= C*I*A =	**5.84**

Proposed Conditions - Time of Concentration = 17.4 minutes

Surface	Coeff.	Area (sf)	C*A (sf)
Proposed Building Roof	0.90	236,655	212,990
Sidewalk	0.90	192,875	173,588
Uncovered Parking	0.90	0	0
Landscape Area	0.30	281,275	84,383
	0.66	***710,805***	***470,960***
		C*A (acres) =	**10.81**
		I (in/hr)=	**0.58**
		Q_{Design}(cfs)= C*I*A =	**6.27**

Time of Concentration - Kirpich's Equation

Existing Conditions

Tc	**6.4**	minutes
L	1360	feet
H	67.55	feet

Time of Concentration for site is 6.4 minutes for existing conditions
Time of Concentration will be a total of 16.4 minutes including the initial 10 minutes.

Proposed Conditions

Tc	**7.4**	minutes
L	1485	feet
H	59.55	feet

Time of Concentration for site is 7.4 minutes for proposed conditions
Time of Concentration will be a total of 17.4 minutes including the initial 10 minutes.

APPENDIX 8

Letter - Storm Runoff to Not Exceed Predevelopment Conditions

1730 North First Street, Suite 600
San Jose, CA 95112
408/467-9100, Fax 408/467-9199

TECHNICAL MEMORANDUM

Date: January 9, 2020 **BKF Job Number:** 20181024-10

Deliver To: City of Daly City
ATTN: Roland Yip
333 90th Street
Daily City, CA 94015

From: Lily Peng, BKF Engineers
Subject: Midway Village Redevelopment, Daily City, CA
Storm Runoff to Not Exceed Predevelopment Conditions

To whom it may concern,

The Midway Village Redevelopment (Project) will not increase the storm runoff from predevelopment conditions. Project will analyze the overall project as a whole to determine the amount of storm runoff to detain. As the Project develops each phase, the storm water management will be carefully designed to consider the overall project storm runoff.

Respectfully yours,

BKF Engineers

Lily Peng, P.E, QSD/P

Senior Project Engineer

APPENDIX D

Air Quality Modeling and Health Risk Assessment Memorandum

Stantec

Midway Village Project

Criteria Air Pollutant Estimates and Health Risk Assessment

March 24, 2020

Prepared for:

City of Daly City
333 90th Street
Daly City, California 94015

Prepared by:

Stantec Consulting Services Inc.
1340 Treat Boulevard, Suite 300
Walnut Creek, California 94597

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LIST OF APPENDICES

Abbreviations

$\mu g/m^3$	micrograms per liter
BAAQMD	Bay Area Air Quality Management District
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CalEEMod	California Emissions Estimator Model
CO_2	carbon dioxide
DPM	diesel particulate matter
HEPA	high-efficiency particulate air
HI	Hazard Index
HRA	Health Risk Assessment
HVAC	heating/vacuum/air conditioning
ITE	Institute of Transportation Engineers
L/kg day	liters per kilogram body weight
MERV	minimum efficiency reporting value
MIR	Maximum Impacted Sensitive Receptor
MM	Mitigation Measure
NO_X	oxides of nitrogen
OEHHA	Office of Environmental Health Hazard Assessment
$PM_{2.5}$	particulate matter 2.5 microns or less aerodynamic diameter
PM_{10}	particulate matter 10 microns or less aerodynamic diameter
project	Midway Village Redevelopment Project
REL	Reference Exposure Level
ROG	reactive organic gases
USEPA	U.S. Environmental Protection Agency

March 24, 2020

1.0 INTRODUCTION

This Air Quality Memorandum evaluates the criteria pollutant emission estimates associated with construction and operations of the proposed Midway Village Redevelopment Project (proposed project or project) in the City of Daly City, California. This Air Quality Memorandum also includes a Health Risk Assessment (HRA) that was prepared evaluating potential air quality impacts for construction of the proposed project.

The analysis was prepared in conformance with appropriate standards, using procedures and methodologies in the Bay Area Air Quality Management District (BAAQMD) and California Environmental Quality Act (CEQA) Air Quality Guidelines. Where applicable, guidelines and methodologies from the California Air Resources Board (CARB), California Office of Environmental Health Hazard Assessment (OEHHA), and the U.S. Environmental Protection Agency (USEPA) were followed.

1.1 PROJECT DESCRIPTION

The Midway Village area is being proposed for redevelopment as part of the proposed project. Currently, the Midway Village area contains 150 residential units, 223 parking spaces, a child-care facility, open space, an existing street system, and office space for the San Mateo County Housing Authority. Additionally, an existing park, David R. Rowe/Bayshore Park, is currently located directly north and east of the Midway Village area.

The proposed project would involve redevelopment of this site and would include mixed-use development consisting of 555 residential units, 746 parking spaces, a child-care facility, a community center, office space for property management and other ancillary services, a revised street system, and recreation facilities. Additionally, David R. Rowe/Bayshore Park would be relocated and redeveloped as part of the proposed project. Other ancillary improvements as part of the proposed project would include landscaping, water and wastewater line improvements, and pedestrian walkways.

The project location and 1,000-foot border from the project boundary are shown in Figure 1.

Figure 1: Project Location and 1,000-Foot Border from Project Boundary

1.1.1 Project Representation

The proposed project as it was represented to estimate construction-related air pollutant emissions is summarized in Table 1.

Table 1: Representation of the Project for the Purposes of Estimating Emissions

Phase		Activity
Phase 1	Demolition	• Phase 1 demolition area: 3.76 acres • Phase 1 demolition totaling approximately 1,074 tons of debris
	Construction	• Total building square footage: 310,612 square feet • Area acreage: 3.76 acres • Proposed dwelling units: 149
Phase 2	Demolition	• Phase 2 demolition area: 4.05 acres • Phase 2 demolition totaling approximately 4,644 tons of debris
	Construction	• Total building square footage: 153,265 square feet • Area acreage: 2.65 acres • Proposed dwelling units: 148
Phase 3	Demolition	• Phase 3 demolition area: 4.71 acres • Phase 3 demolition totaling approximately 7,619 tons of debris
	Construction	• Total building square footage: 191,197 square feet • Area acreage: 4.3 acres • Proposed dwelling units: 117
Phase 4	Demolition	• Phase 4 demolition area: 3.75 acres • Phase 4 demolition totaling approximately 1,789 tons of debris
	Construction	• Total building square footage: 226,526 square feet • Area acreage: 6.13 acres (onsite) • Proposed dwelling units: 141 • Roadway improvements: additional roadway improvements totaling approximately 27,150 square feet
	Total Proposed Residences	**555**

The preliminary construction schedule is provided in Table 2.

Table 2: Preliminary Construction Schedule

Construction Phase	Construction Activity	Conceptual Construction Schedule		Working Days per Week	Total Working Days
		Start Date	End Date		
	Demolition	1/15/2021	2/1/2021	5	12
	Site Preparation	2/2/2021	3/1/2021	5	20
	Grading	3/2/2021	3/22/2021	5	15
	Building Construction	3/23/2021	11/22/2021	5	175
	Paving	7/1/2021	8/2/2021	5	23
Phase 1	Architectural Coating	11/2/2021	12/20/2021	5	35

Construction Phase	Construction Activity	Conceptual Construction Schedule		Working Days per Week	Total Working Days
		Start Date	End Date		
Phase 2	Demolition	9/1/2023	10/5/2023	5	25
	Site Preparation	10/15/2023	11/22/2023	5	28
	Grading	11/26/2023	12/18/2023	5	16
	Building Construction	12/20/2023	7/23/2024	5	155
	Paving	6/1/2024	7/20/2024	5	35
	Architectural Coating	8/3/2024	9/25/2024	5	38
Phase 3	Demolition	7/10/2025	9/3/2025	5	40
	Site Preparation	9/5/2025	10/23/2025	5	35
	Grading	11/1/2025	12/5/2025	5	25
	Building Construction	12/6/2025	8/7/2026	5	175
	Paving	6/1/2026	8/5/2026	5	48
	Architectural Coating	8/18/2026	10/5/2026	5	35
Phase 4 (Road Improvements)	Site Preparation	9/5/2025	9/5/2025	5	1
	Grading	9/6/2025	9/9/2025	5	2
	Paving	9/10/2025	10/17/2025	5	28
Phase 4 (Onsite)	Demolition	7/10/2025	9/3/2025	5	40
	Site Preparation	9/5/2025	10/23/2025	5	35
	Grading	11/1/2025	12/5/2025	5	25
	Building Construction	12/6/2025	8/7/2026	5	175
	Paving	6/1/2026	8/5/2026	5	48
	Architectural Coating	8/18/2026	10/5/2026	5	35

Source: Appendix A

Table 3 shows the total construction trips assumed in Phases 1 through 4. Hauling trips consist of heavy-duty truck trips from demolition, import of 43,092 cubic yards of soil, and transport of pieces of equipment.

Table 3: Summary of Total Construction Trips by Phase

Construction Phase	Total Worker Trips per Phase	Total Vendor Trips per Phase	Total Hauling Trips per Phase
Phase 1 Demolition and Construction	28,425	5,692	182
Phase 2 Demolition and Construction	21,999	3,860	2,095
Phase 3 Demolition and Construction	23,795	4,567	829
Phase 4 Demolition and Construction	24,469	3,923	4,085

Source: Appendix A

Relevant project parameters used to estimate emissions from long-term operations of the proposed project are described below.

- Trip generation rates are based on the project-specific transportation analysis prepared by Hexagon Transportation, Inc. Consistent with the project-specific transportation analysis, trip generation rates for the proposed project were obtained for from the Institute of Transportation Engineers (ITE) Manual, 10th Edition, for weekday, Saturday, and Sunday rates for the ITE Land Uses 220 and 565.
- Carbon dioxide (CO_2) intensity factor adjusted based on Renewable Energy Portfolio Standard and Pacific Gas and Electric's 2017 power content label. Electricity emissions estimates are only used in the greenhouse gas analysis, which is not included as part of this Air Quality Memorandum.
- Solar thermal photovoltaic panels would be included as a project design feature. The amount of onsite renewable energy is unknown; therefore, no reductions for onsite renewable energy were quantified. In addition, electricity emissions estimates are only relevant to greenhouse gas emissions.
- As a project design feature, the proposed project would be built to achieve energy efficiency improvements that would exceed Title 24 standards by at least 10 percent.
- The proposed project would be required to comply with existing regulations. For instance, compliance with BAAQMD Regulation 6, Rule 3: Woodburning Devices would be required by existing regulations.

Existing land uses occupying the site would be removed as part of the project. Existing land uses as represented to estimate existing emissions are described below:

- The Bayshore Child-Care Center, which serves 109 students, and 150 low-rise apartment units.

1.2 REGIONAL AIR QUALITY EMISSIONS

The project's regional construction and operational emissions, which include both on- and offsite emissions, are evaluated separately below. Construction and operational emissions from the project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2.[1] A detailed description of the assumptions used to estimate emissions and the complete CalEEMod output files are provided in Appendix A.

1.2.1 Construction Emissions

During construction, fugitive dust would be generated from site grading and other earth-moving activities. The majority of this fugitive dust would remain localized and would be deposited near the project site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from this source. Exhaust emissions would also be generated from the operation of the off-road construction equipment and vehicles traveling to and from the project site.

1.2.1.1 Construction Fugitive Dust

BAAQMD does not recommend a numerical threshold for fugitive dust particulate matter emissions. Instead, BAAQMD bases the determination of significance for fugitive dust on a consideration of the control measures to be implemented. If all appropriate emissions control measures are implemented for a project as recommended by the BAAQMD, then fugitive dust emissions during construction would not be considered significant. During construction activities, the control measures outlined in Standard Condition AIR-1 are recommended.

Standard Condition AIR-1 The following measures shall be implemented during all phases of construction to control dust and exhaust at the project site:

- Water active construction areas at least twice daily or as often as needed to control dust emissions.
- Cover trucks hauling soil, sand, and other loose materials and/or ensure that all trucks hauling such materials maintain at least two feet of freeboard.
- Remove visible mud or dirt track-out onto adjacent public roads using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- Pave new or improved roadways, driveways, and sidewalks as soon as possible.
- Lay building pads as soon as possible after grading unless seeding or soil binders are used.

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[1] California Emissions Estimator Model (CalEEMod). version 2016.3.2. Website: http://caleemod.com/

- Replant vegetation in disturbed areas as quickly as possible.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Minimize idling times either by shutting off equipment when not in use, or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure, Title 13, Section 2485 of the California Code of Regulations). Provide clear signage for construction workers at all access points.
- Maintain and property tune construction equipment in accordance with manufacturer's specifications. Check all equipment by a certified mechanic and record a determination of running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints.

1.2.1.2 Construction Air Pollutant Emissions: ROG, NO_X, Exhaust PM_{10}, Exhaust $PM_{2.5}$

As previously discussed, CalEEMod version 2016.3.2 was used to estimate the project's construction emissions. CalEEMod provides a consistent platform for estimating construction and operational emissions from a wide variety of land use projects and is the model recommended by BAAQMD for estimating project emissions. Estimated construction emissions are compared with the applicable thresholds of significance established by the BAAQMD to assess reactive organic gases (ROG), oxides of nitrogen (NO_X), exhaust particulate matter 10 microns or less in aerodynamic diameter (PM_{10}), and exhaust particulate matter 2.5 microns or less in aerodynamic diameter ($PM_{2.5}$) construction emissions to determine significance for this criterion.

For the purpose of this analysis, construction of the project was assumed to begin in January 2021 and conclude in October 2026. Construction and operation of the project are anticipated to overlap. Therefore, construction emissions were modeled based on an applicant-provided conceptual phasing schedule. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required by CEQA guidelines.

The calculations of pollutant emissions from the construction equipment account for the type of equipment, horsepower and load factors of the equipment, along with the duration of use. Annual exhaust emissions are shown in Table 4. Average daily construction emissions are compared with the significance thresholds in Table 5.

Table 4: Annual Construction Emissions (Unmitigated)

Construction Year	Tons/Year			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
2021 Construction Emissions—Phase 1	2.50	2.71	0.13	0.12
2023 Construction Emissions—Phase 2	0.08	0.89	0.03	0.03
2024 Construction Emissions—Phase 2	1.25	1.26	0.05	0.05
2025 Construction Emissions—Phase 3	0.13	1.27	0.05	0.05
2026 Construction Emissions—Phase 3	1.51	1.25	0.05	0.04
2025 Construction Emissions—Phase 4	0.15	1.63	0.06	0.05
2026 Construction Emissions—Phase 4	1.75	1.25	0.05	0.05
Total Construction Emissions	**7.37**	**10.25**	**0.41**	**0.38**

Notes:
ROG = reactive organic gases
NO_X = oxides of nitrogen
PM_{10} = particulate matter 10 microns or less in aerodynamic diameter
$PM_{2.5}$ = particulate matter 2.5 microns or less in aerodynamic diameter
Source: CalEEMod Output (Appendix A)

Table 5: Construction Emissions (Unmitigated Average Daily Rate)

Parameter	Air Pollutants			
	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Total Emissions (tons/year)	7.37	10.25	0.41	0.38
Total Emissions (pounds/year)	14,740	20,500	820	760
Average Daily Emissions (pounds/day)[1]	18.11	25.18	1.01	0.93
Significance Threshold (pounds/day)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	No	No	No	No

Notes:
[1] Calculated by dividing the total number of pounds by the total 814 working days of construction for the entire construction period.
Calculations use rounded totals.
NO_X = oxides of nitrogen; ROG = reactive organic gases; PM_{10} = particulate matter 10 microns or less in aerodynamic diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in aerodynamic diameter
Source of thresholds: BAAQMD 2017; Source of emissions: CalEEMod Output (Appendix A)

As shown in Table 5**,** the emissions from all construction activities are below the recommended thresholds of significance.

1.2.2 Operational Emissions

1.2.2.1 Operational Air Pollutant Emissions: ROG, NO_X, PM_{10}, $PM_{2.5}$

The pollutants of regional concern include ROG, NO_x, PM_{10}, and $PM_{2.5}$. The project operational emissions for the respective pollutants were calculated using CalEEMod version 2016.3.2. Operational emissions were estimated for the year 2026, which is the earliest year anticipated for full project buildout. Existing land uses occupying the site would be removed as part of the project; therefore, the existing emissions were included in the analysis baseline. Net project operational emissions are compared to the BAAQMD Criteria Air Pollutant Significance thresholds in Tables 6 and 7. Annual net emissions from project operations are provided in Table 6, and the estimated average daily net emissions are provided in Table 7.

Table 6: Annual Operational Emissions (Unmitigated)

Emissions Source	Tons per Year			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Area	4.21	0.06	0.02	0.02
Energy	0.06	0.49	0.04	0.04
Mobile (Motor Vehicles)	0.86	2.39	3.66	1.00
Total Project Annual Emissions	*5.12*	*2.94*	*3.72*	*1.06*
Existing Emissions	1.11	0.91	1.11	0.32
Net Project Annual Emissions	**4.01**	**2.03**	**2.61**	**0.75**
Thresholds of Significance	**10**	**10**	**15**	**10**
Exceeds Significance Threshold?	No	No	No	No

Notes:
NO_X = oxides of nitrogen
ROG = reactive organic gases
PM_{10} = particulate matter 10 microns or less in aerodynamic diameter
$PM_{2.5}$ = particulate matter 2.5 microns or less in aerodynamic diameter
Source: CalEEMod Output (Appendix A)

Table 7: Average Daily Operational Emissions (Unmitigated)

Emissions Source	Pounds per Day			
	ROG	NO_X	PM_{10}	$PM_{2.5}$
Net Project Annual Emissions (tons/year)	4.01	2.03	2.61	0.75
Net Project Annual Emissions (pounds/year)	8,023	4,064	5,226	1,495
Net Project Annual Emissions (pounds/day)	21.98	11.13	14.32	4.10
Thresholds of Significance	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	No	No	No	No

Notes:
NO_X = oxides of nitrogen
ROG = reactive organic gases
PM_{10} = particulate matter 10 microns or less in aerodynamic diameter
$PM_{2.5}$ = particulate matter 2.5 microns or less in aerodynamic diameter
Source: CalEEMod Output (Appendix A)

As shown in Table 6 and Table 7, the project would not result in operational-related air pollutants or precursors that would exceed BAAQMD's thresholds of significance, indicating that ongoing project operations would not be considered to have the potential to generate a significant quantity of air pollutants.

2.0 CONSTRUCTION HEALTH RISK ASSESSMENT

The purpose of the construction HRA is to assess potential criteria pollutant and health impacts that would result from construction of the proposed project, consistent with guidelines and methodologies from BAAQMD, CARB, OEHHA, and USEPA. Consistent with the methods recommended in those guidelines, the HRA evaluated the estimated excess lifetime cancer risk and $PM_{2.5}$ concentrations associated with diesel exhaust that would be emitted by onsite construction activities and diesel and gasoline exhaust emitted from vehicles associated with trips generated during construction.

Health risks were estimated for sensitive receptors located with 1,000 feet of the project boundary. A sensitive receptor is defined by the BAAQMD as follows, “Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas.”

The HRA evaluated diesel particulate matter (DPM) (represented as exhaust $PM_{2.5}$) and $PM_{2.5}$ (exhaust $PM_{2.5}$ and fugitive $PM_{2.5}$) emissions generated during construction of the proposed project and the related health risk impacts for sensitive receptors located within 1,000 feet of the project boundary. According to BAAQMD, a project would result in a significant impact if it would individually expose sensitive receptors to toxic air contaminants (TACs) resulting in an increased cancer risk greater than 10.0 in one million, an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient $PM_{2.5}$ increase greater than 0.3 micrograms per liter (µg/m3).

The project site is located within 1,000 feet from existing and planned sensitive receptors, including existing and planned onsite sensitive receptors, that could be exposed to diesel emission exhaust during the construction period. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to concentrations at the receptor locations of interest.

2.1 AIR DISPERSION MODELING

This assessment was conducted using CARB exposure methodology with air dispersion modeling performed using the USEPA dispersion model AERMOD. An air dispersion model is a mathematical formulation used to estimate the air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the USEPA AERMOD (version 19191), which is approved by the BAAQMD for air dispersion assessments. Specifically, AERMOD was used to estimate levels of air emissions at sensitive receptor locations from the project’s construction DPM and $PM_{2.5}$ emissions. The use of AERMOD provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and site-specific meteorological data.

Terrain elevations were obtained for the project site using the AERMAP model, the AERMOD terrain data pre-processor. The air dispersion model assessment was performed using meteorological data from the

San Francisco International Airport, which is located approximately 6.17 miles southeast of the project site.

Figure 2 shows a representation of the modeling parameters for Scenario 1 of seven scenarios, including a 1,000-foot buffer, the project area (construction area source), and modeled roadway segments. The impacts were analyzed for seven scenarios. Scenario 1 analyzed impacts from all phases of construction at existing and planned offsite sensitive receptors within approximately 1,000 feet of the project boundary. The other six scenarios, which are summarized in Table 8, analyze the onsite receptors at existing and proposed locations of sensitive receptors. The sensitive receptors shown in Figure 2 only include offsite sensitive receptors.

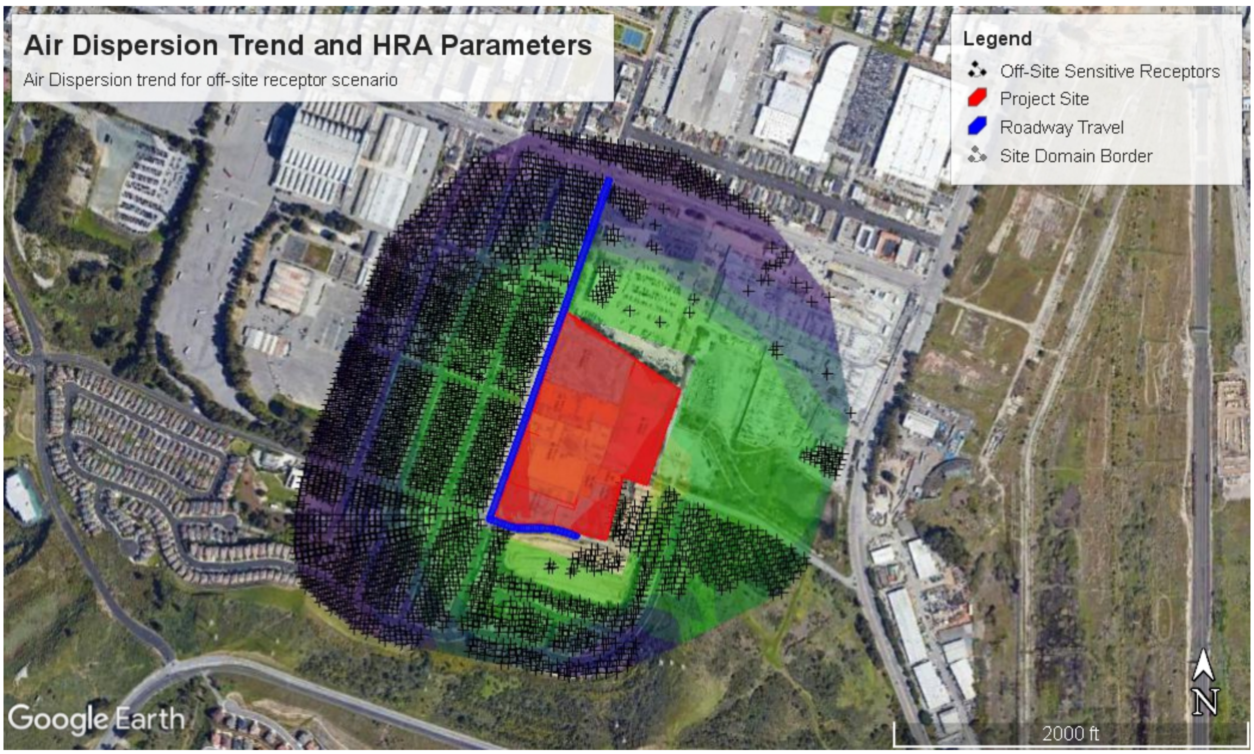

Figure 2: Modeling Parameters (Offsite Sensitive Receptors Scenario)

2.2 PROJECT CONSTRUCTION TOXIC AIR POLLUTANTS

An assessment was made of the potential health impacts to surrounding sensitive receptors resulting from the emissions of TACs during construction. A summary of the assessment is provided below, and a more detailed assessment is provided in Appendix B.

DPM has been identified by CARB as a carcinogenic substance.[2] Major sources of DPM include off-road construction equipment and heavy-duty delivery truck and worker activities.

Existing offsite sensitive receptors and existing and proposed sensitive receptors would be exposed to emissions generated during the demolition and construction activities associated with the proposed project. To provide a complete analysis, impacts were determined for each sensitive receptor scenario. Table 8 provides a description of each scenario analyzed.

Table 8: Summary of Each Scenario Analyzed

Scenario	Description of Scenario
Scenario 1: All Offsite Receptors	All offsite receptors: Exposed to Phases 1, 2, 3, and 4 demolition and Phases 1, 2, 3, and 4 construction
Scenario 2: Existing Phase 2 Receptors	Existing Phase 2 receptors: Exposed to Phase 1 demolition and Phase 1 construction
Scenario 3: Existing Phase 3 Receptors	Existing Phase 3 receptors: Exposed to Phases 1 and 2 demolition and Phases 1 and 2 construction
Scenario 4: Existing Phase 4 Receptors	Existing Phase 4 receptors: Exposed to Phases 1, 2, and 3 demolition and Phases 1, 2, and 3 construction
Scenario 5: New Phase 1 Receptors	New Phase 1 receptors: Exposed to Phases 2, 3, and 4 demolition and Phases 2, 3, and 4 construction
Scenario 6: New Phase 2 Receptors	New Phase 2 receptors: Exposed to Phases 3 and 4 demolition and Phases 3 and 4 construction
Scenario 7: New Phase 3 Receptors	New Phase 3 receptors: Exposed to Phase 4 demolition and Phase 4 construction

Source: Appendix B.

2.3 ESTIMATION OF CONSTRUCTION DPM EMISSIONS

Construction DPM emissions (represented as $PM_{2.5}$ exhaust) were estimated using CalEEMod version 2016.3.2. The construction DPM emissions were assumed to be generated within the project area being constructed in each phase. Because the demolition and construction phasing areas differ, emissions from demolition activities were assumed to be generated with the demolition phasing areas. The demolition phasing areas are shown in Figure 3, and the construction phasing areas are shown in Figure 4. Construction was assumed to occur on a schedule of 8 hours per day and 5 days per week.

[2] California Air Resources Board (CARB). 1998. The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines. Website: www.arb.ca.gov/toxics/dieseltac/factsht1.pdf. Accessed May 7, 2013, and May 26, 2017.

Figure 3: Demolition Phasing

Figure 4: Proposed Construction Phasing

Based on the analysis presented herein, emissions were estimated for the unmitigated scenario and a scenario with clean engines (Tier 4 Final mitigated). Equipment tiers refer to a generation of emission standards established by USEPA and CARB that apply to diesel engines in off-road equipment. The “tier” of an engine depends on the model year and horsepower rating; generally, the newer a piece of equipment is, the greater the tier it is likely to have. Construction exhaust emissions of DPM, both unmitigated and Tier 4 Final mitigated, are shown in Table 9. A detailed breakdown of construction emissions generated in each phase are provided in Appendix B.

Table 9: Project DPM Construction Emissions

Year	Area-source DPM as $PM_{2.5}$ Exhaust (tons/year)	Off-site DPM as $PM_{2.5}$ Exhaust (tons/year)
Unmitigated	0.3821	0.0002
Tier 4 Final Mitigated	0.0543	0.0002

Note: Offsite emissions were adjusted to evaluate localized emissions from the 0.47-mile route within approximately 1,000 feet of the project site.

DPM = diesel particulate matter

$PM_{2.5}$ = particulate matter 2.5 microns or less in aerodynamic diameter

Source: Appendix B

2.4 ESTIMATION OF CANCER RISKS

BAAQMD has developed a set of guidelines for estimating cancer risks that provide adjustment factors including the following:

- Age-sensitivity weighting factors
- Age-specific daily breathing rates
- Age-specific time-at-home factors

The cancer risk adjustment factors used in this construction HRA are provided in Table 10 for infant, child, and adult sensitive receptors.

Table 10: Inhalation Health Risks from Project Construction to Offsite Receptors

Receptor Type	Exposure Frequency		Age Sensitivity Factors (ASF)	Time at Home Factor (TAH) (%)	Daily Breathing Rate (DBR)[1] (L/kg-day)
	Hours/Day	Days/Year			
Third Trimester	24	350	10	85	361
0 to < 2 years	24	350	10	85	1,090
> 2 to 16 years	24	350	3	72	572
> 16 years	24	350	1	73	261

Notes:

[1] The daily breathing rates recommended by the BAAQMD for sensitive/residential receptors assume the 95th percentile breathing rates for all individuals less than 2 years of age and 80th percentile breathing rates for all older individuals.

L/kg-day = liters per kilogram body weight per day

Source: BAAQMD. 2016. Air Toxics New Source Review Program Health Risk Assessment (HRA) Guidelines. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines_clean_jan_2016-pdf.pdf?la=en. Accessed December 21, 2019.

2.5 ESTIMATION OF NON-CANCER CHRONIC HAZARDS

An evaluation of the potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each chemical compound with the appropriate reference exposure level (REL). Available RELs promulgated by OEHHA were considered in the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index (HI). The HI is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the REL.

To calculate the HI, each chemical concentration or dose is divided by the appropriate toxicity REL. Where the total equals or exceeds one (1), a health hazard is presumed to exist. For purposes of this assessment, the TAC of concern is DPM, for which the OEHHA has defined a REL for DPM of 5 $\mu g/m^3$. The principal toxicological endpoint assumed in this assessment was through inhalation.

2.6 ESTIMATION OF ANNUAL $PM_{2.5}$ CONCENTRATION

BAAQMD's guidance also includes a significance threshold for $PM_{2.5}$ based on studies that show health impacts from exposure to this pollutant. The construction emissions of $PM_{2.5}$ incorporated into this assessment included DPM (as $PM_{2.5}$ exhaust) and fugitive dust.

2.7 PROJECT CONSTRUCTION TOXIC AIR POLLUTANTS—RESULTS

Table 11 shows the Maximum Impacted Sensitive Receptor (MIR) for each scenario analyzed.

Table 11: Maximum Impacted Sensitive Receptor in Each Scenario Analyzed

Phase	Coordinates of Maximum Impacted Sensitive Receptor (Latitude, Longitude)	Description of Maximum Impacted Sensitive Receptor
Scenario 1: All Offsite Receptors	37°42'04.8"N 122°24'46.1"W After mitigation: 37°42'10.1"N 122°24'54.0"W	A planned residential area outside of the project boundary near the corner of Main Street and Linda Vista Drive. An existing single-family residence southwest of Schwerin Street and Partridge Street.
Scenario 2: Existing Phase 2 Receptors	37°42'06.5"N 122°24'47.9"W	An existing residential building located in planned Phase 2.

Phase	Coordinates of Maximum Impacted Sensitive Receptor (Latitude, Longitude)	Description of Maximum Impacted Sensitive Receptor
Scenario 3: Existing Phase 3 Receptors	37°42'09.0"N 122°24'48.1"W, Maximum impacted residential receptor: 37°42'05.5"N 122°24'50.2"W	The highest concentrations in Scenario 3 were estimated to occur at an existing school located in northeast corner of the planned Phase 3 area. The first set of coordinates listed for the Scenario 3 MIR are for this existing school. For the infant scenario, impacts were based on the location where concentrations were highest out of any residential area analyzed in Scenario 3. Therefore, the MIR for the infant scenario was determined to be an existing residence located near the southeast corner of the planned Phase 3.
Scenario 4: Existing Phase 4 Receptors	Unmitigated DPM: 37°42'11.7"N 122°24'48.4"W Other concentrations: 37°42'09.3"N 122°24'54.4"W	An existing residential building located in planned Phase 4, in the northern half of project site. An existing residential building located in planned Phase 4, in the southern half of the project site.
Scenario 5: New Phase 1 Receptors	DPM: 37°42'09.2"N 122°24'47.1"W $PM_{2.5}$: 37°42'08.2"N 122°24'47.5"W	A future residence in planned Phase 1. A future residence in planned Phase 1.
Scenario 6: New Phase 2 Receptors	Unmitigated DPM, Mitigated DPM, and Unmitigated $PM_{2.5}$: 37°42'05.6"N 122°24'49.7"W Mitigated $PM_{2.5}$: 37°42'06.6"N 122°24'49.3"W	A future residence in planned Phase 2 in the southern half of the project site, bordered by Phase 3 to the west. A future residence in planned Phase 2 in the southern half of the project site.
Scenario 7: New Phase 3 Receptors	37°42'05.3"N 122°24'50.6"W	A future residence near the southeastern corner of planned Phase 3.
Notes: DPM = diesel particulate matter MIR = Maximum Impacted Sensitive Receptor Source: Appendix B.		

Figures 5 through 13 show the locations of select MIRs listed in Table 11.

Figure 5: Offsite Receptor MIR (Scenario 1)

Figure 6: Offsite Receptor MIR After Mitigation (Scenario 1)

Figure 7: Existing Phase 2 Receptors Scenario MIR (Scenario 2)

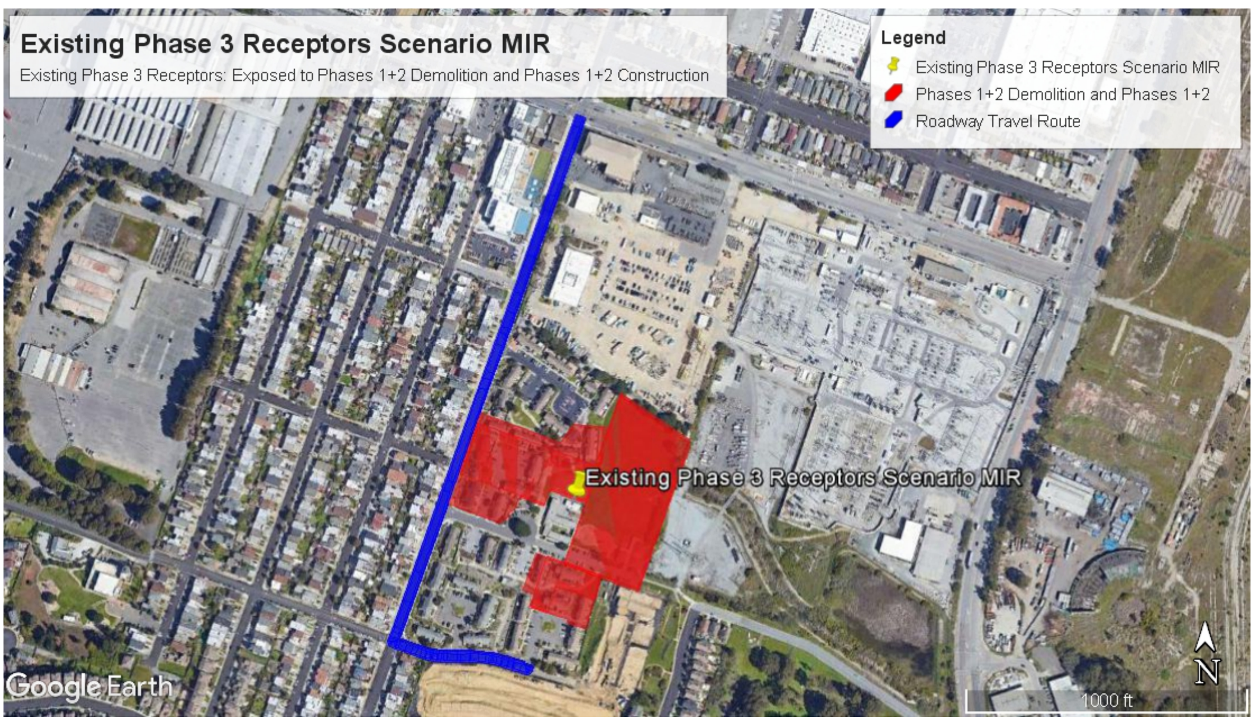

Figure 8: Existing Phase 3 Receptors Scenario Non-residential MIR (Scenario 3)

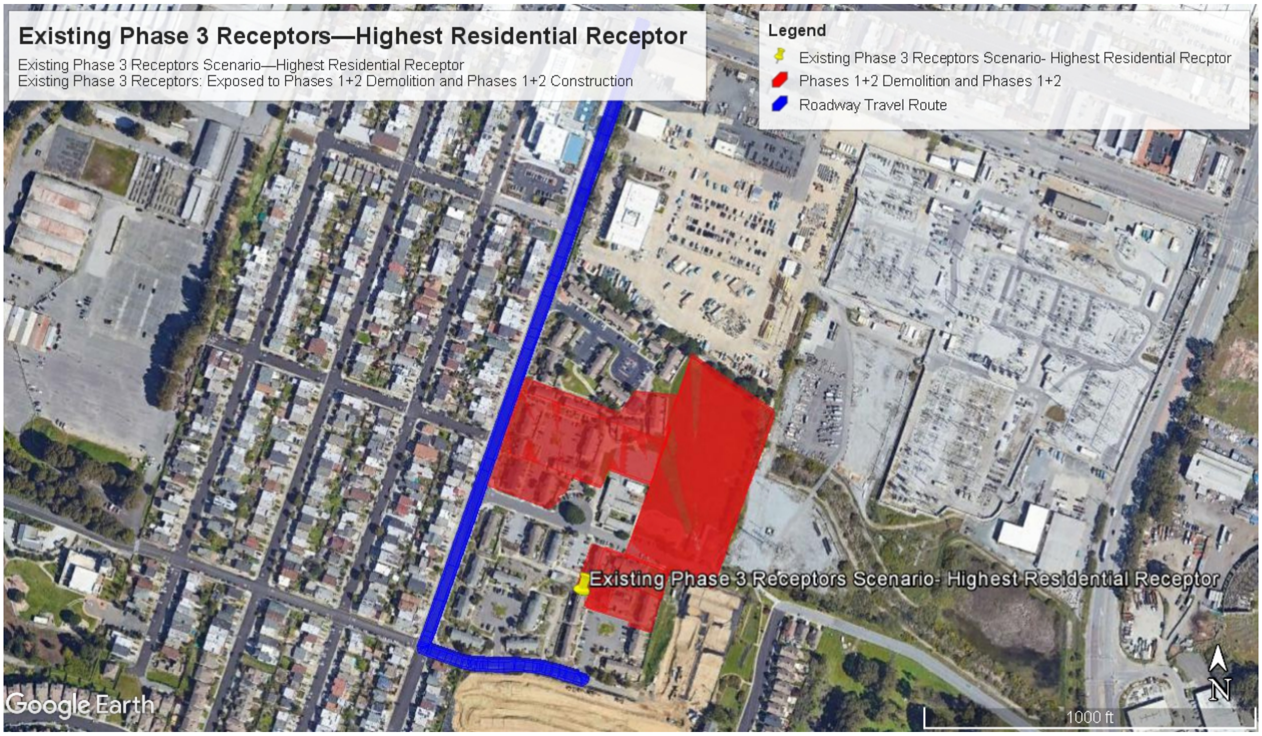

Figure 9: Existing Phase 3 Receptors Scenario Residential MIR (Scenario 3)

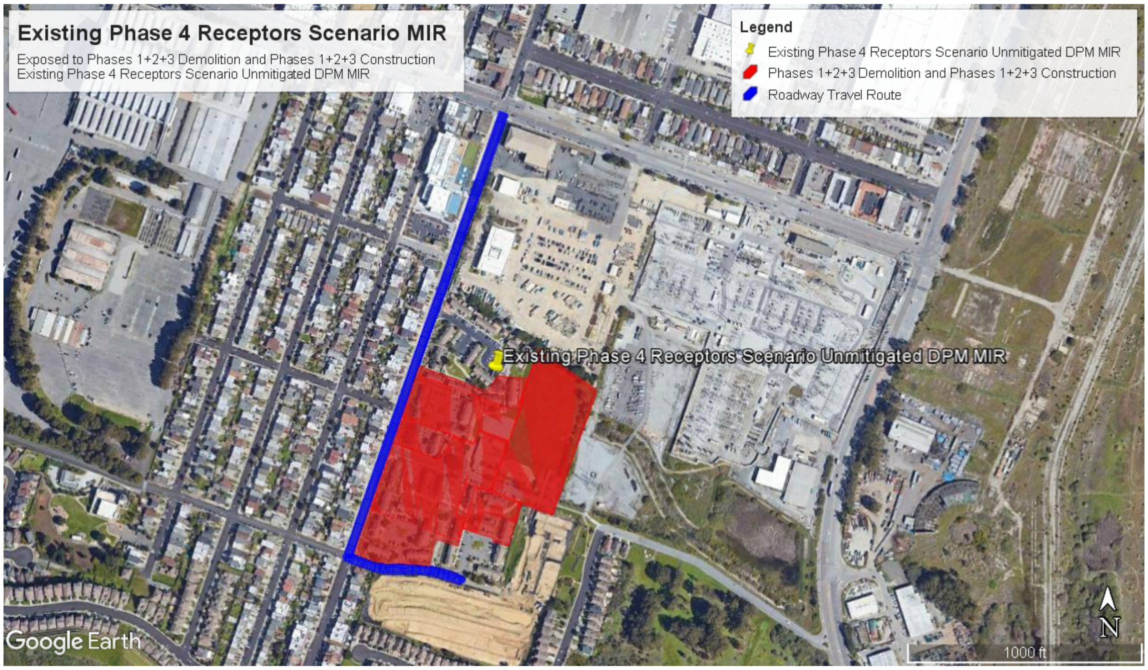

Figure 10: Existing Phase 4 Receptors Scenario MIRs (Scenario 4)

Figure 11: New Phase 1 Receptors Scenario MIR (Scenario 5)

Figure 12: New Phase 2 Receptors Scenario MIR (Scenario 6)

Figure 13: New Phase 3 Receptors Scenario MIR (Scenario 7)

Estimation of Health Risks and Hazards from Project Construction After the Implementation of Dust Control Measures Outlined in Standard Condition AIR-1 and Prior to the Implementation Mitigation

Table 12 presents a summary of the project's construction cancer risk, chronic non-cancer hazard, and $PM_{2.5}$ concentration impacts at the MIR prior to the application of any equipment mitigation for each scenario analyzed. As previously discussed, Standard Condition AIR-1 would be required to reduce fugitive dust emissions during construction. Annual $PM_{2.5}$ emissions were estimated assuming compliance with Standard Condition AIR-1. It should be noted that inclusion of Standard Condition AIR-1 only reduces $PM_{2.5}$ total and not $PM_{2.5}$ exhaust.

Table 12: Estimated Health Risks and Hazards during Project Construction – Unmitigated

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Scenario 1: All Off-site Receptors			
Risks and Hazards at the MIR: Infant[1]	62.10	0.07791	0.5506
Risks and Hazards at the MIR: Child[1]	31.24	0.07791	0.5506

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Risks and Hazards at the MIR: Adult[1]	3.47	0.07791	0.5506
Scenario 2: Existing Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	49.65	0.09340	0.5911
Risks and Hazards at the MIR: Child[1]	11.21	0.09340	0.5911
Risks and Hazards at the MIR: Adult[1]	1.25	0.09340	0.5911
Scenario 3: Existing Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	54.35	0.06819	0.8452
Risks and Hazards at the MIR: Child[1]	27.34	0.06819	0.8452
Risks and Hazards at the MIR: Adult[1]	3.04	0.06819	0.8452
Scenario 4: Existing Phase 4 Receptors			
Risks and Hazards at the MIR: Infant[1]	91.57	0.11489	0.4904
Risks and Hazards at the MIR: Child[1]	46.07	0.11489	0.4904
Risks and Hazards at the MIR: Adult[1]	5.11	0.11489	0.4904
Scenario 5: New Phase 1 Receptors			
Risks and Hazards at the MIR: Infant[1]	106.28	0.09522	0.6683
Risks and Hazards at the MIR: Child[1]	26.75	0.09522	0.6683
Risks and Hazards at the MIR: Adult[1]	2.97	0.09522	0.6683
Scenario 6: New Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	73.53	0.08857	0.7229
Risks and Hazards at the MIR: Child[1]	13.49	0.08857	0.7229
Risks and Hazards at the MIR: Adult[1]	1.50	0.08857	0.7229
Scenario 7: New Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	30.12	0.03628	0.2328
Risks and Hazards at the MIR: Child[1]	5.43	0.03628	0.2328
Risks and Hazards at the MIR: Adult[1]	0.61	0.03628	0.2328

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Highest from Any Scenario			
Risks and Hazards at the MIR	106.28	0.11489	0.8452
BAAQMD Thresholds of Significance	10	1	0.30
Exceeds Individual Source Threshold?	Yes	No	Yes

Notes:

[1] The MIR for each scenario analyzed is shown in Table 11.

[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the REL of 5 $\mu g/m^3$.

$\mu g/m^3$ = micrograms per liter

MIR = Maximum Impacted Sensitive Receptor

$PM_{2.5}$ = particulate matter 2.5 microns or less in aerodynamic diameter

Source: Appendix B

As shown in Table 12, the project's construction DPM emissions would not exceed BAAQMD's chronic non-cancer hazard index threshold of significance at the MIR in any scenario; however, the project's construction DPM emissions would exceed BAAQMD's cancer risk threshold of significance, and the project's $PM_{2.5}$ emissions would exceed BAAQMD's annual $PM_{2.5}$ threshold of significance in at least one scenario. Therefore, mitigation would be necessary to reduce potentially significant impacts from construction of the proposed project.

Estimation of Health Risks and Hazards from Project Construction After the Implementation of Standard Condition AIR-1 and Recommended Mitigation

As described above, mitigation would be necessary to reduce potentially significant impacts from construction of the proposed project. Mitigation Measure (MM) AIR-1, which requires the use of construction equipment meeting Tier 4 Final standards, is recommended to reduce impacts to sensitive receptors during project construction. MM AIR-1 is detailed below.

MM AIR-1 Either of the following two measures shall be implemented during all phases of construction to reduce potential exposure of DPM and $PM_{2.5}$ emissions to nearby sensitive receptors:

- Prior to the issuance of any demolition, grading, or building permits (whichever occurs earliest), the project applicant and/or construction contractor shall prepare a construction operation plan that requires all off-road equipment with engines greater than 50 horsepower to meet particulate matter emissions standards for Tier 4 Final engines during construction activities. The construction contractor shall maintain records documenting its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information shall include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number. The project applicant and/or construction contractor shall submit the construction operations plan and records of compliance to the City.

- Alternatively, in lieu of the Tier 4 Final engines identified above, the construction contractor may use other measures to minimize DPM emissions to reduce the estimated cancer risk below the thresholds. Options could include the use of equipment that includes CARB-certified Level 3 diesel particulate filters, alternatively-fueled equipment (i.e., non-diesel), or use of added exhaust muffling and filtering devices. If any of these alternative measures are proposed, the project applicant and/or construction contractor shall include them in the construction operations plans that include specifications of the equipment to be used during construction. Furthermore, a signed letter by a qualified air quality specialist shall accompany the construction operations plan, which demonstrates that the equipment included in the plan meets the health risk standards set forth in this mitigation measure.

Table 13 presents a summary of the project's construction cancer risk, chronic non-cancer hazard, and $PM_{2.5}$ concentration impacts at the MIR after implementation of MM AIR-1. As previously noted, annual $PM_{2.5}$ emissions were estimated assuming compliance with Standard Condition AIR-1.

Table 13: Estimated Health Risks and Hazards during Project Construction – Mitigated

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Scenario 1: All Offsite Receptors			
Risks and Hazards at the MIR: Infant[1]	5.96	0.00747	0.01975
Risks and Hazards at the MIR: Child[1]	3.00	0.00747	0.01975
Risks and Hazards at the MIR: Adult[1]	0.33	0.00747	0.01975
Scenario 2: Existing Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	3.36	0.00632	0.1557
Risks and Hazards at the MIR: Child[1]	0.76	0.00632	0.1557
Risks and Hazards at the MIR: Adult[1]	0.084	0.00632	0.1557
Scenario 3: Existing Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	5.13	0.02127	0.2758
Risks and Hazards at the MIR: Child[1]	2.58	0.02127	0.2758
Risks and Hazards at the MIR: Adult[1]	0.287	0.02127	0.2758

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Scenario 4: Existing Phase 4 Receptors			
Risks and Hazards at the MIR: Infant[1]	5.92	0.00743	0.2138
Risks and Hazards at the MIR: Child[1]	2.98	0.00743	0.2138
Risks and Hazards at the MIR: Adult[1]	0.331	0.00743	0.2138
Scenario 5: New Phase 1 Receptors			
Risks and Hazards at the MIR: Infant[1]	14.89	0.01334	0.2748
Risks and Hazards at the MIR: Child[1]	3.75	0.01334	0.2748
Risks and Hazards at the MIR: Adult[1]	0.416	0.01334	0.2748
Scenario 6: New Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	7.13	0.00859	0.3273
Risks and Hazards at the MIR: Child[1]	1.31	0.00859	0.3273
Risks and Hazards at the MIR: Adult[1]	0.145	0.00859	0.3273
Scenario 7: New Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	2.61	0.00314	0.0671
Risks and Hazards at the MIR: Child[1]	0.48	0.00314	0.0671
Risks and Hazards at the MIR: Adult[1]	0.05	0.00314	0.0671
Highest from Any Scenario			
Maximum Risks and Hazards	14.89	0.02127	0.3273
BAAQMD Thresholds of Significance	**10**	**1**	**0.30**
Exceeds Individual Source Threshold?	Yes	No	Yes

Notes:

[1] The MIR for each scenario analyzed is shown in Table 11.

[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the REL of 5 $\mu g/m^3$.

$\mu g/m^3$ = micrograms per liter; BAAQMD = Bay Area Air Quality Management District; DPM = diesel particulate matter;

MIR = Maximum Impacted Sensitive Receptor; PM2.5 = particulate matter 2.5 microns or less in aerodynamic diameter;

REL = reference exposure level

Source: Appendix A

As noted in Table 13, the project would not exceed any applicable significance threshold after application of MM-AIR 1 in Scenarios 1 through 4 or in Scenario 7; however, the project would exceed an applicable threshold in both Scenarios 5 and 6. Specifically, the cancer risk in Scenario 5 would exceed BAAQMD's threshold of 10 in million for the cancer risk health impact and the applicable $PM_{2.5}$ concentration threshold would be exceeded in Scenario 6. As noted in Table 8, Scenario 5 analyzes the health impacts of the sensitive receptors that would occupy Phase 1 of the project, and sensitive receptors would be exposed to emissions from demolition and construction activities associated with Phases 2 through 4 of the project. Scenario 6 analyzes the health impacts of the sensitive receptors that would occupy Phase 2 of the project, and sensitive receptors could be exposed to emissions from demolition and construction activities associated with Phases 3 and 4 of the project. Because Scenarios 5 and 6 are the only scenarios in which an applicable health risk threshold was exceeded, and because Scenarios 5 and 6 include residential development contemplated by the project, additional mitigation is available to further reduce the potential impact. MM-AIR 2, which requires the installation of minimum efficiency reporting value (MERV) 13 filters in proposed residences included in Phases 1 and 2 of the proposed project, is recommended to further reduce this impact.

MM AIR-2 The applicant shall install high efficiency MERV filters with a rating of 13 in the intake of the residential ventilation systems in all residential units that would be included in Phases 1 and 2 of the project. To ensure maintenance and replacement of the MERV filters in the individual units, the owner or property manager shall commit to maintaining and replacing the MERV 13 filters in accordance with the manufacturer's recommendations lasting through the end of all construction associated with the proposed project. A signed commitment letter from the owner/property manager shall be submitted to City prior to the first occupancy of Phase 1 of the project.

Many heating/vacuum/air conditioning (HVAC) filters available in the United States are rated for their particle removal efficiency using a laboratory test procedure described in the American Society of Heating, Refrigerating, and Air Conditioning Engineers Standard 52.2-2012, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size. Minimum removal efficiency values in these three sized bins are used to assign HVAC filters a single efficiency metric MERV. In general, the higher the MERV for a filter, the greater the removal efficiency for one or more particle size bins. Average values for approximated outdoor-origin $PM_{2.5}$ removal efficiencies for several MERV-rated filters were derived from Stephens, Brennan, and Harriman.[3] Single-pass outdoor-origin $PM_{2.5}$ removal efficiencies range from less than 10 percent for MERV 6 to more than 95 percent for MERV 16 and high-efficiency particulate air (HEPA) filters.

MERV 13 filters would trap particles at an efficiency rate of 60 percent. After the installation and maintenance of an air filtration system rated at MERV 13 per MM AIR-2, the cancer risk from project construction at the MIR (a residence in Phase 1 of the project) would be reduced to approximately 6 per million, and the $PM_{2.5}$ concentrations at the MIR (a sensitive receptor in Phase 2 of the project) would be

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[3] Stephens, Brent, Terry Brennan, and Lew Harriman. 2016. Selecting Ventilation Air Filters to Reduce $PM_{2.5}$ Of Outdoor Origin. September. Website: http://www.conforlab.com.br/wp-content/uploads/2016/10/2016Sep_012-021_HarrimanFiltersToReducePM2.5.pdf.

reduced to approximately 0.13 µg/m^3. Table 14 provides a summary of impacts to future residents under Scenario 5 and 6with this additional mitigation.

Table 14: Estimated Health Risks and Hazards during Project Construction – Additional Mitigation

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration (µg/m^3)
Scenario 1: All Offsite Receptors			
Risks and Hazards at the MIR: Infant[1]	5.96	0.00747	0.01975
Risks and Hazards at the MIR: Child[1]	3.00	0.00747	0.01975
Risks and Hazards at the MIR: Adult[1]	0.33	0.00747	0.01975
Scenario 2: Existing Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	3.36	0.00632	0.1557
Risks and Hazards at the MIR: Child[1]	0.76	0.00632	0.1557
Risks and Hazards at the MIR: Adult[1]	0.084	0.00632	0.1557
Scenario 3: Existing Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	5.13	0.02127	0.2758
Risks and Hazards at the MIR: Child[1]	2.58	0.02127	0.2758
Risks and Hazards at the MIR: Adult[1]	0.287	0.02127	0.2758
Scenario 4: Existing Phase 4 Receptors			
Risks and Hazards at the MIR: Infant[1]	5.92	0.00743	0.2138
Risks and Hazards at the MIR: Child[1]	2.98	0.00743	0.2138
Risks and Hazards at the MIR: Adult[1]	0.331	0.00743	0.2138
Scenario 5: New Phase 1 Receptors			
Risks and Hazards at the MIR: Infant[1]	5.96	0.00534	0.1099
Risks and Hazards at the MIR: Child[1]	1.50	0.00534	0.1099
Risks and Hazards at the MIR: Adult[1]	0.17	0.00534	0.1099

Scenario	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index[2]	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Scenario 6: New Phase 2 Receptors			
Risks and Hazards at the MIR: Infant[1]	2.85	0.00344	0.1309
Risks and Hazards at the MIR: Child[1]	0.52	0.00344	0.1309
Risks and Hazards at the MIR: Adult[1]	0.058	0.00344	0.1309
Scenario 7: New Phase 3 Receptors			
Risks and Hazards at the MIR: Infant[1]	2.61	0.00314	0.0671
Risks and Hazards at the MIR: Child[1]	0.48	0.00314	0.0671
Risks and Hazards at the MIR: Adult[1]	0.05	0.00314	0.0671
Highest from Any Scenario			
Maximum Risks and Hazards	**5.96**	**0.00747**	**0.2758**
BAAQMD Thresholds of Significance	**10**	**1**	**0.30**
Exceeds Individual Source Threshold?	No	No	No

Notes:

[1] The MIR for each scenario analyzed is shown in Table 11.

[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the REL of 5 $\mu g/m^3$.

$\mu g/m^3$ = micrograms per liter; BAAQMD = Bay Area Air Quality Management District; DPM = diesel particulate matter;

MIR = Maximum Impacted Sensitive Receptor; PM2.5 = particulate matter 2.5 microns or less in aerodynamic diameter;

REL = reference exposure level

Source: Appendix A

The health risk impacts to the future residents would be less than the BAAQMD recommended significance thresholds of 10 in a million and 0.3 $\mu g/m^3$, respectively. Therefore, construction of the project would not expose sensitive receptors to substantial pollutant concentrations after the implementation of mitigation. Specifically, Standard Condition AIR-1, MM AIR-1, and MM-2 are recommended to reduce potential impacts during construction.

APPENDIX A

CalEEMod Results

APPENDIX B

Construction Health Risk Assessment Files

APPENDIX A

CalEEMod Results

CalEEMod Output

Table of Contents

Midway Village Project Phase 1 - Unmitigated Demolition

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	3.76	Acre	3.76	163,785.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 1 Demolition (1/15/2021-02/01/2021)
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Phase 1 Demolition - Demolition of San Mateo County Housing Authority offices

Construction Phase - Phase 1 Demolition (1/15/2021-02/01/2021)

Trips and VMT - Twelve (12) additional hauling trips added to account for off-site trips associated with transport of off-road construction equipment.
Estimate of additional trips based on two trips per piece of equipment.
106+12=118 total hauling trips

Demolition - Phase 1 Demolition totaling approximately 1,074 tons of debris.

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	12.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	106.00	118.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0197	0.2063	0.1392	2.9000e-004	0.0132	9.3700e-003	0.0226	2.2000e-003	8.7000e-003	0.0109	0.0000	25.8153	25.8153	6.3700e-003	0.0000	25.9747
Maximum	**0.0197**	**0.2063**	**0.1392**	**2.9000e-004**	**0.0132**	**9.3700e-003**	**0.0226**	**2.2000e-003**	**8.7000e-003**	**0.0109**	**0.0000**	**25.8153**	**25.8153**	**6.3700e-003**	**0.0000**	**25.9747**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0197	0.2063	0.1392	2.9000e-004	6.8700e-003	9.3700e-003	0.0162	1.2400e-003	8.7000e-003	9.9400e-003	0.0000	25.8153	25.8153	6.3700e-003	0.0000	25.9746
Maximum	**0.0197**	**0.2063**	**0.1392**	**2.9000e-004**	**6.8700e-003**	**9.3700e-003**	**0.0162**	**1.2400e-003**	**8.7000e-003**	**9.9400e-003**	**0.0000**	**25.8153**	**25.8153**	**6.3700e-003**	**0.0000**	**25.9746**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**47.92**	**0.00**	**28.03**	**43.64**	**0.00**	**8.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-15-2021	4-14-2021	0.2424	0.2424
		Highest	0.2424	0.2424

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/15/2021	2/1/2021	5	12	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.76

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	118.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0115	0.0000	0.0115	1.7400e-003	0.0000	1.7400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0190	0.1886	0.1294	2.3000e-004		9.3100e-003	9.3100e-003		8.6500e-003	8.6500e-003	0.0000	20.4005	20.4005	5.7400e-003	0.0000	20.5440
Total	**0.0190**	**0.1886**	**0.1294**	**2.3000e-004**	**0.0115**	**9.3100e-003**	**0.0208**	**1.7400e-003**	**8.6500e-003**	**0.0104**	**0.0000**	**20.4005**	**20.4005**	**5.7400e-003**	**0.0000**	**20.5440**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-004	0.0176	8.2100e-003	5.0000e-005	9.9000e-004	5.0000e-005	1.0400e-003	2.7000e-004	5.0000e-005	3.2000e-004	0.0000	4.8459	4.8459	6.2000e-004	0.0000	4.8614
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.5000e-004	1.6200e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5690	0.5690	1.0000e-005	0.0000	0.5693
Total	**7.3000e-004**	**0.0177**	**9.8300e-003**	**6.0000e-005**	**1.7000e-003**	**5.0000e-005**	**1.7500e-003**	**4.6000e-004**	**5.0000e-005**	**5.1000e-004**	**0.0000**	**5.4149**	**5.4149**	**6.3000e-004**	**0.0000**	**5.4306**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.1700e-003	0.0000	5.1700e-003	7.8000e-004	0.0000	7.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0190	0.1886	0.1294	2.3000e-004		9.3100e-003	9.3100e-003		8.6500e-003	8.6500e-003	0.0000	20.4005	20.4005	5.7400e-003	0.0000	20.5440
Total	**0.0190**	**0.1886**	**0.1294**	**2.3000e-004**	**5.1700e-003**	**9.3100e-003**	**0.0145**	**7.8000e-004**	**8.6500e-003**	**9.4300e-003**	**0.0000**	**20.4005**	**20.4005**	**5.7400e-003**	**0.0000**	**20.5440**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-004	0.0176	8.2100e-003	5.0000e-005	9.9000e-004	5.0000e-005	1.0400e-003	2.7000e-004	5.0000e-005	3.2000e-004	0.0000	4.8459	4.8459	6.2000e-004	0.0000	4.8614
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.5000e-004	1.6200e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5690	0.5690	1.0000e-005	0.0000	0.5693
Total	**7.3000e-004**	**0.0177**	**9.8300e-003**	**6.0000e-005**	**1.7000e-003**	**5.0000e-005**	**1.7500e-003**	**4.6000e-004**	**5.0000e-005**	**5.1000e-004**	**0.0000**	**5.4149**	**5.4149**	**6.3000e-004**	**0.0000**	**5.4306**

Midway Village Project Phase 1 - Unmitigated Construction

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	99.91	1000sqft	2.29	99,910.00	0
Apartments Low Rise	149.00	Dwelling Unit	1.47	310,612.00	426

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 1 Construction
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Phase 1 proposed development based on Project Description dated October 21, 2019.

Construction Phase - Phase 1 conceptual construction schedule consistent with Project Description dated October 21, 2019.
Phase 1 Demolition (1/15/2021-02/01/2021) analyzed in a separate CalEEMod run.

Off-road Equipment - Adjusted building construction equipment usage based on project-specific information.

Off-road Equipment -

Off-road Equipment - Additional grading equipment included based on project-specific information.

Trips and VMT - Additional hauling trips included to account for off-site trips associated with transport of construction equipment. Additional vendor trips added to the paving phase to account for anticipated paving off-site trips.

Demolition - Demolition associated with Phase 1 analyzed in a separate CalEEMod run.

Grading - Material anticipated to be balanced on-site during Phase 1 construction.
No import or export in Phase 1 (43,092 total cubic yards of import for the project accounted for in phases 2 and 4).

Vehicle Trips - Construction run only

Woodstoves - Construction run only

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Area Mitigation -

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	8.00	15.00
tblConstructionPhase	NumDays	230.00	175.00
tblConstructionPhase	NumDays	18.00	23.00
tblConstructionPhase	NumDays	18.00	35.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	25.33	0.00
tblLandUse	LandUseSquareFeet	149,000.00	310,612.00
tblLandUse	LotAcreage	9.31	1.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading

tblOffRoadEquipment	PhaseName		Grading
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	0.00	32.00
tblTripsAndVMT	HaulingTripNumber	0.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	2.4850	2.5004	2.2011	4.8400e-003	0.3601	0.1168	0.4768	0.1597	0.1093	0.2689	0.0000	432.8765	432.8765	0.0766	0.0000	434.7919
Maximum	**2.4850**	**2.5004**	**2.2011**	**4.8400e-003**	**0.3601**	**0.1168**	**0.4768**	**0.1597**	**0.1093**	**0.2689**	**0.0000**	**432.8765**	**432.8765**	**0.0766**	**0.0000**	**434.7919**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	2.4850	2.5004	2.2011	4.8400e-003	0.2337	0.1168	0.3504	0.0912	0.1093	0.2004	0.0000	432.8762	432.8762	0.0766	0.0000	434.7915
Maximum	**2.4850**	**2.5004**	**2.2011**	**4.8400e-003**	**0.2337**	**0.1168**	**0.3504**	**0.0912**	**0.1093**	**0.2004**	**0.0000**	**432.8762**	**432.8762**	**0.0766**	**0.0000**	**434.7915**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**35.10**	**0.00**	**26.51**	**42.91**	**0.00**	**25.47**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-15-2021	4-14-2021	0.8839	0.8839
2	4-15-2021	7-14-2021	0.7621	0.7621
3	7-15-2021	9-30-2021	0.6850	0.6850
		Highest	0.8839	0.8839

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/2/2021	3/1/2021	5	20	
2	Grading	Grading	3/2/2021	3/22/2021	5	15	
3	Building Construction	Building Construction	3/23/2021	11/22/2021	5	175	
4	Paving	Paving	7/1/2021	8/2/2021	5	23	
5	Architectural Coating	Architectural Coating	11/2/2021	12/20/2021	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 2.29

Residential Indoor: 628,989; Residential Outdoor: 209,663; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

Grading	Trenchers		1	8.00	78	0.50
Building Construction	Cranes		1	7.00	231	0.29
Building Construction	Forklifts		3	8.00	89	0.20
Building Construction	Generator Sets		1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes		2	7.00	97	0.37
Building Construction	Welders		1	8.00	46	0.45
Paving	Cement and Mortar Mixers		2	6.00	9	0.56
Paving	Pavers		1	8.00	130	0.42
Paving	Paving Equipment		2	6.00	132	0.36
Paving	Rollers		2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes		1	8.00	97	0.37
Architectural Coating	Air Compressors		1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	149.00	32.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	4.7600e-003	2.2300e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	7.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.3141	1.3141	1.7000e-004	0.0000	1.3183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.0000e-004	3.2300e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1380	1.1380	2.0000e-005	0.0000	1.1385
Total	**6.0000e-004**	**5.0600e-003**	**5.4600e-003**	**2.0000e-005**	**1.6900e-003**	**2.0000e-005**	**1.7100e-003**	**4.5000e-004**	**2.0000e-005**	**4.8000e-004**	**0.0000**	**2.4521**	**2.4521**	**1.9000e-004**	**0.0000**	**2.4568**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0813	0.0000	0.0813	0.0447	0.0000	0.0447	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.0813**	**0.0204**	**0.1017**	**0.0447**	**0.0188**	**0.0635**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	4.7600e-003	2.2300e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	7.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.3141	1.3141	1.7000e-004	0.0000	1.3183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.0000e-004	3.2300e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1380	1.1380	2.0000e-005	0.0000	1.1385
Total	**6.0000e-004**	**5.0600e-003**	**5.4600e-003**	**2.0000e-005**	**1.6900e-003**	**2.0000e-005**	**1.7100e-003**	**4.5000e-004**	**2.0000e-005**	**4.8000e-004**	**0.0000**	**2.4521**	**2.4521**	**1.9000e-004**	**0.0000**	**2.4568**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.2345	0.1540	3.2000e-004		0.0113	0.0113		0.0104	0.0104	0.0000	27.9702	27.9702	9.0500e-003	0.0000	28.1963
Total	**0.0220**	**0.2345**	**0.1540**	**3.2000e-004**	**0.0491**	**0.0113**	**0.0604**	**0.0253**	**0.0104**	**0.0357**	**0.0000**	**27.9702**	**27.9702**	**9.0500e-003**	**0.0000**	**28.1963**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.7000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9483	0.9483	2.0000e-005	0.0000	0.9488
Total	**3.8000e-004**	**2.5000e-004**	**2.7000e-003**	**1.0000e-005**	**1.1800e-003**	**1.0000e-005**	**1.1900e-003**	**3.1000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9483**	**0.9483**	**2.0000e-005**	**0.0000**	**0.9488**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0221	0.0000	0.0221	0.0114	0.0000	0.0114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.2345	0.1540	3.2000e-004		0.0113	0.0113		0.0104	0.0104	0.0000	27.9702	27.9702	9.0500e-003	0.0000	28.1963
Total	**0.0220**	**0.2345**	**0.1540**	**3.2000e-004**	**0.0221**	**0.0113**	**0.0334**	**0.0114**	**0.0104**	**0.0218**	**0.0000**	**27.9702**	**27.9702**	**9.0500e-003**	**0.0000**	**28.1963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.7000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9483	0.9483	2.0000e-005	0.0000	0.9488
Total	**3.8000e-004**	**2.5000e-004**	**2.7000e-003**	**1.0000e-005**	**1.1800e-003**	**1.0000e-005**	**1.1900e-003**	**3.1000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9483**	**0.9483**	**2.0000e-005**	**0.0000**	**0.9488**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1520	1.3802	1.2773	2.1200e-003		0.0753	0.0753		0.0710	0.0710	0.0000	181.7832	181.7832	0.0421	0.0000	182.8367
Total	**0.1520**	**1.3802**	**1.2773**	**2.1200e-003**		**0.0753**	**0.0753**		**0.0710**	**0.0710**	**0.0000**	**181.7832**	**181.7832**	**0.0421**	**0.0000**	**182.8367**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9400e-003	0.2916	0.1252	7.3000e-004	0.0183	6.7000e-004	0.0189	5.2800e-003	6.4000e-004	5.9200e-003	0.0000	73.2769	73.2769	6.3300e-003	0.0000	73.4352
Worker	0.0332	0.0216	0.2343	9.1000e-004	0.1026	6.2000e-004	0.1033	0.0273	5.8000e-004	0.0279	0.0000	82.4245	82.4245	1.5000e-003	0.0000	82.4619
Total	**0.0422**	**0.3132**	**0.3594**	**1.6400e-003**	**0.1209**	**1.2900e-003**	**0.1222**	**0.0326**	**1.2200e-003**	**0.0338**	**0.0000**	**155.7014**	**155.7014**	**7.8300e-003**	**0.0000**	**155.8971**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1520	1.3802	1.2773	2.1200e-003		0.0753	0.0753		0.0710	0.0710	0.0000	181.7830	181.7830	0.0421	0.0000	182.8365
Total	**0.1520**	**1.3802**	**1.2773**	**2.1200e-003**		**0.0753**	**0.0753**		**0.0710**	**0.0710**	**0.0000**	**181.7830**	**181.7830**	**0.0421**	**0.0000**	**182.8365**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9400e-003	0.2916	0.1252	7.3000e-004	0.0183	6.7000e-004	0.0189	5.2800e-003	6.4000e-004	5.9200e-003	0.0000	73.2769	73.2769	6.3300e-003	0.0000	73.4352
Worker	0.0332	0.0216	0.2343	9.1000e-004	0.1026	6.2000e-004	0.1033	0.0273	5.8000e-004	0.0279	0.0000	82.4245	82.4245	1.5000e-003	0.0000	82.4619
Total	**0.0422**	**0.3132**	**0.3594**	**1.6400e-003**	**0.1209**	**1.2900e-003**	**0.1222**	**0.0326**	**1.2200e-003**	**0.0338**	**0.0000**	**155.7014**	**155.7014**	**7.8300e-003**	**0.0000**	**155.8971**

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.1247	0.1410	2.2000e-004		6.6600e-003	6.6600e-003		6.1400e-003	6.1400e-003	0.0000	18.8262	18.8262	5.9200e-003	0.0000	18.9741
Paving	3.0000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0156**	**0.1247**	**0.1410**	**2.2000e-004**		**6.6600e-003**	**6.6600e-003**		**6.1400e-003**	**6.1400e-003**	**0.0000**	**18.8262**	**18.8262**	**5.9200e-003**	**0.0000**	**18.9741**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	4.7900e-003	2.0600e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.2038	1.2038	1.0000e-004	0.0000	1.2064
Worker	5.9000e-004	3.8000e-004	4.1300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4541	1.4541	3.0000e-005	0.0000	1.4547
Total	**7.4000e-004**	**5.1700e-003**	**6.1900e-003**	**3.0000e-005**	**2.1100e-003**	**2.0000e-005**	**2.1300e-003**	**5.7000e-004**	**2.0000e-005**	**5.9000e-004**	**0.0000**	**2.6579**	**2.6579**	**1.3000e-004**	**0.0000**	**2.6612**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.1247	0.1410	2.2000e-004		6.6600e-003	6.6600e-003		6.1400e-003	6.1400e-003	0.0000	18.8262	18.8262	5.9200e-003	0.0000	18.9741
Paving	3.0000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0156**	**0.1247**	**0.1410**	**2.2000e-004**		**6.6600e-003**	**6.6600e-003**		**6.1400e-003**	**6.1400e-003**	**0.0000**	**18.8262**	**18.8262**	**5.9200e-003**	**0.0000**	**18.9741**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	4.7900e-003	2.0600e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.2038	1.2038	1.0000e-004	0.0000	1.2064
Worker	5.9000e-004	3.8000e-004	4.1300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4541	1.4541	3.0000e-005	0.0000	1.4547
Total	**7.4000e-004**	**5.1700e-003**	**6.1900e-003**	**3.0000e-005**	**2.1100e-003**	**2.0000e-005**	**2.1300e-003**	**5.7000e-004**	**2.0000e-005**	**5.9000e-004**	**0.0000**	**2.6579**	**2.6579**	**1.3000e-004**	**0.0000**	**2.6612**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2074					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8300e-003	0.0267	0.0318	5.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	4.4682	4.4682	3.1000e-004	0.0000	4.4759
Total	**2.2112**	**0.0267**	**0.0318**	**5.0000e-005**		**1.6500e-003**	**1.6500e-003**		**1.6500e-003**	**1.6500e-003**	**0.0000**	**4.4682**	**4.4682**	**3.1000e-004**	**0.0000**	**4.4759**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	4.7600e-003	2.2300e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	7.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.3141	1.3141	1.7000e-004	0.0000	1.3183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3400e-003	8.7000e-004	9.4300e-003	4.0000e-005	4.1300e-003	3.0000e-005	4.1600e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.3191	3.3191	6.0000e-005	0.0000	3.3206
Total	**1.4800e-003**	**5.6300e-003**	**0.0117**	**5.0000e-005**	**4.4000e-003**	**4.0000e-005**	**4.4400e-003**	**1.1700e-003**	**3.0000e-005**	**1.2100e-003**	**0.0000**	**4.6333**	**4.6333**	**2.3000e-004**	**0.0000**	**4.6390**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2074					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8300e-003	0.0267	0.0318	5.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	4.4682	4.4682	3.1000e-004	0.0000	4.4759
Total	**2.2112**	**0.0267**	**0.0318**	**5.0000e-005**		**1.6500e-003**	**1.6500e-003**		**1.6500e-003**	**1.6500e-003**	**0.0000**	**4.4682**	**4.4682**	**3.1000e-004**	**0.0000**	**4.4759**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	4.7600e-003	2.2300e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	7.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.3141	1.3141	1.7000e-004	0.0000	1.3183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3400e-003	8.7000e-004	9.4300e-003	4.0000e-005	4.1300e-003	3.0000e-005	4.1600e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.3191	3.3191	6.0000e-005	0.0000	3.3206
Total	**1.4800e-003**	**5.6300e-003**	**0.0117**	**5.0000e-005**	**4.4000e-003**	**4.0000e-005**	**4.4400e-003**	**1.1700e-003**	**3.0000e-005**	**1.2100e-003**	**0.0000**	**4.6333**	**4.6333**	**2.3000e-004**	**0.0000**	**4.6390**

Midway Village Project Phase 2 - Unmitigated Demolition

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.05	Acre	4.05	176,418.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project Characteristics - Phase 2 Demolition (09/01/2023-10/05/2023)
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Phase 2 Demolition

Construction Phase - Phase 2 Demolition (09/01/2023-10/05/2023)

Trips and VMT - Twelve (12) additional hauling trips added to account for off-site trips associated with transport of off-road construction equipment.
459+12=471 total hauling trips

Demolition - Phase 2 Demolition totaling approximately 4,644 tons of debris.

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	25.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	459.00	471.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0302	0.3137	0.2826	6.7000e-004	0.0551	0.0126	0.0677	9.0000e-003	0.0117	0.0207	0.0000	61.8621	61.8621	0.0144	0.0000	62.2227
Maximum	**0.0302**	**0.3137**	**0.2826**	**6.7000e-004**	**0.0551**	**0.0126**	**0.0677**	**9.0000e-003**	**0.0117**	**0.0207**	**0.0000**	**61.8621**	**61.8621**	**0.0144**	**0.0000**	**62.2227**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0302	0.3137	0.2826	6.7000e-004	0.0278	0.0126	0.0403	4.8600e-003	0.0117	0.0166	0.0000	61.8621	61.8621	0.0144	0.0000	62.2226
Maximum	**0.0302**	**0.3137**	**0.2826**	**6.7000e-004**	**0.0278**	**0.0126**	**0.0403**	**4.8600e-003**	**0.0117**	**0.0166**	**0.0000**	**61.8621**	**61.8621**	**0.0144**	**0.0000**	**62.2226**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**49.59**	**0.00**	**40.39**	**46.00**	**0.00**	**20.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2023	9-30-2023	0.2939	0.2939
		Highest	0.2939	0.2939

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2023	10/5/2023	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.05

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	471.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0497	0.0000	0.0497	7.5200e-003	0.0000	7.5200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0284	0.2686	0.2455	4.9000e-004		0.0125	0.0125		0.0116	0.0116	0.0000	42.4901	42.4901	0.0119	0.0000	42.7876
Total	**0.0284**	**0.2686**	**0.2455**	**4.9000e-004**	**0.0497**	**0.0125**	**0.0622**	**7.5200e-003**	**0.0116**	**0.0191**	**0.0000**	**42.4901**	**42.4901**	**0.0119**	**0.0000**	**42.7876**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0449	0.0342	1.7000e-004	3.9400e-003	9.0000e-005	4.0300e-003	1.0800e-003	8.0000e-005	1.1700e-003	0.0000	18.2731	18.2731	2.5000e-003	0.0000	18.3357
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.5000e-004	2.9200e-003	1.0000e-005	1.4800e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.0989	1.0989	2.0000e-005	0.0000	1.0994
Total	**1.8200e-003**	**0.0451**	**0.0371**	**1.8000e-004**	**5.4200e-003**	**1.0000e-004**	**5.5100e-003**	**1.4700e-003**	**9.0000e-005**	**1.5700e-003**	**0.0000**	**19.3721**	**19.3721**	**2.5200e-003**	**0.0000**	**19.4351**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0224	0.0000	0.0224	3.3900e-003	0.0000	3.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0284	0.2686	0.2455	4.9000e-004		0.0125	0.0125		0.0116	0.0116	0.0000	42.4900	42.4900	0.0119	0.0000	42.7875
Total	**0.0284**	**0.2686**	**0.2455**	**4.9000e-004**	**0.0224**	**0.0125**	**0.0348**	**3.3900e-003**	**0.0116**	**0.0150**	**0.0000**	**42.4900**	**42.4900**	**0.0119**	**0.0000**	**42.7875**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0449	0.0342	1.7000e-004	3.9400e-003	9.0000e-005	4.0300e-003	1.0800e-003	8.0000e-005	1.1700e-003	0.0000	18.2731	18.2731	2.5000e-003	0.0000	18.3357
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.5000e-004	2.9200e-003	1.0000e-005	1.4800e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.0989	1.0989	2.0000e-005	0.0000	1.0994
Total	**1.8200e-003**	**0.0451**	**0.0371**	**1.8000e-004**	**5.4200e-003**	**1.0000e-004**	**5.5100e-003**	**1.4700e-003**	**9.0000e-005**	**1.5700e-003**	**0.0000**	**19.3721**	**19.3721**	**2.5200e-003**	**0.0000**	**19.4351**

Midway Village Project Phase 2 - Unmitigated Construction
San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	48.52	1000sqft	1.11	48,525.00	0
Apartments Low Rise	148.00	Dwelling Unit	1.54	153,265.00	423

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 2 Construction
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Phase 2 proposed development based on Project Description dated October 21, 2019.

Construction Phase - Phase 2 conceptual construction schedule consistent with Project Description dated October 21, 2019.
Phase 2 Demolition (09/01/2023-10/05/2023) analyzed in a separate CalEEMod run.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Additional grading equipment included based on project-specific information

Off-road Equipment -

Trips and VMT - Additional hauling trips to account for transport of construction equipment based on two (2) trips per piece of off-road construction equipment. Additional vendor trips included to account for anticipated paving off-site trips.

Demolition - Demolition associated with Phase 2 analyzed in a separate CalEEMod run.

Grading - Approximately 12,611 cubic yards to be imported in Phase 2 (43,092 total cubic yards of import for the project anticipated; 12,611 cubic yards in Phase 2 and 30,481 cubic yards in Phase 4)

Architectural Coating -

Vehicle Trips - Construction run only

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Construction run only

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	3.00	28.00
tblConstructionPhase	NumDays	6.00	16.00
tblConstructionPhase	NumDays	220.00	155.00
tblConstructionPhase	NumDays	10.00	35.00

tblConstructionPhase	NumDays	10.00	38.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	25.16	0.00
tblGrading	MaterialImported	0.00	12,611.00
tblLandUse	LandUseSquareFeet	48,520.00	48,525.00
tblLandUse	LandUseSquareFeet	148,000.00	153,265.00
tblLandUse	LotAcreage	9.25	1.54
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0469	0.5731	0.4323	1.3800e-003	0.0953	0.0175	0.1128	0.0349	0.0162	0.0511	0.0000	130.7923	130.7923	0.0277	0.0000	131.4851
2024	1.2524	1.2591	1.5058	3.3000e-003	0.0915	0.0483	0.1397	0.0246	0.0460	0.0706	0.0000	287.9446	287.9446	0.0424	0.0000	289.0041
Maximum	**1.2524**	**1.2591**	**1.5058**	**3.3000e-003**	**0.0953**	**0.0483**	**0.1397**	**0.0349**	**0.0460**	**0.0706**	**0.0000**	**287.9446**	**287.9446**	**0.0424**	**0.0000**	**289.0041**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0469	0.5731	0.4323	1.3800e-003	0.0538	0.0175	0.0713	0.0187	0.0162	0.0349	0.0000	130.7922	130.7922	0.0277	0.0000	131.4850
2024	1.2524	1.2591	1.5058	3.3000e-003	0.0915	0.0483	0.1397	0.0246	0.0460	0.0706	0.0000	287.9444	287.9444	0.0424	0.0000	289.0039
Maximum	**1.2524**	**1.2591**	**1.5058**	**3.3000e-003**	**0.0915**	**0.0483**	**0.1397**	**0.0246**	**0.0460**	**0.0706**	**0.0000**	**287.9444**	**287.9444**	**0.0424**	**0.0000**	**289.0039**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**22.22**	**0.00**	**16.42**	**27.22**	**0.00**	**13.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**
1	**9-1-2023**	**11-30-2023**	0.2933	0.2933
2	**12-1-2023**	**2-29-2024**	0.6995	0.6995
3	**3-1-2024**	**5-31-2024**	0.5485	0.5485
4	**6-1-2024**	**8-31-2024**	1.0931	1.0931
5	**9-1-2024**	**9-30-2024**	0.5260	0.5260
		Highest	1.0931	1.0931

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/15/2023	11/22/2023	5	28	
2	Grading	Grading	11/26/2023	12/18/2023	5	16	
3	Building Construction	Building Construction	12/20/2023	7/23/2024	5	155	
4	Paving	Paving	6/1/2024	7/20/2024	5	35	
5	Architectural Coating	Architectural Coating	8/3/2024	9/25/2024	5	38	

Acres of Grading (Site Preparation Phase): 42

Acres of Grading (Grading Phase): 8

Acres of Paving: 1.11

Residential Indoor: 310,362; Residential Outdoor: 103,454; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Trenchers	1	8.00	78	0.50
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	24.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,576.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	127.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	24.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0223	0.0000	0.0223	2.4000e-003	0.0000	2.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0182	0.1999	0.1370	3.4000e-004		7.5900e-003	7.5900e-003		6.9800e-003	6.9800e-003	0.0000	30.1622	30.1622	9.7600e-003	0.0000	30.4060
Total	**0.0182**	**0.1999**	**0.1370**	**3.4000e-004**	**0.0223**	**7.5900e-003**	**0.0299**	**2.4000e-003**	**6.9800e-003**	**9.3800e-003**	**0.0000**	**30.1622**	**30.1622**	**9.7600e-003**	**0.0000**	**30.4060**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.2900e-003	1.7400e-003	1.0000e-005	2.0000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.9311	0.9311	1.3000e-004	0.0000	0.9343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.5000e-004	1.7400e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.9000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6564	0.6564	1.0000e-005	0.0000	0.6567
Total	**3.3000e-004**	**2.4400e-003**	**3.4800e-003**	**2.0000e-005**	**1.0800e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**1.5875**	**1.5875**	**1.4000e-004**	**0.0000**	**1.5910**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0100	0.0000	0.0100	1.0800e-003	0.0000	1.0800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0182	0.1999	0.1370	3.4000e-004		7.5900e-003	7.5900e-003		6.9800e-003	6.9800e-003	0.0000	30.1621	30.1621	9.7600e-003	0.0000	30.4060
Total	**0.0182**	**0.1999**	**0.1370**	**3.4000e-004**	**0.0100**	**7.5900e-003**	**0.0176**	**1.0800e-003**	**6.9800e-003**	**8.0600e-003**	**0.0000**	**30.1621**	**30.1621**	**9.7600e-003**	**0.0000**	**30.4060**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.2900e-003	1.7400e-003	1.0000e-005	2.0000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.9311	0.9311	1.3000e-004	0.0000	0.9343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.5000e-004	1.7400e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.9000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6564	0.6564	1.0000e-005	0.0000	0.6567
Total	**3.3000e-004**	**2.4400e-003**	**3.4800e-003**	**2.0000e-005**	**1.0800e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**1.5875**	**1.5875**	**1.4000e-004**	**0.0000**	**1.5910**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0531	0.0000	0.0531	0.0271	0.0000	0.0271	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.1579	0.1066	2.7000e-004		7.1600e-003	7.1600e-003		6.5800e-003	6.5800e-003	0.0000	23.5013	23.5013	7.6000e-003	0.0000	23.6913
Total	**0.0152**	**0.1579**	**0.1066**	**2.7000e-004**	**0.0531**	**7.1600e-003**	**0.0603**	**0.0271**	**6.5800e-003**	**0.0336**	**0.0000**	**23.5013**	**23.5013**	**7.6000e-003**	**0.0000**	**23.6913**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.6400e-003	0.1501	0.1144	5.9000e-004	0.0132	3.0000e-004	0.0135	3.6300e-003	2.8000e-004	3.9100e-003	0.0000	61.1432	61.1432	8.3800e-003	0.0000	61.3526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.6000e-004	1.8700e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.7033	0.7033	1.0000e-005	0.0000	0.7036
Total	**4.9100e-003**	**0.1503**	**0.1163**	**6.0000e-004**	**0.0141**	**3.1000e-004**	**0.0144**	**3.8800e-003**	**2.9000e-004**	**4.1700e-003**	**0.0000**	**61.8465**	**61.8465**	**8.3900e-003**	**0.0000**	**62.0562**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0239	0.0000	0.0239	0.0122	0.0000	0.0122	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.1579	0.1066	2.7000e-004		7.1600e-003	7.1600e-003		6.5800e-003	6.5800e-003	0.0000	23.5013	23.5013	7.6000e-003	0.0000	23.6913
Total	**0.0152**	**0.1579**	**0.1066**	**2.7000e-004**	**0.0239**	**7.1600e-003**	**0.0311**	**0.0122**	**6.5800e-003**	**0.0188**	**0.0000**	**23.5013**	**23.5013**	**7.6000e-003**	**0.0000**	**23.6913**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.6400e-003	0.1501	0.1144	5.9000e-004	0.0132	3.0000e-004	0.0135	3.6300e-003	2.8000e-004	3.9100e-003	0.0000	61.1432	61.1432	8.3800e-003	0.0000	61.3526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.6000e-004	1.8700e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.7033	0.7033	1.0000e-005	0.0000	0.7036
Total	**4.9100e-003**	**0.1503**	**0.1163**	**6.0000e-004**	**0.0141**	**3.1000e-004**	**0.0144**	**3.8800e-003**	**2.9000e-004**	**4.1700e-003**	**0.0000**	**61.8465**	**61.8465**	**8.3900e-003**	**0.0000**	**62.0562**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8500e-003	0.0545	0.0569	1.0000e-004		2.4500e-003	2.4500e-003		2.3500e-003	2.3500e-003	0.0000	8.3081	8.3081	1.5700e-003	0.0000	8.3474
Total	**6.8500e-003**	**0.0545**	**0.0569**	**1.0000e-004**		**2.4500e-003**	**2.4500e-003**		**2.3500e-003**	**2.3500e-003**	**0.0000**	**8.3081**	**8.3081**	**1.5700e-003**	**0.0000**	**8.3474**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	7.3800e-003	4.2200e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.4094	2.4094	2.1000e-004	0.0000	2.4147
Worker	1.1600e-003	6.9000e-004	7.9100e-003	3.0000e-005	4.0000e-003	2.0000e-005	4.0200e-003	1.0600e-003	2.0000e-005	1.0900e-003	0.0000	2.9774	2.9774	5.0000e-005	0.0000	2.9786
Total	**1.3900e-003**	**8.0700e-003**	**0.0121**	**5.0000e-005**	**4.6300e-003**	**3.0000e-005**	**4.6600e-003**	**1.2400e-003**	**3.0000e-005**	**1.2800e-003**	**0.0000**	**5.3867**	**5.3867**	**2.6000e-004**	**0.0000**	**5.3932**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8500e-003	0.0545	0.0569	1.0000e-004		2.4500e-003	2.4500e-003		2.3500e-003	2.3500e-003	0.0000	8.3081	8.3081	1.5700e-003	0.0000	8.3474
Total	**6.8500e-003**	**0.0545**	**0.0569**	**1.0000e-004**		**2.4500e-003**	**2.4500e-003**		**2.3500e-003**	**2.3500e-003**	**0.0000**	**8.3081**	**8.3081**	**1.5700e-003**	**0.0000**	**8.3474**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	7.3800e-003	4.2200e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.4094	2.4094	2.1000e-004	0.0000	2.4147
Worker	1.1600e-003	6.9000e-004	7.9100e-003	3.0000e-005	4.0000e-003	2.0000e-005	4.0200e-003	1.0600e-003	2.0000e-005	1.0900e-003	0.0000	2.9774	2.9774	5.0000e-005	0.0000	2.9786
Total	**1.3900e-003**	**8.0700e-003**	**0.0121**	**5.0000e-005**	**4.6300e-003**	**3.0000e-005**	**4.6600e-003**	**1.2400e-003**	**3.0000e-005**	**1.2800e-003**	**0.0000**	**5.3867**	**5.3867**	**2.6000e-004**	**0.0000**	**5.3932**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1174	0.9425	1.0364	1.8400e-003		0.0396	0.0396		0.0379	0.0379	0.0000	152.6697	152.6697	0.0284	0.0000	153.3806
Total	**0.1174**	**0.9425**	**1.0364**	**1.8400e-003**		**0.0396**	**0.0396**		**0.0379**	**0.0379**	**0.0000**	**152.6697**	**152.6697**	**0.0284**	**0.0000**	**153.3806**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0700e-003	0.1318	0.0787	4.4000e-004	0.0115	1.8000e-004	0.0117	3.3300e-003	1.7000e-004	3.5000e-003	0.0000	43.8750	43.8750	3.9300e-003	0.0000	43.9732
Worker	0.0204	0.0116	0.1358	5.8000e-004	0.0735	4.3000e-004	0.0739	0.0196	3.9000e-004	0.0200	0.0000	52.5816	52.5816	7.9000e-004	0.0000	52.6014
Total	**0.0245**	**0.1433**	**0.2145**	**1.0200e-003**	**0.0850**	**6.1000e-004**	**0.0856**	**0.0229**	**5.6000e-004**	**0.0235**	**0.0000**	**96.4565**	**96.4565**	**4.7200e-003**	**0.0000**	**96.5746**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1174	0.9425	1.0364	1.8400e-003		0.0396	0.0396		0.0379	0.0379	0.0000	152.6696	152.6696	0.0284	0.0000	153.3804
Total	**0.1174**	**0.9425**	**1.0364**	**1.8400e-003**		**0.0396**	**0.0396**		**0.0379**	**0.0379**	**0.0000**	**152.6696**	**152.6696**	**0.0284**	**0.0000**	**153.3804**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0700e-003	0.1318	0.0787	4.4000e-004	0.0115	1.8000e-004	0.0117	3.3300e-003	1.7000e-004	3.5000e-003	0.0000	43.8750	43.8750	3.9300e-003	0.0000	43.9732
Worker	0.0204	0.0116	0.1358	5.8000e-004	0.0735	4.3000e-004	0.0739	0.0196	3.9000e-004	0.0200	0.0000	52.5816	52.5816	7.9000e-004	0.0000	52.6014
Total	**0.0245**	**0.1433**	**0.2145**	**1.0200e-003**	**0.0850**	**6.1000e-004**	**0.0856**	**0.0229**	**5.6000e-004**	**0.0235**	**0.0000**	**96.4565**	**96.4565**	**4.7200e-003**	**0.0000**	**96.5746**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0147	0.1418	0.2049	3.1000e-004		6.9200e-003	6.9200e-003		6.3900e-003	6.3900e-003	0.0000	27.1507	27.1507	8.6000e-003	0.0000	27.3658
Paving	1.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0162**	**0.1418**	**0.2049**	**3.1000e-004**		**6.9200e-003**	**6.9200e-003**		**6.3900e-003**	**6.3900e-003**	**0.0000**	**27.1507**	**27.1507**	**8.6000e-003**	**0.0000**	**27.3658**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.2300e-003	3.1200e-003	2.0000e-005	4.6000e-004	1.0000e-005	4.6000e-004	1.3000e-004	1.0000e-005	1.4000e-004	0.0000	1.7411	1.7411	1.6000e-004	0.0000	1.7450
Worker	5.7000e-004	3.2000e-004	3.8200e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.4787	1.4787	2.0000e-005	0.0000	1.4792
Total	**7.3000e-004**	**5.5500e-003**	**6.9400e-003**	**4.0000e-005**	**2.5300e-003**	**2.0000e-005**	**2.5400e-003**	**6.8000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**3.2197**	**3.2197**	**1.8000e-004**	**0.0000**	**3.2242**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0147	0.1418	0.2049	3.1000e-004		6.9200e-003	6.9200e-003		6.3900e-003	6.3900e-003	0.0000	27.1507	27.1507	8.6000e-003	0.0000	27.3658
Paving	1.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0162**	**0.1418**	**0.2049**	**3.1000e-004**		**6.9200e-003**	**6.9200e-003**		**6.3900e-003**	**6.3900e-003**	**0.0000**	**27.1507**	**27.1507**	**8.6000e-003**	**0.0000**	**27.3658**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.2300e-003	3.1200e-003	2.0000e-005	4.6000e-004	1.0000e-005	4.6000e-004	1.3000e-004	1.0000e-005	1.4000e-004	0.0000	1.7411	1.7411	1.6000e-004	0.0000	1.7450
Worker	5.7000e-004	3.2000e-004	3.8200e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.4787	1.4787	2.0000e-005	0.0000	1.4792
Total	**7.3000e-004**	**5.5500e-003**	**6.9400e-003**	**4.0000e-005**	**2.5300e-003**	**2.0000e-005**	**2.5400e-003**	**6.8000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**3.2197**	**3.2197**	**1.8000e-004**	**0.0000**	**3.2242**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0890					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4300e-003	0.0232	0.0344	6.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	4.8512	4.8512	2.7000e-004	0.0000	4.8580
Total	**1.0925**	**0.0232**	**0.0344**	**6.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.1600e-003**	**1.1600e-003**	**0.0000**	**4.8512**	**4.8512**	**2.7000e-004**	**0.0000**	**4.8580**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.1900e-003	1.8100e-003	1.0000e-005	2.0000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.9210	0.9210	1.3000e-004	0.0000	0.9242
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	5.9000e-004	6.9100e-003	3.0000e-005	3.7400e-003	2.0000e-005	3.7600e-003	1.0000e-003	2.0000e-005	1.0100e-003	0.0000	2.6757	2.6757	4.0000e-005	0.0000	2.6767
Total	**1.1100e-003**	**2.7800e-003**	**8.7200e-003**	**4.0000e-005**	**3.9400e-003**	**2.0000e-005**	**3.9700e-003**	**1.0600e-003**	**2.0000e-005**	**1.0700e-003**	**0.0000**	**3.5967**	**3.5967**	**1.7000e-004**	**0.0000**	**3.6009**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0890					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4300e-003	0.0232	0.0344	6.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	4.8512	4.8512	2.7000e-004	0.0000	4.8580
Total	**1.0925**	**0.0232**	**0.0344**	**6.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.1600e-003**	**1.1600e-003**	**0.0000**	**4.8512**	**4.8512**	**2.7000e-004**	**0.0000**	**4.8580**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.1900e-003	1.8100e-003	1.0000e-005	2.0000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.9210	0.9210	1.3000e-004	0.0000	0.9242
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	5.9000e-004	6.9100e-003	3.0000e-005	3.7400e-003	2.0000e-005	3.7600e-003	1.0000e-003	2.0000e-005	1.0100e-003	0.0000	2.6757	2.6757	4.0000e-005	0.0000	2.6767
Total	**1.1100e-003**	**2.7800e-003**	**8.7200e-003**	**4.0000e-005**	**3.9400e-003**	**2.0000e-005**	**3.9700e-003**	**1.0600e-003**	**2.0000e-005**	**1.0700e-003**	**0.0000**	**3.5967**	**3.5967**	**1.7000e-004**	**0.0000**	**3.6009**

Midway Village Project Phase 3 - Unmitigated Demolition

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.71	Acre	4.71	205,167.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 3 Demolition (07/10/2025-09/03/2025)
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Phase 3 Demolition

Construction Phase - Phase 3 Demolition (07/10/2025-09/03/2025)

Trips and VMT - Twelve (12) additional hauling trips added to account for off-site trips associated with transport of off-road construction equipment.
753+12=765 total hauling trips

Demolition - Phase 3 Demolition totaling approximately 7,619 tons of debris.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	40.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	753.00	765.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0447	0.4515	0.4523	1.0700e-003	0.0903	0.0172	0.1075	0.0147	0.0160	0.0307	0.0000	98.6589	98.6589	0.0232	0.0000	99.2394
Maximum	**0.0447**	**0.4515**	**0.4523**	**1.0700e-003**	**0.0903**	**0.0172**	**0.1075**	**0.0147**	**0.0160**	**0.0307**	**0.0000**	**98.6589**	**98.6589**	**0.0232**	**0.0000**	**99.2394**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0447	0.4515	0.4523	1.0700e-003	0.0455	0.0172	0.0627	7.9400e-003	0.0160	0.0239	0.0000	98.6588	98.6588	0.0232	0.0000	99.2393
Maximum	**0.0447**	**0.4515**	**0.4523**	**1.0700e-003**	**0.0455**	**0.0172**	**0.0627**	**7.9400e-003**	**0.0160**	**0.0239**	**0.0000**	**98.6588**	**98.6588**	**0.0232**	**0.0000**	**99.2393**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	49.66	0.00	41.72	46.10	0.00	22.11	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-10-2025	9-30-2025	0.4946	0.4946
		Highest	0.4946	0.4946

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/10/2025	9/3/2025	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	765.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0815	0.0000	0.0815	0.0123	0.0000	0.0123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.3839	0.3884	7.8000e-004		0.0171	0.0171		0.0158	0.0158	0.0000	67.9953	67.9953	0.0190	0.0000	68.4700
Total	**0.0419**	**0.3839**	**0.3884**	**7.8000e-004**	**0.0815**	**0.0171**	**0.0986**	**0.0123**	**0.0158**	**0.0282**	**0.0000**	**67.9953**	**67.9953**	**0.0190**	**0.0000**	**68.4700**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2000e-003	0.0672	0.0598	2.8000e-004	6.4100e-003	1.3000e-004	6.5400e-003	1.7600e-003	1.3000e-004	1.8900e-003	0.0000	29.0413	29.0413	4.2100e-003	0.0000	29.1466
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.4000e-004	4.0700e-003	2.0000e-005	2.3600e-003	1.0000e-005	2.3800e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.6223	1.6223	2.0000e-005	0.0000	1.6229
Total	**2.8300e-003**	**0.0675**	**0.0639**	**3.0000e-004**	**8.7700e-003**	**1.4000e-004**	**8.9200e-003**	**2.3900e-003**	**1.4000e-004**	**2.5300e-003**	**0.0000**	**30.6636**	**30.6636**	**4.2300e-003**	**0.0000**	**30.7694**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0367	0.0000	0.0367	5.5500e-003	0.0000	5.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.3839	0.3884	7.8000e-004		0.0171	0.0171		0.0158	0.0158	0.0000	67.9952	67.9952	0.0190	0.0000	68.4699
Total	**0.0419**	**0.3839**	**0.3884**	**7.8000e-004**	**0.0367**	**0.0171**	**0.0537**	**5.5500e-003**	**0.0158**	**0.0214**	**0.0000**	**67.9952**	**67.9952**	**0.0190**	**0.0000**	**68.4699**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2000e-003	0.0672	0.0598	2.8000e-004	6.4100e-003	1.3000e-004	6.5400e-003	1.7600e-003	1.3000e-004	1.8900e-003	0.0000	29.0413	29.0413	4.2100e-003	0.0000	29.1466
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.4000e-004	4.0700e-003	2.0000e-005	2.3600e-003	1.0000e-005	2.3800e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.6223	1.6223	2.0000e-005	0.0000	1.6229
Total	**2.8300e-003**	**0.0675**	**0.0639**	**3.0000e-004**	**8.7700e-003**	**1.4000e-004**	**8.9200e-003**	**2.3900e-003**	**1.4000e-004**	**2.5300e-003**	**0.0000**	**30.6636**	**30.6636**	**4.2300e-003**	**0.0000**	**30.7694**

Midway Village Project Phase 3 - Unmitigated Construction

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	76.70	1000sqft	1.76	76,700.00	0
Apartments Low Rise	117.00	Dwelling Unit	2.54	191,197.00	335

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 3 Construction
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label

Land Use - Phase 3 proposed development based on Project Description dated October 21, 2019.

Construction Phase - Phase 3 conceptual construction schedule consistent with Project Description dated October 21, 2019.
Phase 3 Demolition (07/10/2025-09/03/2025) analyzed in a separate CalEEMod run.

Off-road Equipment -

Off-road Equipment - Adjusted building construction equipment usage based on project-specific information

Off-road Equipment - Additional grading equipment included based on project-specific information

Off-road Equipment -

Trips and VMT - Hauling trips added to account for transport of off-road construction equipment. Additional vendor trips included to account for anticipated paving off-site trips.

Grading - Material anticipated to be balanced on-site during Phase 3 construction.
No import or export in Phase 3 (43,092 total cubic yards of import for the project accounted for in phases 2 and 4).

Vehicle Trips - Construction run only

Woodstoves - Construction run only

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	35.00
tblConstructionPhase	NumDays	8.00	25.00
tblConstructionPhase	NumDays	230.00	175.00
tblConstructionPhase	NumDays	18.00	48.00
tblConstructionPhase	NumDays	18.00	35.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	19.89	0.00
tblLandUse	LandUseSquareFeet	117,000.00	191,197.00
tblLandUse	LotAcreage	7.31	2.54
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	0.00	32.00
tblTripsAndVMT	HaulingTripNumber	0.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0841	0.8158	0.7145	1.5800e-003	0.4125	0.0345	0.4469	0.2198	0.0318	0.2515	0.0000	139.4453	139.4453	0.0391	0.0000	140.4218
2026	1.5100	1.2467	1.6588	3.4900e-003	0.0923	0.0477	0.1400	0.0249	0.0449	0.0697	0.0000	310.7062	310.7062	0.0549	0.0000	312.0775
Maximum	**1.5100**	**1.2467**	**1.6588**	**3.4900e-003**	**0.4125**	**0.0477**	**0.4469**	**0.2198**	**0.0449**	**0.2515**	**0.0000**	**310.7062**	**310.7062**	**0.0549**	**0.0000**	**312.0775**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0841	0.8158	0.7145	1.5800e-003	0.1935	0.0345	0.2280	0.1010	0.0318	0.1328	0.0000	139.4452	139.4452	0.0391	0.0000	140.4217
2026	1.5100	1.2467	1.6588	3.4900e-003	0.0923	0.0477	0.1400	0.0249	0.0449	0.0697	0.0000	310.7059	310.7059	0.0549	0.0000	312.0772
Maximum	**1.5100**	**1.2467**	**1.6588**	**3.4900e-003**	**0.1935**	**0.0477**	**0.2280**	**0.1010**	**0.0449**	**0.1328**	**0.0000**	**310.7059**	**310.7059**	**0.0549**	**0.0000**	**312.0772**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	43.37	0.00	37.30	48.53	0.00	36.96	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-10-2025	10-9-2025	0.3491	0.3491
2	10-10-2025	1-9-2026	0.6031	0.6031
3	1-10-2026	4-9-2026	0.4747	0.4747
4	4-10-2026	7-9-2026	0.6001	0.6001
5	7-10-2026	9-30-2026	1.4841	1.4841
		Highest	1.4841	1.4841

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/5/2025	10/23/2025	5	35	
2	Grading	Grading	11/1/2025	12/5/2025	5	25	
3	Building Construction	Building Construction	12/6/2025	8/7/2026	5	175	
4	Paving	Paving	6/1/2026	8/5/2026	5	48	
5	Architectural Coating	Architectural Coating	8/18/2026	10/5/2026	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 1.76

Residential Indoor: 387,174; Residential Outdoor: 129,058; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Trenchers	1	8.00	78	0.50
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	116.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3162	0.0000	0.3162	0.1738	0.0000	0.1738	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0433	0.4416	0.3135	6.7000e-004		0.0190	0.0190		0.0175	0.0175	0.0000	58.5672	58.5672	0.0189	0.0000	59.0408
Total	**0.0433**	**0.4416**	**0.3135**	**6.7000e-004**	**0.3162**	**0.0190**	**0.3352**	**0.1738**	**0.0175**	**0.1913**	**0.0000**	**58.5672**	**58.5672**	**0.0189**	**0.0000**	**59.0408**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.8100e-003	2.5000e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.7000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	1.2148	1.2148	1.8000e-004	0.0000	1.2192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.6000e-004	4.2700e-003	2.0000e-005	2.4800e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.7034	1.7034	2.0000e-005	0.0000	1.7040
Total	**7.5000e-004**	**3.1700e-003**	**6.7700e-003**	**3.0000e-005**	**2.7500e-003**	**2.0000e-005**	**2.7600e-003**	**7.3000e-004**	**2.0000e-005**	**7.5000e-004**	**0.0000**	**2.9182**	**2.9182**	**2.0000e-004**	**0.0000**	**2.9232**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1423	0.0000	0.1423	0.0782	0.0000	0.0782	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0433	0.4416	0.3135	6.7000e-004		0.0190	0.0190		0.0175	0.0175	0.0000	58.5672	58.5672	0.0189	0.0000	59.0407
Total	**0.0433**	**0.4416**	**0.3135**	**6.7000e-004**	**0.1423**	**0.0190**	**0.1613**	**0.0782**	**0.0175**	**0.0957**	**0.0000**	**58.5672**	**58.5672**	**0.0189**	**0.0000**	**59.0407**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.8100e-003	2.5000e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.7000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	1.2148	1.2148	1.8000e-004	0.0000	1.2192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.6000e-004	4.2700e-003	2.0000e-005	2.4800e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.7034	1.7034	2.0000e-005	0.0000	1.7040
Total	**7.5000e-004**	**3.1700e-003**	**6.7700e-003**	**3.0000e-005**	**2.7500e-003**	**2.0000e-005**	**2.7600e-003**	**7.3000e-004**	**2.0000e-005**	**7.5000e-004**	**0.0000**	**2.9182**	**2.9182**	**2.0000e-004**	**0.0000**	**2.9232**

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0819	0.0000	0.0819	0.0421	0.0000	0.0421	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0256	0.2515	0.2393	5.3000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	46.7007	46.7007	0.0151	0.0000	47.0783
Total	**0.0256**	**0.2515**	**0.2393**	**5.3000e-004**	**0.0819**	**0.0110**	**0.0929**	**0.0421**	**0.0101**	**0.0522**	**0.0000**	**46.7007**	**46.7007**	**0.0151**	**0.0000**	**47.0783**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	2.8000e-004	3.3900e-003	1.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.3519	1.3519	2.0000e-005	0.0000	1.3524
Total	**5.3000e-004**	**2.8000e-004**	**3.3900e-003**	**1.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9800e-003**	**5.2000e-004**	**1.0000e-005**	**5.3000e-004**	**0.0000**	**1.3519**	**1.3519**	**2.0000e-005**	**0.0000**	**1.3524**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0369	0.0000	0.0369	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0256	0.2515	0.2393	5.3000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	46.7007	46.7007	0.0151	0.0000	47.0783
Total	**0.0256**	**0.2515**	**0.2393**	**5.3000e-004**	**0.0369**	**0.0110**	**0.0479**	**0.0189**	**0.0101**	**0.0291**	**0.0000**	**46.7007**	**46.7007**	**0.0151**	**0.0000**	**47.0783**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	2.8000e-004	3.3900e-003	1.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.3519	1.3519	2.0000e-005	0.0000	1.3524
Total	**5.3000e-004**	**2.8000e-004**	**3.3900e-003**	**1.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9800e-003**	**5.2000e-004**	**1.0000e-005**	**5.3000e-004**	**0.0000**	**1.3519**	**1.3519**	**2.0000e-005**	**0.0000**	**1.3524**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.1017	0.1272	2.2000e-004		4.3200e-003	4.3200e-003		4.0700e-003	4.0700e-003	0.0000	18.7148	18.7148	4.2100e-003	0.0000	18.8201
Total	**0.0113**	**0.1017**	**0.1272**	**2.2000e-004**		**4.3200e-003**	**4.3200e-003**		**4.0700e-003**	**4.0700e-003**	**0.0000**	**18.7148**	**18.7148**	**4.2100e-003**	**0.0000**	**18.8201**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	0.0164	0.0102	5.0000e-005	1.4700e-003	2.0000e-005	1.4900e-003	4.2000e-004	2.0000e-005	4.5000e-004	0.0000	5.5469	5.5469	5.0000e-004	0.0000	5.5595
Worker	2.1900e-003	1.1900e-003	0.0142	6.0000e-005	8.2200e-003	5.0000e-005	8.2700e-003	2.1900e-003	4.0000e-005	2.2300e-003	0.0000	5.6455	5.6455	8.0000e-005	0.0000	5.6476
Total	**2.7000e-003**	**0.0175**	**0.0244**	**1.1000e-004**	**9.6900e-003**	**7.0000e-005**	**9.7600e-003**	**2.6100e-003**	**6.0000e-005**	**2.6800e-003**	**0.0000**	**11.1924**	**11.1924**	**5.8000e-004**	**0.0000**	**11.2071**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.1017	0.1272	2.2000e-004		4.3200e-003	4.3200e-003		4.0700e-003	4.0700e-003	0.0000	18.7148	18.7148	4.2100e-003	0.0000	18.8200
Total	**0.0113**	**0.1017**	**0.1272**	**2.2000e-004**		**4.3200e-003**	**4.3200e-003**		**4.0700e-003**	**4.0700e-003**	**0.0000**	**18.7148**	**18.7148**	**4.2100e-003**	**0.0000**	**18.8200**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	0.0164	0.0102	5.0000e-005	1.4700e-003	2.0000e-005	1.4900e-003	4.2000e-004	2.0000e-005	4.5000e-004	0.0000	5.5469	5.5469	5.0000e-004	0.0000	5.5595
Worker	2.1900e-003	1.1900e-003	0.0142	6.0000e-005	8.2200e-003	5.0000e-005	8.2700e-003	2.1900e-003	4.0000e-005	2.2300e-003	0.0000	5.6455	5.6455	8.0000e-005	0.0000	5.6476
Total	**2.7000e-003**	**0.0175**	**0.0244**	**1.1000e-004**	**9.6900e-003**	**7.0000e-005**	**9.7600e-003**	**2.6100e-003**	**6.0000e-005**	**2.6800e-003**	**0.0000**	**11.1924**	**11.1924**	**5.8000e-004**	**0.0000**	**11.2071**

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0983	0.8872	1.1095	1.9000e-003		0.0377	0.0377		0.0355	0.0355	0.0000	163.2350	163.2350	0.0367	0.0000	164.1527
Total	**0.0983**	**0.8872**	**1.1095**	**1.9000e-003**		**0.0377**	**0.0377**		**0.0355**	**0.0355**	**0.0000**	**163.2350**	**163.2350**	**0.0367**	**0.0000**	**164.1527**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3200e-003	0.1387	0.0908	4.7000e-004	0.0128	1.9000e-004	0.0130	3.7000e-003	1.8000e-004	3.8800e-003	0.0000	47.9726	47.9726	4.4400e-003	0.0000	48.0836
Worker	0.0185	9.5700e-003	0.1163	5.3000e-004	0.0717	4.0000e-004	0.0721	0.0191	3.6000e-004	0.0194	0.0000	47.5639	47.5639	6.5000e-004	0.0000	47.5802
Total	**0.0228**	**0.1483**	**0.2071**	**1.0000e-003**	**0.0845**	**5.9000e-004**	**0.0851**	**0.0228**	**5.4000e-004**	**0.0233**	**0.0000**	**95.5365**	**95.5365**	**5.0900e-003**	**0.0000**	**95.6638**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0983	0.8872	1.1095	1.9000e-003		0.0377	0.0377		0.0355	0.0355	0.0000	163.2348	163.2348	0.0367	0.0000	164.1525
Total	**0.0983**	**0.8872**	**1.1095**	**1.9000e-003**		**0.0377**	**0.0377**		**0.0355**	**0.0355**	**0.0000**	**163.2348**	**163.2348**	**0.0367**	**0.0000**	**164.1525**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3200e-003	0.1387	0.0908	4.7000e-004	0.0128	1.9000e-004	0.0130	3.7000e-003	1.8000e-004	3.8800e-003	0.0000	47.9726	47.9726	4.4400e-003	0.0000	48.0836
Worker	0.0185	9.5700e-003	0.1163	5.3000e-004	0.0717	4.0000e-004	0.0721	0.0191	3.6000e-004	0.0194	0.0000	47.5639	47.5639	6.5000e-004	0.0000	47.5802
Total	**0.0228**	**0.1483**	**0.2071**	**1.0000e-003**	**0.0845**	**5.9000e-004**	**0.0851**	**0.0228**	**5.4000e-004**	**0.0233**	**0.0000**	**95.5365**	**95.5365**	**5.0900e-003**	**0.0000**	**95.6638**

3.5 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0197	0.1808	0.2923	4.5000e-004		8.4600e-003	8.4600e-003		7.8200e-003	7.8200e-003	0.0000	39.3078	39.3078	0.0124	0.0000	39.6166
Paving	2.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0220**	**0.1808**	**0.2923**	**4.5000e-004**		**8.4600e-003**	**8.4600e-003**		**7.8200e-003**	**7.8200e-003**	**0.0000**	**39.3078**	**39.3078**	**0.0124**	**0.0000**	**39.6166**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	6.7900e-003	4.4400e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.3467	2.3467	2.2000e-004	0.0000	2.3521
Worker	9.7000e-004	5.0000e-004	6.1300e-003	3.0000e-005	3.7800e-003	2.0000e-005	3.8000e-003	1.0100e-003	2.0000e-005	1.0200e-003	0.0000	2.5072	2.5072	3.0000e-005	0.0000	2.5081
Total	**1.1800e-003**	**7.2900e-003**	**0.0106**	**5.0000e-005**	**4.4100e-003**	**3.0000e-005**	**4.4400e-003**	**1.1900e-003**	**3.0000e-005**	**1.2100e-003**	**0.0000**	**4.8539**	**4.8539**	**2.5000e-004**	**0.0000**	**4.8602**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0197	0.1808	0.2923	4.5000e-004		8.4600e-003	8.4600e-003		7.8200e-003	7.8200e-003	0.0000	39.3077	39.3077	0.0124	0.0000	39.6165
Paving	2.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0220**	**0.1808**	**0.2923**	**4.5000e-004**		**8.4600e-003**	**8.4600e-003**		**7.8200e-003**	**7.8200e-003**	**0.0000**	**39.3077**	**39.3077**	**0.0124**	**0.0000**	**39.6165**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	6.7900e-003	4.4400e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.3467	2.3467	2.2000e-004	0.0000	2.3521
Worker	9.7000e-004	5.0000e-004	6.1300e-003	3.0000e-005	3.7800e-003	2.0000e-005	3.8000e-003	1.0100e-003	2.0000e-005	1.0200e-003	0.0000	2.5072	2.5072	3.0000e-005	0.0000	2.5081
Total	**1.1800e-003**	**7.2900e-003**	**0.0106**	**5.0000e-005**	**4.4100e-003**	**3.0000e-005**	**4.4400e-003**	**1.1900e-003**	**3.0000e-005**	**1.2100e-003**	**0.0000**	**4.8539**	**4.8539**	**2.5000e-004**	**0.0000**	**4.8602**

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3619					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0317	5.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	**1.3649**	**0.0201**	**0.0317**	**5.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**4.4682**	**4.4682**	**2.4000e-004**	**0.0000**	**4.4743**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.7000e-003	2.5900e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.7000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	1.2024	1.2024	1.8000e-004	0.0000	1.2069
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	4.2000e-004	5.1400e-003	2.0000e-005	3.1700e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.1024	2.1024	3.0000e-005	0.0000	2.1031
Total	**9.1000e-004**	**3.1200e-003**	**7.7300e-003**	**3.0000e-005**	**3.4400e-003**	**3.0000e-005**	**3.4600e-003**	**9.1000e-004**	**3.0000e-005**	**9.4000e-004**	**0.0000**	**3.3048**	**3.3048**	**2.1000e-004**	**0.0000**	**3.3100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3619					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0317	5.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	**1.3649**	**0.0201**	**0.0317**	**5.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**4.4682**	**4.4682**	**2.4000e-004**	**0.0000**	**4.4743**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.7000e-003	2.5900e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.7000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	1.2024	1.2024	1.8000e-004	0.0000	1.2069
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	4.2000e-004	5.1400e-003	2.0000e-005	3.1700e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.1024	2.1024	3.0000e-005	0.0000	2.1031
Total	**9.1000e-004**	**3.1200e-003**	**7.7300e-003**	**3.0000e-005**	**3.4400e-003**	**3.0000e-005**	**3.4600e-003**	**9.1000e-004**	**3.0000e-005**	**9.4000e-004**	**0.0000**	**3.3048**	**3.3048**	**2.1000e-004**	**0.0000**	**3.3100**

Midway Village Project Phase 4 - Unmitigated Demolition
San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	3.75	Acre	3.75	163,350.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project Characteristics - Phase 4 Demolition (07/10/2025-09/03/2025)
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Phase 4 Demolition

Construction Phase - Phase 4 Demolition (07/10/2025-09/03/2025)

Trips and VMT - Twelve (12) additional hauling trips added to account for off-site trips associated with transport of off-road construction equipment.
177+12=189 total hauling trips

Demolition - Phase 4 Demolition totaling approximately 1,789 tons of debris.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	40.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	177.00	189.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0430	0.4009	0.4072	8.6000e-004	0.0231	0.0171	0.0402	3.9600e-003	0.0159	0.0198	0.0000	76.7925	76.7925	0.0201	0.0000	77.2937
Maximum	**0.0430**	**0.4009**	**0.4072**	**8.6000e-004**	**0.0231**	**0.0171**	**0.0402**	**3.9600e-003**	**0.0159**	**0.0198**	**0.0000**	**76.7925**	**76.7925**	**0.0201**	**0.0000**	**77.2937**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0430	0.4009	0.4072	8.6000e-004	0.0126	0.0171	0.0297	2.3700e-003	0.0159	0.0183	0.0000	76.7924	76.7924	0.0201	0.0000	77.2937
Maximum	**0.0430**	**0.4009**	**0.4072**	**8.6000e-004**	**0.0126**	**0.0171**	**0.0297**	**2.3700e-003**	**0.0159**	**0.0183**	**0.0000**	**76.7924**	**76.7924**	**0.0201**	**0.0000**	**77.2937**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	45.60	0.00	26.20	40.15	0.00	8.01	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-10-2025	9-30-2025	0.4435	0.4435
		Highest	0.4435	0.4435

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/10/2025	9/3/2025	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.75

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	189.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0191	0.0000	0.0191	2.9000e-003	0.0000	2.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.3839	0.3884	7.8000e-004		0.0171	0.0171		0.0158	0.0158	0.0000	67.9953	67.9953	0.0190	0.0000	68.4700
Total	**0.0419**	**0.3839**	**0.3884**	**7.8000e-004**	**0.0191**	**0.0171**	**0.0362**	**2.9000e-003**	**0.0158**	**0.0187**	**0.0000**	**67.9953**	**67.9953**	**0.0190**	**0.0000**	**68.4700**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0166	0.0148	7.0000e-005	1.5800e-003	3.0000e-005	1.6200e-003	4.4000e-004	3.0000e-005	4.7000e-004	0.0000	7.1749	7.1749	1.0400e-003	0.0000	7.2009
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.4000e-004	4.0700e-003	2.0000e-005	2.3600e-003	1.0000e-005	2.3800e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.6223	1.6223	2.0000e-005	0.0000	1.6229
Total	**1.1700e-003**	**0.0169**	**0.0189**	**9.0000e-005**	**3.9400e-003**	**4.0000e-005**	**4.0000e-003**	**1.0700e-003**	**4.0000e-005**	**1.1100e-003**	**0.0000**	**8.7972**	**8.7972**	**1.0600e-003**	**0.0000**	**8.8238**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.6100e-003	0.0000	8.6100e-003	1.3000e-003	0.0000	1.3000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.3839	0.3884	7.8000e-004		0.0171	0.0171		0.0158	0.0158	0.0000	67.9952	67.9952	0.0190	0.0000	68.4699
Total	**0.0419**	**0.3839**	**0.3884**	**7.8000e-004**	**8.6100e-003**	**0.0171**	**0.0257**	**1.3000e-003**	**0.0158**	**0.0171**	**0.0000**	**67.9952**	**67.9952**	**0.0190**	**0.0000**	**68.4699**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0166	0.0148	7.0000e-005	1.5800e-003	3.0000e-005	1.6200e-003	4.4000e-004	3.0000e-005	4.7000e-004	0.0000	7.1749	7.1749	1.0400e-003	0.0000	7.2009
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.4000e-004	4.0700e-003	2.0000e-005	2.3600e-003	1.0000e-005	2.3800e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.6223	1.6223	2.0000e-005	0.0000	1.6229
Total	**1.1700e-003**	**0.0169**	**0.0189**	**9.0000e-005**	**3.9400e-003**	**4.0000e-005**	**4.0000e-003**	**1.0700e-003**	**4.0000e-005**	**1.1100e-003**	**0.0000**	**8.7972**	**8.7972**	**1.0600e-003**	**0.0000**	**8.8238**

Midway Village Project Phase 4 - Unmitigated Construction (Phase 4 On-site)

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	38.51	1000sqft	0.88	38,510.00	0
Apartments Low Rise	141.00	Dwelling Unit	5.25	226,526.00	403

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 4 Construction (On-site Construction)
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard and PG&E's 2017 power content label.

Land Use - Phase 4 proposed on-site development based on Project Description dated October 21, 2019.

Construction Phase - Phase 4 conceptual construction schedule consistent with Project Description dated October 21, 2019.
Phase 4 Demolition (07/10/2025-09/03/2025) analyzed in a separate CalEEMod run.
Phase 4 On-site Construction analyzed in a separate CalEEMod run.

Off-road Equipment - Adjusted building construction equipment usage based on project-specific information

Off-road Equipment - Additional grading equipment included based on project-specific information

Trips and VMT - Additional hauling trips included to account for transport of off-road construction equipment. Additional vendor trips included to account for anticipated paving off-site trips.

Grading - Approximately 30,481 cubic yards to be imported in Phase 4 (43,092 total cubic yards of import for the project anticipated; 12,611 cubic yards accounted for in Phase 2 and 30,481 cubic yards accounted for in Phase 4)

Vehicle Trips - Construction run only

Woodstoves - Construction run only

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	35.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	230.00	175.00
tblConstructionPhase	NumDays	20.00	48.00
tblConstructionPhase	NumDays	20.00	35.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	23.97	0.00
tblGrading	MaterialImported	0.00	30,481.00
tblLandUse	LandUseSquareFeet	141,000.00	226,526.00
tblLandUse	LotAcreage	8.81	5.25
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading

tblOffRoadEquipment	PhaseName		Grading
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	0.00	30.00
tblTripsAndVMT	HaulingTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0950	1.1478	1.0110	2.9400e-003	0.4460	0.0351	0.4811	0.2288	0.0324	0.2612	0.0000	283.2164	283.2164	0.0599	0.0000	284.7149
2026	1.7513	1.2496	1.7024	3.5100e-003	0.0907	0.0493	0.1399	0.0244	0.0463	0.0707	0.0000	311.9785	311.9785	0.0573	0.0000	313.4116
Maximum	**1.7513**	**1.2496**	**1.7024**	**3.5100e-003**	**0.4460**	**0.0493**	**0.4811**	**0.2288**	**0.0463**	**0.2612**	**0.0000**	**311.9785**	**311.9785**	**0.0599**	**0.0000**	**313.4116**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0950	1.1478	1.0110	2.9400e-003	0.2261	0.0351	0.2612	0.1099	0.0324	0.1423	0.0000	283.2163	283.2163	0.0599	0.0000	284.7147
2026	1.7513	1.2496	1.7024	3.5100e-003	0.0907	0.0493	0.1399	0.0244	0.0463	0.0707	0.0000	311.9782	311.9782	0.0573	0.0000	313.4113
Maximum	**1.7513**	**1.2496**	**1.7024**	**3.5100e-003**	**0.2261**	**0.0493**	**0.2612**	**0.1099**	**0.0463**	**0.1423**	**0.0000**	**311.9782**	**311.9782**	**0.0599**	**0.0000**	**313.4113**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**40.97**	**0.00**	**35.41**	**46.96**	**0.00**	**35.83**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-10-2025**	**10-9-2025**	0.3490	0.3490
2	**10-10-2025**	**1-9-2026**	0.9470	0.9470
3	**1-10-2026**	**4-9-2026**	0.4656	0.4656
4	**4-10-2026**	**7-9-2026**	0.6060	0.6060
5	**7-10-2026**	**9-30-2026**	1.7077	1.7077
		Highest	1.7077	1.7077

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/5/2025	10/23/2025	5	35	
2	Grading	Grading	11/1/2025	12/5/2025	5	25	
3	Building Construction	Building Construction	12/6/2025	8/7/2026	5	175	
4	Paving	Paving	6/1/2026	8/5/2026	5	48	
5	Architectural Coating	Architectural Coating	8/18/2026	10/5/2026	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 0.88

Residential Indoor: 458,715; Residential Outdoor: 152,905; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Trenchers	1	8.00	78	0.50
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	30.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,810.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	118.00	21.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	24.00	0.00	30.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3162	0.0000	0.3162	0.1738	0.0000	0.1738	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0433	0.4416	0.3135	6.7000e-004		0.0190	0.0190		0.0175	0.0175	0.0000	58.5672	58.5672	0.0189	0.0000	59.0408
Total	**0.0433**	**0.4416**	**0.3135**	**6.7000e-004**	**0.3162**	**0.0190**	**0.3352**	**0.1738**	**0.0175**	**0.1913**	**0.0000**	**58.5672**	**58.5672**	**0.0189**	**0.0000**	**59.0408**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.6400e-003	2.3500e-003	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	1.1389	1.1389	1.7000e-004	0.0000	1.1430
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.6000e-004	4.2700e-003	2.0000e-005	2.4800e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.7034	1.7034	2.0000e-005	0.0000	1.7040
Total	**7.5000e-004**	**3.0000e-003**	**6.6200e-003**	**3.0000e-005**	**2.7300e-003**	**2.0000e-005**	**2.7500e-003**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**0.0000**	**2.8423**	**2.8423**	**1.9000e-004**	**0.0000**	**2.8470**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1423	0.0000	0.1423	0.0782	0.0000	0.0782	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0433	0.4416	0.3135	6.7000e-004		0.0190	0.0190		0.0175	0.0175	0.0000	58.5672	58.5672	0.0189	0.0000	59.0407
Total	**0.0433**	**0.4416**	**0.3135**	**6.7000e-004**	**0.1423**	**0.0190**	**0.1613**	**0.0782**	**0.0175**	**0.0957**	**0.0000**	**58.5672**	**58.5672**	**0.0189**	**0.0000**	**59.0407**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.6400e-003	2.3500e-003	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	1.1389	1.1389	1.7000e-004	0.0000	1.1430
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.6000e-004	4.2700e-003	2.0000e-005	2.4800e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.7034	1.7034	2.0000e-005	0.0000	1.7040
Total	**7.5000e-004**	**3.0000e-003**	**6.6200e-003**	**3.0000e-005**	**2.7300e-003**	**2.0000e-005**	**2.7500e-003**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**0.0000**	**2.8423**	**2.8423**	**1.9000e-004**	**0.0000**	**2.8470**

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0836	0.0000	0.0836	0.0424	0.0000	0.0424	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0256	0.2515	0.2393	5.3000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	46.7007	46.7007	0.0151	0.0000	47.0783
Total	**0.0256**	**0.2515**	**0.2393**	**5.3000e-004**	**0.0836**	**0.0110**	**0.0946**	**0.0424**	**0.0101**	**0.0525**	**0.0000**	**46.7007**	**46.7007**	**0.0151**	**0.0000**	**47.0783**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0110	0.3347	0.2980	1.3700e-003	0.0319	6.6000e-004	0.0326	8.7700e-003	6.3000e-004	9.4000e-003	0.0000	144.6372	144.6372	0.0210	0.0000	145.1614
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	2.8000e-004	3.3900e-003	1.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.3519	1.3519	2.0000e-005	0.0000	1.3524
Total	**0.0115**	**0.3350**	**0.3014**	**1.3800e-003**	**0.0339**	**6.7000e-004**	**0.0345**	**9.2900e-003**	**6.4000e-004**	**9.9300e-003**	**0.0000**	**145.9891**	**145.9891**	**0.0210**	**0.0000**	**146.5138**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0376	0.0000	0.0376	0.0191	0.0000	0.0191	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0256	0.2515	0.2393	5.3000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	46.7007	46.7007	0.0151	0.0000	47.0783
Total	**0.0256**	**0.2515**	**0.2393**	**5.3000e-004**	**0.0376**	**0.0110**	**0.0486**	**0.0191**	**0.0101**	**0.0292**	**0.0000**	**46.7007**	**46.7007**	**0.0151**	**0.0000**	**47.0783**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0110	0.3347	0.2980	1.3700e-003	0.0319	6.6000e-004	0.0326	8.7700e-003	6.3000e-004	9.4000e-003	0.0000	144.6372	144.6372	0.0210	0.0000	145.1614
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	2.8000e-004	3.3900e-003	1.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.3519	1.3519	2.0000e-005	0.0000	1.3524
Total	**0.0115**	**0.3350**	**0.3014**	**1.3800e-003**	**0.0339**	**6.7000e-004**	**0.0345**	**9.2900e-003**	**6.4000e-004**	**9.9300e-003**	**0.0000**	**145.9891**	**145.9891**	**0.0210**	**0.0000**	**146.5138**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.1017	0.1272	2.2000e-004		4.3200e-003	4.3200e-003		4.0700e-003	4.0700e-003	0.0000	18.7148	18.7148	4.2100e-003	0.0000	18.8201
Total	**0.0113**	**0.1017**	**0.1272**	**2.2000e-004**		**4.3200e-003**	**4.3200e-003**		**4.0700e-003**	**4.0700e-003**	**0.0000**	**18.7148**	**18.7148**	**4.2100e-003**	**0.0000**	**18.8201**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0137	8.5700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2500e-003	3.6000e-004	2.0000e-005	3.7000e-004	0.0000	4.6594	4.6594	4.2000e-004	0.0000	4.6700
Worker	2.2300e-003	1.2100e-003	0.0144	6.0000e-005	8.3600e-003	5.0000e-005	8.4100e-003	2.2200e-003	4.0000e-005	2.2700e-003	0.0000	5.7429	5.7429	8.0000e-005	0.0000	5.7449
Total	**2.6500e-003**	**0.0149**	**0.0230**	**1.1000e-004**	**9.5900e-003**	**7.0000e-005**	**9.6600e-003**	**2.5800e-003**	**6.0000e-005**	**2.6400e-003**	**0.0000**	**10.4023**	**10.4023**	**5.0000e-004**	**0.0000**	**10.4149**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.1017	0.1272	2.2000e-004		4.3200e-003	4.3200e-003		4.0700e-003	4.0700e-003	0.0000	18.7148	18.7148	4.2100e-003	0.0000	18.8200
Total	**0.0113**	**0.1017**	**0.1272**	**2.2000e-004**		**4.3200e-003**	**4.3200e-003**		**4.0700e-003**	**4.0700e-003**	**0.0000**	**18.7148**	**18.7148**	**4.2100e-003**	**0.0000**	**18.8200**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0137	8.5700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2500e-003	3.6000e-004	2.0000e-005	3.7000e-004	0.0000	4.6594	4.6594	4.2000e-004	0.0000	4.6700
Worker	2.2300e-003	1.2100e-003	0.0144	6.0000e-005	8.3600e-003	5.0000e-005	8.4100e-003	2.2200e-003	4.0000e-005	2.2700e-003	0.0000	5.7429	5.7429	8.0000e-005	0.0000	5.7449
Total	**2.6500e-003**	**0.0149**	**0.0230**	**1.1000e-004**	**9.5900e-003**	**7.0000e-005**	**9.6600e-003**	**2.5800e-003**	**6.0000e-005**	**2.6400e-003**	**0.0000**	**10.4023**	**10.4023**	**5.0000e-004**	**0.0000**	**10.4149**

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0983	0.8872	1.1095	1.9000e-003		0.0377	0.0377		0.0355	0.0355	0.0000	163.2350	163.2350	0.0367	0.0000	164.1527
Total	**0.0983**	**0.8872**	**1.1095**	**1.9000e-003**		**0.0377**	**0.0377**		**0.0355**	**0.0355**	**0.0000**	**163.2350**	**163.2350**	**0.0367**	**0.0000**	**164.1527**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6300e-003	0.1165	0.0763	4.0000e-004	0.0108	1.6000e-004	0.0109	3.1100e-003	1.5000e-004	3.2600e-003	0.0000	40.2970	40.2970	3.7300e-003	0.0000	40.3902
Worker	0.0188	9.7300e-003	0.1183	5.3000e-004	0.0729	4.0000e-004	0.0733	0.0194	3.7000e-004	0.0198	0.0000	48.3840	48.3840	6.6000e-004	0.0000	48.4005
Total	**0.0224**	**0.1263**	**0.1946**	**9.3000e-004**	**0.0837**	**5.6000e-004**	**0.0842**	**0.0225**	**5.2000e-004**	**0.0230**	**0.0000**	**88.6810**	**88.6810**	**4.3900e-003**	**0.0000**	**88.7907**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0983	0.8872	1.1095	1.9000e-003		0.0377	0.0377		0.0355	0.0355	0.0000	163.2348	163.2348	0.0367	0.0000	164.1525
Total	**0.0983**	**0.8872**	**1.1095**	**1.9000e-003**		**0.0377**	**0.0377**		**0.0355**	**0.0355**	**0.0000**	**163.2348**	**163.2348**	**0.0367**	**0.0000**	**164.1525**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6300e-003	0.1165	0.0763	4.0000e-004	0.0108	1.6000e-004	0.0109	3.1100e-003	1.5000e-004	3.2600e-003	0.0000	40.2970	40.2970	3.7300e-003	0.0000	40.3902
Worker	0.0188	9.7300e-003	0.1183	5.3000e-004	0.0729	4.0000e-004	0.0733	0.0194	3.7000e-004	0.0198	0.0000	48.3840	48.3840	6.6000e-004	0.0000	48.4005
Total	**0.0224**	**0.1263**	**0.1946**	**9.3000e-004**	**0.0837**	**5.6000e-004**	**0.0842**	**0.0225**	**5.2000e-004**	**0.0230**	**0.0000**	**88.6810**	**88.6810**	**4.3900e-003**	**0.0000**	**88.7907**

3.5 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0220	0.2060	0.3499	5.5000e-004		0.0100	0.0100		9.2400e-003	9.2400e-003	0.0000	48.0462	48.0462	0.0155	0.0000	48.4347
Paving	1.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0231**	**0.2060**	**0.3499**	**5.5000e-004**		**0.0100**	**0.0100**		**9.2400e-003**	**9.2400e-003**	**0.0000**	**48.0462**	**48.0462**	**0.0155**	**0.0000**	**48.4347**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	6.7900e-003	4.4400e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.3467	2.3467	2.2000e-004	0.0000	2.3521
Worker	7.3000e-004	3.8000e-004	4.6000e-003	2.0000e-005	2.8300e-003	2.0000e-005	2.8500e-003	7.5000e-004	1.0000e-005	7.7000e-004	0.0000	1.8804	1.8804	3.0000e-005	0.0000	1.8811
Total	**9.4000e-004**	**7.1700e-003**	**9.0400e-003**	**4.0000e-005**	**3.4600e-003**	**3.0000e-005**	**3.4900e-003**	**9.3000e-004**	**2.0000e-005**	**9.6000e-004**	**0.0000**	**4.2271**	**4.2271**	**2.5000e-004**	**0.0000**	**4.2332**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0220	0.2060	0.3499	5.5000e-004		0.0100	0.0100		9.2400e-003	9.2400e-003	0.0000	48.0462	48.0462	0.0155	0.0000	48.4346
Paving	1.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0231**	**0.2060**	**0.3499**	**5.5000e-004**		**0.0100**	**0.0100**		**9.2400e-003**	**9.2400e-003**	**0.0000**	**48.0462**	**48.0462**	**0.0155**	**0.0000**	**48.4346**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	6.7900e-003	4.4400e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.3467	2.3467	2.2000e-004	0.0000	2.3521
Worker	7.3000e-004	3.8000e-004	4.6000e-003	2.0000e-005	2.8300e-003	2.0000e-005	2.8500e-003	7.5000e-004	1.0000e-005	7.7000e-004	0.0000	1.8804	1.8804	3.0000e-005	0.0000	1.8811
Total	**9.4000e-004**	**7.1700e-003**	**9.0400e-003**	**4.0000e-005**	**3.4600e-003**	**3.0000e-005**	**3.4900e-003**	**9.3000e-004**	**2.0000e-005**	**9.6000e-004**	**0.0000**	**4.2271**	**4.2271**	**2.5000e-004**	**0.0000**	**4.2332**

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6026					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0317	5.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	**1.6056**	**0.0201**	**0.0317**	**5.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**4.4682**	**4.4682**	**2.4000e-004**	**0.0000**	**4.4743**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.5300e-003	2.4300e-003	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	1.1272	1.1272	1.7000e-004	0.0000	1.1314
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5000e-004	4.4000e-004	5.3600e-003	2.0000e-005	3.3100e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.1938	2.1938	3.0000e-005	0.0000	2.1946
Total	**9.4000e-004**	**2.9700e-003**	**7.7900e-003**	**3.0000e-005**	**3.5600e-003**	**3.0000e-005**	**3.5800e-003**	**9.5000e-004**	**2.0000e-005**	**9.7000e-004**	**0.0000**	**3.3210**	**3.3210**	**2.0000e-004**	**0.0000**	**3.3260**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6026					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0317	5.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	**1.6056**	**0.0201**	**0.0317**	**5.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**4.4682**	**4.4682**	**2.4000e-004**	**0.0000**	**4.4743**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.5300e-003	2.4300e-003	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	1.1272	1.1272	1.7000e-004	0.0000	1.1314
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5000e-004	4.4000e-004	5.3600e-003	2.0000e-005	3.3100e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.1938	2.1938	3.0000e-005	0.0000	2.1946
Total	**9.4000e-004**	**2.9700e-003**	**7.7900e-003**	**3.0000e-005**	**3.5600e-003**	**3.0000e-005**	**3.5800e-003**	**9.5000e-004**	**2.0000e-005**	**9.7000e-004**	**0.0000**	**3.3210**	**3.3210**	**2.0000e-004**	**0.0000**	**3.3260**

Midway Village Project Phase 4 - Unmitigated Construction (Phase 4 Off-site Road Improvements)

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	27.15	1000sqft	0.62	27,150.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 4 Off-site Road Improvements
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Additional roadway improvements totaling approximately 27,150 square feet.
Improvements to Schwerin St. and Martin St.

Construction Phase - Adjusted construction schedule to match applicant-provided estimated duration of 6 weeks for off-site roadway improvements.

Trips and VMT - Two additional vendor trips per day added to the paving phase to account for anticipated paving off-site trips. Additional hauling trips included to account for transport of off-road construction equipment.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	28.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	0.00	13.00
tblTripsAndVMT	HaulingTripNumber	0.00	13.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0102	0.0810	0.1145	2.1000e-004	3.5000e-003	3.3700e-003	6.8700e-003	1.1100e-003	3.1600e-003	4.2700e-003	0.0000	17.7388	17.7388	4.3900e-003	0.0000	17.8484
Maximum	**0.0102**	**0.0810**	**0.1145**	**2.1000e-004**	**3.5000e-003**	**3.3700e-003**	**6.8700e-003**	**1.1100e-003**	**3.1600e-003**	**4.2700e-003**	**0.0000**	**17.7388**	**17.7388**	**4.3900e-003**	**0.0000**	**17.8484**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0102	0.0810	0.1145	2.1000e-004	2.9400e-003	3.3700e-003	6.3100e-003	8.7000e-004	3.1600e-003	4.0200e-003	0.0000	17.7387	17.7387	4.3900e-003	0.0000	17.8484
Maximum	**0.0102**	**0.0810**	**0.1145**	**2.1000e-004**	**2.9400e-003**	**3.3700e-003**	**6.3100e-003**	**8.7000e-004**	**3.1600e-003**	**4.0200e-003**	**0.0000**	**17.7387**	**17.7387**	**4.3900e-003**	**0.0000**	**17.8484**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**16.00**	**0.00**	**8.15**	**21.62**	**0.00**	**5.85**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**
1	**9-5-2025**	**9-30-2025**	0.0546	0.0546
		Highest	0.0546	0.0546

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/5/2025	9/5/2025	5	1	
2	Grading	Grading	9/6/2025	9/9/2025	5	2	
3	Paving	Paving	9/10/2025	10/17/2025	5	28	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.62

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	13.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	2.00	13.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2000e-004	2.4000e-003	1.9100e-003	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309
Total	**2.2000e-004**	**2.4000e-003**	**1.9100e-003**	**0.0000**	**2.7000e-004**	**8.0000e-005**	**3.5000e-004**	**3.0000e-005**	**8.0000e-005**	**1.1000e-004**	**0.0000**	**0.4274**	**0.4274**	**1.4000e-004**	**0.0000**	**0.4309**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.1400e-003	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.4935	0.4935	7.0000e-005	0.0000	0.4953
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0135	0.0135	0.0000	0.0000	0.0135
Total	**5.0000e-005**	**1.1400e-003**	**1.0500e-003**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.5070**	**0.5070**	**7.0000e-005**	**0.0000**	**0.5088**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2000e-004	2.4000e-003	1.9100e-003	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309
Total	**2.2000e-004**	**2.4000e-003**	**1.9100e-003**	**0.0000**	**1.2000e-004**	**8.0000e-005**	**2.0000e-004**	**1.0000e-005**	**8.0000e-005**	**9.0000e-005**	**0.0000**	**0.4274**	**0.4274**	**1.4000e-004**	**0.0000**	**0.4309**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.1400e-003	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.4935	0.4935	7.0000e-005	0.0000	0.4953
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0135	0.0135	0.0000	0.0000	0.0135
Total	**5.0000e-005**	**1.1400e-003**	**1.0500e-003**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.5070**	**0.5070**	**7.0000e-005**	**0.0000**	**0.5088**

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7000e-004	5.1000e-003	7.3600e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.0000e-004	2.0000e-004	0.0000	1.0425	1.0425	1.9000e-004	0.0000	1.0471
Total	**5.7000e-004**	**5.1000e-003**	**7.3600e-003**	**1.0000e-005**	**7.5000e-004**	**2.1000e-004**	**9.6000e-004**	**4.1000e-004**	**2.0000e-004**	**6.1000e-004**	**0.0000**	**1.0425**	**1.0425**	**1.9000e-004**	**0.0000**	**1.0471**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0541	0.0541	0.0000	0.0000	0.0541
Total	**2.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0541**	**0.0541**	**0.0000**	**0.0000**	**0.0541**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.4000e-004	0.0000	3.4000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7000e-004	5.1000e-003	7.3600e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.0000e-004	2.0000e-004	0.0000	1.0425	1.0425	1.9000e-004	0.0000	1.0471
Total	**5.7000e-004**	**5.1000e-003**	**7.3600e-003**	**1.0000e-005**	**3.4000e-004**	**2.1000e-004**	**5.5000e-004**	**1.9000e-004**	**2.0000e-004**	**3.9000e-004**	**0.0000**	**1.0425**	**1.0425**	**1.9000e-004**	**0.0000**	**1.0471**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0541	0.0541	0.0000	0.0000	0.0541
Total	**2.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0541**	**0.0541**	**0.0000**	**0.0000**	**0.0541**

3.4 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8900e-003	0.0689	0.0984	1.6000e-004		3.0600e-003	3.0600e-003		2.8600e-003	2.8600e-003	0.0000	13.1613	13.1613	3.8300e-003	0.0000	13.2571
Paving	8.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.7000e-003**	**0.0689**	**0.0984**	**1.6000e-004**		**3.0600e-003**	**3.0600e-003**		**2.8600e-003**	**2.8600e-003**	**0.0000**	**13.1613**	**13.1613**	**3.8300e-003**	**0.0000**	**13.2571**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.1400e-003	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.4935	0.4935	7.0000e-005	0.0000	0.4953
Vendor	6.0000e-005	2.0300e-003	1.2700e-003	1.0000e-005	1.8000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.6903	0.6903	6.0000e-005	0.0000	0.6919
Worker	5.3000e-004	2.9000e-004	3.4200e-003	2.0000e-005	1.9800e-003	1.0000e-005	2.0000e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.3627	1.3627	2.0000e-005	0.0000	1.3632
Total	**6.3000e-004**	**3.4600e-003**	**5.7100e-003**	**3.0000e-005**	**2.2700e-003**	**1.0000e-005**	**2.3000e-003**	**6.1000e-004**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**2.5465**	**2.5465**	**1.5000e-004**	**0.0000**	**2.5504**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8900e-003	0.0689	0.0984	1.6000e-004		3.0600e-003	3.0600e-003		2.8600e-003	2.8600e-003	0.0000	13.1612	13.1612	3.8300e-003	0.0000	13.2571
Paving	8.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.7000e-003**	**0.0689**	**0.0984**	**1.6000e-004**		**3.0600e-003**	**3.0600e-003**		**2.8600e-003**	**2.8600e-003**	**0.0000**	**13.1612**	**13.1612**	**3.8300e-003**	**0.0000**	**13.2571**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.1400e-003	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.4935	0.4935	7.0000e-005	0.0000	0.4953
Vendor	6.0000e-005	2.0300e-003	1.2700e-003	1.0000e-005	1.8000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.6903	0.6903	6.0000e-005	0.0000	0.6919
Worker	5.3000e-004	2.9000e-004	3.4200e-003	2.0000e-005	1.9800e-003	1.0000e-005	2.0000e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.3627	1.3627	2.0000e-005	0.0000	1.3632
Total	**6.3000e-004**	**3.4600e-003**	**5.7100e-003**	**3.0000e-005**	**2.2700e-003**	**1.0000e-005**	**2.3000e-003**	**6.1000e-004**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**2.5465**	**2.5465**	**1.5000e-004**	**0.0000**	**2.5504**

Midway Village Project Phase 1 - Mitigated Demolition
San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	3.76	Acre	3.76	163,785.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 1 Demolition (1/15/2021-02/01/2021) - Tier 4 mitigated equipment
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Phase 1 Demolition - Demolition of San Mateo County Housing Authority offices

Construction Phase - Phase 1 Demolition (1/15/2021-02/01/2021)

Trips and VMT - Twelve (12) additional hauling trips added to account for off-site trips associated with transport of off-road construction equipment.
Estimate of additional trips based on two trips per piece of equipment.
106+12=118 total hauling trips

Demolition - Phase 1 Demolition totaling approximately 1,074 tons of debris.

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 Final mitigation for construction equipment >50 HP
Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	12.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	106.00	118.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0197	0.2063	0.1392	2.9000e-004	0.0132	9.3700e-003	0.0226	2.2000e-003	8.7000e-003	0.0109	0.0000	25.8153	25.8153	6.3700e-003	0.0000	25.9747
Maximum	**0.0197**	**0.2063**	**0.1392**	**2.9000e-004**	**0.0132**	**9.3700e-003**	**0.0226**	**2.2000e-003**	**8.7000e-003**	**0.0109**	**0.0000**	**25.8153**	**25.8153**	**6.3700e-003**	**0.0000**	**25.9747**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	3.5000e-003	0.0297	0.1495	2.9000e-004	6.8700e-003	4.3000e-004	7.2900e-003	1.2400e-003	4.2000e-004	1.6700e-003	0.0000	25.8153	25.8153	6.3700e-003	0.0000	25.9746
Maximum	**3.5000e-003**	**0.0297**	**0.1495**	**2.9000e-004**	**6.8700e-003**	**4.3000e-004**	**7.2900e-003**	**1.2400e-003**	**4.2000e-004**	**1.6700e-003**	**0.0000**	**25.8153**	**25.8153**	**6.3700e-003**	**0.0000**	**25.9746**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**82.25**	**85.60**	**-7.39**	**0.00**	**47.92**	**95.41**	**67.67**	**43.64**	**95.17**	**84.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**
1	**1-15-2021**	**4-14-2021**	0.2424	0.0358
		Highest	0.2424	0.0358

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/15/2021	2/1/2021	5	12	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.76

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	118.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0115	0.0000	0.0115	1.7400e-003	0.0000	1.7400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0190	0.1886	0.1294	2.3000e-004		9.3100e-003	9.3100e-003		8.6500e-003	8.6500e-003	0.0000	20.4005	20.4005	5.7400e-003	0.0000	20.5440
Total	**0.0190**	**0.1886**	**0.1294**	**2.3000e-004**	**0.0115**	**9.3100e-003**	**0.0208**	**1.7400e-003**	**8.6500e-003**	**0.0104**	**0.0000**	**20.4005**	**20.4005**	**5.7400e-003**	**0.0000**	**20.5440**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-004	0.0176	8.2100e-003	5.0000e-005	9.9000e-004	5.0000e-005	1.0400e-003	2.7000e-004	5.0000e-005	3.2000e-004	0.0000	4.8459	4.8459	6.2000e-004	0.0000	4.8614
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.5000e-004	1.6200e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5690	0.5690	1.0000e-005	0.0000	0.5693
Total	**7.3000e-004**	**0.0177**	**9.8300e-003**	**6.0000e-005**	**1.7000e-003**	**5.0000e-005**	**1.7500e-003**	**4.6000e-004**	**5.0000e-005**	**5.1000e-004**	**0.0000**	**5.4149**	**5.4149**	**6.3000e-004**	**0.0000**	**5.4306**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.1700e-003	0.0000	5.1700e-003	7.8000e-004	0.0000	7.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7700e-003	0.0120	0.1397	2.3000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	20.4005	20.4005	5.7400e-003	0.0000	20.5440
Total	**2.7700e-003**	**0.0120**	**0.1397**	**2.3000e-004**	**5.1700e-003**	**3.7000e-004**	**5.5400e-003**	**7.8000e-004**	**3.7000e-004**	**1.1500e-003**	**0.0000**	**20.4005**	**20.4005**	**5.7400e-003**	**0.0000**	**20.5440**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-004	0.0176	8.2100e-003	5.0000e-005	9.9000e-004	5.0000e-005	1.0400e-003	2.7000e-004	5.0000e-005	3.2000e-004	0.0000	4.8459	4.8459	6.2000e-004	0.0000	4.8614
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.5000e-004	1.6200e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5690	0.5690	1.0000e-005	0.0000	0.5693
Total	**7.3000e-004**	**0.0177**	**9.8300e-003**	**6.0000e-005**	**1.7000e-003**	**5.0000e-005**	**1.7500e-003**	**4.6000e-004**	**5.0000e-005**	**5.1000e-004**	**0.0000**	**5.4149**	**5.4149**	**6.3000e-004**	**0.0000**	**5.4306**

Midway Village Project Phase 1 - Mitigated Construction

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	99.91	1000sqft	2.29	99,910.00	0
Apartments Low Rise	149.00	Dwelling Unit	1.47	310,612.00	426

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 1 Construction - Tier 4 mitigated equipment
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Phase 1 proposed development based on Project Description dated October 21, 2019.

Construction Phase - Phase 1 conceptual construction schedule consistent with Project Description dated October 21, 2019.
Phase 1 Demolition (1/15/2021-02/01/2021) analyzed in a separate CalEEMod run.
Off-road Equipment -

Off-road Equipment - Adjusted building construction equipment usage based on project-specific information.

Off-road Equipment -

Off-road Equipment - Additional grading equipment included based on project-specific information.

Off-road Equipment -

Trips and VMT - Additional hauling trips included to account for off-site trips associated with transport of construction equipment. Additional vendor trips added to the paving phase to account for anticipated paving off-site trips.

Demolition - Demolition associated with Phase 1 analyzed in a separate CalEEMod run.

Grading - Material anticipated to be balanced on-site during Phase 1 construction.
No import or export in Phase 1 (43,092 total cubic yards of import for the project accounted for in phases 2 and 4).

Vehicle Trips - Construction run only

Woodstoves - Construction run only

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 Final mitigation for construction equipment >50 HP
Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	8.00	15.00
tblConstructionPhase	NumDays	230.00	175.00
tblConstructionPhase	NumDays	18.00	23.00
tblConstructionPhase	NumDays	18.00	35.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	25.33	0.00
tblLandUse	LandUseSquareFeet	149,000.00	310,612.00
tblLandUse	LotAcreage	9.31	1.47
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	0.00	32.00
tblTripsAndVMT	HaulingTripNumber	0.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	7.16	0.00

tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	2.4850	2.5004	2.2011	4.8400e-003	0.3601	0.1168	0.4768	0.1597	0.1093	0.2689	0.0000	432.8765	432.8765	0.0766	0.0000	434.7919
Maximum	**2.4850**	**2.5004**	**2.2011**	**4.8400e-003**	**0.3601**	**0.1168**	**0.4768**	**0.1597**	**0.1093**	**0.2689**	**0.0000**	**432.8765**	**432.8765**	**0.0766**	**0.0000**	**434.7919**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	2.3168	0.6131	2.3394	4.8400e-003	0.2337	0.0126	0.2463	0.0912	0.0125	0.1037	0.0000	432.8762	432.8762	0.0766	0.0000	434.7915
Maximum	**2.3168**	**0.6131**	**2.3394**	**4.8400e-003**	**0.2337**	**0.0126**	**0.2463**	**0.0912**	**0.0125**	**0.1037**	**0.0000**	**432.8762**	**432.8762**	**0.0766**	**0.0000**	**434.7915**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**6.77**	**75.48**	**-6.28**	**0.00**	**35.10**	**89.22**	**48.35**	**42.91**	**88.55**	**61.46**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**
1	**1-15-2021**	**4-14-2021**	0.8839	0.1112
2	**4-15-2021**	**7-14-2021**	0.7621	0.2448
3	**7-15-2021**	**9-30-2021**	0.6850	0.2162
		Highest	0.8839	0.2448

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/2/2021	3/1/2021	5	20	
2	Grading	Grading	3/2/2021	3/22/2021	5	15	
3	Building Construction	Building Construction	3/23/2021	11/22/2021	5	175	
4	Paving	Paving	7/1/2021	8/2/2021	5	23	
5	Architectural Coating	Architectural Coating	11/2/2021	12/20/2021	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 2.29

Residential Indoor: 628,989; Residential Outdoor: 209,663; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Trenchers	1	8.00	78	0.50
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	149.00	32.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	**0.0389**	**0.4050**	**0.2115**	**3.8000e-004**	**0.1807**	**0.0204**	**0.2011**	**0.0993**	**0.0188**	**0.1181**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	4.7600e-003	2.2300e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	7.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.3141	1.3141	1.7000e-004	0.0000	1.3183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.0000e-004	3.2300e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1380	1.1380	2.0000e-005	0.0000	1.1385
Total	**6.0000e-004**	**5.0600e-003**	**5.4600e-003**	**2.0000e-005**	**1.6900e-003**	**2.0000e-005**	**1.7100e-003**	**4.5000e-004**	**2.0000e-005**	**4.8000e-004**	**0.0000**	**2.4521**	**2.4521**	**1.9000e-004**	**0.0000**	**2.4568**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0813	0.0000	0.0813	0.0447	0.0000	0.0447	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6600e-003	0.0202	0.2087	3.8000e-004		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	**4.6600e-003**	**0.0202**	**0.2087**	**3.8000e-004**	**0.0813**	**6.2000e-004**	**0.0819**	**0.0447**	**6.2000e-004**	**0.0453**	**0.0000**	**33.4357**	**33.4357**	**0.0108**	**0.0000**	**33.7060**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	4.7600e-003	2.2300e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	7.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.3141	1.3141	1.7000e-004	0.0000	1.3183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.0000e-004	3.2300e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1380	1.1380	2.0000e-005	0.0000	1.1385
Total	**6.0000e-004**	**5.0600e-003**	**5.4600e-003**	**2.0000e-005**	**1.6900e-003**	**2.0000e-005**	**1.7100e-003**	**4.5000e-004**	**2.0000e-005**	**4.8000e-004**	**0.0000**	**2.4521**	**2.4521**	**1.9000e-004**	**0.0000**	**2.4568**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.2345	0.1540	3.2000e-004		0.0113	0.0113		0.0104	0.0104	0.0000	27.9702	27.9702	9.0500e-003	0.0000	28.1963
Total	**0.0220**	**0.2345**	**0.1540**	**3.2000e-004**	**0.0491**	**0.0113**	**0.0604**	**0.0253**	**0.0104**	**0.0357**	**0.0000**	**27.9702**	**27.9702**	**9.0500e-003**	**0.0000**	**28.1963**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.7000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9483	0.9483	2.0000e-005	0.0000	0.9488
Total	**3.8000e-004**	**2.5000e-004**	**2.7000e-003**	**1.0000e-005**	**1.1800e-003**	**1.0000e-005**	**1.1900e-003**	**3.1000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9483**	**0.9483**	**2.0000e-005**	**0.0000**	**0.9488**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0221	0.0000	0.0221	0.0114	0.0000	0.0114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9100e-003	0.0169	0.1844	3.2000e-004		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	27.9702	27.9702	9.0500e-003	0.0000	28.1963
Total	**3.9100e-003**	**0.0169**	**0.1844**	**3.2000e-004**	**0.0221**	**5.2000e-004**	**0.0226**	**0.0114**	**5.2000e-004**	**0.0119**	**0.0000**	**27.9702**	**27.9702**	**9.0500e-003**	**0.0000**	**28.1963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.5000e-004	2.7000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9483	0.9483	2.0000e-005	0.0000	0.9488
Total	**3.8000e-004**	**2.5000e-004**	**2.7000e-003**	**1.0000e-005**	**1.1800e-003**	**1.0000e-005**	**1.1900e-003**	**3.1000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9483**	**0.9483**	**2.0000e-005**	**0.0000**	**0.9488**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1520	1.3802	1.2773	2.1200e-003		0.0753	0.0753		0.0710	0.0710	0.0000	181.7832	181.7832	0.0421	0.0000	182.8367
Total	**0.1520**	**1.3802**	**1.2773**	**2.1200e-003**		**0.0753**	**0.0753**		**0.0710**	**0.0710**	**0.0000**	**181.7832**	**181.7832**	**0.0421**	**0.0000**	**182.8367**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9400e-003	0.2916	0.1252	7.3000e-004	0.0183	6.7000e-004	0.0189	5.2800e-003	6.4000e-004	5.9200e-003	0.0000	73.2769	73.2769	6.3300e-003	0.0000	73.4352
Worker	0.0332	0.0216	0.2343	9.1000e-004	0.1026	6.2000e-004	0.1033	0.0273	5.8000e-004	0.0279	0.0000	82.4245	82.4245	1.5000e-003	0.0000	82.4619
Total	**0.0422**	**0.3132**	**0.3594**	**1.6400e-003**	**0.1209**	**1.2900e-003**	**0.1222**	**0.0326**	**1.2200e-003**	**0.0338**	**0.0000**	**155.7014**	**155.7014**	**7.8300e-003**	**0.0000**	**155.8971**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0484	0.2271	1.3679	2.1200e-003		9.4100e-003	9.4100e-003		9.4100e-003	9.4100e-003	0.0000	181.7830	181.7830	0.0421	0.0000	182.8365
Total	**0.0484**	**0.2271**	**1.3679**	**2.1200e-003**		**9.4100e-003**	**9.4100e-003**		**9.4100e-003**	**9.4100e-003**	**0.0000**	**181.7830**	**181.7830**	**0.0421**	**0.0000**	**182.8365**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.9400e-003	0.2916	0.1252	7.3000e-004	0.0183	6.7000e-004	0.0189	5.2800e-003	6.4000e-004	5.9200e-003	0.0000	73.2769	73.2769	6.3300e-003	0.0000	73.4352
Worker	0.0332	0.0216	0.2343	9.1000e-004	0.1026	6.2000e-004	0.1033	0.0273	5.8000e-004	0.0279	0.0000	82.4245	82.4245	1.5000e-003	0.0000	82.4619
Total	**0.0422**	**0.3132**	**0.3594**	**1.6400e-003**	**0.1209**	**1.2900e-003**	**0.1222**	**0.0326**	**1.2200e-003**	**0.0338**	**0.0000**	**155.7014**	**155.7014**	**7.8300e-003**	**0.0000**	**155.8971**

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.1247	0.1410	2.2000e-004		6.6600e-003	6.6600e-003		6.1400e-003	6.1400e-003	0.0000	18.8262	18.8262	5.9200e-003	0.0000	18.9741
Paving	3.0000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0156**	**0.1247**	**0.1410**	**2.2000e-004**		**6.6600e-003**	**6.6600e-003**		**6.1400e-003**	**6.1400e-003**	**0.0000**	**18.8262**	**18.8262**	**5.9200e-003**	**0.0000**	**18.9741**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	4.7900e-003	2.0600e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.2038	1.2038	1.0000e-004	0.0000	1.2064
Worker	5.9000e-004	3.8000e-004	4.1300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4541	1.4541	3.0000e-005	0.0000	1.4547
Total	**7.4000e-004**	**5.1700e-003**	**6.1900e-003**	**3.0000e-005**	**2.1100e-003**	**2.0000e-005**	**2.1300e-003**	**5.7000e-004**	**2.0000e-005**	**5.9000e-004**	**0.0000**	**2.6579**	**2.6579**	**1.3000e-004**	**0.0000**	**2.6612**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.5400e-003	0.0173	0.1609	2.2000e-004		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	18.8262	18.8262	5.9200e-003	0.0000	18.9741
Paving	3.0000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.5400e-003**	**0.0173**	**0.1609**	**2.2000e-004**		**5.8000e-004**	**5.8000e-004**		**5.8000e-004**	**5.8000e-004**	**0.0000**	**18.8262**	**18.8262**	**5.9200e-003**	**0.0000**	**18.9741**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	4.7900e-003	2.0600e-003	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.2038	1.2038	1.0000e-004	0.0000	1.2064
Worker	5.9000e-004	3.8000e-004	4.1300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4541	1.4541	3.0000e-005	0.0000	1.4547
Total	**7.4000e-004**	**5.1700e-003**	**6.1900e-003**	**3.0000e-005**	**2.1100e-003**	**2.0000e-005**	**2.1300e-003**	**5.7000e-004**	**2.0000e-005**	**5.9000e-004**	**0.0000**	**2.6579**	**2.6579**	**1.3000e-004**	**0.0000**	**2.6612**

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2074					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8300e-003	0.0267	0.0318	5.0000e-005		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003	0.0000	4.4682	4.4682	3.1000e-004	0.0000	4.4759
Total	**2.2112**	**0.0267**	**0.0318**	**5.0000e-005**		**1.6500e-003**	**1.6500e-003**		**1.6500e-003**	**1.6500e-003**	**0.0000**	**4.4682**	**4.4682**	**3.1000e-004**	**0.0000**	**4.4759**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	4.7600e-003	2.2300e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	7.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.3141	1.3141	1.7000e-004	0.0000	1.3183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3400e-003	8.7000e-004	9.4300e-003	4.0000e-005	4.1300e-003	3.0000e-005	4.1600e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.3191	3.3191	6.0000e-005	0.0000	3.3206
Total	**1.4800e-003**	**5.6300e-003**	**0.0117**	**5.0000e-005**	**4.4000e-003**	**4.0000e-005**	**4.4400e-003**	**1.1700e-003**	**3.0000e-005**	**1.2100e-003**	**0.0000**	**4.6333**	**4.6333**	**2.3000e-004**	**0.0000**	**4.6390**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2074					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	2.2500e-003	0.0321	5.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.4682	4.4682	3.1000e-004	0.0000	4.4759
Total	**2.2079**	**2.2500e-003**	**0.0321**	**5.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**4.4682**	**4.4682**	**3.1000e-004**	**0.0000**	**4.4759**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	4.7600e-003	2.2300e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	7.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.3141	1.3141	1.7000e-004	0.0000	1.3183
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3400e-003	8.7000e-004	9.4300e-003	4.0000e-005	4.1300e-003	3.0000e-005	4.1600e-003	1.1000e-003	2.0000e-005	1.1200e-003	0.0000	3.3191	3.3191	6.0000e-005	0.0000	3.3206
Total	**1.4800e-003**	**5.6300e-003**	**0.0117**	**5.0000e-005**	**4.4000e-003**	**4.0000e-005**	**4.4400e-003**	**1.1700e-003**	**3.0000e-005**	**1.2100e-003**	**0.0000**	**4.6333**	**4.6333**	**2.3000e-004**	**0.0000**	**4.6390**

Midway Village Project Phase 2 - Mitigated Demolition

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.05	Acre	4.05	176,418.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project Characteristics - Phase 2 Demolition (09/01/2023-10/05/2023) - Tier 4 mitigated equipment
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard and PG&E's 2017 power content label.

Land Use - Phase 2 Demolition

Construction Phase - Phase 2 Demolition (09/01/2023-10/05/2023)

Demolition - Phase 2 Demolition totaling approximately 4,644 tons of debris.

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 Final mitigation for construction equipment >50 HP
Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Trips and VMT - Twelve (12) additional hauling trips added to account for off-site trips associated with transport of off-road construction equipment. 459+12=471 total hauling trips

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	25.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	459.00	471.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0302	0.3137	0.2826	6.7000e-004	0.0551	0.0126	0.0677	9.0000e-003	0.0117	0.0207	0.0000	61.8621	61.8621	0.0144	0.0000	62.2227
Maximum	**0.0302**	**0.3137**	**0.2826**	**6.7000e-004**	**0.0551**	**0.0126**	**0.0677**	**9.0000e-003**	**0.0117**	**0.0207**	**0.0000**	**61.8621**	**61.8621**	**0.0144**	**0.0000**	**62.2227**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	7.6000e-003	0.0702	0.3281	6.7000e-004	0.0278	8.7000e-004	0.0287	4.8600e-003	8.6000e-004	5.7200e-003	0.0000	61.8621	61.8621	0.0144	0.0000	62.2226
Maximum	**7.6000e-003**	**0.0702**	**0.3281**	**6.7000e-004**	**0.0278**	**8.7000e-004**	**0.0287**	**4.8600e-003**	**8.6000e-004**	**5.7200e-003**	**0.0000**	**61.8621**	**61.8621**	**0.0144**	**0.0000**	**62.2226**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**74.82**	**77.64**	**-16.08**	**0.00**	**49.59**	**93.08**	**57.66**	**46.00**	**92.64**	**72.35**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2023**	**9-30-2023**	0.2939	0.0658
		Highest	0.2939	0.0658

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2023	10/5/2023	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.05

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	471.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0497	0.0000	0.0497	7.5200e-003	0.0000	7.5200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0284	0.2686	0.2455	4.9000e-004		0.0125	0.0125		0.0116	0.0116	0.0000	42.4901	42.4901	0.0119	0.0000	42.7876
Total	**0.0284**	**0.2686**	**0.2455**	**4.9000e-004**	**0.0497**	**0.0125**	**0.0622**	**7.5200e-003**	**0.0116**	**0.0191**	**0.0000**	**42.4901**	**42.4901**	**0.0119**	**0.0000**	**42.7876**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0449	0.0342	1.7000e-004	3.9400e-003	9.0000e-005	4.0300e-003	1.0800e-003	8.0000e-005	1.1700e-003	0.0000	18.2731	18.2731	2.5000e-003	0.0000	18.3357
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.5000e-004	2.9200e-003	1.0000e-005	1.4800e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.0989	1.0989	2.0000e-005	0.0000	1.0994
Total	**1.8200e-003**	**0.0451**	**0.0371**	**1.8000e-004**	**5.4200e-003**	**1.0000e-004**	**5.5100e-003**	**1.4700e-003**	**9.0000e-005**	**1.5700e-003**	**0.0000**	**19.3721**	**19.3721**	**2.5200e-003**	**0.0000**	**19.4351**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0224	0.0000	0.0224	3.3900e-003	0.0000	3.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7800e-003	0.0250	0.2910	4.9000e-004		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	42.4900	42.4900	0.0119	0.0000	42.7875
Total	**5.7800e-003**	**0.0250**	**0.2910**	**4.9000e-004**	**0.0224**	**7.7000e-004**	**0.0231**	**3.3900e-003**	**7.7000e-004**	**4.1600e-003**	**0.0000**	**42.4900**	**42.4900**	**0.0119**	**0.0000**	**42.7875**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0449	0.0342	1.7000e-004	3.9400e-003	9.0000e-005	4.0300e-003	1.0800e-003	8.0000e-005	1.1700e-003	0.0000	18.2731	18.2731	2.5000e-003	0.0000	18.3357
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.5000e-004	2.9200e-003	1.0000e-005	1.4800e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.0989	1.0989	2.0000e-005	0.0000	1.0994
Total	**1.8200e-003**	**0.0451**	**0.0371**	**1.8000e-004**	**5.4200e-003**	**1.0000e-004**	**5.5100e-003**	**1.4700e-003**	**9.0000e-005**	**1.5700e-003**	**0.0000**	**19.3721**	**19.3721**	**2.5200e-003**	**0.0000**	**19.4351**

Midway Village Project Phase 2 - Mitigated Construction
San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	48.52	1000sqft	1.11	48,525.00	0
Apartments Low Rise	148.00	Dwelling Unit	1.54	153,265.00	423

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 2 Construction - Tier 4 mitigated equipment
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Phase 2 proposed development based on Project Description dated October 21, 2019.

Construction Phase - Phase 2 conceptual construction schedule consistent with Project Description dated October 21, 2019.
Phase 2 Demolition (09/01/2023-10/05/2023) analyzed in a separate CalEEMod run.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Additional grading equipment included based on project-specific information

Off-road Equipment -

Trips and VMT - Additional hauling trips to account for transport of construction equipment based on two (2) trips per piece of off-road construction equipment. Additional vendor trips included to account for anticipated paving off-site trips.

Demolition - Demolition associated with Phase 2 analyzed in a separate CalEEMod run.

Grading - Approximately 12,611 cubic yards to be imported in Phase 2 (43,092 total cubic yards of import for the project anticipated; 12,611 cubic yards in Phase 2 and 30,481 cubic yards in Phase 4)

Architectural Coating -

Vehicle Trips - Construction run only

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Construction run only

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Tier 4 Final mitigation for construction equipment >50 HP
Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	3.00	28.00
tblConstructionPhase	NumDays	6.00	16.00
tblConstructionPhase	NumDays	220.00	155.00
tblConstructionPhase	NumDays	10.00	35.00
tblConstructionPhase	NumDays	10.00	38.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	25.16	0.00
tblGrading	MaterialImported	0.00	12,611.00
tblLandUse	LandUseSquareFeet	48,520.00	48,525.00

tblLandUse	LandUseSquareFeet	148,000.00	153,265.00
tblLandUse	LotAcreage	9.25	1.54
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	HaulingTripNumber	0.00	24.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0469	0.5731	0.4323	1.3800e-003	0.0953	0.0175	0.1128	0.0349	0.0162	0.0511	0.0000	130.7923	130.7923	0.0277	0.0000	131.4851
2024	1.2524	1.2591	1.5058	3.3000e-003	0.0915	0.0483	0.1397	0.0246	0.0460	0.0706	0.0000	287.9446	287.9446	0.0424	0.0000	289.0041
Maximum	**1.2524**	**1.2591**	**1.5058**	**3.3000e-003**	**0.0953**	**0.0483**	**0.1397**	**0.0349**	**0.0460**	**0.0706**	**0.0000**	**287.9446**	**287.9446**	**0.0424**	**0.0000**	**289.0041**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0180	0.2137	0.5017	1.3800e-003	0.0538	2.1100e-003	0.0559	0.0187	2.0900e-003	0.0208	0.0000	130.7922	130.7922	0.0277	0.0000	131.4850
2024	1.1886	0.5440	1.6320	3.3000e-003	0.0915	0.0139	0.1053	0.0246	0.0138	0.0385	0.0000	287.9444	287.9444	0.0424	0.0000	289.0039
Maximum	**1.1886**	**0.5440**	**1.6320**	**3.3000e-003**	**0.0915**	**0.0139**	**0.1053**	**0.0246**	**0.0138**	**0.0385**	**0.0000**	**287.9444**	**287.9444**	**0.0424**	**0.0000**	**289.0039**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	7.13	58.64	-10.09	0.00	22.22	75.71	36.16	27.22	74.43	51.37	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2023	11-30-2023	0.2933	0.0639
2	12-1-2023	2-29-2024	0.6995	0.3524
3	3-1-2024	5-31-2024	0.5485	0.2687
4	6-1-2024	8-31-2024	1.0931	0.7870
5	9-1-2024	9-30-2024	0.5260	0.5149
		Highest	1.0931	0.7870

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/15/2023	11/22/2023	5	28	
2	Grading	Grading	11/26/2023	12/18/2023	5	16	
3	Building Construction	Building Construction	12/20/2023	7/23/2024	5	155	
4	Paving	Paving	6/1/2024	7/20/2024	5	35	
5	Architectural Coating	Architectural Coating	8/3/2024	9/25/2024	5	38	

Acres of Grading (Site Preparation Phase): 42

Acres of Grading (Grading Phase): 8

Acres of Paving: 1.11

Residential Indoor: 310,362; Residential Outdoor: 103,454; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Grading	Trenchers	1	8.00	78	0.50
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	24.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,576.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	127.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	24.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Fugitive Dust					0.0223	0.0000	0.0223	2.4000e-003	0.0000	2.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0182	0.1999	0.1370	3.4000e-004		7.5900e-003	7.5900e-003		6.9800e-003	6.9800e-003	0.0000	30.1622	30.1622	9.7600e-003	0.0000	30.4060
Total	**0.0182**	**0.1999**	**0.1370**	**3.4000e-004**	**0.0223**	**7.5900e-003**	**0.0299**	**2.4000e-003**	**6.9800e-003**	**9.3800e-003**	**0.0000**	**30.1622**	**30.1622**	**9.7600e-003**	**0.0000**	**30.4060**

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	7.0000e-005	2.2900e-003	1.7400e-003	1.0000e-005	2.0000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.9311	0.9311	1.3000e-004	0.0000	0.9343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.5000e-004	1.7400e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.9000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6564	0.6564	1.0000e-005	0.0000	0.6567
Total	**3.3000e-004**	**2.4400e-003**	**3.4800e-003**	**2.0000e-005**	**1.0800e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**1.5875**	**1.5875**	**1.4000e-004**	**0.0000**	**1.5910**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0100	0.0000	0.0100	1.0800e-003	0.0000	1.0800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2100e-003	0.0183	0.1660	3.4000e-004		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	30.1621	30.1621	9.7600e-003	0.0000	30.4060
Total	**4.2100e-003**	**0.0183**	**0.1660**	**3.4000e-004**	**0.0100**	**5.6000e-004**	**0.0106**	**1.0800e-003**	**5.6000e-004**	**1.6400e-003**	**0.0000**	**30.1621**	**30.1621**	**9.7600e-003**	**0.0000**	**30.4060**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.2900e-003	1.7400e-003	1.0000e-005	2.0000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.9311	0.9311	1.3000e-004	0.0000	0.9343
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.5000e-004	1.7400e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.9000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6564	0.6564	1.0000e-005	0.0000	0.6567
Total	**3.3000e-004**	**2.4400e-003**	**3.4800e-003**	**2.0000e-005**	**1.0800e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**0.0000**	**3.0000e-004**	**0.0000**	**1.5875**	**1.5875**	**1.4000e-004**	**0.0000**	**1.5910**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0531	0.0000	0.0531	0.0271	0.0000	0.0271	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.1579	0.1066	2.7000e-004		7.1600e-003	7.1600e-003		6.5800e-003	6.5800e-003	0.0000	23.5013	23.5013	7.6000e-003	0.0000	23.6913
Total	**0.0152**	**0.1579**	**0.1066**	**2.7000e-004**	**0.0531**	**7.1600e-003**	**0.0603**	**0.0271**	**6.5800e-003**	**0.0336**	**0.0000**	**23.5013**	**23.5013**	**7.6000e-003**	**0.0000**	**23.6913**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.6400e-003	0.1501	0.1144	5.9000e-004	0.0132	3.0000e-004	0.0135	3.6300e-003	2.8000e-004	3.9100e-003	0.0000	61.1432	61.1432	8.3800e-003	0.0000	61.3526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.6000e-004	1.8700e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.7033	0.7033	1.0000e-005	0.0000	0.7036
Total	**4.9100e-003**	**0.1503**	**0.1163**	**6.0000e-004**	**0.0141**	**3.1000e-004**	**0.0144**	**3.8800e-003**	**2.9000e-004**	**4.1700e-003**	**0.0000**	**61.8465**	**61.8465**	**8.3900e-003**	**0.0000**	**62.0562**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0239	0.0000	0.0239	0.0122	0.0000	0.0122	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2800e-003	0.0142	0.1419	2.7000e-004		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	23.5013	23.5013	7.6000e-003	0.0000	23.6913
Total	**3.2800e-003**	**0.0142**	**0.1419**	**2.7000e-004**	**0.0239**	**4.4000e-004**	**0.0244**	**0.0122**	**4.4000e-004**	**0.0126**	**0.0000**	**23.5013**	**23.5013**	**7.6000e-003**	**0.0000**	**23.6913**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.6400e-003	0.1501	0.1144	5.9000e-004	0.0132	3.0000e-004	0.0135	3.6300e-003	2.8000e-004	3.9100e-003	0.0000	61.1432	61.1432	8.3800e-003	0.0000	61.3526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.6000e-004	1.8700e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.7033	0.7033	1.0000e-005	0.0000	0.7036
Total	**4.9100e-003**	**0.1503**	**0.1163**	**6.0000e-004**	**0.0141**	**3.1000e-004**	**0.0144**	**3.8800e-003**	**2.9000e-004**	**4.1700e-003**	**0.0000**	**61.8465**	**61.8465**	**8.3900e-003**	**0.0000**	**62.0562**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8500e-003	0.0545	0.0569	1.0000e-004		2.4500e-003	2.4500e-003		2.3500e-003	2.3500e-003	0.0000	8.3081	8.3081	1.5700e-003	0.0000	8.3474
Total	**6.8500e-003**	**0.0545**	**0.0569**	**1.0000e-004**		**2.4500e-003**	**2.4500e-003**		**2.3500e-003**	**2.3500e-003**	**0.0000**	**8.3081**	**8.3081**	**1.5700e-003**	**0.0000**	**8.3474**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	7.3800e-003	4.2200e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.4094	2.4094	2.1000e-004	0.0000	2.4147
Worker	1.1600e-003	6.9000e-004	7.9100e-003	3.0000e-005	4.0000e-003	2.0000e-005	4.0200e-003	1.0600e-003	2.0000e-005	1.0900e-003	0.0000	2.9774	2.9774	5.0000e-005	0.0000	2.9786
Total	**1.3900e-003**	**8.0700e-003**	**0.0121**	**5.0000e-005**	**4.6300e-003**	**3.0000e-005**	**4.6600e-003**	**1.2400e-003**	**3.0000e-005**	**1.2800e-003**	**0.0000**	**5.3867**	**5.3867**	**2.6000e-004**	**0.0000**	**5.3932**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8500e-003	0.0205	0.0619	1.0000e-004		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	8.3081	8.3081	1.5700e-003	0.0000	8.3474
Total	**3.8500e-003**	**0.0205**	**0.0619**	**1.0000e-004**		**7.7000e-004**	**7.7000e-004**		**7.7000e-004**	**7.7000e-004**	**0.0000**	**8.3081**	**8.3081**	**1.5700e-003**	**0.0000**	**8.3474**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	7.3800e-003	4.2200e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.4094	2.4094	2.1000e-004	0.0000	2.4147
Worker	1.1600e-003	6.9000e-004	7.9100e-003	3.0000e-005	4.0000e-003	2.0000e-005	4.0200e-003	1.0600e-003	2.0000e-005	1.0900e-003	0.0000	2.9774	2.9774	5.0000e-005	0.0000	2.9786
Total	**1.3900e-003**	**8.0700e-003**	**0.0121**	**5.0000e-005**	**4.6300e-003**	**3.0000e-005**	**4.6600e-003**	**1.2400e-003**	**3.0000e-005**	**1.2800e-003**	**0.0000**	**5.3867**	**5.3867**	**2.6000e-004**	**0.0000**	**5.3932**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1174	0.9425	1.0364	1.8400e-003		0.0396	0.0396		0.0379	0.0379	0.0000	152.6697	152.6697	0.0284	0.0000	153.3806
Total	**0.1174**	**0.9425**	**1.0364**	**1.8400e-003**		**0.0396**	**0.0396**		**0.0379**	**0.0379**	**0.0000**	**152.6697**	**152.6697**	**0.0284**	**0.0000**	**153.3806**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0700e-003	0.1318	0.0787	4.4000e-004	0.0115	1.8000e-004	0.0117	3.3300e-003	1.7000e-004	3.5000e-003	0.0000	43.8750	43.8750	3.9300e-003	0.0000	43.9732
Worker	0.0204	0.0116	0.1358	5.8000e-004	0.0735	4.3000e-004	0.0739	0.0196	3.9000e-004	0.0200	0.0000	52.5816	52.5816	7.9000e-004	0.0000	52.6014
Total	**0.0245**	**0.1433**	**0.2145**	**1.0200e-003**	**0.0850**	**6.1000e-004**	**0.0856**	**0.0229**	**5.6000e-004**	**0.0235**	**0.0000**	**96.4565**	**96.4565**	**4.7200e-003**	**0.0000**	**96.5746**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0666	0.3676	1.1346	1.8400e-003		0.0124	0.0124		0.0124	0.0124	0.0000	152.6696	152.6696	0.0284	0.0000	153.3804
Total	**0.0666**	**0.3676**	**1.1346**	**1.8400e-003**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**152.6696**	**152.6696**	**0.0284**	**0.0000**	**153.3804**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0700e-003	0.1318	0.0787	4.4000e-004	0.0115	1.8000e-004	0.0117	3.3300e-003	1.7000e-004	3.5000e-003	0.0000	43.8750	43.8750	3.9300e-003	0.0000	43.9732
Worker	0.0204	0.0116	0.1358	5.8000e-004	0.0735	4.3000e-004	0.0739	0.0196	3.9000e-004	0.0200	0.0000	52.5816	52.5816	7.9000e-004	0.0000	52.6014
Total	**0.0245**	**0.1433**	**0.2145**	**1.0200e-003**	**0.0850**	**6.1000e-004**	**0.0856**	**0.0229**	**5.6000e-004**	**0.0235**	**0.0000**	**96.4565**	**96.4565**	**4.7200e-003**	**0.0000**	**96.5746**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0147	0.1418	0.2049	3.1000e-004		6.9200e-003	6.9200e-003		6.3900e-003	6.3900e-003	0.0000	27.1507	27.1507	8.6000e-003	0.0000	27.3658
Paving	1.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0162**	**0.1418**	**0.2049**	**3.1000e-004**		**6.9200e-003**	**6.9200e-003**		**6.3900e-003**	**6.3900e-003**	**0.0000**	**27.1507**	**27.1507**	**8.6000e-003**	**0.0000**	**27.3658**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.2300e-003	3.1200e-003	2.0000e-005	4.6000e-004	1.0000e-005	4.6000e-004	1.3000e-004	1.0000e-005	1.4000e-004	0.0000	1.7411	1.7411	1.6000e-004	0.0000	1.7450
Worker	5.7000e-004	3.2000e-004	3.8200e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.4787	1.4787	2.0000e-005	0.0000	1.4792
Total	**7.3000e-004**	**5.5500e-003**	**6.9400e-003**	**4.0000e-005**	**2.5300e-003**	**2.0000e-005**	**2.5400e-003**	**6.8000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**3.2197**	**3.2197**	**1.8000e-004**	**0.0000**	**3.2242**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7100e-003	0.0224	0.2324	3.1000e-004		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	27.1507	27.1507	8.6000e-003	0.0000	27.3658
Paving	1.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.1600e-003**	**0.0224**	**0.2324**	**3.1000e-004**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**27.1507**	**27.1507**	**8.6000e-003**	**0.0000**	**27.3658**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.2300e-003	3.1200e-003	2.0000e-005	4.6000e-004	1.0000e-005	4.6000e-004	1.3000e-004	1.0000e-005	1.4000e-004	0.0000	1.7411	1.7411	1.6000e-004	0.0000	1.7450
Worker	5.7000e-004	3.2000e-004	3.8200e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.4787	1.4787	2.0000e-005	0.0000	1.4792
Total	**7.3000e-004**	**5.5500e-003**	**6.9400e-003**	**4.0000e-005**	**2.5300e-003**	**2.0000e-005**	**2.5400e-003**	**6.8000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**3.2197**	**3.2197**	**1.8000e-004**	**0.0000**	**3.2242**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0890					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4300e-003	0.0232	0.0344	6.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	4.8512	4.8512	2.7000e-004	0.0000	4.8580
Total	**1.0925**	**0.0232**	**0.0344**	**6.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.1600e-003**	**1.1600e-003**	**0.0000**	**4.8512**	**4.8512**	**2.7000e-004**	**0.0000**	**4.8580**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.1900e-003	1.8100e-003	1.0000e-005	2.0000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.9210	0.9210	1.3000e-004	0.0000	0.9242
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	5.9000e-004	6.9100e-003	3.0000e-005	3.7400e-003	2.0000e-005	3.7600e-003	1.0000e-003	2.0000e-005	1.0100e-003	0.0000	2.6757	2.6757	4.0000e-005	0.0000	2.6767
Total	**1.1100e-003**	**2.7800e-003**	**8.7200e-003**	**4.0000e-005**	**3.9400e-003**	**2.0000e-005**	**3.9700e-003**	**1.0600e-003**	**2.0000e-005**	**1.0700e-003**	**0.0000**	**3.5967**	**3.5967**	**1.7000e-004**	**0.0000**	**3.6009**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0890					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6000e-004	2.4500e-003	0.0348	6.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	4.8512	4.8512	2.7000e-004	0.0000	4.8580
Total	**1.0896**	**2.4500e-003**	**0.0348**	**6.0000e-005**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**	**0.0000**	**4.8512**	**4.8512**	**2.7000e-004**	**0.0000**	**4.8580**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-005	2.1900e-003	1.8100e-003	1.0000e-005	2.0000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.9210	0.9210	1.3000e-004	0.0000	0.9242
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	5.9000e-004	6.9100e-003	3.0000e-005	3.7400e-003	2.0000e-005	3.7600e-003	1.0000e-003	2.0000e-005	1.0100e-003	0.0000	2.6757	2.6757	4.0000e-005	0.0000	2.6767
Total	**1.1100e-003**	**2.7800e-003**	**8.7200e-003**	**4.0000e-005**	**3.9400e-003**	**2.0000e-005**	**3.9700e-003**	**1.0600e-003**	**2.0000e-005**	**1.0700e-003**	**0.0000**	**3.5967**	**3.5967**	**1.7000e-004**	**0.0000**	**3.6009**

Midway Village Project Phase 3 - Mitigated Demolition

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	4.71	Acre	4.71	205,167.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 3 Demolition (07/10/2025-09/03/2025) - Tier 4 mitigated equipment
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard and PG&E's 2017 power content label.

Land Use - Phase 3 Demolition

Construction Phase - Phase 3 Demolition (07/10/2025-09/03/2025)

Demolition - Phase 3 Demolition totaling approximately 7,619 tons of debris.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 Final mitigation for construction equipment >50 HP
Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Fleet Mix -

Trips and VMT - Twelve (12) additional hauling trips added to account for off-site trips associated with transport of off-road construction equipment. 753+12=765 total hauling trips

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	40.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	753.00	765.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0447	0.4515	0.4523	1.0700e-003	0.0903	0.0172	0.1075	0.0147	0.0160	0.0307	0.0000	98.6589	98.6589	0.0232	0.0000	99.2394
Maximum	**0.0447**	**0.4515**	**0.4523**	**1.0700e-003**	**0.0903**	**0.0172**	**0.1075**	**0.0147**	**0.0160**	**0.0307**	**0.0000**	**98.6589**	**98.6589**	**0.0232**	**0.0000**	**99.2394**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0121	0.1076	0.5295	1.0700e-003	0.0455	1.3800e-003	0.0468	7.9400e-003	1.3700e-003	9.3200e-003	0.0000	98.6588	98.6588	0.0232	0.0000	99.2393
Maximum	**0.0121**	**0.1076**	**0.5295**	**1.0700e-003**	**0.0455**	**1.3800e-003**	**0.0468**	**7.9400e-003**	**1.3700e-003**	**9.3200e-003**	**0.0000**	**98.6588**	**98.6588**	**0.0232**	**0.0000**	**99.2393**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**72.96**	**76.17**	**-17.08**	**0.00**	**49.66**	**91.98**	**56.43**	**46.10**	**91.43**	**69.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-10-2025**	**9-30-2025**	0.4946	0.1181
		Highest	0.4946	0.1181

Mitigated Operational

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/10/2025	9/3/2025	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	765.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0815	0.0000	0.0815	0.0123	0.0000	0.0123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.3839	0.3884	7.8000e-004		0.0171	0.0171		0.0158	0.0158	0.0000	67.9953	67.9953	0.0190	0.0000	68.4700
Total	**0.0419**	**0.3839**	**0.3884**	**7.8000e-004**	**0.0815**	**0.0171**	**0.0986**	**0.0123**	**0.0158**	**0.0282**	**0.0000**	**67.9953**	**67.9953**	**0.0190**	**0.0000**	**68.4700**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2000e-003	0.0672	0.0598	2.8000e-004	6.4100e-003	1.3000e-004	6.5400e-003	1.7600e-003	1.3000e-004	1.8900e-003	0.0000	29.0413	29.0413	4.2100e-003	0.0000	29.1466
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.4000e-004	4.0700e-003	2.0000e-005	2.3600e-003	1.0000e-005	2.3800e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.6223	1.6223	2.0000e-005	0.0000	1.6229
Total	**2.8300e-003**	**0.0675**	**0.0639**	**3.0000e-004**	**8.7700e-003**	**1.4000e-004**	**8.9200e-003**	**2.3900e-003**	**1.4000e-004**	**2.5300e-003**	**0.0000**	**30.6636**	**30.6636**	**4.2300e-003**	**0.0000**	**30.7694**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0367	0.0000	0.0367	5.5500e-003	0.0000	5.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2500e-003	0.0401	0.4656	7.8000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	67.9952	67.9952	0.0190	0.0000	68.4699
Total	**9.2500e-003**	**0.0401**	**0.4656**	**7.8000e-004**	**0.0367**	**1.2300e-003**	**0.0379**	**5.5500e-003**	**1.2300e-003**	**6.7800e-003**	**0.0000**	**67.9952**	**67.9952**	**0.0190**	**0.0000**	**68.4699**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2000e-003	0.0672	0.0598	2.8000e-004	6.4100e-003	1.3000e-004	6.5400e-003	1.7600e-003	1.3000e-004	1.8900e-003	0.0000	29.0413	29.0413	4.2100e-003	0.0000	29.1466
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.4000e-004	4.0700e-003	2.0000e-005	2.3600e-003	1.0000e-005	2.3800e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.6223	1.6223	2.0000e-005	0.0000	1.6229
Total	**2.8300e-003**	**0.0675**	**0.0639**	**3.0000e-004**	**8.7700e-003**	**1.4000e-004**	**8.9200e-003**	**2.3900e-003**	**1.4000e-004**	**2.5300e-003**	**0.0000**	**30.6636**	**30.6636**	**4.2300e-003**	**0.0000**	**30.7694**

Midway Village Project Phase 3 - Mitigated Construction
San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	76.70	1000sqft	1.76	76,700.00	0
Apartments Low Rise	117.00	Dwelling Unit	2.54	191,197.00	335

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO_2 Intensity (lb/MWhr)	390.65	**CH_4 Intensity (lb/MWhr)**	0.029	**N_2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 3 Construction - Tier 4 mitigated equipment
CO_2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label

Land Use - Phase 3 proposed development based on Project Description dated October 21, 2019.

Construction Phase - Phase 3 conceptual construction schedule consistent with Project Description dated October 21, 2019.
Phase 3 Demolition (07/10/2025-09/03/2025) analyzed in a separate CalEEMod run.

Off-road Equipment -

Off-road Equipment - Adjusted building construction equipment usage based on project-specific information

Off-road Equipment - Additional grading equipment included based on project-specific information

Off-road Equipment -

Trips and VMT - Hauling trips added to account for transport of off-road construction equipment. Additional vendor trips included to account for anticipated paving off-site trips.

Grading - Material anticipated to be balanced on-site during Phase 3 construction.
No import or export in Phase 3 (43,092 total cubic yards of import for the project accounted for in phases 2 and 4).

Vehicle Trips - Construction run only

Woodstoves - Construction run only

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 Final mitigation for construction equipment >50 HP
Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	35.00
tblConstructionPhase	NumDays	8.00	25.00
tblConstructionPhase	NumDays	230.00	175.00
tblConstructionPhase	NumDays	18.00	48.00
tblConstructionPhase	NumDays	18.00	35.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	19.89	0.00
tblLandUse	LandUseSquareFeet	117,000.00	191,197.00
tblLandUse	LotAcreage	7.31	2.54
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	0.00	32.00
tblTripsAndVMT	HaulingTripNumber	0.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0841	0.8158	0.7145	1.5800e-003	0.4125	0.0345	0.4469	0.2198	0.0318	0.2515	0.0000	139.4453	139.4453	0.0391	0.0000	140.4218
2026	1.5100	1.2467	1.6588	3.4900e-003	0.0923	0.0477	0.1400	0.0249	0.0449	0.0697	0.0000	310.7062	310.7062	0.0549	0.0000	312.0775
Maximum	**1.5100**	**1.2467**	**1.6588**	**3.4900e-003**	**0.4125**	**0.0477**	**0.4469**	**0.2198**	**0.0449**	**0.2515**	**0.0000**	**310.7062**	**310.7062**	**0.0549**	**0.0000**	**312.0775**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0229	0.1064	0.8471	1.5800e-003	0.1935	2.7200e-003	0.1963	0.1010	2.7200e-003	0.1037	0.0000	139.4452	139.4452	0.0391	0.0000	140.4217
2026	1.4340	0.3877	1.8153	3.4900e-003	0.0923	7.7600e-003	0.1001	0.0249	7.7200e-003	0.0326	0.0000	310.7059	310.7059	0.0549	0.0000	312.0772
Maximum	**1.4340**	**0.3877**	**1.8153**	**3.4900e-003**	**0.1935**	**7.7600e-003**	**0.1963**	**0.1010**	**7.7200e-003**	**0.1037**	**0.0000**	**310.7059**	**310.7059**	**0.0549**	**0.0000**	**312.0772**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**8.61**	**76.04**	**-12.18**	**0.00**	**43.37**	**87.24**	**49.51**	**48.53**	**86.38**	**57.57**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**
1	**7-10-2025**	**10-9-2025**	0.3491	0.0338
2	**10-10-2025**	**1-9-2026**	0.6031	0.1139
3	**1-10-2026**	**4-9-2026**	0.4747	0.1644
4	**4-10-2026**	**7-9-2026**	0.6001	0.1952
5	**7-10-2026**	**9-30-2026**	1.4841	1.3029
		Highest	1.4841	1.3029

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/5/2025	10/23/2025	5	35	
2	Grading	Grading	11/1/2025	12/5/2025	5	25	
3	Building Construction	Building Construction	12/6/2025	8/7/2026	5	175	
4	Paving	Paving	6/1/2026	8/5/2026	5	48	
5	Architectural Coating	Architectural Coating	8/18/2026	10/5/2026	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 1.76

Residential Indoor: 387,174; Residential Outdoor: 129,058; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Trenchers	1	8.00	78	0.50
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	116.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3162	0.0000	0.3162	0.1738	0.0000	0.1738	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0433	0.4416	0.3135	6.7000e-004		0.0190	0.0190		0.0175	0.0175	0.0000	58.5672	58.5672	0.0189	0.0000	59.0408
Total	**0.0433**	**0.4416**	**0.3135**	**6.7000e-004**	**0.3162**	**0.0190**	**0.3352**	**0.1738**	**0.0175**	**0.1913**	**0.0000**	**58.5672**	**58.5672**	**0.0189**	**0.0000**	**59.0408**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.8100e-003	2.5000e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.7000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	1.2148	1.2148	1.8000e-004	0.0000	1.2192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.6000e-004	4.2700e-003	2.0000e-005	2.4800e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.7034	1.7034	2.0000e-005	0.0000	1.7040
Total	**7.5000e-004**	**3.1700e-003**	**6.7700e-003**	**3.0000e-005**	**2.7500e-003**	**2.0000e-005**	**2.7600e-003**	**7.3000e-004**	**2.0000e-005**	**7.5000e-004**	**0.0000**	**2.9182**	**2.9182**	**2.0000e-004**	**0.0000**	**2.9232**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1423	0.0000	0.1423	0.0782	0.0000	0.0782	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1500e-003	0.0353	0.3652	6.7000e-004		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	58.5672	58.5672	0.0189	0.0000	59.0407
Total	**8.1500e-003**	**0.0353**	**0.3652**	**6.7000e-004**	**0.1423**	**1.0900e-003**	**0.1434**	**0.0782**	**1.0900e-003**	**0.0793**	**0.0000**	**58.5672**	**58.5672**	**0.0189**	**0.0000**	**59.0407**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.8100e-003	2.5000e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.7000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	1.2148	1.2148	1.8000e-004	0.0000	1.2192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.6000e-004	4.2700e-003	2.0000e-005	2.4800e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.7034	1.7034	2.0000e-005	0.0000	1.7040
Total	**7.5000e-004**	**3.1700e-003**	**6.7700e-003**	**3.0000e-005**	**2.7500e-003**	**2.0000e-005**	**2.7600e-003**	**7.3000e-004**	**2.0000e-005**	**7.5000e-004**	**0.0000**	**2.9182**	**2.9182**	**2.0000e-004**	**0.0000**	**2.9232**

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0819	0.0000	0.0819	0.0421	0.0000	0.0421	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0256	0.2515	0.2393	5.3000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	46.7007	46.7007	0.0151	0.0000	47.0783
Total	**0.0256**	**0.2515**	**0.2393**	**5.3000e-004**	**0.0819**	**0.0110**	**0.0929**	**0.0421**	**0.0101**	**0.0522**	**0.0000**	**46.7007**	**46.7007**	**0.0151**	**0.0000**	**47.0783**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	2.8000e-004	3.3900e-003	1.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.3519	1.3519	2.0000e-005	0.0000	1.3524
Total	**5.3000e-004**	**2.8000e-004**	**3.3900e-003**	**1.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9800e-003**	**5.2000e-004**	**1.0000e-005**	**5.3000e-004**	**0.0000**	**1.3519**	**1.3519**	**2.0000e-005**	**0.0000**	**1.3524**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0369	0.0000	0.0369	0.0189	0.0000	0.0189	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5200e-003	0.0282	0.3073	5.3000e-004		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	46.7007	46.7007	0.0151	0.0000	47.0783
Total	**6.5200e-003**	**0.0282**	**0.3073**	**5.3000e-004**	**0.0369**	**8.7000e-004**	**0.0377**	**0.0189**	**8.7000e-004**	**0.0198**	**0.0000**	**46.7007**	**46.7007**	**0.0151**	**0.0000**	**47.0783**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	2.8000e-004	3.3900e-003	1.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.3519	1.3519	2.0000e-005	0.0000	1.3524
Total	**5.3000e-004**	**2.8000e-004**	**3.3900e-003**	**1.0000e-005**	**1.9700e-003**	**1.0000e-005**	**1.9800e-003**	**5.2000e-004**	**1.0000e-005**	**5.3000e-004**	**0.0000**	**1.3519**	**1.3519**	**2.0000e-005**	**0.0000**	**1.3524**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.1017	0.1272	2.2000e-004		4.3200e-003	4.3200e-003		4.0700e-003	4.0700e-003	0.0000	18.7148	18.7148	4.2100e-003	0.0000	18.8201
Total	**0.0113**	**0.1017**	**0.1272**	**2.2000e-004**		**4.3200e-003**	**4.3200e-003**		**4.0700e-003**	**4.0700e-003**	**0.0000**	**18.7148**	**18.7148**	**4.2100e-003**	**0.0000**	**18.8201**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	0.0164	0.0102	5.0000e-005	1.4700e-003	2.0000e-005	1.4900e-003	4.2000e-004	2.0000e-005	4.5000e-004	0.0000	5.5469	5.5469	5.0000e-004	0.0000	5.5595
Worker	2.1900e-003	1.1900e-003	0.0142	6.0000e-005	8.2200e-003	5.0000e-005	8.2700e-003	2.1900e-003	4.0000e-005	2.2300e-003	0.0000	5.6455	5.6455	8.0000e-005	0.0000	5.6476
Total	**2.7000e-003**	**0.0175**	**0.0244**	**1.1000e-004**	**9.6900e-003**	**7.0000e-005**	**9.7600e-003**	**2.6100e-003**	**6.0000e-005**	**2.6800e-003**	**0.0000**	**11.1924**	**11.1924**	**5.8000e-004**	**0.0000**	**11.2071**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2400e-003	0.0219	0.1401	2.2000e-004		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	18.7148	18.7148	4.2100e-003	0.0000	18.8200
Total	**4.2400e-003**	**0.0219**	**0.1401**	**2.2000e-004**		**6.7000e-004**	**6.7000e-004**		**6.7000e-004**	**6.7000e-004**	**0.0000**	**18.7148**	**18.7148**	**4.2100e-003**	**0.0000**	**18.8200**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	0.0164	0.0102	5.0000e-005	1.4700e-003	2.0000e-005	1.4900e-003	4.2000e-004	2.0000e-005	4.5000e-004	0.0000	5.5469	5.5469	5.0000e-004	0.0000	5.5595
Worker	2.1900e-003	1.1900e-003	0.0142	6.0000e-005	8.2200e-003	5.0000e-005	8.2700e-003	2.1900e-003	4.0000e-005	2.2300e-003	0.0000	5.6455	5.6455	8.0000e-005	0.0000	5.6476
Total	**2.7000e-003**	**0.0175**	**0.0244**	**1.1000e-004**	**9.6900e-003**	**7.0000e-005**	**9.7600e-003**	**2.6100e-003**	**6.0000e-005**	**2.6800e-003**	**0.0000**	**11.1924**	**11.1924**	**5.8000e-004**	**0.0000**	**11.2071**

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0983	0.8872	1.1095	1.9000e-003		0.0377	0.0377		0.0355	0.0355	0.0000	163.2350	163.2350	0.0367	0.0000	164.1527
Total	**0.0983**	**0.8872**	**1.1095**	**1.9000e-003**		**0.0377**	**0.0377**		**0.0355**	**0.0355**	**0.0000**	**163.2350**	**163.2350**	**0.0367**	**0.0000**	**164.1527**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3200e-003	0.1387	0.0908	4.7000e-004	0.0128	1.9000e-004	0.0130	3.7000e-003	1.8000e-004	3.8800e-003	0.0000	47.9726	47.9726	4.4400e-003	0.0000	48.0836
Worker	0.0185	9.5700e-003	0.1163	5.3000e-004	0.0717	4.0000e-004	0.0721	0.0191	3.6000e-004	0.0194	0.0000	47.5639	47.5639	6.5000e-004	0.0000	47.5802
Total	**0.0228**	**0.1483**	**0.2071**	**1.0000e-003**	**0.0845**	**5.9000e-004**	**0.0851**	**0.0228**	**5.4000e-004**	**0.0233**	**0.0000**	**95.5365**	**95.5365**	**5.0900e-003**	**0.0000**	**95.6638**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0369	0.1907	1.2219	1.9000e-003		5.8300e-003	5.8300e-003		5.8300e-003	5.8300e-003	0.0000	163.2348	163.2348	0.0367	0.0000	164.1525
Total	**0.0369**	**0.1907**	**1.2219**	**1.9000e-003**		**5.8300e-003**	**5.8300e-003**		**5.8300e-003**	**5.8300e-003**	**0.0000**	**163.2348**	**163.2348**	**0.0367**	**0.0000**	**164.1525**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.3200e-003	0.1387	0.0908	4.7000e-004	0.0128	1.9000e-004	0.0130	3.7000e-003	1.8000e-004	3.8800e-003	0.0000	47.9726	47.9726	4.4400e-003	0.0000	48.0836
Worker	0.0185	9.5700e-003	0.1163	5.3000e-004	0.0717	4.0000e-004	0.0721	0.0191	3.6000e-004	0.0194	0.0000	47.5639	47.5639	6.5000e-004	0.0000	47.5802
Total	**0.0228**	**0.1483**	**0.2071**	**1.0000e-003**	**0.0845**	**5.9000e-004**	**0.0851**	**0.0228**	**5.4000e-004**	**0.0233**	**0.0000**	**95.5365**	**95.5365**	**5.0900e-003**	**0.0000**	**95.6638**

3.5 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0197	0.1808	0.2923	4.5000e-004		8.4600e-003	8.4600e-003		7.8200e-003	7.8200e-003	0.0000	39.3078	39.3078	0.0124	0.0000	39.6166
Paving	2.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0220**	**0.1808**	**0.2923**	**4.5000e-004**		**8.4600e-003**	**8.4600e-003**		**7.8200e-003**	**7.8200e-003**	**0.0000**	**39.3078**	**39.3078**	**0.0124**	**0.0000**	**39.6166**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	6.7900e-003	4.4400e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.3467	2.3467	2.2000e-004	0.0000	2.3521
Worker	9.7000e-004	5.0000e-004	6.1300e-003	3.0000e-005	3.7800e-003	2.0000e-005	3.8000e-003	1.0100e-003	2.0000e-005	1.0200e-003	0.0000	2.5072	2.5072	3.0000e-005	0.0000	2.5081
Total	**1.1800e-003**	**7.2900e-003**	**0.0106**	**5.0000e-005**	**4.4100e-003**	**3.0000e-005**	**4.4400e-003**	**1.1900e-003**	**3.0000e-005**	**1.2100e-003**	**0.0000**	**4.8539**	**4.8539**	**2.5000e-004**	**0.0000**	**4.8602**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.3800e-003	0.0361	0.3359	4.5000e-004		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	39.3077	39.3077	0.0124	0.0000	39.6165
Paving	2.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.6900e-003**	**0.0361**	**0.3359**	**4.5000e-004**		**1.2200e-003**	**1.2200e-003**		**1.2200e-003**	**1.2200e-003**	**0.0000**	**39.3077**	**39.3077**	**0.0124**	**0.0000**	**39.6165**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	6.7900e-003	4.4400e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.3467	2.3467	2.2000e-004	0.0000	2.3521
Worker	9.7000e-004	5.0000e-004	6.1300e-003	3.0000e-005	3.7800e-003	2.0000e-005	3.8000e-003	1.0100e-003	2.0000e-005	1.0200e-003	0.0000	2.5072	2.5072	3.0000e-005	0.0000	2.5081
Total	**1.1800e-003**	**7.2900e-003**	**0.0106**	**5.0000e-005**	**4.4100e-003**	**3.0000e-005**	**4.4400e-003**	**1.1900e-003**	**3.0000e-005**	**1.2100e-003**	**0.0000**	**4.8539**	**4.8539**	**2.5000e-004**	**0.0000**	**4.8602**

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3619					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0317	5.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	**1.3649**	**0.0201**	**0.0317**	**5.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**4.4682**	**4.4682**	**2.4000e-004**	**0.0000**	**4.4743**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.7000e-003	2.5900e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.7000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	1.2024	1.2024	1.8000e-004	0.0000	1.2069
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	4.2000e-004	5.1400e-003	2.0000e-005	3.1700e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.1024	2.1024	3.0000e-005	0.0000	2.1031
Total	**9.1000e-004**	**3.1200e-003**	**7.7300e-003**	**3.0000e-005**	**3.4400e-003**	**3.0000e-005**	**3.4600e-003**	**9.1000e-004**	**3.0000e-005**	**9.4000e-004**	**0.0000**	**3.3048**	**3.3048**	**2.1000e-004**	**0.0000**	**3.3100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3619					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	2.2500e-003	0.0321	5.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	**1.3624**	**2.2500e-003**	**0.0321**	**5.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**4.4682**	**4.4682**	**2.4000e-004**	**0.0000**	**4.4743**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.7000e-003	2.5900e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.7000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	1.2024	1.2024	1.8000e-004	0.0000	1.2069
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	4.2000e-004	5.1400e-003	2.0000e-005	3.1700e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.1024	2.1024	3.0000e-005	0.0000	2.1031
Total	**9.1000e-004**	**3.1200e-003**	**7.7300e-003**	**3.0000e-005**	**3.4400e-003**	**3.0000e-005**	**3.4600e-003**	**9.1000e-004**	**3.0000e-005**	**9.4000e-004**	**0.0000**	**3.3048**	**3.3048**	**2.1000e-004**	**0.0000**	**3.3100**

Midway Village Project Phase 4 - Mitigated Demolition

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	3.75	Acre	3.75	163,350.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO_2 Intensity (lb/MWhr)	390.65	**CH_4 Intensity (lb/MWhr)**	0.029	**N_2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project Characteristics - Phase 4 Demolition (07/10/2025-09/03/2025) - Tier 4 mitigated equipment
CO_2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard and PG&E's 2017 power content label.

Land Use - Phase 4 Demolition

Construction Phase - Phase 4 Demolition (07/10/2025-09/03/2025)

Demolition - Phase 4 Demolition totaling approximately 1,789 tons of debris.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 Final mitigation for construction equipment >50 HP
Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Fleet Mix -

Trips and VMT - Twelve (12) additional hauling trips added to account for off-site trips associated with transport of off-road construction equipment. 177+12=189 total hauling trips

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	40.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	177.00	189.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0430	0.4009	0.4072	8.6000e-004	0.0231	0.0171	0.0402	3.9600e-003	0.0159	0.0198	0.0000	76.7925	76.7925	0.0201	0.0000	77.2937
Maximum	**0.0430**	**0.4009**	**0.4072**	**8.6000e-004**	**0.0231**	**0.0171**	**0.0402**	**3.9600e-003**	**0.0159**	**0.0198**	**0.0000**	**76.7925**	**76.7925**	**0.0201**	**0.0000**	**77.2937**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0104	0.0570	0.4845	8.6000e-004	0.0126	1.2800e-003	0.0138	2.3700e-003	1.2800e-003	3.6400e-003	0.0000	76.7924	76.7924	0.0201	0.0000	77.2937
Maximum	**0.0104**	**0.0570**	**0.4845**	**8.6000e-004**	**0.0126**	**1.2800e-003**	**0.0138**	**2.3700e-003**	**1.2800e-003**	**3.6400e-003**	**0.0000**	**76.7924**	**76.7924**	**0.0201**	**0.0000**	**77.2937**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**75.78**	**85.78**	**-18.97**	**0.00**	**45.60**	**92.51**	**65.56**	**40.15**	**91.94**	**81.65**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-10-2025**	**9-30-2025**	0.4435	0.0670
		Highest	0.4435	0.0670

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/10/2025	9/3/2025	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.75

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	189.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0191	0.0000	0.0191	2.9000e-003	0.0000	2.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.3839	0.3884	7.8000e-004		0.0171	0.0171		0.0158	0.0158	0.0000	67.9953	67.9953	0.0190	0.0000	68.4700
Total	**0.0419**	**0.3839**	**0.3884**	**7.8000e-004**	**0.0191**	**0.0171**	**0.0362**	**2.9000e-003**	**0.0158**	**0.0187**	**0.0000**	**67.9953**	**67.9953**	**0.0190**	**0.0000**	**68.4700**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0166	0.0148	7.0000e-005	1.5800e-003	3.0000e-005	1.6200e-003	4.4000e-004	3.0000e-005	4.7000e-004	0.0000	7.1749	7.1749	1.0400e-003	0.0000	7.2009
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.4000e-004	4.0700e-003	2.0000e-005	2.3600e-003	1.0000e-005	2.3800e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.6223	1.6223	2.0000e-005	0.0000	1.6229
Total	**1.1700e-003**	**0.0169**	**0.0189**	**9.0000e-005**	**3.9400e-003**	**4.0000e-005**	**4.0000e-003**	**1.0700e-003**	**4.0000e-005**	**1.1100e-003**	**0.0000**	**8.7972**	**8.7972**	**1.0600e-003**	**0.0000**	**8.8238**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.6100e-003	0.0000	8.6100e-003	1.3000e-003	0.0000	1.3000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2500e-003	0.0401	0.4656	7.8000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	67.9952	67.9952	0.0190	0.0000	68.4699
Total	**9.2500e-003**	**0.0401**	**0.4656**	**7.8000e-004**	**8.6100e-003**	**1.2300e-003**	**9.8400e-003**	**1.3000e-003**	**1.2300e-003**	**2.5300e-003**	**0.0000**	**67.9952**	**67.9952**	**0.0190**	**0.0000**	**68.4699**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0166	0.0148	7.0000e-005	1.5800e-003	3.0000e-005	1.6200e-003	4.4000e-004	3.0000e-005	4.7000e-004	0.0000	7.1749	7.1749	1.0400e-003	0.0000	7.2009
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.4000e-004	4.0700e-003	2.0000e-005	2.3600e-003	1.0000e-005	2.3800e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.6223	1.6223	2.0000e-005	0.0000	1.6229
Total	**1.1700e-003**	**0.0169**	**0.0189**	**9.0000e-005**	**3.9400e-003**	**4.0000e-005**	**4.0000e-003**	**1.0700e-003**	**4.0000e-005**	**1.1100e-003**	**0.0000**	**8.7972**	**8.7972**	**1.0600e-003**	**0.0000**	**8.8238**

Midway Village Project Phase 4 - Mitigated Construction (Phase 4 On-site)

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	38.51	1000sqft	0.88	38,510.00	0
Apartments Low Rise	141.00	Dwelling Unit	5.25	226,526.00	403

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 4 Construction (On-site Construction) - Tier 4 mitigated equipment
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard and PG&E's 2017 power content label.
Land Use - Phase 4 proposed on-site development based on Project Description dated October 21, 2019.

Construction Phase - Phase 4 conceptual construction schedule consistent with Project Description dated October 21, 2019.
Phase 4 Demolition (07/10/2025-09/03/2025) analyzed in a separate CalEEMod run.

Off-road Equipment -

Off-road Equipment - Adjusted building construction equipment usage based on project-specific information

Off-road Equipment - Additional grading equipment included based on project-specific information

Off-road Equipment -

Trips and VMT - Additional hauling trips included to account for transport of off-road construction equipment. Additional vendor trips included to account for anticipated paving off-site trips.

Grading - Approximately 30,481 cubic yards to be imported in Phase 4 (43,092 total cubic yards of import for the project anticipated; 12,611 cubic yards accounted for in Phase 2 and 30,481 cubic yards accounted for in Phase 4)

Vehicle Trips - Construction run only

Woodstoves - Construction run only

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 Final mitigation for construction equipment >50 HP
Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	35.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	230.00	175.00
tblConstructionPhase	NumDays	20.00	48.00
tblConstructionPhase	NumDays	20.00	35.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	23.97	0.00
tblGrading	MaterialImported	0.00	30,481.00
tblLandUse	LandUseSquareFeet	141,000.00	226,526.00
tblLandUse	LotAcreage	8.81	5.25
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	0.00	30.00
tblTripsAndVMT	HaulingTripNumber	0.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	SU_TR	6.07	0.00
tblVehicleTrips	WD_TR	6.59	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0950	1.1478	1.0110	2.9400e-003	0.4460	0.0351	0.4811	0.2288	0.0324	0.2612	0.0000	283.2164	283.2164	0.0599	0.0000	284.7149
2026	1.7513	1.2496	1.7024	3.5100e-003	0.0907	0.0493	0.1399	0.0244	0.0463	0.0707	0.0000	311.9785	311.9785	0.0573	0.0000	313.4116
Maximum	**1.7513**	**1.2496**	**1.7024**	**3.5100e-003**	**0.4460**	**0.0493**	**0.4811**	**0.2288**	**0.0463**	**0.2612**	**0.0000**	**311.9785**	**311.9785**	**0.0599**	**0.0000**	**313.4116**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0338	0.4383	1.1436	2.9400e-003	0.2261	3.3800e-003	0.2295	0.1099	3.3500e-003	0.1132	0.0000	283.2163	283.2163	0.0599	0.0000	284.7147
2026	1.6723	0.3585	1.8805	3.5100e-003	0.0907	7.4100e-003	0.0981	0.0244	7.3700e-003	0.0318	0.0000	311.9782	311.9782	0.0573	0.0000	313.4113
Maximum	**1.6723**	**0.4383**	**1.8805**	**3.5100e-003**	**0.2261**	**7.4100e-003**	**0.2295**	**0.1099**	**7.3700e-003**	**0.1132**	**0.0000**	**311.9782**	**311.9782**	**0.0599**	**0.0000**	**313.4113**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**7.60**	**66.76**	**-11.45**	**0.00**	**40.97**	**87.21**	**47.25**	**46.96**	**86.37**	**56.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-10-2025**	**10-9-2025**	0.3490	0.0337
2	**10-10-2025**	**1-9-2026**	0.9470	0.4578
3	**1-10-2026**	**4-9-2026**	0.4656	0.1553
4	**4-10-2026**	**7-9-2026**	0.6060	0.1808
5	**7-10-2026**	**9-30-2026**	1.7077	1.5124
		Highest	1.7077	1.5124

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/5/2025	10/23/2025	5	35	
2	Grading	Grading	11/1/2025	12/5/2025	5	25	
3	Building Construction	Building Construction	12/6/2025	8/7/2026	5	175	
4	Paving	Paving	6/1/2026	8/5/2026	5	48	
5	Architectural Coating	Architectural Coating	8/18/2026	10/5/2026	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 12.5

Acres of Paving: 0.88

Residential Indoor: 458,715; Residential Outdoor: 152,905; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Trenchers	1	8.00	78	0.50
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	30.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,810.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	118.00	21.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	24.00	0.00	30.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3162	0.0000	0.3162	0.1738	0.0000	0.1738	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0433	0.4416	0.3135	6.7000e-004		0.0190	0.0190		0.0175	0.0175	0.0000	58.5672	58.5672	0.0189	0.0000	59.0408
Total	**0.0433**	**0.4416**	**0.3135**	**6.7000e-004**	**0.3162**	**0.0190**	**0.3352**	**0.1738**	**0.0175**	**0.1913**	**0.0000**	**58.5672**	**58.5672**	**0.0189**	**0.0000**	**59.0408**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.6400e-003	2.3500e-003	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	1.1389	1.1389	1.7000e-004	0.0000	1.1430
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.6000e-004	4.2700e-003	2.0000e-005	2.4800e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.7034	1.7034	2.0000e-005	0.0000	1.7040
Total	**7.5000e-004**	**3.0000e-003**	**6.6200e-003**	**3.0000e-005**	**2.7300e-003**	**2.0000e-005**	**2.7500e-003**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**0.0000**	**2.8423**	**2.8423**	**1.9000e-004**	**0.0000**	**2.8470**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1423	0.0000	0.1423	0.0782	0.0000	0.0782	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1500e-003	0.0353	0.3652	6.7000e-004		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	58.5672	58.5672	0.0189	0.0000	59.0407
Total	**8.1500e-003**	**0.0353**	**0.3652**	**6.7000e-004**	**0.1423**	**1.0900e-003**	**0.1434**	**0.0782**	**1.0900e-003**	**0.0793**	**0.0000**	**58.5672**	**58.5672**	**0.0189**	**0.0000**	**59.0407**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.6400e-003	2.3500e-003	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	1.1389	1.1389	1.7000e-004	0.0000	1.1430
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.6000e-004	4.2700e-003	2.0000e-005	2.4800e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.7034	1.7034	2.0000e-005	0.0000	1.7040
Total	**7.5000e-004**	**3.0000e-003**	**6.6200e-003**	**3.0000e-005**	**2.7300e-003**	**2.0000e-005**	**2.7500e-003**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**0.0000**	**2.8423**	**2.8423**	**1.9000e-004**	**0.0000**	**2.8470**

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0836	0.0000	0.0836	0.0424	0.0000	0.0424	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0256	0.2515	0.2393	5.3000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	46.7007	46.7007	0.0151	0.0000	47.0783
Total	**0.0256**	**0.2515**	**0.2393**	**5.3000e-004**	**0.0836**	**0.0110**	**0.0946**	**0.0424**	**0.0101**	**0.0525**	**0.0000**	**46.7007**	**46.7007**	**0.0151**	**0.0000**	**47.0783**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0110	0.3347	0.2980	1.3700e-003	0.0319	6.6000e-004	0.0326	8.7700e-003	6.3000e-004	9.4000e-003	0.0000	144.6372	144.6372	0.0210	0.0000	145.1614
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	2.8000e-004	3.3900e-003	1.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.3519	1.3519	2.0000e-005	0.0000	1.3524
Total	**0.0115**	**0.3350**	**0.3014**	**1.3800e-003**	**0.0339**	**6.7000e-004**	**0.0345**	**9.2900e-003**	**6.4000e-004**	**9.9300e-003**	**0.0000**	**145.9891**	**145.9891**	**0.0210**	**0.0000**	**146.5138**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0376	0.0000	0.0376	0.0191	0.0000	0.0191	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5200e-003	0.0282	0.3073	5.3000e-004		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004	0.0000	46.7007	46.7007	0.0151	0.0000	47.0783
Total	**6.5200e-003**	**0.0282**	**0.3073**	**5.3000e-004**	**0.0376**	**8.7000e-004**	**0.0385**	**0.0191**	**8.7000e-004**	**0.0199**	**0.0000**	**46.7007**	**46.7007**	**0.0151**	**0.0000**	**47.0783**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0110	0.3347	0.2980	1.3700e-003	0.0319	6.6000e-004	0.0326	8.7700e-003	6.3000e-004	9.4000e-003	0.0000	144.6372	144.6372	0.0210	0.0000	145.1614
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	2.8000e-004	3.3900e-003	1.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.3519	1.3519	2.0000e-005	0.0000	1.3524
Total	**0.0115**	**0.3350**	**0.3014**	**1.3800e-003**	**0.0339**	**6.7000e-004**	**0.0345**	**9.2900e-003**	**6.4000e-004**	**9.9300e-003**	**0.0000**	**145.9891**	**145.9891**	**0.0210**	**0.0000**	**146.5138**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.1017	0.1272	2.2000e-004		4.3200e-003	4.3200e-003		4.0700e-003	4.0700e-003	0.0000	18.7148	18.7148	4.2100e-003	0.0000	18.8201
Total	**0.0113**	**0.1017**	**0.1272**	**2.2000e-004**		**4.3200e-003**	**4.3200e-003**		**4.0700e-003**	**4.0700e-003**	**0.0000**	**18.7148**	**18.7148**	**4.2100e-003**	**0.0000**	**18.8201**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0137	8.5700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2500e-003	3.6000e-004	2.0000e-005	3.7000e-004	0.0000	4.6594	4.6594	4.2000e-004	0.0000	4.6700
Worker	2.2300e-003	1.2100e-003	0.0144	6.0000e-005	8.3600e-003	5.0000e-005	8.4100e-003	2.2200e-003	4.0000e-005	2.2700e-003	0.0000	5.7429	5.7429	8.0000e-005	0.0000	5.7449
Total	**2.6500e-003**	**0.0149**	**0.0230**	**1.1000e-004**	**9.5900e-003**	**7.0000e-005**	**9.6600e-003**	**2.5800e-003**	**6.0000e-005**	**2.6400e-003**	**0.0000**	**10.4023**	**10.4023**	**5.0000e-004**	**0.0000**	**10.4149**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2400e-003	0.0219	0.1401	2.2000e-004		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	18.7148	18.7148	4.2100e-003	0.0000	18.8200
Total	**4.2400e-003**	**0.0219**	**0.1401**	**2.2000e-004**		**6.7000e-004**	**6.7000e-004**		**6.7000e-004**	**6.7000e-004**	**0.0000**	**18.7148**	**18.7148**	**4.2100e-003**	**0.0000**	**18.8200**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2000e-004	0.0137	8.5700e-003	5.0000e-005	1.2300e-003	2.0000e-005	1.2500e-003	3.6000e-004	2.0000e-005	3.7000e-004	0.0000	4.6594	4.6594	4.2000e-004	0.0000	4.6700
Worker	2.2300e-003	1.2100e-003	0.0144	6.0000e-005	8.3600e-003	5.0000e-005	8.4100e-003	2.2200e-003	4.0000e-005	2.2700e-003	0.0000	5.7429	5.7429	8.0000e-005	0.0000	5.7449
Total	**2.6500e-003**	**0.0149**	**0.0230**	**1.1000e-004**	**9.5900e-003**	**7.0000e-005**	**9.6600e-003**	**2.5800e-003**	**6.0000e-005**	**2.6400e-003**	**0.0000**	**10.4023**	**10.4023**	**5.0000e-004**	**0.0000**	**10.4149**

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0983	0.8872	1.1095	1.9000e-003		0.0377	0.0377		0.0355	0.0355	0.0000	163.2350	163.2350	0.0367	0.0000	164.1527
Total	**0.0983**	**0.8872**	**1.1095**	**1.9000e-003**		**0.0377**	**0.0377**		**0.0355**	**0.0355**	**0.0000**	**163.2350**	**163.2350**	**0.0367**	**0.0000**	**164.1527**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6300e-003	0.1165	0.0763	4.0000e-004	0.0108	1.6000e-004	0.0109	3.1100e-003	1.5000e-004	3.2600e-003	0.0000	40.2970	40.2970	3.7300e-003	0.0000	40.3902
Worker	0.0188	9.7300e-003	0.1183	5.3000e-004	0.0729	4.0000e-004	0.0733	0.0194	3.7000e-004	0.0198	0.0000	48.3840	48.3840	6.6000e-004	0.0000	48.4005
Total	**0.0224**	**0.1263**	**0.1946**	**9.3000e-004**	**0.0837**	**5.6000e-004**	**0.0842**	**0.0225**	**5.2000e-004**	**0.0230**	**0.0000**	**88.6810**	**88.6810**	**4.3900e-003**	**0.0000**	**88.7907**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0369	0.1907	1.2219	1.9000e-003		5.8300e-003	5.8300e-003		5.8300e-003	5.8300e-003	0.0000	163.2348	163.2348	0.0367	0.0000	164.1525
Total	**0.0369**	**0.1907**	**1.2219**	**1.9000e-003**		**5.8300e-003**	**5.8300e-003**		**5.8300e-003**	**5.8300e-003**	**0.0000**	**163.2348**	**163.2348**	**0.0367**	**0.0000**	**164.1525**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6300e-003	0.1165	0.0763	4.0000e-004	0.0108	1.6000e-004	0.0109	3.1100e-003	1.5000e-004	3.2600e-003	0.0000	40.2970	40.2970	3.7300e-003	0.0000	40.3902
Worker	0.0188	9.7300e-003	0.1183	5.3000e-004	0.0729	4.0000e-004	0.0733	0.0194	3.7000e-004	0.0198	0.0000	48.3840	48.3840	6.6000e-004	0.0000	48.4005
Total	**0.0224**	**0.1263**	**0.1946**	**9.3000e-004**	**0.0837**	**5.6000e-004**	**0.0842**	**0.0225**	**5.2000e-004**	**0.0230**	**0.0000**	**88.6810**	**88.6810**	**4.3900e-003**	**0.0000**	**88.7907**

3.5 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0220	0.2060	0.3499	5.5000e-004		0.0100	0.0100		9.2400e-003	9.2400e-003	0.0000	48.0462	48.0462	0.0155	0.0000	48.4347
Paving	1.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0231**	**0.2060**	**0.3499**	**5.5000e-004**		**0.0100**	**0.0100**		**9.2400e-003**	**9.2400e-003**	**0.0000**	**48.0462**	**48.0462**	**0.0155**	**0.0000**	**48.4347**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	6.7900e-003	4.4400e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.3467	2.3467	2.2000e-004	0.0000	2.3521
Worker	7.3000e-004	3.8000e-004	4.6000e-003	2.0000e-005	2.8300e-003	2.0000e-005	2.8500e-003	7.5000e-004	1.0000e-005	7.7000e-004	0.0000	1.8804	1.8804	3.0000e-005	0.0000	1.8811
Total	**9.4000e-004**	**7.1700e-003**	**9.0400e-003**	**4.0000e-005**	**3.4600e-003**	**3.0000e-005**	**3.4900e-003**	**9.3000e-004**	**2.0000e-005**	**9.6000e-004**	**0.0000**	**4.2271**	**4.2271**	**2.5000e-004**	**0.0000**	**4.2332**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7300e-003	0.0292	0.4151	5.5000e-004		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	48.0462	48.0462	0.0155	0.0000	48.4346
Paving	1.1500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.8800e-003**	**0.0292**	**0.4151**	**5.5000e-004**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**48.0462**	**48.0462**	**0.0155**	**0.0000**	**48.4346**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	6.7900e-003	4.4400e-003	2.0000e-005	6.3000e-004	1.0000e-005	6.4000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	2.3467	2.3467	2.2000e-004	0.0000	2.3521
Worker	7.3000e-004	3.8000e-004	4.6000e-003	2.0000e-005	2.8300e-003	2.0000e-005	2.8500e-003	7.5000e-004	1.0000e-005	7.7000e-004	0.0000	1.8804	1.8804	3.0000e-005	0.0000	1.8811
Total	**9.4000e-004**	**7.1700e-003**	**9.0400e-003**	**4.0000e-005**	**3.4600e-003**	**3.0000e-005**	**3.4900e-003**	**9.3000e-004**	**2.0000e-005**	**9.6000e-004**	**0.0000**	**4.2271**	**4.2271**	**2.5000e-004**	**0.0000**	**4.2332**

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6026					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0317	5.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	**1.6056**	**0.0201**	**0.0317**	**5.0000e-005**		**9.0000e-004**	**9.0000e-004**		**9.0000e-004**	**9.0000e-004**	**0.0000**	**4.4682**	**4.4682**	**2.4000e-004**	**0.0000**	**4.4743**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.5300e-003	2.4300e-003	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	1.1272	1.1272	1.7000e-004	0.0000	1.1314
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5000e-004	4.4000e-004	5.3600e-003	2.0000e-005	3.3100e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.1938	2.1938	3.0000e-005	0.0000	2.1946
Total	**9.4000e-004**	**2.9700e-003**	**7.7900e-003**	**3.0000e-005**	**3.5600e-003**	**3.0000e-005**	**3.5800e-003**	**9.5000e-004**	**2.0000e-005**	**9.7000e-004**	**0.0000**	**3.3210**	**3.3210**	**2.0000e-004**	**0.0000**	**3.3260**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6026					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	2.2500e-003	0.0321	5.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	**1.6032**	**2.2500e-003**	**0.0321**	**5.0000e-005**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**4.4682**	**4.4682**	**2.4000e-004**	**0.0000**	**4.4743**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	2.5300e-003	2.4300e-003	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	1.1272	1.1272	1.7000e-004	0.0000	1.1314
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5000e-004	4.4000e-004	5.3600e-003	2.0000e-005	3.3100e-003	2.0000e-005	3.3200e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.1938	2.1938	3.0000e-005	0.0000	2.1946
Total	**9.4000e-004**	**2.9700e-003**	**7.7900e-003**	**3.0000e-005**	**3.5600e-003**	**3.0000e-005**	**3.5800e-003**	**9.5000e-004**	**2.0000e-005**	**9.7000e-004**	**0.0000**	**3.3210**	**3.3210**	**2.0000e-004**	**0.0000**	**3.3260**

Midway Village Project Phase 4 - Mitigated Construction (Phase 4 Off-site Road Improvements)

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	27.15	1000sqft	0.62	27,150.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Phase 4 Off-site Road Improvements - Tier 4 mitigated equipment
CO2 intensity factor adjusted based on California's Renewables Energy Portfolio Standard (RPS) Program and PG&E's 2017 power content label.

Land Use - Additional roadway improvements totaling approximately 27,150 square feet.
Improvements to Schwerin St. and Martin St.

Construction Phase - Adjusted construction schedule to match applicant-provided estimated duration of 6 weeks for off-site roadway improvements.

Trips and VMT - Two additional vendor trips per day added to the paving phase to account for anticipated paving off-site trips. Additional hauling trips included to account for transport of off-road construction equipment.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 Final mitigation for construction equipment >50 HP
Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures Recommended for All Proposed Projects.

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	28.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	HaulingTripNumber	0.00	13.00
tblTripsAndVMT	HaulingTripNumber	0.00	13.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0102	0.0810	0.1145	2.1000e-004	3.5000e-003	3.3700e-003	6.8700e-003	1.1100e-003	3.1600e-003	4.2700e-003	0.0000	17.7388	17.7388	4.3900e-003	0.0000	17.8484
Maximum	**0.0102**	**0.0810**	**0.1145**	**2.1000e-004**	**3.5000e-003**	**3.3700e-003**	**6.8700e-003**	**1.1100e-003**	**3.1600e-003**	**4.2700e-003**	**0.0000**	**17.7388**	**17.7388**	**4.3900e-003**	**0.0000**	**17.8484**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	5.7300e-003	0.0277	0.1270	2.1000e-004	2.9400e-003	8.5000e-004	3.8000e-003	8.7000e-004	8.5000e-004	1.7200e-003	0.0000	17.7387	17.7387	4.3900e-003	0.0000	17.8484
Maximum	**5.7300e-003**	**0.0277**	**0.1270**	**2.1000e-004**	**2.9400e-003**	**8.5000e-004**	**3.8000e-003**	**8.7000e-004**	**8.5000e-004**	**1.7200e-003**	**0.0000**	**17.7387**	**17.7387**	**4.3900e-003**	**0.0000**	**17.8484**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**43.77**	**65.79**	**-10.88**	**0.00**	**16.00**	**74.78**	**44.69**	**21.62**	**73.10**	**59.72**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	**Start Date**	**End Date**	**Maximum Unmitigated ROG + NOX (tons/quarter)**	**Maximum Mitigated ROG + NOX (tons/quarter)**
1	**9-5-2025**	**9-30-2025**	0.0546	0.0188
		Highest	0.0546	0.0188

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/5/2025	9/5/2025	5	1	
2	Grading	Grading	9/6/2025	9/9/2025	5	2	
3	Paving	Paving	9/10/2025	10/17/2025	5	28	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.62

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	13.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	2.00	13.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2000e-004	2.4000e-003	1.9100e-003	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309
Total	**2.2000e-004**	**2.4000e-003**	**1.9100e-003**	**0.0000**	**2.7000e-004**	**8.0000e-005**	**3.5000e-004**	**3.0000e-005**	**8.0000e-005**	**1.1000e-004**	**0.0000**	**0.4274**	**0.4274**	**1.4000e-004**	**0.0000**	**0.4309**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.1400e-003	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.4935	0.4935	7.0000e-005	0.0000	0.4953
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0135	0.0135	0.0000	0.0000	0.0135
Total	**5.0000e-005**	**1.1400e-003**	**1.0500e-003**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.5070**	**0.5070**	**7.0000e-005**	**0.0000**	**0.5088**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0000e-005	2.6000e-004	2.6600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309
Total	**6.0000e-005**	**2.6000e-004**	**2.6600e-003**	**0.0000**	**1.2000e-004**	**1.0000e-005**	**1.3000e-004**	**1.0000e-005**	**1.0000e-005**	**2.0000e-005**	**0.0000**	**0.4274**	**0.4274**	**1.4000e-004**	**0.0000**	**0.4309**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.1400e-003	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.4935	0.4935	7.0000e-005	0.0000	0.4953
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0135	0.0135	0.0000	0.0000	0.0135
Total	**5.0000e-005**	**1.1400e-003**	**1.0500e-003**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.5070**	**0.5070**	**7.0000e-005**	**0.0000**	**0.5088**

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7000e-004	5.1000e-003	7.3600e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.0000e-004	2.0000e-004	0.0000	1.0425	1.0425	1.9000e-004	0.0000	1.0471
Total	**5.7000e-004**	**5.1000e-003**	**7.3600e-003**	**1.0000e-005**	**7.5000e-004**	**2.1000e-004**	**9.6000e-004**	**4.1000e-004**	**2.0000e-004**	**6.1000e-004**	**0.0000**	**1.0425**	**1.0425**	**1.9000e-004**	**0.0000**	**1.0471**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0541	0.0541	0.0000	0.0000	0.0541
Total	**2.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0541**	**0.0541**	**0.0000**	**0.0000**	**0.0541**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.4000e-004	0.0000	3.4000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3000e-004	5.7000e-004	7.8500e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.0425	1.0425	1.9000e-004	0.0000	1.0471
Total	**1.3000e-004**	**5.7000e-004**	**7.8500e-003**	**1.0000e-005**	**3.4000e-004**	**2.0000e-005**	**3.6000e-004**	**1.9000e-004**	**2.0000e-005**	**2.1000e-004**	**0.0000**	**1.0425**	**1.0425**	**1.9000e-004**	**0.0000**	**1.0471**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0541	0.0541	0.0000	0.0000	0.0541
Total	**2.0000e-005**	**1.0000e-005**	**1.4000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0541**	**0.0541**	**0.0000**	**0.0000**	**0.0541**

3.4 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8900e-003	0.0689	0.0984	1.6000e-004		3.0600e-003	3.0600e-003		2.8600e-003	2.8600e-003	0.0000	13.1613	13.1613	3.8300e-003	0.0000	13.2571
Paving	8.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.7000e-003**	**0.0689**	**0.0984**	**1.6000e-004**		**3.0600e-003**	**3.0600e-003**		**2.8600e-003**	**2.8600e-003**	**0.0000**	**13.1613**	**13.1613**	**3.8300e-003**	**0.0000**	**13.2571**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.1400e-003	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.4935	0.4935	7.0000e-005	0.0000	0.4953
Vendor	6.0000e-005	2.0300e-003	1.2700e-003	1.0000e-005	1.8000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.6903	0.6903	6.0000e-005	0.0000	0.6919
Worker	5.3000e-004	2.9000e-004	3.4200e-003	2.0000e-005	1.9800e-003	1.0000e-005	2.0000e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.3627	1.3627	2.0000e-005	0.0000	1.3632
Total	**6.3000e-004**	**3.4600e-003**	**5.7100e-003**	**3.0000e-005**	**2.2700e-003**	**1.0000e-005**	**2.3000e-003**	**6.1000e-004**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**2.5465**	**2.5465**	**1.5000e-004**	**0.0000**	**2.5504**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0300e-003	0.0223	0.1096	1.6000e-004		8.1000e-004	8.1000e-004		8.1000e-004	8.1000e-004	0.0000	13.1612	13.1612	3.8300e-003	0.0000	13.2571
Paving	8.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.8400e-003**	**0.0223**	**0.1096**	**1.6000e-004**		**8.1000e-004**	**8.1000e-004**		**8.1000e-004**	**8.1000e-004**	**0.0000**	**13.1612**	**13.1612**	**3.8300e-003**	**0.0000**	**13.2571**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.1400e-003	1.0200e-003	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.4935	0.4935	7.0000e-005	0.0000	0.4953
Vendor	6.0000e-005	2.0300e-003	1.2700e-003	1.0000e-005	1.8000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.6903	0.6903	6.0000e-005	0.0000	0.6919
Worker	5.3000e-004	2.9000e-004	3.4200e-003	2.0000e-005	1.9800e-003	1.0000e-005	2.0000e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.3627	1.3627	2.0000e-005	0.0000	1.3632
Total	**6.3000e-004**	**3.4600e-003**	**5.7100e-003**	**3.0000e-005**	**2.2700e-003**	**1.0000e-005**	**2.3000e-003**	**6.1000e-004**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**2.5465**	**2.5465**	**1.5000e-004**	**0.0000**	**2.5504**

Midway Village Proposed Project—2026 Unmitigated Operations
San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	555.00	Dwelling Unit	10.42	864,840.00	1587
Day-Care Center	125.00	Student	0.38	16,760.00	0
Other Asphalt Surfaces	6.04	Acre	6.04	263,645.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Midway Village Proposed Project Unmitigated Operations for the 2026 Operational Year
CO2 intensity factor adjusted based on Renewable Energy Portfolio Standard and PG&E's 2017 power content label.

Land Use - Full buildout
Proposed development based on Project Description dated October 21, 2019.

Construction Phase - Operational run only (construction analyzed separately)

Off-road Equipment - Zeroed out construction equipment-operational run only

Trips and VMT - Operational run only

Vehicle Trips - Trip generation rates based on the project-specific transportation analysis prepared by Hexagon Transportation, Inc.
ITE Manual, 10th Edition weekday, Saturday, and Sunday rates - ITE Land Uses 220 and 565.

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Energy Mitigation - Solar thermal PV panels would be included as a project design feature. Generation of kWh is unknown; therefore, no reductions for on-site renewable energy were quantified. Energy efficiency improvements at least 10% > Title 24 standards.

Area Mitigation - Compliance with BAAQMD Regulation 6, Rule 3 Wood-burning devices

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	7/28/2022	7/1/2022
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	94.35	0.00
tblLandUse	LandUseSquareFeet	555,000.00	864,840.00
tblLandUse	LandUseSquareFeet	7,065.35	16,760.00
tblLandUse	LandUseSquareFeet	263,102.40	263,645.00
tblLandUse	LotAcreage	34.69	10.42
tblLandUse	LotAcreage	0.16	0.38
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	WorkerTripNumber	103.00	0.00
tblVehicleTrips	ST_TR	7.16	8.14
tblVehicleTrips	SU_TR	6.07	6.28
tblVehicleTrips	WD_TR	6.59	7.32
tblVehicleTrips	WD_TR	4.38	4.09
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.2079	0.0564	4.1221	2.7000e-004		0.0236	0.0236		0.0236	0.0236	0.0000	17.1267	17.1267	6.6500e-003	1.9000e-004	17.3498
Energy	0.0624	0.5339	0.2328	3.4000e-003		0.0431	0.0431		0.0431	0.0431	0.0000	1,045.2405	1,045.2405	0.0436	0.0179	1,051.6616
Mobile	0.8583	2.3940	9.3069	0.0345	3.6303	0.0274	3.6578	0.9757	0.0255	1.0013	0.0000	3,162.2020	3,162.2020	0.1134	0.0000	3,165.0358
Waste						0.0000	0.0000		0.0000	0.0000	56.4538	0.0000	56.4538	3.3363	0.0000	139.8619
Water						0.0000	0.0000		0.0000	0.0000	11.5682	49.5830	61.1512	1.1918	0.0288	99.5347
Total	**5.1286**	**2.9844**	**13.6618**	**0.0381**	**3.6303**	**0.0941**	**3.7244**	**0.9757**	**0.0922**	**1.0679**	**68.0220**	**4,274.1522**	**4,342.1742**	**4.6918**	**0.0469**	**4,473.4438**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.2079	0.0564	4.1221	2.7000e-004		0.0236	0.0236		0.0236	0.0236	0.0000	17.1267	17.1267	6.6500e-003	1.9000e-004	17.3498
Energy	0.0570	0.4874	0.2125	3.1100e-003		0.0393	0.0393		0.0393	0.0393	0.0000	988.9002	988.9002	0.0424	0.0169	994.9853
Mobile	0.8583	2.3940	9.3069	0.0345	3.6303	0.0274	3.6578	0.9757	0.0255	1.0013	0.0000	3,162.2020	3,162.2020	0.1134	0.0000	3,165.0358
Waste						0.0000	0.0000		0.0000	0.0000	56.4538	0.0000	56.4538	3.3363	0.0000	139.8619
Water						0.0000	0.0000		0.0000	0.0000	9.2546	39.6664	48.9209	0.9535	0.0231	79.6277
Total	**5.1232**	**2.9378**	**13.6414**	**0.0378**	**3.6303**	**0.0904**	**3.7207**	**0.9757**	**0.0884**	**1.0642**	**65.7084**	**4,207.8953**	**4,273.6037**	**4.4522**	**0.0401**	**4,396.8606**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.11**	**1.56**	**0.15**	**0.76**	**0.00**	**4.00**	**0.10**	**0.00**	**4.08**	**0.35**	**3.40**	**1.55**	**1.58**	**5.11**	**14.50**	**1.71**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8583	2.3940	9.3069	0.0345	3.6303	0.0274	3.6578	0.9757	0.0255	1.0013	0.0000	3,162.2020	3,162.2020	0.1134	0.0000	3,165.0358
Unmitigated	0.8583	2.3940	9.3069	0.0345	3.6303	0.0274	3.6578	0.9757	0.0255	1.0013	0.0000	3,162.2020	3,162.2020	0.1134	0.0000	3,165.0358

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	4,062.60	4,517.70	3485.40	9,342,724	9,342,724
Day-Care Center	511.25	48.75	46.25	446,027	446,027
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	4,573.85	4,566.45	3,531.65	9,788,752	9,788,752

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.458271	0.050791	0.272788	0.143353	0.016986	0.007324	0.025695	0.006686	0.004346	0.003010	0.009369	0.000540	0.000841
Day-Care Center	0.458271	0.050791	0.272788	0.143353	0.016986	0.007324	0.025695	0.006686	0.004346	0.003010	0.009369	0.000540	0.000841
Other Asphalt Surfaces	0.458271	0.050791	0.272788	0.143353	0.016986	0.007324	0.025695	0.006686	0.004346	0.003010	0.009369	0.000540	0.000841

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	425.3327	425.3327	0.0316	6.5300e-003	428.0688
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	427.8207	427.8207	0.0318	6.5700e-003	430.5728
NaturalGas Mitigated	0.0570	0.4874	0.2125	3.1100e-003		0.0393	0.0393		0.0393	0.0393	0.0000	563.5675	563.5675	0.0108	0.0103	566.9165
NaturalGas Unmitigated	0.0624	0.5339	0.2328	3.4000e-003		0.0431	0.0431		0.0431	0.0431	0.0000	617.4198	617.4198	0.0118	0.0113	621.0888

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.1294e+007	0.0609	0.5204	0.2215	3.3200e-003		0.0421	0.0421		0.0421	0.0421	0.0000	602.6894	602.6894	0.0116	0.0111	606.2709
Day-Care Center	276037	1.4900e-003	0.0135	0.0114	8.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	14.7304	14.7304	2.8000e-004	2.7000e-004	14.8179
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0624**	**0.5339**	**0.2328**	**3.4000e-003**		**0.0431**	**0.0431**		**0.0431**	**0.0431**	**0.0000**	**617.4198**	**617.4198**	**0.0118**	**0.0113**	**621.0888**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.03097e+007	0.0556	0.4751	0.2022	3.0300e-003		0.0384	0.0384		0.0384	0.0384	0.0000	550.1653	550.1653	0.0105	0.0101	553.4346
Day-Care Center	251149	1.3500e-003	0.0123	0.0103	7.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	13.4023	13.4023	2.6000e-004	2.5000e-004	13.4819
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0569**	**0.4874**	**0.2125**	**3.1000e-003**		**0.0394**	**0.0394**		**0.0394**	**0.0394**	**0.0000**	**563.5675**	**563.5675**	**0.0108**	**0.0103**	**566.9165**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.33998e+006	414.6348	0.0308	6.3700e-003	417.3020
Day-Care Center	74414.4	13.1859	9.8000e-004	2.0000e-004	13.2708
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**427.8207**	**0.0318**	**6.5700e-003**	**430.5728**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	2.32705e+006	412.3428	0.0306	6.3300e-003	414.9953
Day-Care Center	73308.2	12.9899	9.6000e-004	2.0000e-004	13.0735
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**425.3327**	**0.0316**	**6.5300e-003**	**428.0688**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.2079	0.0564	4.1221	2.7000e-004		0.0236	0.0236		0.0236	0.0236	0.0000	17.1267	17.1267	6.6500e-003	1.9000e-004	17.3498
Unmitigated	4.2079	0.0564	4.1221	2.7000e-004		0.0236	0.0236		0.0236	0.0236	0.0000	17.1267	17.1267	6.6500e-003	1.9000e-004	17.3498

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.4601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.0500e-003	8.9700e-003	3.8200e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.3929	10.3929	2.0000e-004	1.9000e-004	10.4546
Landscaping	0.1237	0.0474	4.1182	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	6.7338	6.7338	6.4500e-003	0.0000	6.8951
Total	**4.2079**	**0.0564**	**4.1221**	**2.8000e-004**		**0.0236**	**0.0236**		**0.0236**	**0.0236**	**0.0000**	**17.1267**	**17.1267**	**6.6500e-003**	**1.9000e-004**	**17.3498**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.6230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.4601					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.0500e-003	8.9700e-003	3.8200e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.3929	10.3929	2.0000e-004	1.9000e-004	10.4546
Landscaping	0.1237	0.0474	4.1182	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	6.7338	6.7338	6.4500e-003	0.0000	6.8951
Total	**4.2079**	**0.0564**	**4.1221**	**2.8000e-004**		**0.0236**	**0.0236**		**0.0236**	**0.0236**	**0.0000**	**17.1267**	**17.1267**	**6.6500e-003**	**1.9000e-004**	**17.3498**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	48.9209	0.9535	0.0231	79.6277
Unmitigated	61.1512	1.1918	0.0288	99.5347

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	36.1605 / 22.7968	60.2812	1.1819	0.0286	98.3434
Day-Care Center	0.30303 / 0.77922	0.8700	9.9300e-003	2.5000e-004	1.1913
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**61.1512**	**1.1918**	**0.0288**	**99.5347**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	28.9284 / 18.2375	48.2250	0.9455	0.0229	78.6747
Day-Care Center	0.242424 / 0.623376	0.6960	7.9500e-003	2.0000e-004	0.9530
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**48.9210**	**0.9535**	**0.0231**	**79.6277**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	56.4538	3.3363	0.0000	139.8619
Unmitigated	56.4538	3.3363	0.0000	139.8619

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	255.3	51.8236	3.0627	0.0000	128.3908
Day-Care Center	22.81	4.6302	0.2736	0.0000	11.4712
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**56.4538**	**3.3363**	**0.0000**	**139.8619**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	255.3	51.8236	3.0627	0.0000	128.3908
Day-Care Center	22.81	4.6302	0.2736	0.0000	11.4712
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**56.4538**	**3.3363**	**0.0000**	**139.8619**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Midway Village Existing Emissions (2026 Operational Year)

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	150.00	Dwelling Unit	15.93	157,885.00	429
Day-Care Center	109.00	Student	0.34	14,615.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	70
Climate Zone	5			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	390.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Midway Village Project Existing Emissions

Land Use - The Midway Village area currently consists of 172,500 square feet (sf) of residential, office, and day-care space.

Construction Phase - Existing emissions operational run only

Off-road Equipment - Zeroed out construction equipment

Trips and VMT - Zeroed out construction trips

Vehicle Trips - Adjusted weekday, Saturday, and Sunday consistent with rates provided in the project-specific Transportation Impact Analysis prepared by Hexagon Transportation Consultants.
ITE Manual, 10th Edition rates for ITE Land Uses 220 and 565.

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Area Mitigation - Compliance with BAAQMD Regulation 6, Rule 3 Wood-burning devices

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	7/28/2022	7/1/2022
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	25.50	0.00
tblLandUse	LandUseSquareFeet	150,000.00	157,885.00
tblLandUse	LandUseSquareFeet	6,160.99	14,615.00
tblLandUse	LotAcreage	9.38	15.93
tblLandUse	LotAcreage	0.14	0.34
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	390.65
tblTripsAndVMT	WorkerTripNumber	23.00	0.00
tblVehicleTrips	ST_TR	7.16	8.14
tblVehicleTrips	SU_TR	6.07	6.28
tblVehicleTrips	WD_TR	6.59	7.32
tblVehicleTrips	WD_TR	4.38	4.09
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.8263	0.0153	1.1147	7.0000e-005		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	4.6302	4.6302	1.8000e-003	5.0000e-005	4.6905
Energy	0.0178	0.1525	0.0698	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	299.2960	299.2960	0.0125	5.1200e-003	301.1351
Mobile	0.2678	0.7383	2.8281	0.0103	1.0807	8.2700e-003	1.0890	0.2905	7.6900e-003	0.2982	0.0000	944.5421	944.5421	0.0341	0.0000	945.3945
Waste						0.0000	0.0000		0.0000	0.0000	18.0439	0.0000	18.0439	1.0664	0.0000	44.7029
Water						0.0000	0.0000		0.0000	0.0000	3.1844	13.8664	17.0508	0.3281	7.9400e-003	27.6181
Total	**1.1118**	**0.9060**	**4.0126**	**0.0113**	**1.0807**	**0.0269**	**1.1076**	**0.2905**	**0.0263**	**0.3168**	**21.2283**	**1,262.3346**	**1,283.5629**	**1.4429**	**0.0131**	**1,323.5412**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.8263	0.0153	1.1147	7.0000e-005		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	4.6302	4.6302	1.8000e-003	5.0000e-005	4.6905
Energy	0.0178	0.1525	0.0698	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	299.2960	299.2960	0.0125	5.1200e-003	301.1351
Mobile	0.2678	0.7383	2.8281	0.0103	1.0807	8.2700e-003	1.0890	0.2905	7.6900e-003	0.2982	0.0000	944.5421	944.5421	0.0341	0.0000	945.3945
Waste						0.0000	0.0000		0.0000	0.0000	18.0439	0.0000	18.0439	1.0664	0.0000	44.7029
Water						0.0000	0.0000		0.0000	0.0000	3.1844	13.8664	17.0508	0.3281	7.9400e-003	27.6181
Total	**1.1118**	**0.9060**	**4.0126**	**0.0113**	**1.0807**	**0.0269**	**1.1076**	**0.2905**	**0.0263**	**0.3168**	**21.2283**	**1,262.3346**	**1,283.5629**	**1.4429**	**0.0131**	**1,323.5412**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2678	0.7383	2.8281	0.0103	1.0807	8.2700e-003	1.0890	0.2905	7.6900e-003	0.2982	0.0000	944.5421	944.5421	0.0341	0.0000	945.3945
Unmitigated	0.2678	0.7383	2.8281	0.0103	1.0807	8.2700e-003	1.0890	0.2905	7.6900e-003	0.2982	0.0000	944.5421	944.5421	0.0341	0.0000	945.3945

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,098.00	1,221.00	942.00	2,525,061	2,525,061
Day-Care Center	445.81	42.51	40.33	388,936	388,936
Total	1,543.81	1,263.51	982.33	2,913,996	2,913,996

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.458271	0.050791	0.272788	0.143353	0.016986	0.007324	0.025695	0.006686	0.004346	0.003010	0.009369	0.000540	0.000841
Day-Care Center	0.458271	0.050791	0.272788	0.143353	0.016986	0.007324	0.025695	0.006686	0.004346	0.003010	0.009369	0.000540	0.000841

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	123.5618	123.5618	9.1700e-003	1.9000e-003	124.3567
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	123.5618	123.5618	9.1700e-003	1.9000e-003	124.3567
NaturalGas Mitigated	0.0178	0.1525	0.0698	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	175.7342	175.7342	3.3700e-003	3.2200e-003	176.7785
NaturalGas Unmitigated	0.0178	0.1525	0.0698	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	175.7342	175.7342	3.3700e-003	3.2200e-003	176.7785

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	3.05243e+006	0.0165	0.1407	0.0599	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8890	162.8890	3.1200e-003	2.9900e-003	163.8570
Day-Care Center	240709	1.3000e-003	0.0118	9.9100e-003	7.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	12.8452	12.8452	2.5000e-004	2.4000e-004	12.9215
Total		**0.0178**	**0.1525**	**0.0698**	**9.7000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**	**0.0000**	**175.7342**	**175.7342**	**3.3700e-003**	**3.2300e-003**	**176.7785**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	3.05243e+006	0.0165	0.1407	0.0599	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8890	162.8890	3.1200e-003	2.9900e-003	163.8570
Day-Care Center	240709	1.3000e-003	0.0118	9.9100e-003	7.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	12.8452	12.8452	2.5000e-004	2.4000e-004	12.9215
Total		**0.0178**	**0.1525**	**0.0698**	**9.7000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**	**0.0000**	**175.7342**	**175.7342**	**3.3700e-003**	**3.2300e-003**	**176.7785**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	632427	112.0635	8.3200e-003	1.7200e-003	112.7843
Day-Care Center	64890.6	11.4984	8.5000e-004	1.8000e-004	11.5723
Total		**123.5618**	**9.1700e-003**	**1.9000e-003**	**124.3567**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	632427	112.0635	8.3200e-003	1.7200e-003	112.7843
Day-Care Center	64890.6	11.4984	8.5000e-004	1.8000e-004	11.5723
Total		**123.5618**	**9.1700e-003**	**1.9000e-003**	**124.3567**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8263	0.0153	1.1147	7.0000e-005		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	4.6302	4.6302	1.8000e-003	5.0000e-005	4.6905
Unmitigated	0.8263	0.0153	1.1147	7.0000e-005		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	4.6302	4.6302	1.8000e-003	5.0000e-005	4.6905

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6737					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.8000e-004	2.4300e-003	1.0300e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8089	2.8089	5.0000e-005	5.0000e-005	2.8256
Landscaping	0.0335	0.0128	1.1137	6.0000e-005		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	1.8213	1.8213	1.7500e-003	0.0000	1.8650
Total	**0.8262**	**0.0153**	**1.1147**	**8.0000e-005**		**6.3800e-003**	**6.3800e-003**		**6.3800e-003**	**6.3800e-003**	**0.0000**	**4.6302**	**4.6302**	**1.8000e-003**	**5.0000e-005**	**4.6905**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1188					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6737					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.8000e-004	2.4300e-003	1.0300e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8089	2.8089	5.0000e-005	5.0000e-005	2.8256
Landscaping	0.0335	0.0128	1.1137	6.0000e-005		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	1.8213	1.8213	1.7500e-003	0.0000	1.8650
Total	**0.8262**	**0.0153**	**1.1147**	**8.0000e-005**		**6.3800e-003**	**6.3800e-003**		**6.3800e-003**	**6.3800e-003**	**0.0000**	**4.6302**	**4.6302**	**1.8000e-003**	**5.0000e-005**	**4.6905**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.0508	0.3281	7.9400e-003	27.6181
Unmitigated	17.0508	0.3281	7.9400e-003	27.6181

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	9.7731 / 6.1613	16.2922	0.3194	7.7200e-003	26.5793
Day-Care Center	0.264242 / 0.67948	0.7586	8.6600e-003	2.1000e-004	1.0388
Total		**17.0508**	**0.3281**	**7.9300e-003**	**27.6181**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	9.7731 / 6.1613	16.2922	0.3194	7.7200e-003	26.5793
Day-Care Center	0.264242 / 0.67948	0.7586	8.6600e-003	2.1000e-004	1.0388
Total		**17.0508**	**0.3281**	**7.9300e-003**	**27.6181**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	18.0439	1.0664	0.0000	44.7029
Unmitigated	18.0439	1.0664	0.0000	44.7029

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	69	14.0064	0.8278	0.0000	34.7002
Day-Care Center	19.89	4.0375	0.2386	0.0000	10.0027
Total		**18.0439**	**1.0664**	**0.0000**	**44.7029**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	69	14.0064	0.8278	0.0000	34.7002
Day-Care Center	19.89	4.0375	0.2386	0.0000	10.0027
Total		**18.0439**	**1.0664**	**0.0000**	**44.7029**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B

Construction Health Risk Assessment Files

Midway Village Project—All Off-site Receptors Scenario

Phase 1—Demolition

Estimation of Annual On-site Construction Emissions

	Phase 1—Demolition	Total
Start of Construction	1/15/2021	
End of Construction	2/1/2021	
Number of Days	17	17
Number of Hours	408	408
Number of Construction Days	12	12
Number of Construction Hours (8 hours/day)	96	96

Size of the construction area source: **15,556 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)
Phase 1	2021	On-Site Demolition	0.0087	0.0094

Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
2021	On-Site Demolition	0.00037	0.00115

Total Unmitigated DPM (On-site)	8.650E-03	tons
Average Emission	7.847E+03	grams
	2.2706E-02	grams/sec
	1.460E-06	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	9.430E-03	tons
Average Emission	8.555E+03	grams
	2.475E-02	grams/sec
	1.591E-06	grams/m2-sec

Total Mitigated DPM (On-site)	3.700E-04	tons
Average Emission	3.357E+02	grams
	9.712E-04	grams/sec
	6.244E-08	grams/m2-sec
Total Mitigated PM2.5 (On-site)	1.150E-03	tons
Average Emission	1.043E+03	grams
	3.019E-03	grams/sec
	1.941E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 1—Construction **Construction Area 1B (Phase 1)**

Estimation of Annual On-site Construction Emissions

	Phase 1—Construction	Total
Start of Construction	2/2/2021	
End of Construction	12/20/2021	
Number of Days	321	321
Number of Hours	7,704	7,704
Number of Construction Days	230	230
Number of Construction Hours (8 hours/day)	1,840	1,840

Size of the construction area source: **15,604 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)
Phase 1	2021	On-Site Site Preperation	0.0188	0.0635
Phase 1	2021	On-Site Grading	0.0104	0.0218
Phase 1	2021	On-Site Building Construction	0.0710	0.0710
Phase 1	2021	On-Site Paving	0.0061	0.0061
Phase 1	2021	On-Site Architectural Coating	0.0017	0.0017

Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
2021	On-Site Site Preperation	0.00062	0.0453
2021	On-Site Grading	0.00052	0.0119
2021	On-Site Building Construction	0.00941	0.00941
2021	On-Site Paving	0.0006	0.0006
2021	On-Site Architectural Coating	0.00007	0.00007

Total Unmitigated DPM (On-site)	1.080E-01	tons
Average Emission	9.797E+04	grams
	1.479E-02	grams/sec
	9.478E-07	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	1.641E-01	tons
Average Emission	1.489E+05	grams
	2.247E-02	grams/sec
	1.440E-06	grams/m2-sec

Total Mitigated DPM (On-site)	1.120E-02	tons
Average Emission	1.016E+04	grams
	1.534E-03	grams/sec
	9.830E-08	grams/m2-sec
Total Mitigated PM2.5 (On-site)	6.726E-02	tons
Average Emission	6.102E+04	grams
	9.212E-03	grams/sec
	5.903E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 2—Demolition **Demolition Area 2A (Part 1 of 2 Phase 2)**

Estimation of Annual On-site Construction Emissions

	Phase 2—Demolition	Total
Start of Construction	9/1/2023	
End of Construction	10/5/2023	
Number of Days	34	34
Number of Hours	816	816
Number of Construction Days	25	25
Number of Construction Hours (8 hours/day)	200	200

Size of the construction area source: **12,692 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)	Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
Phase 2	2023	On-Site Demolition	0.0116	0.0150	2023	On-Site Demolition	0.00077	0.00416

Demolition Area 2A (Part 1 of 2 Phase 2)	12691.9
Demolition Area 2A (Part 2 of 2 Phase 2)	4089
Part 1 Percent	0.756330113

Total Unmitigated DPM (On-site)	8.773E-03	tons	**Total Mitigated DPM (On-site)**	5.824E-04	tons
Average Emission	7.959E+03	grams	Average Emission	5.283E+02	grams
	1.105E-02	grams/sec		7.338E-04	grams/sec
	8.710E-07	grams/m2-sec		5.781E-08	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	1.134E-02	tons	**Total Mitigated PM2.5 (On-site)**	3.146E-03	tons
Average Emission	1.029E+04	grams	Average Emission	2.854E+03	grams
	1.429E-02	grams/sec		3.964E-03	grams/sec
	1.126E-06	grams/m2-sec		3.123E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 2—Demolition **Demolition Area 2A (Part 2 of 2 Phase 2)**

Estimation of Annual On-site Construction Emissions

	Phase 2—Demolition	Total
Start of Construction	9/1/2023	
End of Construction	10/5/2023	
Number of Days	34	34
Number of Hours	816	816
Number of Construction Days	25	25
Number of Construction Hours (8 hours/day)	200	200

Size of the construction area source: **4,089 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)	Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
Phase 2	2023	On-Site Demolition	0.0116	0.0150	2023	On-Site Demolition	0.00077	0.00416

Demolition Area 2A (Part 1 of 2 Phase 2)	12691.9
Demolition Area 2A (Part 2 of 2 Phase 2)	4089
Part 2 Percent	0.243669887

Total Unmitigated DPM (On-site)	2.827E-03	tons	**Total Mitigated DPM (On-site)**	1.876E-04	tons
Average Emission	2.564E+03	grams	Average Emission	1.702E+02	grams
	3.561E-03	grams/sec		2.364E-04	grams/sec
	8.710E-07	grams/m2-sec		5.781E-08	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	3.655E-03	tons	**Total Mitigated PM2.5 (On-site)**	1.014E-03	tons
Average Emission	3.316E+03	grams	Average Emission	9.196E+02	grams
	4.605E-03	grams/sec		1.277E-03	grams/sec
	1.126E-06	grams/m2-sec		3.123E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 2—Construction **Construction Area 2B (Part 1 of 2 Phase 2)**

Estimation of Annual On-site Construction Emissions

	Phase 2—Construction	Phase 2—Construction	Phase 2—Construction	Phase 2—Construction	Total
Start of Construction	10/15/2023	11/26/2023	12/20/2023	8/3/2024	
End of Construction	11/22/2023	12/18/2023	7/23/2024	9/25/2024	
Number of Days	38	22	216	53	329
Number of Hours	912	528	5,184	1,272	7,896
Number of Construction Days	28	16	155	38	237
Number of Construction Hours (8 hours/day)	224	128	1,240	304	1,896

Size of the construction area source: **7,417 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)
Phase 2	2023	On-Site Site Preperation	0.0070	0.0081
Phase 2	2023	On-Site Grading	0.0066	0.0188
Phase 2	2023	On-Site Building Construction	0.0024	0.0024
Phase 2	2024	On-Site Building Construction	0.0379	0.0379
Phase 2	2024	On-Site Paving	0.0064	0.0064
Phase 2	2024	On-Site Architectural Coating	0.0012	0.0012

Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
2023	On-Site Site Preperation	0.0006	0.0016
2023	On-Site Grading	0.0004	0.0126
2023	On-Site Building Construction	0.0008	0.0008
2024	On-Site Building Construction	0.0124	0.0124
2024	On-Site Paving	0.0007	0.0007
2024	On-Site Architectural Coating	0.0001	0.0001

Part 1 Percent 0.763045804

Total Unmitigated DPM (On-site)	4.682E-02	tons	**Total Mitigated DPM (On-site)**	1.144E-02	tons
Average Emission	4.247E+04	grams	Average Emission	1.038E+04	grams
	6.223E-03	grams/sec		1.520E-03	grams/sec
	8.391E-07	grams/m2-sec		2.050E-07	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	5.697E-02	tons	**Total Mitigated PM2.5 (On-site)**	2.154E-02	tons
Average Emission	5.168E+04	grams	Average Emission	1.954E+04	grams
	7.572E-03	grams/sec		2.863E-03	grams/sec
	1.021E-06	grams/m2-sec		3.860E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 2—Construction **Construction Area 2B and 2B/3B (Part 2 of Phase 2)**

Estimation of Annual On-site Construction Emissions

	Phase 2—Construction	Phase 2—Construction	Phase 2—Construction	Phase 2—Construction	Total
Start of Construction	10/15/2023	11/26/2023	12/20/2023	8/3/2024	
End of Construction	11/22/2023	12/18/2023	7/23/2024	9/25/2024	
Number of Days	38	22	216	53	329
Number of Hours	912	528	5,184	1,272	7,896
Number of Construction Days	28	16	155	38	237
Number of Construction Hours (8 hours/day)	224	128	1,240	304	1,896

Size of the construction area source: **2,303 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)	Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
Phase 2	2023	On-Site Site Preperation	0.0070	0.0081	2023	On-Site Site Preperation	0.0006	0.0016
Phase 2	2023	On-Site Grading	0.0066	0.0188	2023	On-Site Grading	0.0004	0.0126
Phase 2	2023	On-Site Building Construction	0.0024	0.0024	2023	On-Site Building Construction	0.0008	0.0008
Phase 2	2024	On-Site Building Construction	0.0379	0.0379	2024	On-Site Building Construction	0.0124	0.0124
Phase 2	2024	On-Site Paving	0.0064	0.0064	2024	On-Site Paving	0.0007	0.0007
Phase 2	2024	On-Site Architectural Coating	0.0012	0.0012	2024	On-Site Architectural Coating	0.0001	0.0001

Part 2 Percent 0.236954196

Total Unmitigated DPM (On-site)	1.454E-02	tons	**Total Mitigated DPM (On-site)**	3.552E-03	tons
Average Emission	1.319E+04	grams	Average Emission	3.222E+03	grams
	1.932E-03	grams/sec		4.721E-04	grams/sec
	8.391E-07	grams/m2-sec		2.050E-07	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	1.769E-02	tons	**Total Mitigated PM2.5 (On-site)**	6.689E-03	tons
Average Emission	1.605E+04	grams	Average Emission	6.068E+03	grams
	2.351E-03	grams/sec		8.891E-04	grams/sec
	1.021E-06	grams/m2-sec		3.860E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 3—Demolition

Estimation of Annual On-site Construction Emissions

	Phase 3—Demolition	Total
Start of Construction	7/10/2025	
End of Construction	9/3/2025	
Number of Days	55	55
Number of Hours	1,320	1,320
Number of Construction Days	40	40
Number of Construction Hours (8 hours/day)	320	320

Size of the construction area source: **19,540 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)
Phase 3	2025	On-Site Demolition	0.0158	0.0214

Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
2025	On-Site Demolition	0.00123	0.00678

Total Unmitigated DPM (On-site)	1.580E-02	tons
Average Emission	1.433E+04	grams
	1.244E-02	grams/sec
	6.367E-07	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	2.140E-02	tons
Average Emission	1.941E+04	grams
	1.685E-02	grams/sec
	8.624E-07	grams/m2-sec

Total Mitigated DPM (On-site)	1.230E-03	tons
Average Emission	1.116E+03	grams
	9.686E-04	grams/sec
	4.957E-08	grams/m2-sec
Total Mitigated PM2.5 (On-site)	6.780E-03	tons
Average Emission	6.151E+03	grams
	5.339E-03	grams/sec
	2.732E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 3—Construction **Construction Area 3B (Phase 3)**

Estimation of Annual On-site Construction Emissions

	Phase 3—Construction	Phase 3—Construction	Phase 3—Construction	Total
Start of Construction	9/5/2025	11/1/2025	8/18/2026	
End of Construction	10/23/2025	8/7/2026	10/5/2026	
Number of Days	48	279	48	375
Number of Hours	1,152	6,696	1,152	9,000
Number of Construction Days	35	200	35	270
Number of Construction Hours (8 hours/day)	280	1,600	280	2,160

Size of the construction area source: **16,634 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)	Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
Phase 3	2025	On-Site Site Preperation	0.0175	0.0957	2025	On-Site Site Preperation	0.0011	0.0793
Phase 3	2025	On-Site Grading	0.0101	0.0291	2025	On-Site Grading	0.0009	0.0198
Phase 3	2025	On-Site Building Construction	0.0041	0.0041	2025	On-Site Building Construction	0.0007	0.0007
Phase 3	2026	On-Site Building Construction	0.0355	0.0355	2026	On-Site Building Construction	0.0058	0.0058
Phase 3	2026	On-Site Paving	0.0078	0.0078	2026	On-Site Paving	0.0012	0.0012
Phase 3	2026	On-Site Architectural Coating	0.0009	0.0009	2026	On-Site Architectural Coating	0.0001	0.0001

Total Unmitigated DPM (On-site)	7.589E-02	tons	**Total Mitigated DPM (On-site)**	9.750E-03	tons
Average Emission	6.885E+04	grams	Average Emission	8.845E+03	grams
	8.854E-03	grams/sec		1.137E-03	grams/sec
	5.323E-07	grams/m2-sec		6.838E-08	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	1.731E-01	tons	**Total Mitigated PM2.5 (On-site)**	1.069E-01	tons
Average Emission	1.570E+05	grams	Average Emission	9.697E+04	grams
	2.019E-02	grams/sec		1.247E-02	grams/sec
	1.214E-06	grams/m2-sec		7.497E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 4—Demolition **Demolition Area 4A (Part 1 of 2 Phase 4)**

Estimation of Annual On-site Construction Emissions

	Phase 4—Demolition	Total
Start of Construction	7/10/2025	
End of Construction	9/3/2025	
Number of Days	55	55
Number of Hours	1,320	1,320
Number of Construction Days	40	40
Number of Construction Hours (8 hours/day)	320	320

Size of the construction area source: **4,641 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)	Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
Phase 4	2025	On-Site Demolition	0.0158	0.0171	2025	On-Site Demolition	0.00123	0.00253

Demolition Area 4A (Part 1 of 2 Phase 4)	4641.4
Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5)	10867
Part 1 Percent	0.299282969

Total Unmitigated DPM (On-site)	4.729E-03	tons	**Total Mitigated DPM (On-site)**	3.681E-04	tons
Average Emission	4.290E+03	grams	Average Emission	3.340E+02	grams
	3.724E-03	grams/sec		2.899E-04	grams/sec
	8.023E-07	grams/m2-sec		6.246E-08	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	5.118E-03	tons	**Total Mitigated PM2.5 (On-site)**	7.572E-04	tons
Average Emission	4.643E+03	grams	Average Emission	6.869E+02	grams
	4.030E-03	grams/sec		5.963E-04	grams/sec
	8.683E-07	grams/m2-sec		1.285E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 4—Demolition **Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5)**

Estimation of Annual On-site Construction Emissions

	Phase 4—Demolition	Total
Start of Construction	7/10/2025	
End of Construction	9/3/2025	
Number of Days	55	55
Number of Hours	1,320	1,320
Number of Construction Days	40	40
Number of Construction Hours (8 hours/day)	320	320

Size of the construction area source: **10,867 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)	Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
Phase 4	2025	On-Site Demolition	0.0158	0.0171	2025	On-Site Demolition	0.00123	0.00253

Demolition Area 4A (Part 1 of 2 Phase 4)	4641.4
Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5)	10867
Part 2 Percent	0.700717031

Total Unmitigated DPM (On-site)	1.107E-02	tons	**Total Mitigated DPM (On-site)**	8.619E-04	tons
Average Emission	1.004E+04	grams	Average Emission	7.819E+02	grams
	8.719E-03	grams/sec		6.787E-04	grams/sec
	8.023E-07	grams/m2-sec		6.246E-08	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	1.198E-02	tons	**Total Mitigated PM2.5 (On-site)**	1.773E-03	tons
Average Emission	1.087E+04	grams	Average Emission	1.608E+03	grams
	9.436E-03	grams/sec		1.396E-03	grams/sec
	8.683E-07	grams/m2-sec		1.285E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 4—Construction **Construction Area 4B and Area 2B/4B (Phase 4)**

Estimation of Annual On-site Construction Emissions

	Phase 4—Construction	Phase 4—Construction	Phase 4—Construction	**Total**
Start of Construction	9/5/2025	11/1/2025	8/18/2026	
End of Construction	10/23/2025	8/7/2026	10/5/2026	
Number of Days	48	279	48	375
Number of Hours	1,152	6,696	1,152	9,000
Number of Construction Days	35	200	35	270
Number of Construction Hours (8 hours/day)	280	1,600	280	2,160

Size of the construction area source: **11,650 sq-meters**

	Year	**On-site Construction Activity**	**Unmitigated Onsite DPM (tons)**	**Unmitigated Onsite PM2.5 (tons)**
Phase 4	2025	On-Site Site Preperation	0.0175	0.0957
Phase 4	2025	On-Site Grading	0.0101	0.0292
Phase 4	2025	On-Site Building Construction	0.0041	0.0041
Phase 4	2026	On-Site Building Construction	0.0355	0.0355
Phase 4	2026	On-Site Paving	0.0092	0.0092
Phase 4	2026	On-Site Architectural Coating	0.0009	0.0009
Roadway Improvements	2025	On-Site Site Preperation	0.0001	0.0001
Roadway Improvements	2025	On-Site Grading	0.0002	0.0004
Roadway Improvements	2025	On-Site Paving	0.0029	0.0029
Part 1 Percent	0.456680505			

Total Unmitigated DPM (On-site)	3.674E-02	tons
Average Emission	3.333E+04	grams
	4.286E-03	grams/sec
	3.679E-07	grams/m2-sec
Total Unmitigated PM2.5 (On-site)	8.127E-02	tons
Average Emission	7.372E+04	grams
	9.481E-03	grams/sec
	8.138E-07	grams/m2-sec

Year	**On-site Construction Activity**	**Mitigated Onsite DPM (tons)**	**Mitigated Onsite PM2.5 (tons)**
2025	On-Site Site Preperation	0.0011	0.0793
2025	On-Site Grading	0.0009	0.0199
2025	On-Site Building Construction	0.0007	0.0007
2026	On-Site Building Construction	0.0058	0.0058
2026	On-Site Paving	0.0009	0.0009
2026	On-Site Architectural Coating	0.0001	0.0001
2025	On-Site Site Preperation	0.0000	0.0000
2025	On-Site Grading	0.0000	0.0002
2025	On-Site Paving	0.0008	0.0008

Total Mitigated DPM (On-site)	4.690E-03	tons
Average Emission	4.255E+03	grams
	5.472E-04	grams/sec
	4.697E-08	grams/m2-sec
Total Mitigated PM2.5 (On-site)	4.919E-02	tons
Average Emission	4.462E+04	grams
	5.739E-03	grams/sec
	4.926E-07	grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 4—Construction **Construction Area 4B (Phase 4)**

Estimation of Annual On-site Construction Emissions

	Phase 4—Construction	Phase 4—Construction	Phase 4—Construction	Total
Start of Construction	9/5/2025	11/1/2025	8/18/2026	
End of Construction	10/23/2025	8/7/2026	10/5/2026	
Number of Days	48	279	48	375
Number of Hours	1,152	6,696	1,152	9,000
Number of Construction Days	35	200	35	270
Number of Construction Hours (8 hours/day)	280	1,600	280	2,160

Size of the construction area source: **13,860 sq-meters**

	Year	On-site Construction Activity	Unmitigated Onsite DPM (tons)	Unmitigated Onsite PM2.5 (tons)	Year	On-site Construction Activity	Mitigated Onsite DPM (tons)	Mitigated Onsite PM2.5 (tons)
Phase 4	2025	On-Site Site Preperation	0.0175	0.0957	2025	On-Site Site Preperation	0.00109	0.0793
Phase 4	2025	On-Site Grading	0.0101	0.0292	2025	On-Site Grading	0.00087	0.0199
Phase 4	2025	On-Site Building Construction	0.0041	0.0041	2025	On-Site Building Construction	0.00067	0.00067
Phase 4	2026	On-Site Building Construction	0.0355	0.0355	2026	On-Site Building Construction	0.00583	0.00583
Phase 4	2026	On-Site Paving	0.0092	0.0092	2026	On-Site Paving	0.0009	0.0009
Phase 4	2026	On-Site Architectural Coating	0.0009	0.0009	2026	On-Site Architectural Coating	0.00007	0.00007
Roadway Improvements	2025	On-Site Site Preperation	0.0001	0.0001	2025	On-Site Site Preperation	0.00001	0.00002
Roadway Improvements	2025	On-Site Grading	0.0002	0.0004	2025	On-Site Grading	0.00002	0.00021
Roadway Improvements	2025	On-Site Paving	0.0029	0.0029	2025	On-Site Paving	0.00081	0.00081
Part 2 Percent	0.543319495							

Total Unmitigated DPM (On-site)	4.371E-02 tons		**Total Mitigated DPM (On-site)**	5.580E-03 tons
Average Emission	3.965E+04 grams		Average Emission	5.062E+03 grams
	5.099E-03 grams/sec			6.510E-04 grams/sec
	3.679E-07 grams/m2-sec			4.697E-08 grams/m2-sec
Total Unmitigated PM2.5 (On-site)	9.668E-02 tons		**Total Mitigated PM2.5 (On-site)**	5.852E-02 tons
Average Emission	8.771E+04 grams		Average Emission	5.309E+04 grams
	1.128E-02 grams/sec			6.827E-03 grams/sec
	8.138E-07 grams/m2-sec			4.926E-07 grams/m2-sec

Midway Village Project—All Off-site Receptors Scenario

Phase 1—Demolition

Estimation of Annual Offsite Construction DPM Emissions (No Mitigation)

Start of Construction	1/15/2021	
End of Construction	2/1/2021	**Total**
Number of Days	17	17
Number of Hours	408	408
Number of Construction Days	12	12
Number of Construction Hours (8 hours/day)	96	96

		Phase 1 2021
	Construction Trip Type	Demolition
PM2.5 Fugitive	Haul Truck	0.00027
PM2.5 Fugitive	Vendor Truck	0.00000
PM2.5 Fugitive	Worker	0.00019
PM2.5 Fugitive	Total	0.00046
PM2.5 Exhaust	Haul Truck	0.00005
PM2.5 Exhaust	Vendor Truck	0.00000
PM2.5 Exhaust	Worker	0.00000
PM2.5 Exhaust	Total	0.00005
PM2.5 Total	Haul Truck	0.00032
PM2.5 Total	Vendor Truck	0.00000
PM2.5 Total	Worker	0.00019
PM2.5 Total	Total	0.00051

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total DPM		5.000E-05	0.000E+00	0.000E+00	5.000E-05
				Checking Total	5.000E-05
Average Emissions	Grams	4.536E+01	0.000E+00	0.000E+00	
	Grams/sec	1.312E-04	0.000E+00	0.000E+00	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.467	0.467	0.467	miles
	Road Segment 2	0.472	0.472	0.472	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	7.661E-07	0.000E+00	0.000E+00	7.661E-07
	Road Segment 2	1.549E-06	0.000E+00	0.000E+00	1.549E-06
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	5.837E-07	0.000E+00	0.000E+00	5.837E-07
	Road Segment 2	5.902E-07	0.000E+00	0.000E+00	5.902E-07
				Total	**1.174E-06**

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total PM2.5 Total		3.200E-04	0.000E+00	1.900E-04	5.100E-04
				Checking Total	5.100E-04
Average Emissions	Grams	2.903E+02	0.000E+00	1.724E+02	
	Grams/sec	8.400E-04	0.000E+00	4.987E-04	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.467	0.467	0.467	miles
	Road Segment 2	0.472	0.472	0.472	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	9.806E-06	0.000E+00	1.078E-05	2.059E-05
	Road Segment 2	9.916E-06	0.000E+00	1.090E-05	2.082E-05
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	3.736E-06	0.000E+00	4.108E-06	7.843E-06
	Road Segment 2	3.777E-06	0.000E+00	4.153E-06	7.931E-06
				Total	**1.577E-05**

Midway Village Project—All Off-site Receptors Scenario
Phase 1—Construction

Estimation of Annual Offsite Construction DPM Emissions (No Mitigation)

	Start of Construction	2/2/2021				
	End of Construction	12/20/2021				**Total**
	Number of Days	321				321
	Number of Hours	7,704				7,704
	Number of Construction Days	230				230
	Number of Construction Hours (8 hours/day)	1,840				1,840
		Phase 1	Phase 1	Phase 1	Phase 1	Phase 1
		2021	2021	2021	2021	2021
	Construction Trip Type	Site Preparation	Grading	Building Construction	Paving	Architectural Coating
PM2.5 Fugitive	Haul Truck	0.00007	0.00000	0.00000	0.00000	0.00007
PM2.5 Fugitive	Vendor Truck	0.00000	0.00000	0.00528	0.00009	0.00000
PM2.5 Fugitive	Worker	0.00038	0.00031	0.02730	0.00048	0.00110
PM2.5 Fugitive	Total	0.00045	0.00031	0.03260	0.00057	0.00117
PM2.5 Exhaust	Haul Truck	0.00001	0.00000	0.00000	0.00000	0.00001
PM2.5 Exhaust	Vendor Truck	0.00000	0.00000	0.00064	0.00001	0.00000
PM2.5 Exhaust	Worker	0.00001	0.00001	0.00058	0.00001	0.00002
PM2.5 Exhaust	Total	0.00002	0.00001	0.00122	0.00002	0.00003
PM2.5 Total	Haul Truck	0.00009	0.00000	0.00000	0.00000	0.00009
PM2.5 Total	Vendor Truck	0.00000	0.00000	0.00592	0.00010	0.00000
PM2.5 Total	Worker	0.00039	0.00032	0.02790	0.00049	0.00112
PM2.5 Total	Total	0.00048	0.00032	0.03380	0.00059	0.00121

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total DPM		2.000E-05	6.500E-04	6.300E-04	1.300E-03
				Checking Total	1.300E-03
Average Emissions	Grams	1.814E+01	5.897E+02	5.715E+02	
	Grams/sec	2.739E-06	8.902E-05	8.628E-05	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	1.599E-08	2.847E-06	1.865E-06	4.728E-06
	Road Segment 2	3.233E-08	2.879E-06	1.886E-06	4.797E-06
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	1.167E-07	2.079E-05	1.362E-05	3.453E-05
	Road Segment 2	2.361E-07	2.102E-05	1.377E-05	3.503E-05
				Total	**6.956E-05**

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total PM2.5 Total		1.800E-04	6.020E-03	3.022E-02	3.642E-02
				Checking Total	3.640E-02
Average Emissions	Grams	1.633E+02	5.461E+03	2.742E+04	
	Grams/sec	2.465E-05	8.245E-04	4.139E-03	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	2.878E-07	2.637E-05	8.947E-05	1.161E-04
	Road Segment 2	2.910E-07	2.666E-05	9.047E-05	1.174E-04
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	2.101E-06	1.925E-04	6.533E-04	8.480E-04
	Road Segment 2	2.125E-06	1.947E-04	6.606E-04	8.574E-04
				Total	**1.705E-03**

Midway Village Project—All Off-site Receptors Scenario

Phase 2—Demolition

Estimation of Annual Offsite Construction DPM Emissions (No Mitigation)

Start of Construction	9/1/2023		
End of Construction	10/5/2023		**Total**
Number of Days	34		34
Number of Hours	816		816
Number of Construction Days	25		25
Number of Construction Hours (8 hours/day)	200		200

		Phase 2 2023
	Construction Trip Type	Demolition
PM2.5 Fugitive	Haul Truck	0.00108
PM2.5 Fugitive	Vendor Truck	0.00000
PM2.5 Fugitive	Worker	0.00039
PM2.5 Fugitive	Total	0.00147
PM2.5 Exhaust	Haul Truck	0.00008
PM2.5 Exhaust	Vendor Truck	0.00000
PM2.5 Exhaust	Worker	0.00001
PM2.5 Exhaust	Total	0.00009
PM2.5 Total	Haul Truck	0.00117
PM2.5 Total	Vendor Truck	0.00000
PM2.5 Total	Worker	0.00040
PM2.5 Total	Total	0.00157

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total DPM		8.000E-05	0.000E+00	1.000E-05	9.000E-05
				Checking Total	9.000E-05
Average Emissions	Grams	7.257E+01	0.000E+00	9.072E+00	
	Grams/sec	1.008E-04	0.000E+00	1.260E-05	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	5.884E-07	0.000E+00	2.724E-07	8.607E-07
	Road Segment 2	1.190E-06	0.000E+00	2.754E-07	1.465E-06
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	4.670E-07	0.000E+00	2.162E-07	6.831E-07
	Road Segment 2	9.444E-07	0.000E+00	2.186E-07	1.163E-06
				Total	**1.846E-06**

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total PM2.5 Total		1.170E-03	0.000E+00	4.000E-04	1.570E-03
				Checking Total	1.570E-03
Average Emissions	Grams	1.061E+03	0.000E+00	3.629E+02	
	Grams/sec	1.474E-03	0.000E+00	5.040E-04	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	1.721E-05	0.000E+00	1.090E-05	2.811E-05
	Road Segment 2	1.740E-05	0.000E+00	1.102E-05	2.842E-05
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	1.366E-05	0.000E+00	8.647E-06	2.231E-05
	Road Segment 2	1.381E-05	0.000E+00	8.744E-06	2.256E-05
				Total	**4.486E-05**

Midway Village Project—All Off-site Receptors Scenario

Phase 2—Construction

Estimation of Annual Offsite Construction DPM Emissions (No Mitigation)

	Start of Construction	10/15/2023	11/26/2023	12/20/2023	8/3/2024		
	End of Construction	11/22/2023	12/18/2023	7/23/2024	9/25/2024		**Total**
	Number of Days	38	22	216	53		329
	Number of Hours	912	528	5,184	1,272		7,896
	Number of Construction Days	28	16	155	38		237
	Number of Construction Hours (8 hours/day)	224	128	1,240	304		1,896
		Phase 2 2023	Phase 2 2023	Phase 2 2023	Phase 2 2024	Phase 2 2024	Phase 2 2024
	Construction Trip Type	Site Preparation	Grading	Building Construction	Building Construction	Paving	Architectural Coating
PM2.5 Fugitive	Haul Truck	0.00006	0.00363	0.00000	0.00000	0.00000	0.00006
PM2.5 Fugitive	Vendor Truck	0.00000	0.00000	0.00018	0.00333	0.00013	0.00000
PM2.5 Fugitive	Worker	0.00023	0.00025	0.00106	0.01960	0.00055	0.00100
PM2.5 Fugitive	Total	0.00029	0.00388	0.00124	0.02290	0.00068	0.00106
PM2.5 Exhaust	Haul Truck	0.00000	0.00028	0.00000	0.00000	0.00000	0.00000
PM2.5 Exhaust	Vendor Truck	0.00000	0.00000	0.00001	0.00017	0.00001	0.00000
PM2.5 Exhaust	Worker	0.00000	0.00001	0.00002	0.00039	0.00001	0.00002
PM2.5 Exhaust	Total	0.00000	0.00029	0.00003	0.00056	0.00002	0.00002
PM2.5 Total	Haul Truck	0.00006	0.00391	0.00000	0.00000	0.00000	0.00006
PM2.5 Total	Vendor Truck	0.00000	0.00000	0.00019	0.00350	0.00014	0.00000
PM2.5 Total	Worker	0.00024	0.00026	0.00109	0.02000	0.00056	0.00101
PM2.5 Total	Total	0.00030	0.00417	0.00128	0.02350	0.00070	0.00107

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total DPM		2.800E-04	1.900E-04	4.500E-04	9.200E-04
				Checking Total	9.200E-04
Average Emissions	Grams	2.540E+02	1.724E+02	4.082E+02	
	Grams/sec	3.721E-05	2.525E-05	5.981E-05	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	2.172E-07	8.077E-07	1.293E-06	2.318E-06
	Road Segment 2	4.393E-07	8.167E-07	1.307E-06	2.563E-06
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	1.634E-06	6.077E-06	9.728E-06	1.744E-05
	Road Segment 2	3.305E-06	6.145E-06	9.837E-06	1.929E-05
				Total	**3.673E-05**

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total PM2.5 Total		4.030E-03	3.830E-03	2.316E-02	3.102E-02
				Checking Total	3.102E-02
Average Emissions	Grams	3.656E+03	3.475E+03	2.101E+04	
	Grams/sec	5.356E-04	5.090E-04	3.078E-03	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	6.253E-06	1.628E-05	6.655E-05	8.908E-05
	Road Segment 2	6.323E-06	1.646E-05	6.729E-05	9.008E-05
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	4.705E-05	1.225E-04	5.007E-04	6.702E-04
	Road Segment 2	4.757E-05	1.239E-04	5.063E-04	6.777E-04
				Total	**1.348E-03**

Midway Village Project—All Off-site Receptors Scenario

Phase 3—Demolition

Estimation of Annual Offsite Construction DPM Emissions (No Mitigation)

Start of Construction	7/10/2025	
End of Construction	9/3/2025	**Total**
Number of Days	55	55
Number of Hours	1,320	1,320
Number of Construction Days	40	40
Number of Construction Hours (8 hours/day)	320	320

		Phase 3 2025
	Construction Trip Type	Demolition
PM2.5 Fugitive	Haul Truck	0.00176
PM2.5 Fugitive	Vendor Truck	0.00000
PM2.5 Fugitive	Worker	0.00063
PM2.5 Fugitive	Total	0.00239
PM2.5 Exhaust	Haul Truck	0.00013
PM2.5 Exhaust	Vendor Truck	0.00000
PM2.5 Exhaust	Worker	0.00001
PM2.5 Exhaust	Total	0.00014
PM2.5 Total	Haul Truck	0.00189
PM2.5 Total	Vendor Truck	0.00000
PM2.5 Total	Worker	0.00064
PM2.5 Total	Total	0.00253

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total DPM		1.300E-04	0.000E+00	1.000E-05	1.400E-04
				Checking Total	1.400E-04
Average Emissions	Grams	1.179E+02	0.000E+00	9.072E+00	
	Grams/sec	1.024E-04	0.000E+00	7.875E-06	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	5.976E-07	0.000E+00	1.702E-07	7.678E-07
	Road Segment 2	1.208E-06	0.000E+00	1.721E-07	1.381E-06
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	7.588E-07	0.000E+00	2.162E-07	9.750E-07
	Road Segment 2	1.535E-06	0.000E+00	2.186E-07	1.753E-06
				Total	**2.728E-06**

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total PM2.5 Total		1.890E-03	0.000E+00	6.400E-04	2.530E-03
				Checking Total	2.530E-03
Average Emissions	Grams	1.715E+03	0.000E+00	5.806E+02	
	Grams/sec	1.488E-03	0.000E+00	5.040E-04	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	1.738E-05	0.000E+00	1.090E-05	2.827E-05
	Road Segment 2	1.757E-05	0.000E+00	1.102E-05	2.859E-05
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	2.206E-05	0.000E+00	1.384E-05	3.590E-05
	Road Segment 2	2.231E-05	0.000E+00	1.399E-05	3.630E-05
				Total	**7.220E-05**

Midway Village Project—All Off-site Receptors Scenario

Phase 3—Construction

Estimation of Annual Offsite Construction DPM Emissions (No Mitigation)

	Start of Construction	9/5/2025	11/1/2025	8/18/2026			
	End of Construction	10/23/2025	8/7/2026	10/5/2026			**Total**
	Number of Days	48	279	48			375
	Number of Hours	1,152	6,696	1,152			9,000
	Number of Construction Days	35	200	35			270
	Number of Construction Hours (8 hours/day)	280	1,600	280			2,160
		Phase 3 2025	Phase 3 2025	Phase 3 2025	Phase 3 2026	Phase 3 2026	Phase 3 2026
	Construction Trip Type	Site Preparation	Grading	Building Construction	Building Construction	Paving	Architectural Coating
PM2.5 Fugitive	Haul Truck	0.00007	0.00000	0.00000	0.00000	0.00000	0.00007
PM2.5 Fugitive	Vendor Truck	0.00000	0.00000	0.00042	0.00370	0.00018	0.00000
PM2.5 Fugitive	Worker	0.00066	0.00052	0.00219	0.01910	0.00101	0.00084
PM2.5 Fugitive	Total	0.00073	0.00052	0.00261	0.02280	0.00119	0.00091
PM2.5 Exhaust	Haul Truck	0.00001	0.00000	0.00000	0.00000	0.00000	0.00001
PM2.5 Exhaust	Vendor Truck	0.00000	0.00000	0.00002	0.00018	0.00001	0.00000
PM2.5 Exhaust	Worker	0.00001	0.00001	0.00004	0.00036	0.00002	0.00002
PM2.5 Exhaust	Total	0.00002	0.00001	0.00006	0.00054	0.00003	0.00003
PM2.5 Total	Haul Truck	0.00008	0.00000	0.00000	0.00000	0.00000	0.00008
PM2.5 Total	Vendor Truck	0.00000	0.00000	0.00045	0.00388	0.00019	0.00000
PM2.5 Total	Worker	0.00067	0.00053	0.00223	0.01940	0.00102	0.00086
PM2.5 Total	Total	0.00075	0.00053	0.00268	0.02330	0.00121	0.00094

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total DPM		2.000E-05	2.100E-04	4.600E-04	6.900E-04
				Checking Total	6.900E-04
Average Emissions	Grams	1.814E+01	1.905E+02	4.173E+02	
	Grams/sec	2.333E-06	2.450E-05	5.367E-05	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	1.362E-08	7.836E-07	1.160E-06	1.957E-06
	Road Segment 2	2.754E-08	7.923E-07	1.173E-06	1.993E-06
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	1.167E-07	6.717E-06	9.945E-06	1.678E-05
	Road Segment 2	2.361E-07	6.792E-06	1.006E-05	1.708E-05
				Total	**3.386E-05**

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total PM2.5 Total		1.600E-04	4.520E-03	2.471E-02	2.939E-02
				Checking Total	2.941E-02
Average Emissions	Grams	1.451E+02	4.100E+03	2.242E+04	
	Grams/sec	1.867E-05	5.273E-04	2.883E-03	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	2.179E-07	1.687E-05	6.232E-05	7.941E-05
	Road Segment 2	2.203E-07	1.705E-05	6.302E-05	8.029E-05
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	1.868E-06	1.446E-04	5.342E-04	6.806E-04
	Road Segment 2	1.889E-06	1.462E-04	5.402E-04	6.882E-04
				Total	**1.369E-03**

Midway Village Project—All Off-site Receptors Scenario
Phase 4—Demolition

Estimation of Annual Offsite Construction DPM Emissions (No Mitigation)

Start of Construction	7/10/2025	
End of Construction	9/3/2025	**Total**
Number of Days	55	55
Number of Hours	1,320	1,320
Number of Construction Days	40	40
Number of Construction Hours (8 hours/day)	320	320

		Phase 4 2025
	Construction Trip Type	Demolition
PM2.5 Fugitive	Haul Truck	0.00044
PM2.5 Fugitive	Vendor Truck	0.00000
PM2.5 Fugitive	Worker	0.00063
PM2.5 Fugitive	Total	0.00107
PM2.5 Exhaust	Haul Truck	0.00003
PM2.5 Exhaust	Vendor Truck	0.00000
PM2.5 Exhaust	Worker	0.00001
PM2.5 Exhaust	Total	0.00004
PM2.5 Total	Haul Truck	0.00047
PM2.5 Total	Vendor Truck	0.00000
PM2.5 Total	Worker	0.00064
PM2.5 Total	Total	0.00111

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total DPM		3.000E-05	0.000E+00	1.000E-05	4.000E-05
				Checking Total	4.000E-05
Average Emissions	Grams	2.722E+01	0.000E+00	9.072E+00	
	Grams/sec	2.362E-05	0.000E+00	7.875E-06	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	1.379E-07	0.000E+00	1.702E-07	3.081E-07
	Road Segment 2	2.789E-07	0.000E+00	1.721E-07	4.510E-07
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	1.751E-07	0.000E+00	2.162E-07	3.913E-07
	Road Segment 2	3.541E-07	0.000E+00	2.186E-07	5.727E-07
				Total	**9.640E-07**

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total PM2.5 Total		4.700E-04	0.000E+00	6.400E-04	1.110E-03
				Checking Total	1.110E-03
Average Emissions	Grams	4.264E+02	0.000E+00	5.806E+02	
	Grams/sec	3.701E-04	0.000E+00	5.040E-04	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
	Road Segment 1	4.321E-06	0.000E+00	1.090E-05	1.522E-05
	Road Segment 2	4.369E-06	0.000E+00	1.102E-05	1.539E-05
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				**Total**
	Road Segment 1	5.487E-06	0.000E+00	1.384E-05	1.932E-05
	Road Segment 2	5.548E-06	0.000E+00	1.399E-05	1.954E-05
				Total	**3.886E-05**

Midway Village Project—All Off-site Receptors Scenario

Phase 4—Construction

Estimation of Annual Offsite Construction DPM Emissions (No Mitigation)

				Total
Start of Construction	9/5/2025	11/1/2025	8/18/2026	
End of Construction	10/23/2025	8/7/2026	10/5/2026	
Number of Days	48	279	48	375
Number of Hours	1,152	6,696	1,152	9,000
Number of Construction Days	35	200	35	270
Number of Construction Hours (8 hours/day)	280	1,600	280	2,160

	Construction Trip Type	Phase 4 2025 Site Preparation	Phase 4 2025 Grading	Phase 4 2025 Building Construction	Phase 4 2026 Building Construction	Phase 4 2026 Paving	Phase 4 2026 Architectural Coating	Roadway 2025 Site Preparation	Roadway 2025 Grading	Roadway 2025 Paving
PM2.5 Fugitive	Haul Truck	0.00007	0.00877	0.00000	0.00000	0.00000	0.00007	0.00003	0.00000	0.00003
PM2.5 Fugitive	Vendor Truck	0.00000	0.00000	0.00036	0.00311	0.00018	0.00000	0.00000	0.00000	0.00005
PM2.5 Fugitive	Worker	0.00066	0.00052	0.00222	0.01940	0.00075	0.00088	0.00001	0.00002	0.00053
PM2.5 Fugitive	Total	0.00073	0.00929	0.00258	0.02250	0.00093	0.00095	0.00004	0.00002	0.00061
PM2.5 Exhaust	Haul Truck	0.00000	0.00063	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PM2.5 Exhaust	Vendor Truck	0.00000	0.00000	0.00002	0.00015	0.00001	0.00000	0.00000	0.00000	0.00000
PM2.5 Exhaust	Worker	0.00001	0.00001	0.00004	0.00037	0.00001	0.00002	0.00000	0.00000	0.00001
PM2.5 Exhaust	Total	0.00001	0.00064	0.00006	0.00052	0.00002	0.00002	0.00000	0.00000	0.00001
PM2.5 Total	Haul Truck	0.00007	0.00940	0.00000	0.00000	0.00000	0.00007	0.00003	0.00000	0.00003
PM2.5 Total	Vendor Truck	0.00000	0.00000	0.00037	0.00326	0.00019	0.00000	0.00000	0.00000	0.00006
PM2.5 Total	Worker	0.00067	0.00053	0.00227	0.01980	0.00077	0.00090	0.00001	0.00002	0.00054
PM2.5 Total	Total	0.00074	0.00993	0.00264	0.02300	0.00096	0.00097	0.00004	0.00002	0.00063

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total DPM		6.300E-04	1.800E-04	4.700E-04	1.280E-03
				Checking Total	1.280E-03
Average Emissions	Grams	5.715E+02	1.633E+02	4.264E+02	
	Grams/sec	7.350E-05	2.100E-05	5.483E-05	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				Total
	Road Segment 1	4.290E-07	6.716E-07	1.185E-06	2.286E-06
	Road Segment 2	8.676E-07	6.792E-07	1.199E-06	2.745E-06
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				Total
	Road Segment 1	3.677E-06	5.757E-06	1.016E-05	1.960E-05
	Road Segment 2	7.437E-06	5.821E-06	1.027E-05	2.353E-05
				Total	**4.313E-05**

		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)
Total PM2.5 Total		9.600E-03	3.880E-03	2.551E-02	3.899E-02
				Checking Total	3.893E-02
Average Emissions	Grams	8.709E+03	3.520E+03	2.314E+04	
	Grams/sec	1.120E-03	4.527E-04	2.976E-03	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8	
	Vehicle Travel Distances in the Construction HRA (miles)				
	Road Segment 1	0.47	0.47	0.47	miles
	Road Segment 2	0.47	0.47	0.47	miles
	Trip Distribution (percent)				
	Road Segment 1	50%	50%	50%	
	Road Segment 2	50%	50%	50%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				Total
	Road Segment 1	1.307E-05	1.448E-05	6.434E-05	9.189E-05
	Road Segment 2	1.322E-05	1.464E-05	6.506E-05	9.292E-05
	Total Average Offsite Vehicle Emissions Along Travel Distance (tons/year)				Total
	Road Segment 1	1.121E-04	1.241E-04	5.515E-04	7.877E-04
	Road Segment 2	1.133E-04	1.255E-04	5.577E-04	7.965E-04
				Total	**1.584E-03**

OEHHA Cancer/BAAQMD Risk Methodology

Cancer Risk = DPM x CPF x ASF x DBR x ED x EF x TAH x AF/ AT

Cancer Risk = probability of an individual contracting cancer out of a population of 1 million people over a lifetime exposure duration of 30 years

DPM = long-term average concentration of diesel PM as predicted by the air dispersion model (ug/m3)

CPF = cancer potency factor for DPM (mg.ke-day)

ASF = age sensitivity factors that are dependent on the age of the exposed individual (unitless)

DBR = daily breathing rates that are dependent on the age of the exposed individual (liters/kg-day)

ED = exposure duration (years)

EF = exposure frequency (days/year)

TAH = time at home factors that are dependent on the age of the exposed individual (%)

AT = averaging time over the lifetime of an individual (days)

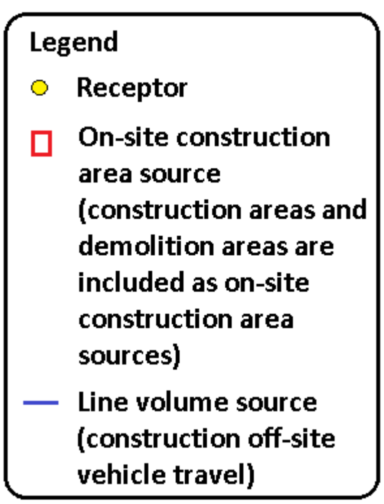
AF = adjustment factor for workers and students (unitless)

Cancer Risk Equation Values as recommended by the California Office of Environmental Health Hazards Assessment

Summary of Each Scenario Analyzed

Scenario	Description of Scenario
Scenario 1: All Off-site Receptors	All Off-site Receptors: Exposed to Phases 1+2+3+4 Demolition and Phases 1+2+3+4 Construction
Scenario 2: Existing Phase 2 Receptors	Existing Phase 2 Receptors: Exposed to Phase 1 Demolition and Phase 1 Construction
Scenario 3: Existing Phase 3 Receptors	Existing Phase 3 Receptors: Exposed to Phases 1+2 Demolition and Phases 1+2 Construction
Scenario 4: Existing Phase 4 Receptors	Existing Phase 4 Receptors: Exposed to Phases 1+2+3 Demolition and Phases 1+2+3 Construction
Scenario 5: New Phase 1 Receptors	New Phase 1 Receptors: Exposed to Phases 2+3+4 Demolition and Phases 2+3+4 Construction
Scenario 6: New Phase 2 Receptors	New Phase 2 Receptors: Exposed to Phases 3+4 Demolition and Phases 3+4 Construction
Scenario 7: New Phase 3 Receptors	New Phase 3 Receptors: Exposed to Phase 4 Demolition and Phase 4 Construction
Source: Appendix B.	

Images showing the receptors analyzed in each of the seven scenarios are included below. The following legend corresponds with the graphics used in Figure 1 through Figure 10.



Scenario 1: All Off-site Receptors

All Off-site Receptors: Exposed to Phases 1+2+3+4 Demolition and Phases 1+2+3+4 Construction

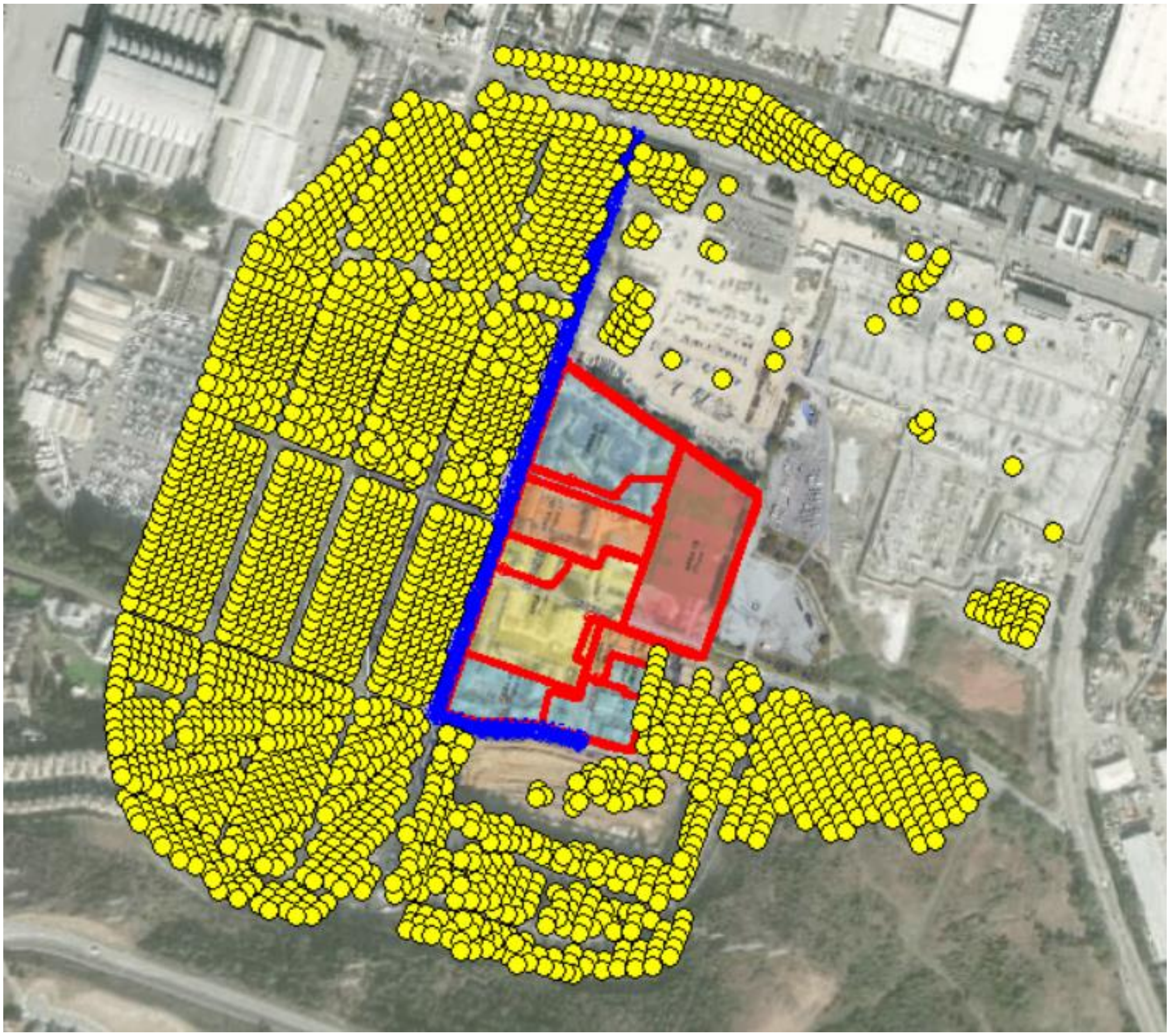


Figure 1 Scenario 1: All Off-site Receptors

Scenario 2: Existing Phase 2 Receptors

Existing Phase 2 Receptors: Exposed to Phase 1 Demolition and Phase 1 Construction

Figure 2 Scenario 2 with Construction Map as a Base Map

Figure 3 Scenario 2 with Demolition Map as a Base Map

Scenario 3: Existing Phase 3 Receptors

Existing Phase 3 Receptors: Exposed to Phases 1+2 Demolition and Phases 1+2 Construction

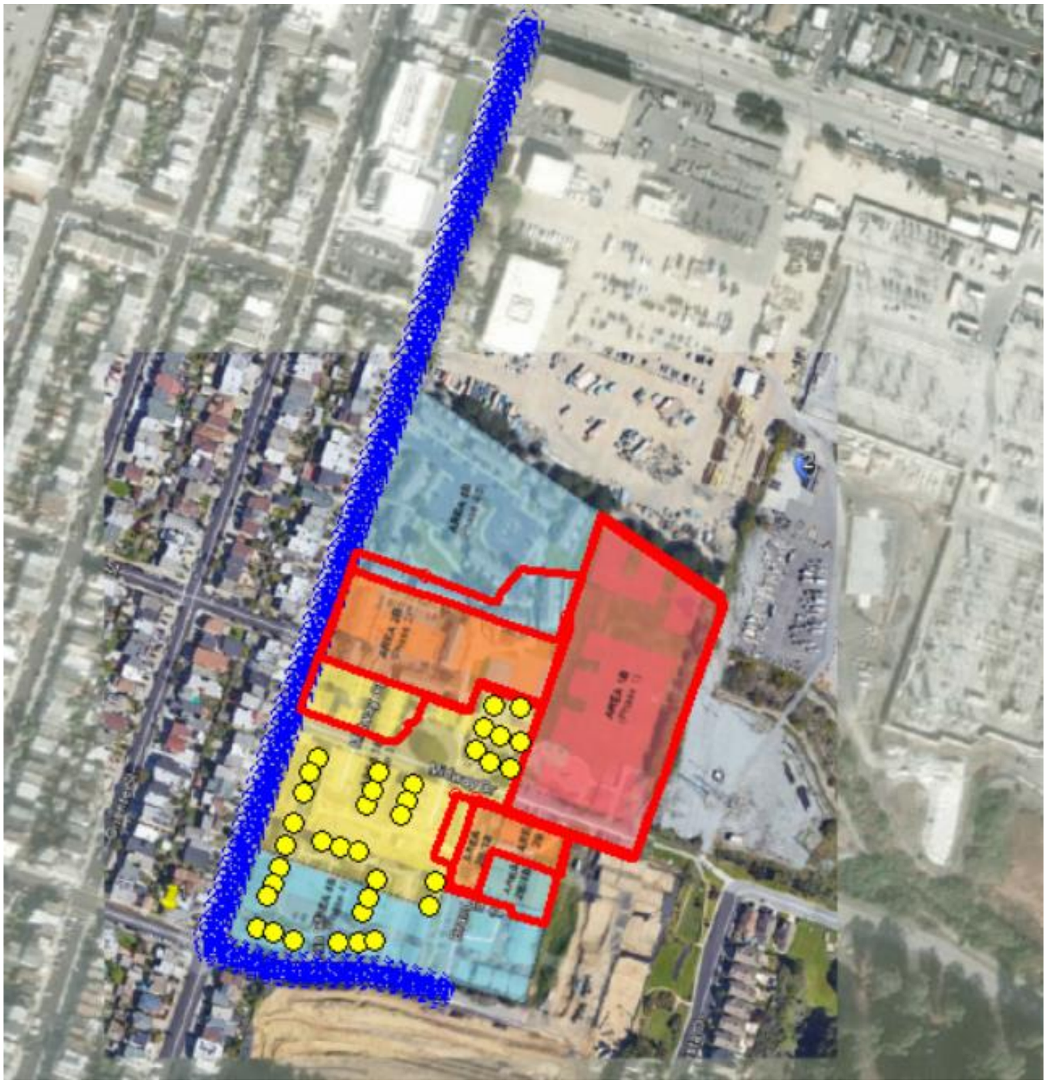


Figure 4 Scenario 3 with Construction Map as a Base Map

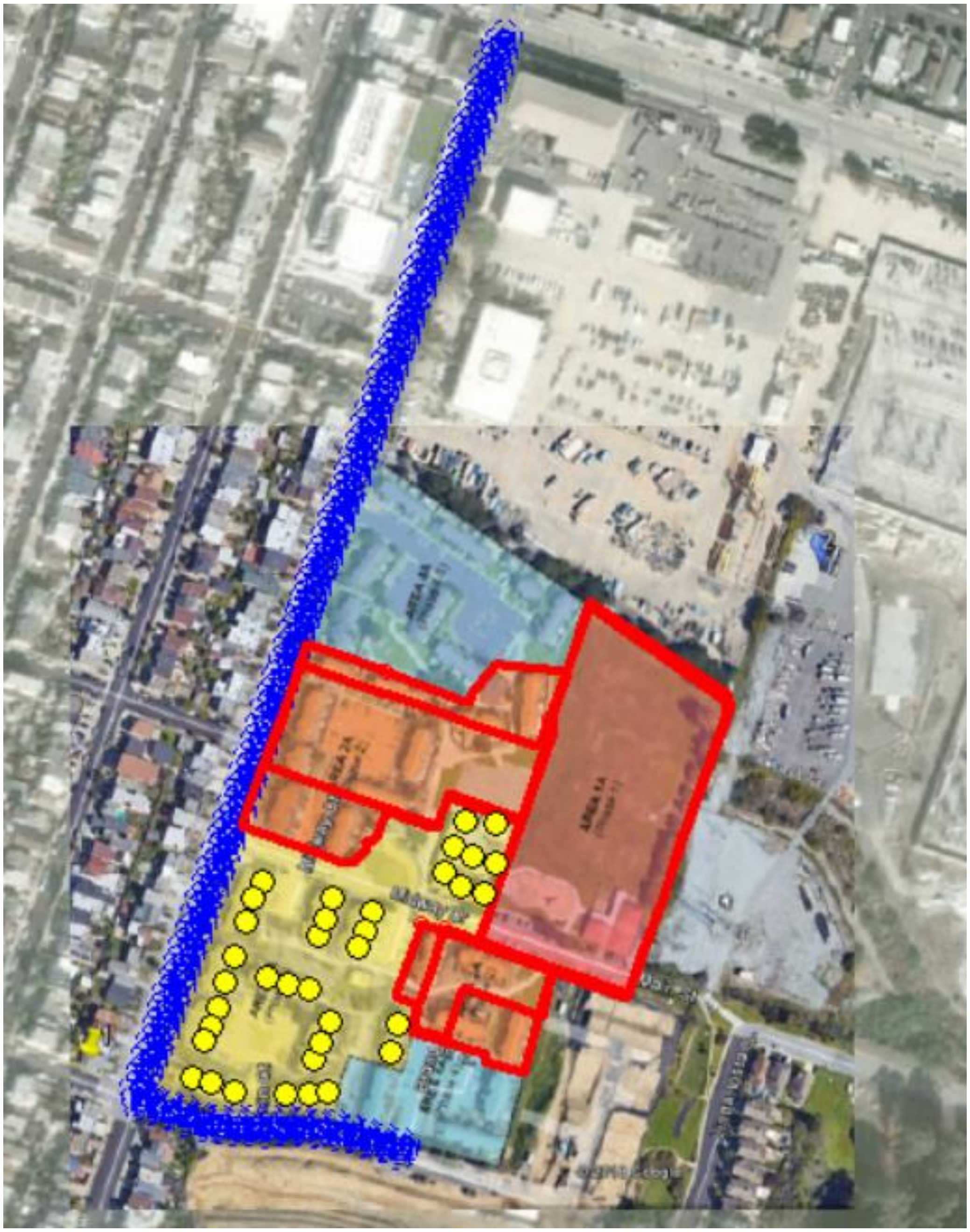


Figure 5 Scenario 3 with Demolition Map as a Base Map

Scenario 4: Existing Phase 4 Receptors

Existing Phase 4 Receptors: Exposed to Phases 1+2+3 Demolition and Phases 1+2+3 Construction

Figure 6 Scenario 4 with Construction Map as a Base Map

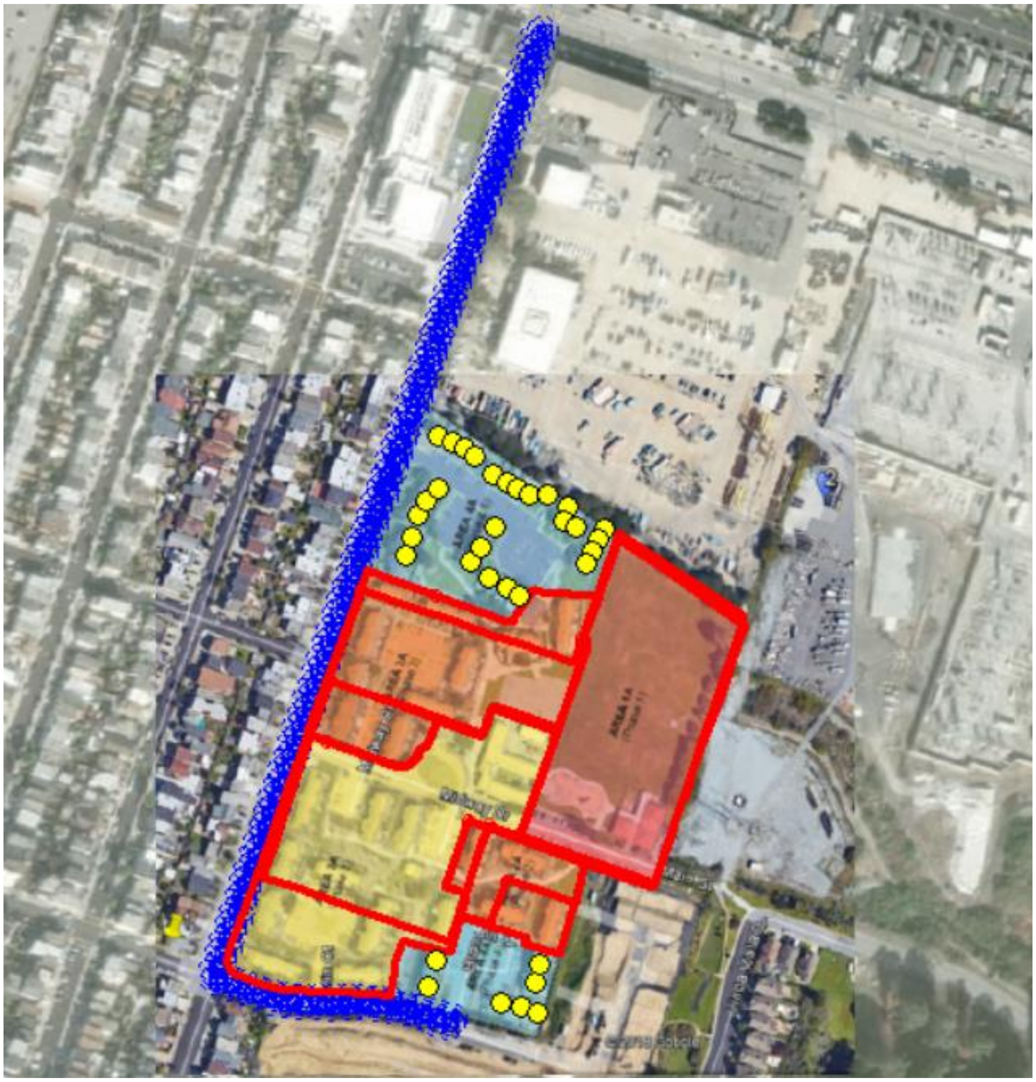


Figure 7 Scenario 4 with Demolition Map as a Base Map

Scenario 5: New Phase 1 Receptors

New Phase 1 Receptors: Exposed to Phases 2+3+4 Demolition and Phases 2+3+4 Construction

Figure 8 Scenario 5 with Construction Map as a Base Map

Scenario 6: New Phase 2 Receptors

New Phase 2 Receptors: Exposed to Phases 3+4 Demolition and Phases 3+4 Construction

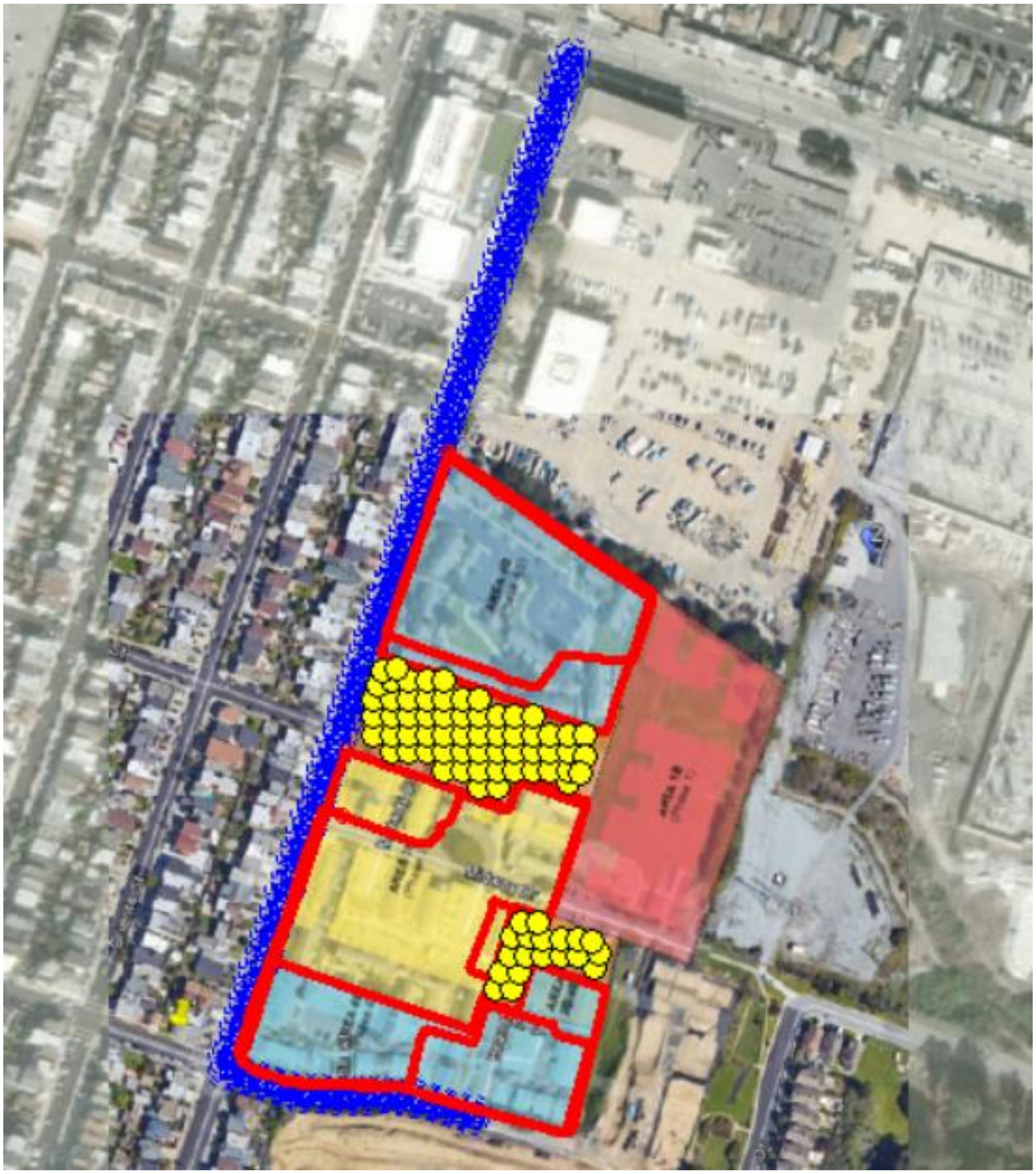


Figure 9 Scenario 6 with Construction Map as a Base Map

Scenario 7: New Phase 3 Receptors

New Phase 3 Receptors: Exposed to Phase 4 Demolition and Phase 4 Construction

Figure 10 Scenario 7

Scenario 1

Cancer Risk Calculations Using OEHHA/BAAQMD Cancer Risk Assumptions
Midway Village Project— Scenario 1: All Off-site Receptors
Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant

UTM: 551763.51 4172840.85

UTM: 551568.65 4173003.88

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Age	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.389539517	10	361	0.85	0.25	4.5
0-1	0.389539517	10	1,090	0.85	0.68	37.1
1-<2	0.389539517	10	1,090	0.85	0.00	0.0
2-<3	0.389539517	3	631	0.85	0.58	5.4
3-<4	0.389539517	3	631	0.85	0.42	3.9
4-<5	0.389539517	3	631	0.85	0.73	6.9
5-<6	0.389539517	3	631	0.85	0.44	4.2
					Total	62.10

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.037367916	10	361	0.85	0.25	0.4
0-1	0.037367916	10	1,090	0.85	0.68	3.6
1-<2	0.037367916	10	1,090	0.85	0.00	0.0
2-<3	0.037367916	3	631	0.85	0.58	0.5
3-<4	0.037367916	3	631	0.85	0.42	0.4
4-<5	0.037367916	3	631	0.85	0.73	0.7
5-<6	0.037367916	3	631	0.85	0.44	0.4
					Total	5.96

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child

UTM: 551763.51 4172840.85

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Period	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.389539517	3	572	1	3.10	31.2
					Total	31.24

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.037367916	3	572	1	3.10	3.0
					Total	3.00

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult

UTM: 551763.51 4172840.85

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.389539517	1	261	0.73	3.10	3.5
					Total	3.47

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.037367916	1	261	0.73	3.10	0.3
					Total	0.333

Midway Village Project—All Off-site Receptors Scenario

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551763.51	4172840.85	0.3895	0.3895	0.07791

Unmitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551763.51	4172840.85	0.5506	0.5506

Mitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551568.65	4173003.88	0.0374	0.0374	0.00747

Mitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551558.98	4172977.03	0.1975	0.1975

Midway Village Project—All Off-site Receptors Scenario

All Off-site Receptors: Exposed to Phases 1+2+3+4 Demolition and Phases 1+2+3+4 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

	Unmitigated Concentrations
Annual Average Onsite DPM Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.46E-06
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	8.71E-07
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	8.71E-07
Annual Average Onsite DPM Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	6.37E-07
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	8.02E-07
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	8.02E-07
Annual Average Onsite DPM Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	9.48E-07
Annual Average Onsite DPM Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	8.39E-07
Annual Average Onsite DPM Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	8.39E-07
Annual Average Onsite DPM Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	5.32E-07
Annual Average Onsite DPM Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	3.68E-07
Annual Average Onsite DPM Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	3.68E-07
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	1.40E-05
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	1.69E-05

Unmitigated DPM Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
3.8954E-01	551763.51	4172840.85

MIR		
UTM	551763.51	4172840.85
Latitude, Longitude	37°42'04.8"N 122°24'46.1"W	

X	Y	Unit Emissions Demolition Area 1A (Phase 1) AREA8	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) AREA9	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) AREA10	Unit Emissions Demolition Area 3A (Phase 3) AREA11	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Construction Area 1B (Phase 1) AREA2	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) AREA3	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) AREA4	Unit Emissions Construction Area 3B (Phase 3) AREA5	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Road Segment 1 LINE1	Unit Emissions Road Segment 2 LINE2	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
551763.51	4172840.85	64602.40637	13983.34295	65769.74448	58987.55675	40337.01297	5357.08967	61830.48958	8101.26788	27676.37478	52416.22872	87627.14487	7526.48473	0.87588	0.86566	9.43E-02	1.22E-02	5.73E-02	3.76E-02	3.24E-02	4.30E-03	5.86E-02	6.80E-03	2.32E-02	2.79E-02	3.22E-02	2.77E-03	1.23E-05	1.47E-05	3.8954E-01
551760.24	4172831.56	53670.68708	12353.06854	56620.45345	57660.10853	50770.23164	4979.1095	51644.11565	6940.80097	21234.25424	48622.61948	99583.36673	6983.56985	0.89425	0.88382	7.83E-02	1.08E-02	4.93E-02	3.67E-02	4.07E-02	3.99E-03	4.89E-02	5.82E-03	1.78E-02	2.59E-02	3.66E-02	2.57E-03	1.25E-05	1.50E-05	3.5756E-01
551785.57	4172857.1	84715.16033	17456.05793	45188.73925	50959.76905	20261.38392	6226.90249	80196.12675	10544.76826	26589.68961	49102.60533	46279.46112	8691.89029	0.76041	0.7526	1.24E-01	1.52E-02	3.94E-02	3.24E-02	1.63E-02	5.00E-03	7.60E-02	8.85E-03	2.23E-02	2.61E-02	1.70E-02	3.20E-03	1.06E-05	1.28E-05	3.8547E-01
551568.65	4173003.88	14589.91369	113158.5989	4489.87338	48624.12408	3752.77982	38156.84601	14676.38996	69908.17452	2570.385	74494.21139	11031.91488	49344.55997	12.06746	13.52869	2.13E-02	9.86E-02	3.91E-03	3.10E-02	3.01E-03	3.06E-02	1.39E-02	5.87E-02	2.16E-03	3.97E-02	4.06E-03	1.82E-02	1.69E-04	2.29E-04	3.2534E-01
551565.43	4172994.93	14467.87805	108774.6102	4613.40206	56349.10018	3969.76135	33720.81783	14536.9892	62431.58858	2638.7479	83877.88486	12040.77064	43646.06742	12.05368	13.54158	2.11E-02	9.47E-02	4.02E-03	3.59E-02	3.18E-03	2.71E-02	1.38E-02	5.24E-02	2.21E-03	4.46E-02	4.43E-03	1.61E-02	1.69E-04	2.29E-04	3.1990E-01
551562.21	4172985.98	14066.59961	102795.9946	4741.13472	65921.19248	4191.96335	29989.06749	14117.10949	54700.12339	2709.35668	92519.68259	13184.76867	38843.05428	11.99866	13.47263	2.05E-02	8.95E-02	4.13E-03	4.20E-02	3.36E-03	2.41E-02	1.34E-02	4.59E-02	2.27E-03	4.92E-02	4.85E-03	1.43E-02	1.68E-04	2.28E-04	3.1393E-01
551756.98	4172822.27	42121.234	10375.77459	38914.57823	55270.30929	61363.46572	4451.6105	40794.006	5741.86225	14494.50852	42766.24139	113485.7243	6228.55513	0.92281	0.91182	6.15E-02	9.04E-03	3.39E-02	3.52E-02	4.92E-02	3.57E-03	3.87E-02	4.82E-03	1.22E-02	2.28E-02	4.18E-02	2.29E-03	1.29E-05	1.55E-05	3.1489E-01
551558.98	4172977.03	13841.71438	95047.52039	4868.99275	77587.17648	4419.02431	26809.85554	13876.38617	47457.36852	2779.76878	99560.97041	14498.51234	34750.67984	11.92408	13.3595	2.02E-02	8.28E-02	4.24E-03	4.94E-02	3.55E-03	2.15E-02	1.32E-02	3.98E-02	2.33E-03	5.30E-02	5.33E-03	1.28E-02	1.67E-04	2.26E-04	3.0850E-01
551555.76	4172968.07	13572.44385	83764.12702	4992.92204	89279.52393	4652.18449	24072.07486	13591.84775	41103.93444	2848.07336	104513.4984	16036.98576	31220.24591	11.88962	13.30544	1.98E-02	7.30E-02	4.35E-03	5.68E-02	3.73E-03	1.93E-02	1.29E-02	3.45E-02	2.39E-03	5.56E-02	5.90E-03	1.15E-02	1.66E-04	2.25E-04	3.0018E-01
551552.53	4172959.12	13261.72429	73400.10118	5113.134	99370.84802	4887.46591	21703.38888	13266.81246	35703.70907	2913.8782	107586.6156	17848.0931	27901.4077	11.85687	13.24135	1.94E-02	6.39E-02	4.45E-03	6.33E-02	3.92E-03	1.74E-02	1.26E-02	3.00E-02	2.44E-03	5.73E-02	6.57E-03	1.03E-02	1.66E-04	2.24E-04	2.9181E-01
551782.31	4172847.81	67443.38143	15538.32949	47264.15042	50617.80712	24626.85985	5659.13668	64373.25066	9199.19041	25333.88133	47485.85795	53930.07467	7894.99939	0.77392	0.76597	9.84E-02	1.35E-02	4.12E-02	3.22E-02	1.98E-02	4.54E-03	6.10E-02	7.72E-03	2.13E-02	2.53E-02	1.98E-02	2.90E-03	1.08E-05	1.30E-05	3.4771E-01

Construction Health Risk Assessment Files

551819.9	4172819.1	28695.79482	10759.81699	19959.26854	32809.68438	17334.84053	4203.92539	27584.98061	6434.18222	10383.22481	29231.51803	33715.72333	5771.6215	0.6099	0.6058	4.19E-02	9.37E-03	1.74E-02	2.09E-02	1.39E-02	3.37E-03	2.61E-02	5.40E-03	8.71E-03	1.56E-02	1.24E-02	2.12E-03	8.53E-06	1.03E-05	1.7718E-01
551715	4172753.51	19749.94235	6118.97361	10836.84028	32775.35942	35368.66486	3492.36629	19308.26449	3643.18558	5134.7141	16974.07369	67860.29679	4833.95208	1.29964	1.29859	2.88E-02	5.33E-03	9.44E-03	2.09E-02	2.84E-02	2.80E-03	1.83E-02	3.06E-03	4.31E-03	9.03E-03	2.50E-02	1.78E-03	1.82E-05	2.20E-05	1.5713E-01
551505.38	4172915.37	8740.21615	24039.815	3893.55462	62457.34516	4296.32993	10723.999	8712.17865	12878.31553	2200.15373	49510.68885	24242.73326	13729.92996	4.21032	4.4209	1.28E-02	2.09E-02	3.39E-03	3.98E-02	3.45E-03	8.60E-03	8.26E-03	1.08E-02	1.85E-03	2.64E-02	8.92E-03	5.05E-03	5.89E-05	7.49E-05	1.5027E-01
551668.12	4172745.39	16636.59623	7208.8456	12329.82452	31707.82735	36442.77016	4072.02882	16298.57228	4395.42632	6087.30295	17927.0401	65334.29581	5609.12507	1.89405	1.95931	2.43E-02	6.28E-03	1.07E-02	2.02E-02	2.92E-02	3.27E-03	1.54E-02	3.69E-03	5.11E-03	9.54E-03	2.40E-02	2.06E-03	2.65E-05	3.32E-05	1.5394E-01
551793.14	4172793.87	20238.08094	7330.38237	16833.22194	34870.73047	30176.11736	3169.36176	19799.50216	4109.20334	7380.26947	26245.94215	49536.26112	4345.34711	0.68914	0.68498	2.95E-02	6.38E-03	1.47E-02	2.22E-02	2.42E-02	2.54E-03	1.88E-02	3.45E-03	6.19E-03	1.40E-02	1.82E-02	1.60E-03	9.64E-06	1.16E-05	1.6177E-01
551525.14	4172999.33	9831.1499	39839.36006	3178.05312	37606.42911	3118.86749	20114.08565	9874.36697	22996.78809	1812.80744	39496.73749	10648.48631	25395.84294	3.49638	3.65366	1.44E-02	3.47E-02	2.77E-03	2.39E-02	2.50E-03	1.61E-02	9.36E-03	1.93E-02	1.52E-03	2.10E-02	3.92E-03	9.34E-03	4.89E-05	6.19E-05	1.5897E-01
551567.75	4173089.8	10194.56776	32460.2978	2490.88209	17429.25109	2130.2843	46859.10094	10328.70356	20307.97024	1440.14695	19607.63064	5749.47184	54747.54854	4.41425	4.57489	1.49E-02	2.83E-02	2.17E-03	1.11E-02	1.71E-03	3.76E-02	9.79E-03	1.70E-02	1.21E-03	1.04E-02	2.12E-03	2.01E-02	6.18E-05	7.75E-05	1.5660E-01
551528.37	4173008.28	9903.18838	40655.64831	3111.38982	34820.35709	3008.84584	21768.96616	9955.57152	23957.73972	1775.65646	37356.37935	9937.77111	27393.66961	3.51311	3.66885	1.45E-02	3.54E-02	2.71E-03	2.22E-02	2.41E-03	1.75E-02	9.44E-03	2.01E-02	1.49E-03	1.99E-02	3.66E-03	1.01E-02	4.92E-05	6.22E-05	1.5938E-01
551695.88	4172749.8	18504.81565	6413.51454	11720.6252	31476.03045	35621.15847	3686.53632	18102.66994	3872.94767	5566.14455	16171.38242	67221.44197	5101.43258	1.64785	1.68457	2.70E-02	5.59E-03	1.02E-02	2.00E-02	2.86E-02	2.96E-03	1.72E-02	3.25E-03	4.67E-03	8.61E-03	2.47E-02	1.88E-03	2.31E-05	2.85E-05	1.5473E-01
551527.61	4172782.74	7844.2331	11403.07825	4672.44247	70299.22278	8338.75559	5577.35774	7779.41389	6408.63489	2542.17051	32214.64283	58770.40892	7321.58155	5.12239	5.50009	1.14E-02	9.93E-03	4.07E-03	4.48E-02	6.69E-03	4.47E-03	7.37E-03	5.38E-03	2.13E-03	1.71E-02	2.16E-02	2.69E-03	7.17E-05	9.32E-05	1.3789E-01
551531.59	4173017.23	9956.93442	41039.20559	3045.06035	32103.08438	2897.75441	23577.72728	10018.37734	24633.93949	1738.96637	35159.81292	9283.4164	29551.77691	3.52999	3.68271	1.45E-02	3.57E-02	2.65E-03	2.04E-02	2.32E-03	1.89E-02	9.50E-03	2.07E-02	1.46E-03	1.87E-02	3.42E-03	1.09E-02	4.94E-05	6.24E-05	1.5935E-01
551521.92	4172990.38	9738.63007	37797.96829	3244.54872	40256.72362	3228.40706	18603.77807	9772.70523	21829.1439	1850.00046	41481.52304	11425.98907	23550.67767	3.4809	3.63842	1.42E-02	3.29E-02	2.83E-03	2.56E-02	2.59E-03	1.49E-02	9.26E-03	1.83E-02	1.55E-03	2.21E-02	4.20E-03	8.67E-03	4.87E-05	6.17E-05	1.5730E-01
551734.11	4172757.23	19903.88901	5832.76033	9341.08603	32737.3487	36437.62426	3260.65184	19467.35855	3408.004	4558.41445	17972.37776	65028.76662	4502.40171	1.01849	1.01386	2.91E-02	5.08E-03	8.14E-03	2.08E-02	2.92E-02	2.62E-03	1.85E-02	2.86E-03	3.82E-03	9.57E-03	2.39E-02	1.66E-03	1.43E-05	1.72E-05	1.5528E-01
551518.69	4172981.42	9622.7141	36203.81406	3310.34643	42849.68589	3337.31231	17220.62002	9647.70453	20528.98571	1886.91889	43210.97724	12279.52047	21573.36677	3.46522	3.62211	1.40E-02	3.15E-02	2.88E-03	2.73E-02	2.68E-03	1.38E-02	9.14E-03	1.72E-02	1.58E-03	2.30E-02	4.52E-03	7.94E-03	4.85E-05	6.14E-05	1.5576E-01
551515.47	4172972.47	9465.1816	34182.33092	3368.67125	45206.16603	3447.98726	15919.88638	9481.58015	19124.1612	1919.1978	44459.57304	13244.7049	19973.61316	3.4464	3.60493	1.38E-02	2.98E-02	2.93E-03	2.88E-02	2.77E-03	1.28E-02	8.99E-03	1.60E-02	1.61E-03	2.37E-02	4.87E-03	7.35E-03	4.82E-05	6.11E-05	1.5348E-01
551502.15	4172906.4	8444.1288	21985.15045	3886.32122	62099.50058	4374.96698	9976.13987	8412.60292	11830.37128	2190.18284	47545.87341	25702.29809	12779.79086	4.18436	4.39752	1.23E-02	1.91E-02	3.38E-03	3.95E-02	3.51E-03	8.00E-03	7.97E-03	9.93E-03	1.84E-03	2.53E-02	9.46E-03	4.70E-03	5.85E-05	7.45E-05	1.4525E-01
551498.51	4172867.21	7753.63061	16886.42191	4011.0997	67647.35659	5020.96594	7917.5985	7711.33121	9188.72298	2229.36447	42588.4936	37974.15362	10198.38875	5.24083	5.5538	1.13E-02	1.47E-02	3.49E-03	4.31E-02	4.03E-03	6.35E-03	7.31E-03	7.71E-03	1.87E-03	2.27E-02	1.40E-02	3.75E-03	7.33E-05	9.41E-05	1.4042E-01
551592.46	4173129.39	10002.92381	22956.32664	2121.22262	12600.56585	1752.16004	58526.94575	10162.4658	14157.16516	1236.91742	13748.57278	4483.87105	65721.37347	5.87395	6.15755	1.46E-02	2.00E-02	1.85E-03	8.02E-03	1.41E-03	4.70E-02	9.63E-03	1.19E-02	1.04E-03	7.32E-03	1.65E-03	2.42E-02	8.22E-05	1.04E-04	1.4871E-01
551540.62	4173042.59	9909.39199	39150.86853	2825.04292	25569.84395	2596.70028	29016.14517	9994.93374	24246.58961	1617.6213	28623.75589	7764.20941	35830.4815	3.54542	3.68495	1.45E-02	3.41E-02	2.46E-03	1.63E-02	2.08E-03	2.33E-02	9.47E-03	2.03E-02	1.36E-03	1.52E-02	2.86E-03	1.32E-02	4.96E-05	6.24E-05	1.5523E-01
551499.47	4172838.8	7352.12576	14222.07702	3978.82193	69638.18631	5633.73716	6818.82179	7306.70422	7811.38305	2193.38636	37188.45489	46060.00525	8822.88704	6.5143	7.20839	1.07E-02	1.24E-02	3.47E-03	4.43E-02	4.52E-03	5.47E-03	6.93E-03	6.55E-03	1.84E-03	1.98E-02	1.69E-02	3.25E-03	9.12E-05	1.22E-04	1.3644E-01
551773.67	4172774.52	18595.96842	5959.648	10517.63372	32914.52147	36339.32727	2945.34172	18240.42495	3346.48692	4833.78684	21685.65806	57446.00652	4035.98124	0.76764	0.76199	2.71E-02	5.19E-03	9.16E-03	2.10E-02	2.92E-02	2.36E-03	1.73E-02	2.81E-03	4.06E-03	1.15E-02	2.11E-02	1.48E-03	1.07E-05	1.29E-05	1.5231E-01
551570.84	4173098.38	10006.60046	29657.82193	2389.80896	16225.1879	2040.06777	47706.17374	10143.55891	18509.97552	1383.74094	18041.13614	5453.60175	55200.35043	4.4119	4.57152	1.46E-02	2.58E-02	2.08E-03	1.03E-02	1.64E-03	3.83E-02	9.61E-03	1.55E-02	1.16E-03	9.60E-03	2.01E-03	2.03E-02	6.17E-05	7.75E-05	1.5113E-01
551512.24	4172963.52	9298.18744	32048.81357	3381.70832	47548.37754	3554.86347	14600.89578	9306.18858	17438.9269	1923.64121	44172.93861	14282.67749	18539.76468	3.42189	3.57492	1.36E-02	2.79E-02	2.95E-03	3.03E-02	2.85E-03	1.17E-02	8.82E-03	1.46E-02	1.61E-03	2.35E-02	5.26E-03	6.82E-03	4.79E-05	6.06E-05	1.5004E-01
551505.44	4172809.34	7193.29349	12293.92935	4022.39127	69666.61402	6402.31527	5997.2811	7144.12712	6821.26881	2201.96572	32995.11639	52392.17824	7802.76281	7.19873	8.17425	1.05E-02	1.07E-02	3.50E-03	4.44E-02	5.14E-03	4.81E-03	6.77E-03	5.72E-03	1.85E-03	1.76E-02	1.93E-02	2.87E-03	1.01E-04	1.39E-04	1.3331E-01
551498.93	4172897.44	8154.02856	20170.15904	3862.73638	61423.42825	4379.97839	9305.86037	8119.97999	10901.1873	2170.33115	45351.58035	27191.76424	11928.10522	4.15616	4.36876	1.19E-02	1.76E-02	3.36E-03	3.91E-02	3.51E-03	7.47E-03	7.70E-03	9.15E-03	1.82E-03	2.41E-02	1.00E-02	4.39E-03	5.82E-05	7.40E-05	1.4025E-01

551782.91	4172743.95	12116.1019	4338.95022	5580.51263	23218.61717	19678.98461	2316.49925	11934.87757	2455.66209	2731.13673	14212.33016	34476.28585	3145.58762	0.69424	0.69325	1.77E-02	3.78E-03	4.86E-03	1.48E-02	1.58E-02	1.86E-03	1.13E-02	2.06E-03	2.29E-03	7.56E-03	1.27E-02	1.16E-03	9.71E-06	1.17E-05	9.5849E-02
551796.12	4172748.56	11410.01835	4480.53486	6323.51587	23330.88291	19501.32215	2276.42885	11240.43277	2521.19152	3003.70136	15059.24111	33643.63677	3085.6668	0.63834	0.63661	1.67E-02	3.90E-03	5.51E-03	1.49E-02	1.56E-02	1.83E-03	1.07E-02	2.12E-03	2.52E-03	8.02E-03	1.24E-02	1.14E-03	8.93E-06	1.08E-05	9.5231E-02
551558.96	4172725.14	7705.21744	7711.8707	4693.29938	33037.97201	9265.86134	4110.78139	7623.49596	4481.68205	2543.69524	19778.78525	28857.00423	5457.52142	1.35502	1.39737	1.12E-02	6.72E-03	4.09E-03	2.10E-02	7.43E-03	3.30E-03	7.23E-03	3.76E-03	2.13E-03	1.05E-02	1.06E-02	2.01E-03	1.90E-05	2.37E-05	9.0136E-02
551484.85	4173003.72	7141.49558	20018.86254	2271.02509	24097.1281	2426.9358	12343.76109	7171.56101	11705.08806	1291.231	22311.30589	8727.42672	15452.90116	1.7497	1.79712	1.04E-02	1.74E-02	1.98E-03	1.53E-02	1.95E-03	9.90E-03	6.80E-03	9.82E-03	1.08E-03	1.19E-02	3.21E-03	5.69E-03	2.45E-05	3.05E-05	9.5561E-02
551753.61	4173170.73	16050.15999	9688.2295	1366.30491	5713.5122	1060.11176	32261.97732	16742.46957	5476.54626	813.78814	5902.80569	2478.786	37167.70285	1.47536	1.44443	2.34E-02	8.44E-03	1.19E-03	3.64E-03	8.51E-04	2.59E-02	1.59E-02	4.60E-03	6.83E-04	3.14E-03	9.12E-04	1.37E-02	2.06E-05	2.45E-05	1.0235E-01
551476.45	4172802.4	5720.48149	9540.1581	2932.69081	39255.06774	4474.30962	5009.23202	5688.1718	5330.37981	1610.93768	22140.12645	26402.36314	6474.37845	2.43219	2.59596	8.35E-03	8.31E-03	2.55E-03	2.50E-02	3.59E-03	4.02E-03	5.39E-03	4.47E-03	1.35E-03	1.18E-02	9.71E-03	2.38E-03	3.40E-05	4.40E-05	8.6992E-02
551631.49	4173193.36	8892.90741	11899.7259	1513.58047	7564.89216	1243.07789	35173.292	9064.27906	7078.53531	889.1821	7898.14574	3037.53078	40280.35398	10.23233	11.05907	1.30E-02	1.04E-02	1.32E-03	4.82E-03	9.97E-04	2.82E-02	8.59E-03	5.94E-03	7.46E-04	4.20E-03	1.12E-03	1.48E-02	1.43E-04	1.87E-04	9.4446E-02
551481.63	4172994.77	7067.84829	19517.14436	2294.53131	24978.77974	2477.3617	11635.20425	7092.40839	11299.96153	1304.64198	22807.31984	9177.68056	14596.68289	1.73696	1.78496	1.03E-02	1.70E-02	2.00E-03	1.59E-02	1.99E-03	9.33E-03	6.72E-03	9.48E-03	1.09E-03	1.21E-02	3.38E-03	5.37E-03	2.43E-05	3.02E-05	9.4781E-02
551469.73	4172820.18	5715.48533	10031.78686	2880.42611	38838.41007	4191.73177	5288.58478	5685.05785	5593.60729	1587.38125	22718.68173	24872.97878	6808.57788	2.46529	2.61582	8.34E-03	8.74E-03	2.51E-03	2.47E-02	3.36E-03	4.24E-03	5.39E-03	4.69E-03	1.33E-03	1.21E-02	9.15E-03	2.51E-03	3.45E-05	4.43E-05	8.7167E-02
551586.17	4173169.3	8006.84939	14506.77635	1656.22023	9334.10045	1400.15193	31411.70237	8128.28909	8770.63314	966.61651	9898.89149	3571.49434	36548.47463	3.5755	3.69474	1.17E-02	1.26E-02	1.44E-03	5.94E-03	1.12E-03	2.52E-02	7.70E-03	7.36E-03	8.11E-04	5.27E-03	1.31E-03	1.34E-02	5.00E-05	6.26E-05	9.4050E-02
551478.41	4172985.82	7002.45737	18987.19608	2327.62986	25945.43416	2524.03852	11010.37922	7021.39932	10882.23403	1323.49558	23351.52674	9621.34223	13837.13663	1.73632	1.78439	1.02E-02	1.65E-02	2.03E-03	1.65E-02	2.03E-03	8.83E-03	6.65E-03	9.13E-03	1.11E-03	1.24E-02	3.54E-03	5.09E-03	2.43E-05	3.02E-05	9.4176E-02
551516.83	4172744.94	6363.03726	8166.41935	3516.49904	37405.04494	6111.31629	4297.20438	6314.07506	4646.22385	1918.0462	20445.29059	28707.23385	5631.92141	1.77137	1.83981	9.29E-03	7.11E-03	3.06E-03	2.38E-02	4.90E-03	3.45E-03	5.98E-03	3.90E-03	1.61E-03	1.09E-02	1.06E-02	2.07E-03	2.48E-05	3.12E-05	8.6697E-02
551552.31	4173134.14	7586.29717	16938.74983	1826.4473	11869.71012	1618.88369	26476.27386	7683.58078	10400.82023	1054.77865	12544.2553	4364.74306	30830.53587	2.41193	2.47447	1.11E-02	1.48E-02	1.59E-03	7.56E-03	1.30E-03	2.12E-02	7.28E-03	8.73E-03	8.85E-04	6.68E-03	1.61E-03	1.13E-02	3.37E-05	4.19E-05	9.4112E-02
551475.18	4172976.87	6917.69732	18330.99751	2358.49788	26841.29703	2567.50157	10409.4036	6931.27648	10414.50297	1341.05244	23757.18711	10082.02277	13102.36223	1.7315	1.78071	1.01E-02	1.60E-02	2.05E-03	1.71E-02	2.06E-03	8.35E-03	6.57E-03	8.74E-03	1.13E-03	1.26E-02	3.71E-03	4.82E-03	2.42E-05	3.02E-05	9.3283E-02
551623.41	4173191.97	8635.00418	12116.8852	1522.2861	7741.19128	1256.53734	34320.37238	8793.94353	7242.29948	893.3251	8100.10113	3089.25115	39186.40403	7.54986	8.02847	1.26E-02	1.06E-02	1.33E-03	4.93E-03	1.01E-03	2.75E-02	8.33E-03	6.08E-03	7.50E-04	4.31E-03	1.14E-03	1.44E-02	1.06E-04	1.36E-04	9.3225E-02
551472.13	4172810.81	5675.03556	9697.25016	2879.32257	38517.71947	4292.97717	5111.70702	5644.03496	5412.89875	1584.28334	22155.50907	25288.16479	6593.20672	2.36559	2.56046	8.28E-03	8.45E-03	2.51E-03	2.45E-02	3.44E-03	4.10E-03	5.35E-03	4.54E-03	1.33E-03	1.18E-02	9.30E-03	2.43E-03	3.31E-05	4.34E-05	8.6129E-02
551503.47	4173055.72	7197.11283	19729.17556	2081.21381	18514.07667	2081.56632	16922.41587	7256.61305	12110.25715	1187.52168	18210.17016	6549.89265	20765.01786	1.75904	1.80091	1.05E-02	1.72E-02	1.81E-03	1.18E-02	1.67E-03	1.36E-02	6.88E-03	1.02E-02	9.96E-04	9.69E-03	2.41E-03	7.64E-03	2.46E-05	3.05E-05	9.4370E-02
551570.84	4173156.57	7750.55226	15427.82767	1719.62225	10217.29276	1476.8118	29155.29461	7859.48607	9445.05402	1000.23131	10868.73436	3847.72194	33643.86411	2.93393	3.01947	1.13E-02	1.34E-02	1.50E-03	6.51E-03	1.18E-03	2.34E-02	7.45E-03	7.92E-03	8.39E-04	5.79E-03	1.42E-03	1.24E-02	4.11E-05	5.12E-05	9.3215E-02
551883.03	4172794.78	16630.62076	7915.22379	9025.73037	20261.20416	8814.87396	3427.72203	16120.13171	4824.36055	4871.37704	17850.81511	17567.97665	4700.05849	0.43756	0.436	2.43E-02	6.89E-03	7.86E-03	1.29E-02	7.07E-03	2.75E-03	1.53E-02	4.05E-03	4.09E-03	9.50E-03	6.46E-03	1.73E-03	6.12E-06	7.39E-06	1.0288E-01
551471.96	4172967.92	6810.68486	17565.07729	2384.54701	27628.45899	2606.15348	9827.58911	6819.14448	9909.80802	1355.65105	23982.32918	10564.06311	12388.09945	1.72225	1.77178	9.94E-03	1.53E-02	2.08E-03	1.76E-02	2.09E-03	7.88E-03	6.46E-03	8.31E-03	1.14E-03	1.28E-02	3.89E-03	4.56E-03	2.41E-05	3.00E-05	9.2064E-02
551857.22	4172778.98	12921.07496	6591.84677	9823.32121	22338.56261	12017.03879	2716.74339	12525.18207	3850.92631	4963.67452	18233.61062	22115.85676	3705.29793	0.47344	0.47196	1.89E-02	5.74E-03	8.56E-03	1.42E-02	9.64E-03	2.18E-03	1.19E-02	3.23E-03	4.16E-03	9.71E-03	8.14E-03	1.36E-03	6.62E-06	8.00E-06	9.7690E-02
551908.65	4172810.34	20666.45576	9000.35325	7268.62197	17965.34546	6678.93662	4352.79386	20204.34146	5413.19905	4068.77789	16103.20747	13738.96464	6043.0416	0.40086	0.39929	3.02E-02	7.84E-03	6.33E-03	1.14E-02	5.36E-03	3.49E-03	1.91E-02	4.54E-03	3.41E-03	8.57E-03	5.05E-03	2.22E-03	5.61E-06	6.77E-06	1.0759E-01
551700.26	4173190.02	12089.54011	10356.45271	1434.81416	6315.80548	1132.84164	32711.60593	12449.50285	5881.37528	850.26142	6509.14673	2668.99495	37957.5176	3.50942	3.37213	1.76E-02	9.02E-03	1.25E-03	4.02E-03	9.09E-04	2.62E-02	1.18E-02	4.93E-03	7.13E-04	3.46E-03	9.82E-04	1.40E-02	4.91E-05	5.71E-05	9.5058E-02
551468.72	4172958.94	6686.18998	16731.52892	2407.24982	28298.60558	2642.25973	9272.98775	6689.84045	9392.19899	1368.08859	24047.44562	11059.26411	11704.17506	1.71102	1.75946	9.76E-03	1.46E-02	2.10E-03	1.80E-02	2.12E-03	7.44E-03	6.34E-03	7.88E-03	1.15E-03	1.28E-02	4.07E-03	4.31E-03	2.39E-05	2.98E-05	9.0606E-02
551509.39	4173072.46	7121.48889	19130.56567	2003.37588	16805.94655	1965.47213	18167.32457	7187.88773	11506.93539	1144.89221	16704.51695	5976.45743	22062.31044	1.755	1.79435	1.04E-02	1.67E-02	1.74E-03	1.07E-02	1.58E-03	1.46E-02	6.81E-03	9.65E-03	9.61E-04	8.89E-03	2.20E-03	8.12E-03	2.46E-05	3.04E-05	9.2347E-02
551590.14	4172713.71	8772.48294	7004.26204	5612.89165	26437.99422	12181.86169	3846.07296	8660.62657	4146.20686	3002.88287	17494.70084	27444.57043	5156.75791	1.11444	1.14938	1.28E-02	6.10E-03	4.89E-03	1.68E-02	9.77E-03	3.09E-03	8.21E-03	3.48E-03	2.52E-03	9.31E-03	1.01E-02	1.90E-03	1.56E-05	1.95E-05	8.9037E-02
551533.23	4172729.4	6727.83619	7711.55968	3845.59206	34133.98053	6995.48705	4098.53647	6668.17962	4426.77818	2095.51456	19424.81254	27352.66766	5398.02745	1.46132	1.50777	9.82E-03	6.72E-03	3.35E-03	2.17E-02	5.61E-03	3.29E-03	6.32E-03	3.71E-03	1.76E-03	1.03E-02	1.01E-02	1.99E-03	2.04E-05	2.56E-05	8.4750E-02
551555.4	4173142.73	7477.42967	16025.56292	1770.83644	11179.15557	1555.45174	26055.77835	7574.81662	9844.00125	1023.55573	11839.91592	4156.59752	30263.52164	2.442	2.50577	1.09E-02	1.40E-02	1.54E-03	7.12E-03	1.25E-03	2.09E-02	7.18E-03	8.26E-03	8.59E-04	6.30E-03	1.53E-03	1.11E-02	3.42E-05	4.25E-05	9.1026E-02
551465.5	4172949.97	6550.96124	15880.9465	2427.93407	28214.22717	2677.86702	8756.31926	6550.23245	8887.43755	1378.93911	23988.49012	11559.70106	11063.17175	1.69707	1.74603	9.56E-03	1.38E-02	2.11E-03	1.80E-02	2.15E-03	7.03E-03	6.21E-03	7.46E-03	1.16E-03	1.28E-02	4.25E-03	4.07E-03	2.37E-05	2.96E-05	8.8615E-02
551897.91	4172798.03	17964.88285	8286.56305	7792.82773	18623.38255	7590.41629	3802.66888	17488.4533	5017.43121	4302.49715	16488.28297	15324.156	5180.28366	0.4131	0.41161	2.62E-02	7.22E-03	6.79E-03	1.19E-02	6.09E-03	3.05E-03	1.66E-02	4.21E-03	3.61E-03	8.78E-03	5.64E-03	1.91E-03	5.78E-06	6.97E-06	1.0196E-01
551497.82	4173052.15	7004.2312	18874.48905	2043.2726	18387.11572	2065.14556	15751.80734	7059.47315	11554.03524	1165.01877	17895.14273	6587.15531	19377.48175	1.66839	1.7071	1.02E-02	1.64E-02	1.78E-03	1.17E-02	1.66E-03	1.26E-02	6.69E-03	9.69E-03	9.78E-04	9.53E-03	2.42E-03	7.13E-03	2.33E-05	2.89E-05	9.0939E-02
551462.12	4172851.33	5706.71623	10721.39054	2744.05678	35244.71264	3605.54972	5740.25935	5680.53262	5979.0141	1522.91347	22903.70101	20175.10378	7344.0995	2.06352	2.1756	8.33E-03	9.34E-03	2.39E-03	2.24E-02	2.89E-03	4.61E-03	5.38E-03	5.02E-03	1.28E-03	1.22E-02	7.42E-03	2.70E-03	2.89E-05	3.69E-05	8.4058E-02
551832.7	4172759.82	10290.6358	5168.78622	8265.43338	22421.94246	15431.75951	2298.28583	10073.97165	2937.19011	3936.90967	16459.24322	26860.33406	3111.93651	0.51122	0.51009	1.50E-02	4.50E-03	7.20E-03	1.43E-02	1.24E-02	1.84E-03	9.55E-03	2.46E-03	3.30E-03	8.76E-03	9.88E-03	1.14E-03	7.15E-06	8.64E-06	9.0344E-02
551812.51	4172749.53	10182.51194	4527.89582	6741.01526	22263.4848	17245.53918	2191.94765	10022.52659	2547.64151	3171.28973	15080.99288	29938.2473	2964.25383	0.57366	0.57195	1.49E-02	3.94E-03	5.87E-03	1.42E-02	1.38E-02	1.76E-03	9.50E-03	2.14E-03	2.66E-03	8.03E-03	1.10E-02	1.09E-03	8.03E-06	9.69E-06	8.8897E-02
551872.25	4172782.41	13676.1116	6922.14729	9184.14481	20899.81751	10039.68358	2870.38281	13246.38836	4102.23134	4779.74175	17607.99851	19323.076	3918.12872	0.44601	0.4447	2.00E-02	6.03E-03	8.00E-03	1.33E-02	8.05E-03	2.30E-03	1.26E-02	3.44E-03	4.01E-03	9.37E-03	7.11E-03	1.44E-03	6.24E-06	7.54E-06	9.5601E-02
551462.27	4172941.01	6414.3551	15061.26705	2449.56586	28607.69064	2717.02608	8286.15166	6409.64387	8413.92617	1389.65808	23864.8544	12048.99931	10478.43359	1.68501	1.73549	9.36E-03	1.31E-02	2.13E-03	1.82E-02	2.18E-03	6.65E-03	6.07E-03	7.06E-03	1.17E-03	1.27E-02	4.43E-03	3.86E-03	2.36E-05	2.94E-05	8.7003E-02
551546.17	4172723.81	7040.75549	7477.68989	4105.92368	31801.24978	7698.75751	4004.72409	6972.97935	4321.75355	2233.75895	18770.70026	26350.3886	5295.25539	1.29016	1.32704	1.03E-02	6.51E-03	3.58E-03	2.02E-02	6.18E-03	3.21E-03	6.61E-03	3.63E-03	1.87E-03	9.99E-03	9.70E-03	1.95E-03	1.81E-05	2.25E-05	8.3790E-02
551524.15	4172732.07	6422.72576	7688.66028	3589.20698	34027.33834	6365.36963	4090.19883	6369.61741	4397.69358	1957.60957	19160.26155	26590.95709	5373.21725	1.49901	1.54894	9.38E-03	6.70E-03	3.13E-03	2.17E-02	5.11E-03	3.28E-03	6.04E-03	3.69E-03	1.64E-03	1.02E-02	9.78E-03	1.98E-03	2.10E-05	2.62E-05	8.2629E-02
551486.25	4172773.19	5638.48355	8503.67304	2926.00186	36238.04402	4706.06795	4500.54105	5604.47416	4785.26945	1600.81631	20090.79186	25545.0848	5847.34423	2.03386	2.15107	8.23E-03	7.41E-03	2.55E-03	2.31E-02	3.78E-03	3.61E-03	5.31E-03	4.02E-03	1.34E-03	1.07E-02	9.40E-03	2.15E-03	2.85E-05	3.65E-05	8.1625E-02
551573.81	4173165.07	7591.69382	14386.96079	1653.50146	9642.3901	1419.51762	27737.34508	7699.57611	8779.80591	962.44222	10201.65629	3676.98863	32048.36778	2.9232	3.00972	1.11E-02	1.25E-02	1.44E-03	6.14E-03	1.14E-03	2.23E-02	7.30E-03	7.37E-03	8.08E-04	5.43E-03	1.35E-03	1.18E-02	4.09E-05	5.10E-05	8.8723E-02
551846.37	4172766.54	10761.17503	5640.50921	8836.26894	22100.38695	13561.38473	2404.26398	10484.05445	3241.25388	4316.7074	16967.2871	24097.51527	3262.84309	0.48547	0.4845	1.57E-02	4.91E-03	7.70E-03	1.41E-02	1.09E-02	1.93E-03	9.94E-03	2.72E-03	3.62E-03	9.03E-03	8.87E-03	1.20E-03	6.79E-06	8.21E-06	9.0589E-02
551576.1	4172714.44	8067.94768	7076.33159	4994.3991	27555.37751	10298.92326	3857.53701	7973.76972	4157.13938	2687.90668	17668.7533	26080.81547	5149.77757	1.10505	1.13658	1.18E-02	6.16E-03	4.35E-03	1.75E-02	8.26E-03	3.09E-03	7.56E-03	3.49E-03	2.26E-03	9.40E-03	9.60E-03	1.89E-03	1.55E-05	1.93E-05	8.5424E-02
551515.31	4173089.2	7003.80721	17863.8459	1918.93805	15164.20177	1850.70484	19095.359	7075.26159	10751.70029	1098.62542	15230.37965	5463.99636	22941.09779	1.74884	1.78653	1.02E-02	1.56E-02	1.67E-03	9.66E-03	1.48E-03	1.53E-02	6.71E-03	9.02E-03	9.22E-04	8.11E-03	2.01E-03	8.44E-03	2.45E-05	3.03E-05	8.9176E-02
551923.41	4172813.46	20408.85679	8828.12361	6455.11749	16577.14998	5841.8226	4448.75437	20019.52302	5301.98634	3640.05118	14962.26382	12153.5363	6160.67047	0.3796	0.37815	2.98E-02	7.69E-03	5.62E-03	1.06E-02	4.69E-03	3.57E-03	1.90E-02	4.45E-03	3.05E-03	7.96E-03	4.47E-03	2.27E-03	5.31E-06	6.41E-06	1.0310E-01
551590.64	4173180.04	7784.57775	13177.68603	1573.35247	8678.32435	1331.89181	28942.2665	7904.81196	7962.43386	918.75406	9135.29139	3376.48899	33526.78078	3.60714	3.72957	1.14E-02	1.15E-02	1.37E-03	5.53E-03	1.07E-03	2.32E-02	7.49E-03	6.68E-03	7.71E-04	4.86E-03	1.24E-03	1.23E-02	5.05E-05	6.32E-05	8.7523E-02
551555.88	4172718.22	7307.483	7270.14041	4341.08573	29938.4808	8392.77784	3920.81143	7232.13864	4225.02235	2354.10368	18200.61691	25746.98626	5200.54597	1.19076	1.22369	1.07E-02	6.33E-03	3.78E-03	1.91E-02	6.73E-03	3.15E-03	6.85E-03	3.55E-03	1.98E-03	9.69E-03	9.47E-03	1.91E-03	1.67E-05	2.07E-05	8.3208E-02
551459.04	4172932.04	6265.85705	14246.42731	2464.17443	28835.50564	2755.07237	7840.80059	6257.68374	7953.59569	1395.87403	23591.73287	12493.34108	9923.16459	1.66895	1.71979	9.15E-03	1.24E-02	2.15E-03	1.84E-02	2.21E-03	6.29E-03	5.93E-03	6.67E-03	1.17E-03	1.26E-02	4.60E-03	3.65E-03	2.34E-05	2.91E-05	8.5196E-02
551558.49	4173151.31	7360.61299	15122.04275	1710.1155	10541.51972	1495.19175	25441.76975	7457.80455	9284.13026	991.52924	11153.77962	3963.8482	29490.92355	2.45144	2.51496	1.07E-02	1.32E-02	1.49E-03	6.71E-03	1.20E-03	2.04E-02	7.07E-03	7.79E-03	8.32E-04	5.94E-03	1.46E-03	1.09E-02	3.43E-05	4.26E-05	8.7741E-02
551610.65	4173192.13	8101.93163	12047.30929	1508.72107	7886.01997	1260.88601	30416.24798	8240.24551	7242.34871	883.38987	8248.11804	3134.07496	34781.05268	5.11589	5.34833	1.18E-02	1.05E-02	1.31E-03	5.02E-03	1.01E-03	2.44E-02	7.81E-03	6.08E-03	7.41E-04	4.39E-03	1.15E-03	1.28E-02	7.16E-05	9.06E-05	8.7199E-02
551804.98	4173151.99	17154.63132	9269.36688	1231.33209	5221.2193	961.3863	26641.83023	18021.92012	5183.57646	732.72414	5426.18301	2264.76668	31615.23526	0.92159	0.90722	2.50E-02	8.07E-03	1.07E-03	3.32E-03	7.71E-04	2.14E-02	1.71E-02	4.35E-03	6.15E-04	2.89E-03	8.33E-04	1.16E-02	1.29E-05	1.54E-05	9.7083E-02
551692.16	4173195.55	11265.80913	10134.79255	1412.73226	6291.13015	1124.14856	30403.48855	11580.14281	5789.18646	835.95376	6476.48011	2656.80984	35376.15277	4.48839	4.27975	1.64E-02	8.83E-03	1.23E-03	4.01E-03	9.02E-04	2.44E-02	1.10E-02	4.86E-03	7.01E-04	3.45E-03	9.78E-04	1.30E-02	6.28E-05	7.25E-05	8.9913E-02
551792.56	4172739.25	10692.05224	4115.57908	5233.20266	21523.3204	17194.08349	2174.1166	10541.36634	2324.5916	2544.96929	13390.90001	30481.98146	2943.5386	0.64068	0.64034	1.56E-02	3.58E-03	4.56E-03	1.37E-02	1.38E-02	1.74E-03	9.99E-03	1.95E-03	2.14E-03	7.13E-03	1.12E-02	1.08E-03	8.96E-06	1.09E-05	8.6516E-02
551912.73	4172801.2	18416.94916	8358.50694	6876.18014	17240.20221	6599.40069	4054.06794	17997.1388	5027.52565	3821.47427	15289.9661	13489.29889	5614.96142	0.39026	0.3889	2.69E-02	7.28E-03	5.99E-03	1.10E-02	5.29E-03	3.25E-03	1.71E-02	4.22E-03	3.21E-03	8.14E-03	4.96E-03	2.07E-03	5.46E-06	6.59E-06	9.9338E-02
551565.07	4172715.1	7577.0052	7106.32863	4568.11145	28307.48644	9060.61716	3858.72072	7494.52678	4151.14483	2469.13078	17699.5161	25288.73419	5133.07067	1.1149	1.1451	1.11E-02	6.19E-03	3.98E-03	1.80E-02	7.27E-03	3.10E-03	7.10E-03	3.48E-03	2.07E-03	9.42E-03	9.30E-03	1.89E-03	1.56E-05	1.94E-05	8.2925E-02
551887.18	4172785.72	14712.95862	7300.23536	8298.60002	19223.94145	8540.38772	3197.9677	14272.98009	4441.74542	4444.81025	16702.29127	16922.48574	4373.30917	0.42399	0.42271	2.15E-02	6.36E-03	7.23E-03	1.22E-02	6.85E-03	2.57E-03	1.35E-02	3.73E-03	3.73E-03	8.89E-03	6.23E-03	1.61E-03	5.93E-06	7.16E-06	9.4443E-02
551485.26	4173033.92	6760.17257	17998.35767	2039.29815	19359.23131	2115.90902	13389.84248	6803.43161	10925.91722	1161.16768	18421.97201	7081.1605	16318.95181	1.55682	1.59386	9.87E-03	1.57E-02	1.78E-03	1.23E-02	1.70E-03	1.07E-02	6.45E-03	9.17E-03	9.74E-04	9.81E-03	2.61E-03	6.00E-03	2.18E-05	2.70E-05	8.7141E-02
551499.06	4173063.6	6818.07819	17676.71924	1958.83017	16943.30744	1969.03536	15960.35852	6876.48219	10827.34676	1117.60092	16528.54942	6159.54375	19515.01131	1.60184	1.63761	9.95E-03	1.54E-02	1.71E-03	1.08E-02	1.58E-03	1.28E-02	6.52E-03	9.08E-03	9.38E-04	8.80E-03	2.27E-03	7.18E-03	2.24E-05	2.78E-05	8.7062E-02
551631.72	4173199.8	8544.39581	11139.69863	1456.30164	7276.55502	1207.33516	30636.45534	8707.82939	6616.42749	853.96731	7532.47388	2952.44351	35249.72819	9.32537	10.01996	1.25E-02	9.70E-03	1.27E-03	4.63E-03	9.69E-04	2.46E-02	8.25E-03	5.55E-03	7.17E-04	4.01E-03	1.09E-03	1.30E-02	1.30E-04	1.70E-04	8.6511E-02
551482.04	4173024.97	6726.10832	17921.20746	2064.89498	20057.22608	2169.17954	12477.46815	6764.76713	10668.32939	1175.39336	18988.76592	7429.62538	15523.88312	1.54564	1.58254	9.82E-03	1.56E-02	1.80E-03	1.28E-02	1.74E-03	1.00E-02	6.41E-03	8.95E-03	9.86E-04	1.01E-02	2.73E-03	5.71E-03	2.16E-05	2.68E-05	8.6698E-02
551478.81	4173016.01	6690.78845	17774.24414	2072.89323	20803.59856	2219.72098	11833.38932	6724.61084	10512.48887	1178.15767	19175.60155	7782.32674	14764.6959	1.53512	1.57188	9.77E-03	1.55E-02	1.81E-03	1.32E-02	1.78E-03	9.49E-03	6.37E-03	8.82E-03	9.89E-04	1.02E-02	2.86E-03	5.43E-03	2.15E-05	2.66E-05	8.6307E-02
551475.59	4173007.06	6648.10144	17534.11892	2096.45755	21565.06057	2267.17695	11222.17824	6677.00887	10287.09972	1191.51836	19671.93177	8142.72801	14036.10653	1.52674	1.56452	9.70E-03	1.53E-02	1.83E-03	1.37E-02	1.82E-03	9.00E-03	6.33E-03	8.63E-03	1.00E-03	1.05E-02	3.00E-03	5.16E-03	2.14E-05	2.65E-05	8.5994E-02
551455.82	4172923.08	6093.70602	13405.60052	2462.34904	28752.30494	2785.06218	7399.73046	6082.75535	7486.98267	1392.36394	23075.46981	12760.63585	9371.57539	1.64338	1.69319	8.89E-03	1.17E-02	2.14E-03	1.83E-02	2.23E-03	5.94E-03	5.77E-03	6.28E-03	1.17E-03	1.23E-02	4.70E-03	3.45E-03	2.30E-05	2.87E-05	8.2887E-02
551861.46	4172770.03	11312.95407	6010.00684	8695.09598	21039.02248	11494.78198	2516.68857	10984.53584	3498.99926	4373.99513	16756.88867	20848.09825	3424.02987	0.45611	0.45504	1.65E-02	5.23E-03	7.57E-03	1.34E-02	9.22E-03	2.02E-03	1.04E-02	2.94E-03	3.67E-03	8.92E-03	7.67E-03	1.26E-03	6.38E-06	7.71E-06	8.8839E-02
551475.99	4172783.17	5434.21197	8526.21373	2769.12784	34493.58686	4336.96338	4548.53929	5403.46986	4787.74961	1517.84776	19608.32812	23580.4653	5890.88842	1.96946	2.08587	7.93E-03	7.43E-03	2.41E-03	2.20E-02	3.48E-03	3.65E-03	5.12E-03	4.02E-03	1.27E-03	1.04E-02	8.68E-03	2.17E-03	2.76E-05	3.53E-05	7.8618E-02
551472.36	4172998.11	6589.84033	17172.3598	2118.50349	22300.91343	2303.03653	10629.69175	6613.82071	9987.07788	1204.20647	20097.98082	8515.1982	13322.93322	1.52074	1.55854	9.62E-03	1.50E-02	1.85E-03	1.42E-02	1.85E-03	8.53E-03	6.27E-03	8.38E-03	1.01E-03	1.07E-02	3.13E-03	4.90E-03	2.13E-05	2.64E-05	8.5436E-02
551513.61	4172735.63	6056.94349	7590.18787	3287.31892	33021.30692	5661.30864	4054.48302	6011.1917	4326.26057	1794.56536	18552.37476	25036.04848	5311.6238	1.50035	1.5534	8.84E-03	6.61E-03	2.86E-03	2.10E-02	4.54E-03	3.25E-03	5.70E-03	3.63E-03	1.51E-03	9.87E-03	9.21E-03	1.95E-03	2.10E-05	2.63E-05	7.9057E-02
551469.14	4172989.16	6526.92193	16741.49945	2144.10352	23049.37749	2340.75309	10080.92878	6545.91839	9649.43856	1218.87834	20501.46432	8890.24763	12657.7726	1.51611	1.55459	9.53E-03	1.46E-02	1.87E-03	1.47E-02	1.88E-03	8.09E-03	6.20E-03	8.10E-03	1.02E-03	1.09E-02	3.27E-03	4.66E-03	2.12E-05	2.63E-05	8.4830E-02
551521.23	4173105.94	6857.93819	16507.76315	1829.78911	13672.00347	1738.10867	19593.9957	6932.59878	9957.4338	1049.56697	13824.02416	5002.70957	23317.04283	1.74302	1.77957	1.00E-02	1.44E-02	1.59E-03	8.71E-03	1.39E-03	1.57E-02	6.57E-03	8.35E-03	8.81E-04	7.36E-03	1.84E-03	8.58E-03	2.44E-05	3.02E-05	8.5441E-02
551459.2	4172828.05	5403.60327	9545.09021	2643.12431	33645.01127	3723.59083	5156.36013	5377.082	5335.03786	1460.25322	20659.70764	20691.79225	6616.26021	1.96583	2.07126	7.89E-03	8.31E-03	2.30E-03	2.14E-02	2.99E-03	4.14E-03	5.10E-03	4.48E-03	1.23E-03	1.10E-02	7.61E-03	2.43E-03	2.75E-05	3.51E-05	7.8955E-02
551471.04	4172791.83	5386.18704	8685.34978	2722.19744	34215.99754	4186.42088	4645.74309	5356.62403	4869.7331	1494.31373	19707.7022	22957.31266	6004.60714	1.97851	2.09639	7.86E-03	7.56E-03	2.37E-03	2.18E-02	3.36E-03	3.73E-03	5.08E-03	4.09E-03	1.25E-03	1.05E-02	8.45E-03	2.21E-03	2.77E-05	3.55E-05	7.8296E-02
551781.43	4172734.69	11079.47243	3975.12299	4656.69453	20983.01557	16361.1833	2189.86595	10922.03821	2260.92803	2327.48406	12467.92325	29811.7529	2968.4649	0.68643	0.68746	1.62E-02	3.46E-03	4.06E-03	1.34E-02	1.31E-02	1.76E-03	1.04E-02	1.90E-03	1.95E-03	6.64E-03	1.10E-02	1.09E-03	9.60E-06	1.16E-05	8.4855E-02
551465.92	4172980.21	6452.24981	16226.32632	2170.22883	23767.09538	2377.70563	9561.4819	6466.44081	9276.19736	1233.83645	20829.81724	9271.50715	12024.42221	1.51079	1.5503	9.42E-03	1.41E-02	1.89E-03	1.51E-02	1.91E-03	7.67E-03	6.13E-03	7.78E-03	1.04E-03	1.11E-02	3.41E-03	4.42E-03	2.11E-05	2.63E-05	8.4071E-02
551494.19	4173059.01	6693.95562	17237.72754	1940.82133	17027.84381	1970.0111	15048.73174	6748.69299	10543.37953	1106.56577	16473.49997	6246.01185	18457.50757	1.54241	1.57639	9.77E-03	1.50E-02	1.69E-03	1.08E-02	1.58E-03	1.21E-02	6.40E-03	8.85E-03	9.28E-04	8.77E-03	2.30E-03	6.79E-03	2.16E-05	2.67E-05	8.5049E-02
551828.89	4172750.5	9403.39603	4658.49007	7068.76734	21224.88395	15038.31591	2154.99968	9231.64131	2636.18644	3355.35118	15034.43795	26366.0574	2911.43564	0.51615	0.51475	1.37E-02	4.06E-03	6.16E-03	1.35E-02	1.21E-02	1.73E-03	8.75E-03	2.21E-03	2.82E-03	8.00E-03	9.70E-03	1.07E-03	7.22E-06	8.72E-06	8.3816E-02
551466.83	4172800.01	5342.64757	8811.78205	2676.72588	33723.1006	4038.65077	4730.83312	5314.15862	4935.82724	1471.57409	19713.13478	22200.29035	6102.99779	1.95425	2.06815	7.80E-03	7.67E-03	2.33E-03	2.15E-02	3.24E-03	3.80E-03	5.04E-03	4.14E-03	1.23E-03	1.05E-02	8.17E-03	2.25E-03	2.73E-05	3.50E-05	7.7695E-02
551902.04	4172788.94	15969.23785	7669.65386	7290.22821	17764.24662	7408.48419	3530.98977	15548.57479	4635.06681	3994.24373	15566.8263	14875.09268	4800.25427	0.40111	0.39987	2.33E-02	6.68E-03	6.35E-03	1.13E-02	5.94E-03	2.83E-03	1.47E-02	3.89E-03	3.35E-03	8.29E-03	5.47E-03	1.77E-03	5.61E-06	6.78E-06	9.3942E-02
551561.58	4173159.9	7231.11791	14216.67783	1648.93702	9955.82028	1438.51351	24587.71696	7327.75378	8714.74111	956.87622	10491.65393	3786.94151	28470.1412	2.44724	2.51157	1.06E-02	1.24E-02	1.44E-03	6.34E-03	1.15E-03	1.97E-02	6.95E-03	7.31E-03	8.03E-04	5.58E-03	1.39E-03	1.05E-02	3.42E-05	4.26E-05	8.4183E-02
551462.69	4172971.25	6364.23703	15636.53495	2195.80432	24425.78291	2413.40167	9067.34984	6373.76421	8878.48546	1248.24758	21060.35218	9658.87331	11418.94259	1.50443	1.54384	9.29E-03	1.36E-02	1.91E-03	1.56E-02	1.94E-03	7.27E-03	6.04E-03	7.45E-03	1.05E-03	1.12E-02	3.55E-03	4.20E-03	2.11E-05	2.62E-05	8.3135E-02
551503.82	4173080.79	6698.5677	16904.41032	1875.7888	15366.40972	1848.52237	16717.16561	6761.90214	10134.97452	1071.76244	15117.56836	5600.02378	20240.56593	1.58119	1.61387	9.78E-03	1.47E-02	1.63E-03	9.78E-03	1.48E-03	1.34E-02	6.41E-03	8.50E-03	8.99E-04	8.05E-03	2.06E-03	7.45E-03	2.21E-05	2.73E-05	8.4230E-02
551713.92	4173192.61	12249.89884	9505.0987	1366.54315	5910.51968	1081.45472	28071.46691	12640.51226	5370.42431	810.15692	6052.57057	2540.97676	32691.62403	2.71773	2.62719	1.79E-02	8.28E-03	1.19E-03	3.76E-03	8.68E-04	2.25E-02	1.20E-02	4.51E-03	6.80E-04	3.22E-03	9.35E-04	1.20E-02	3.80E-05	4.45E-05	8.7936E-02
551488.95	4172759.84	5533.93124	7950.21809	2864.28748	33409.34871	4664.79854	4248.51557	5499.91159	4490.74737	1565.99224	18716.91837	23758.02612	5528.53593	1.74548	1.83196	8.08E-03	6.92E-03	2.49E-03	2.13E-02	3.74E-03	3.41E-03	5.21E-03	3.77E-03	1.31E-03	9.96E-03	8.74E-03	2.03E-03	2.44E-05	3.10E-05	7.7009E-02
551460.21	4172817.67	5321.91494	9161.33013	2619.86198	33082.15739	3786.76279	4952.76207	5295.12618	5124.88491	1445.00686	19966.90817	20875.2403	6365.66584	1.90348	2.02578	7.77E-03	7.98E-03	2.28E-03	2.11E-02	3.04E-03	3.97E-03	5.02E-03	4.30E-03	1.21E-03	1.06E-02	7.68E-03	2.34E-03	2.66E-05	3.43E-05	7.7349E-02
551452.59	4172914.11	5917.05605	12602.27809	2451.5091	28523.8924	2772.93532	6986.56694	5903.87443	7044.26469	1383.26655	22437.87404	13033.51551	8854.20168	1.61149	1.66319	8.64E-03	1.10E-02	2.14E-03	1.82E-02	2.22E-03	5.61E-03	5.60E-03	5.91E-03	1.16E-03	1.19E-02	4.80E-03	3.26E-03	2.25E-05	2.82E-05	8.0455E-02
551462.63	4172808.18	5303.99703	8928.44074	2632.57998	33153.07047	3893.97305	4815.94201	5276.54768	4998.13029	1449.56161	19685.86853	21386.92287	6200.77002	1.91214	2.0192	7.74E-03	7.78E-03	2.29E-03	2.11E-02	3.12E-03	3.86E-03	5.00E-03	4.19E-03	1.22E-03	1.05E-02	7.87E-03	2.28E-03	2.68E-05	3.42E-05	7.7010E-02
551459.46	4172962.27	6261.75253	14988.05889	2219.31148	24999.35312	2447.32554	8595.88151	6266.85072	8466.9078	1261.24352	21175.21908	10053.78705	10837.82209	1.49506	1.53577	9.14E-03	1.31E-02	1.93E-03	1.59E-02	1.96E-03	6.90E-03	5.94E-03	7.10E-03	1.06E-03	1.13E-02	3.70E-03	3.99E-03	2.09E-05	2.60E-05	8.2012E-02
551524.5	4173115.06	6790.10772	15822.33511	1783.47716	12910.41554	1676.67979	19724.4036	6865.92077	9567.03287	1023.98904	13131.87521	4763.08275	23377.70297	1.7506	1.787	9.91E-03	1.38E-02	1.55E-03	8.22E-03	1.35E-03	1.58E-02	6.51E-03	8.03E-03	8.59E-04	6.99E-03	1.75E-03	8.60E-03	2.45E-05	3.03E-05	8.3428E-02
551500.11	4173075.75	6645.10467	16847.92069	1877.74932	15665.00117	1865.96793	16067.03669	6705.72964	10093.2025	1072.10287	15294.83887	5718.87053	19520.33492	1.547	1.57905	9.70E-03	1.47E-02	1.64E-03	9.97E-03	1.50E-03	1.29E-02	6.36E-03	8.47E-03	9.00E-04	8.14E-03	2.10E-03	7.18E-03	2.16E-05	2.68E-05	8.3571E-02
551927.48	4172804.31	18365.67199	8247.97269	6156.67535	15975.92656	5796.86771	4149.05832	18003.87561	4944.77684	3448.59832	14276.35716	11988.14881	5734.38852	0.37001	0.36874	2.68E-02	7.18E-03	5.36E-03	1.02E-02	4.65E-03	3.33E-03	1.71E-02	4.15E-03	2.89E-03	7.60E-03	4.41E-03	2.11E-03	5.18E-06	6.25E-06	9.5743E-02
551578.62	4173177.16	7388.60465	13064.97425	1564.8227	8891.39764	1342.66202	25735.87603	7495.50847	7933.70758	911.62112	9340.59409	3449.45191	29829.11664	2.93531	3.02322	1.08E-02	1.14E-02	1.36E-03	5.66E-03	1.08E-03	2.06E-02	7.10E-03	6.66E-03	7.65E-04	4.97E-03	1.27E-03	1.10E-02	4.11E-05	5.12E-05	8.2748E-02
551598.32	4172703.94	8618.81065	6355.37216	5382.83242	22111.21491	11561.3289	3569.96096	8507.06212	3780.2601	2870.5301	15248.27045	24039.7029	4795.70234	0.91167	0.93703	1.26E-02	5.54E-03	4.69E-03	1.41E-02	9.28E-03	2.86E-03	8.06E-03	3.17E-03	2.41E-03	8.12E-03	8.84E-03	1.76E-03	1.28E-05	1.59E-05	8.1421E-02
551876.45	4172773.41	11921.2741	6305.13427	8275.44866	19748.63928	9801.44826	2636.77241	11560.9277	3712.28941	4271.50966	16299.24086	18414.33474	3595.79795	0.43011	0.42913	1.74E-02	5.49E-03	7.21E-03	1.26E-02	7.86E-03	2.12E-03	1.10E-02	3.11E-03	3.58E-03	8.68E-03	6.78E-03	1.32E-03	6.02E-06	7.27E-06	8.7098E-02
551608.3	4172701.76	8997.75633	6148.48902	5648.43699	20674.10707	12345.00655	3490.99158	8875.27488	3674.91543	2997.15322	14556.17533	24178.20624	4701.4649	0.88251	0.90811	1.31E-02	5.36E-03	4.92E-03	1.32E-02	9.90E-03	2.80E-03	8.41E-03	3.08E-03	2.51E-03	7.75E-03	8.90E-03	1.73E-03	1.23E-05	1.54E-05	8.1689E-02
551808.86	4172740.22	9467.32044	4111.0358	5550.62148	20674.14223	15741.1979	2075.1207	9332.39106	2312.94172	2649.97427	13479.2799	27933.00885	2802.53059	0.58127	0.58063	1.38E-02	3.58E-03	4.83E-03	1.32E-02	1.26E-02	1.66E-03	8.85E-03	1.94E-03	2.22E-03	7.17E-03	1.03E-02	1.03E-03	8.13E-06	9.84E-06	8.1203E-02
551839.82	4172752.89	9181.91784	4813.61354	7294.9998	20709.89553	13795.59798	2159.77763	8990.72833	2738.10142	3504.3846	15100.21587	24441.35394	2918.95734	0.48951	0.48811	1.34E-02	4.19E-03	6.35E-03	1.32E-02	1.11E-02	1.73E-03	8.52E-03	2.30E-03	2.94E-03	8.04E-03	8.99E-03	1.07E-03	6.85E-06	8.27E-06	8.1815E-02
551542.2	4172716.64	6661.68092	7037.8873	3792.95004	28772.82559	6972.94567	3815.97675	6599.55765	4068.62917	2065.09624	17253.60204	23489.17757	5039.72039	1.1424	1.17207	9.72E-03	6.13E-03	3.30E-03	1.83E-02	5.59E-03	3.06E-03	6.25E-03	3.41E-03	1.73E-03	9.18E-03	8.64E-03	1.85E-03	1.60E-05	1.99E-05	7.7252E-02
551530.53	4172719.95	6358.83376	7131.10748	3549.03748	29827.14654	6355.44008	3851.90462	6303.73457	4100.25507	1935.77128	17449.48147	23603.43379	5070.47659	1.23088	1.26566	9.28E-03	6.21E-03	3.09E-03	1.90E-02	5.10E-03	3.09E-03	5.97E-03	3.44E-03	1.62E-03	9.29E-03	8.68E-03	1.87E-03	1.72E-05	2.14E-05	7.6681E-02
551456.23	4172953.31	6140.31517	14286.06404	2236.8677	24885.84821	2477.22386	8139.3843	6141.43504	8043.52716	1270.46635	21136.82991	10455.09369	10272.22652	1.48255	1.52264	8.96E-03	1.24E-02	1.95E-03	1.58E-02	1.99E-03	6.53E-03	5.82E-03	6.75E-03	1.07E-03	1.13E-02	3.85E-03	3.78E-03	2.07E-05	2.58E-05	8.0277E-02
551619.55	4173200.53	8018.79132	11060.333	1441.6903	7416.34319	1213.78473	27716.88012	8161.36254	6608.34254	843.43928	7647.30003	2999.0757	31890.78505	5.93372	6.24099	1.17E-02	9.63E-03	1.26E-03	4.72E-03	9.74E-04	2.22E-02	7.74E-03	5.54E-03	7.08E-04	4.07E-03	1.10E-03	1.17E-02	8.30E-05	1.06E-04	8.1611E-02
551586.71	4172703.96	8097.20161	6463.1462	4970.38915	23215.34918	10358.06549	3601.12334	7998.51914	3822.11837	2662.78823	15613.57051	23341.94413	4821.32371	0.9205	0.94434	1.18E-02	5.63E-03	4.33E-03	1.48E-02	8.31E-03	2.89E-03	7.58E-03	3.21E-03	2.23E-03	8.31E-03	8.59E-03	1.77E-03	1.29E-05	1.60E-05	7.9483E-02
551850.67	4172757.66	9505.77994	5148.68385	7703.33768	20510.97253	12706.41027	2237.21763	9275.19707	2953.34187	3765.43962	15479.85525	22636.21787	3028.90133	0.4652	0.46445	1.39E-02	4.48E-03	6.71E-03	1.31E-02	1.02E-02	1.79E-03	8.79E-03	2.48E-03	3.16E-03	8.24E-03	8.33E-03	1.11E-03	6.51E-06	7.87E-06	8.2244E-02
551527.59	4173123.64	6731.63667	15208.89401	1741.27205	12227.47296	1619.11231	19754.09953	6808.25387	9221.35737	1000.60305	12520.78741	4545.77482	23342.523	1.76458	1.80159	9.83E-03	1.32E-02	1.52E-03	7.79E-03	1.30E-03	1.58E-02	6.45E-03	7.74E-03	8.40E-04	6.66E-03	1.67E-03	8.59E-03	2.47E-05	3.05E-05	8.1533E-02
551916.84	4172792.1	16391.42887	7751.28749	6485.1355	16527.91099	6486.28482	3782.94046	16009.94033	4675.05734	3580.93414	14505.76215	13193.42039	5141.99739	0.37972	0.37856	2.39E-02	6.75E-03	5.65E-03	1.05E-02	5.20E-03	3.04E-03	1.52E-02	3.92E-03	3.00E-03	7.72E-03	4.85E-03	1.89E-03	5.31E-06	6.41E-06	9.1669E-02
551449.37	4172905.15	5732.97486	11826.37466	2427.25337	28104.86566	2784.32738	6592.90192	5718.12255	6618.06069	1366.36754	21651.0807	13278.60897	8360.85859	1.57306	1.6245	8.37E-03	1.03E-02	2.11E-03	1.79E-02	2.23E-03	5.29E-03	5.42E-03	5.55E-03	1.15E-03	1.15E-02	4.89E-03	3.08E-03	2.20E-05	2.75E-05	7.7856E-02
551597.22	4173191.67	7579.53861	11878.87731	1491.68228	8035.71879	1265.08353	26472.03817	7699.41578	7180.4332	871.23143	8383.77173	3184.98154	30386.66647	3.75766	3.89179	1.11E-02	1.03E-02	1.30E-03	5.12E-03	1.01E-03	2.12E-02	7.30E-03	6.02E-03	7.31E-04	4.46E-03	1.17E-03	1.12E-02	5.26E-05	6.59E-05	8.1065E-02
551453	4172944.34	6018.17457	13604.39509	2255.82578	25201.96453	2510.70421	7722.75999	6015.61147	7643.35115	1279.93958	21050.85993	10839.70397	9754.81219	1.47051	1.51071	8.78E-03	1.18E-02	1.96E-03	1.60E-02	2.01E-03	6.20E-03	5.70E-03	6.41E-03	1.07E-03	1.12E-02	3.99E-03	3.59E-03	2.06E-05	2.56E-05	7.8873E-02
551575.53	4172704.61	7647.46648	6559.81476	4608.22859	24308.48756	9310.44965	3629.84272	7559.80337	3857.59192	2478.6551	15921.81313	22901.31615	4843.56123	0.94192	0.96522	1.12E-02	5.71E-03	4.01E-03	1.55E-02	7.47E-03	2.91E-03	7.17E-03	3.24E-03	2.08E-03	8.47E-03	8.43E-03	1.78E-03	1.32E-05	1.64E-05	7.7944E-02
551891.36	4172776.69	13065.68828	6736.8733	7620.35292	18246.53143	8227.18157	2983.50784	12685.58633	4092.93506	4054.72872	15627.06299	16236.76087	3974.69925	0.41038	0.40947	1.91E-02	5.87E-03	6.64E-03	1.16E-02	6.60E-03	2.39E-03	1.20E-02	3.43E-03	3.40E-03	8.32E-03	5.97E-03	1.46E-03	5.74E-06	6.94E-06	8.6816E-02
551506.02	4173092.49	6532.25351	15819.54962	1803.38563	14250.15895	1764.78967	16752.98183	6597.1199	9480.75402	1031.39543	14053.95607	5257.78067	20158.62699	1.53826	1.56874	9.53E-03	1.38E-02	1.57E-03	9.07E-03	1.42E-03	1.34E-02	6.25E-03	7.95E-03	8.65E-04	7.48E-03	1.93E-03	7.42E-03	2.15E-05	2.66E-05	8.0768E-02
551564.69	4173168.79	7094.96466	13333.97221	1586.40004	9387.73259	1381.62726	23536.42569	7190.93634	8142.81103	921.37507	9854.4232	3612.86027	27292.60258	2.4395	2.50411	1.04E-02	1.16E-02	1.38E-03	5.98E-03	1.11E-03	1.89E-02	6.82E-03	6.83E-03	7.73E-04	5.25E-03	1.33E-03	1.00E-02	3.41E-05	4.24E-05	8.0434E-02
551520.93	4172722.76	6076.17887	7121.70268	3320.31732	29839.36276	5805.08812	3848.98587	6027.15102	4080.01327	1812.95269	17265.9327	23018.32738	5053.45403	1.26852	1.30674	8.87E-03	6.20E-03	2.89E-03	1.90E-02	4.66E-03	3.09E-03	5.71E-03	3.42E-03	1.52E-03	9.19E-03	8.47E-03	1.86E-03	1.77E-05	2.21E-05	7.4925E-02
551705.82	4173198.14	11462.79386	9355.05562	1350.81287	5901.13395	1075.93164	26479.82306	11805.67915	5310.278	799.8016	6038.1506	2533.93784	30928.85805	3.28918	3.16416	1.67E-02	8.15E-03	1.18E-03	3.76E-03	8.63E-04	2.12E-02	1.12E-02	4.46E-03	6.71E-04	3.21E-03	9.32E-04	1.14E-02	4.60E-05	5.36E-05	8.3863E-02
551479.37	4172766.17	5295.66019	7849.39243	2690.17208	31538.27857	4292.04152	4229.53024	5265.21963	4427.06984	1472.51197	18024.99705	21859.95211	5490.20676	1.67446	1.7605	7.73E-03	6.84E-03	2.34E-03	2.01E-02	3.44E-03	3.39E-03	4.99E-03	3.71E-03	1.24E-03	9.59E-03	8.04E-03	2.02E-03	2.34E-05	2.98E-05	7.3479E-02
551449.78	4172935.38	5894.127	12948.41641	2273.39136	25459.96972	2546.88964	7340.3775	5888.24928	7266.07054	1288.10279	20898.57531	11182.84408	9279.01701	1.45823	1.49959	8.60E-03	1.13E-02	1.98E-03	1.62E-02	2.04E-03	5.89E-03	5.58E-03	6.10E-03	1.08E-03	1.11E-02	4.11E-03	3.41E-03	2.04E-05	2.54E-05	7.7462E-02
551584.14	4173185.33	7309.55351	12258.81387	1514.0967	8434.77844	1297.61253	24897.46449	7417.88548	7449.61346	882.35933	8814.62867	3311.52532	28656.51288	3.05742	3.15346	1.07E-02	1.07E-02	1.32E-03	5.37E-03	1.04E-03	2.00E-02	7.03E-03	6.25E-03	7.40E-04	4.69E-03	1.22E-03	1.05E-02	4.28E-05	5.34E-05	7.9624E-02
551530.68	4173132.23	6708.01857	14581.66885	1697.08806	11585.31993	1563.40103	19645.79779	6785.81177	8860.82756	976.06501	11915.61891	4342.82355	23158.04929	1.77558	1.8129	9.79E-03	1.27E-02	1.48E-03	7.38E-03	1.25E-03	1.58E-02	6.43E-03	7.43E-03	8.19E-04	6.34E-03	1.60E-03	8.52E-03	2.48E-05	3.07E-05	7.9564E-02
551564.48	4172705.27	7219.1494	6609.72871	4257.30914	25118.98067	8321.98321	3640.8632	7141.52303	3866.301	2298.9203	16049.12259	22398.39169	4841.83324	0.9627	0.98575	1.05E-02	5.76E-03	3.71E-03	1.60E-02	6.68E-03	2.92E-03	6.77E-03	3.24E-03	1.93E-03	8.54E-03	8.24E-03	1.78E-03	1.35E-05	1.67E-05	7.6131E-02
551554.81	4172708.45	6905.87167	6708.28483	3996.61682	26096.28167	7580.11957	3678.71765	6836.12366	3905.6666	2166.65661	16291.70494	22278.41592	4877.26411	1.00162	1.02552	1.01E-02	5.84E-03	3.48E-03	1.66E-02	6.08E-03	2.95E-03	6.48E-03	3.28E-03	1.82E-03	8.67E-03	8.20E-03	1.79E-03	1.40E-05	1.74E-05	7.5322E-02
551942.19	4172807.36	18015.23634	8062.87239	5525.84549	14812.80942	5130.69542	4224.02587	17709.48499	4832.48879	3114.33138	13319.45425	10722.33163	5821.4132	0.35169	0.35051	2.63E-02	7.02E-03	4.81E-03	9.43E-03	4.12E-03	3.39E-03	1.68E-02	4.05E-03	2.61E-03	7.09E-03	3.95E-03	2.14E-03	4.92E-06	5.94E-06	9.1709E-02
551865.72	4172761.1	9931.60823	5476.21551	7688.05404	19673.12772	10902.0235	2330.04472	9658.38109	3178.38624	3855.27776	15382.78947	19739.08273	3162.13816	0.43889	0.43808	1.45E-02	4.77E-03	6.70E-03	1.25E-02	8.75E-03	1.87E-03	9.15E-03	2.67E-03	3.23E-03	8.19E-03	7.26E-03	1.16E-03	6.14E-06	7.42E-06	8.0789E-02
551906.2	4172779.89	14203.85124	7092.36731	6826.92602	16932.1035	7193.87368	3263.54989	13832.10855	4275.62118	3712.25066	14712.56693	14388.99096	4431.95753	0.38921	0.3882	2.07E-02	6.18E-03	5.95E-03	1.08E-02	5.77E-03	2.62E-03	1.31E-02	3.59E-03	3.11E-03	7.83E-03	5.29E-03	1.63E-03	5.45E-06	6.58E-06	8.6608E-02
551446.14	4172896.18	5545.55049	11094.4449	2391.13578	27523.45113	2791.15208	6222.30967	5529.51653	6214.22182	1342.70458	20755.17623	13499.40986	7897.18507	1.52764	1.57845	8.09E-03	9.66E-03	2.08E-03	1.75E-02	2.24E-03	4.99E-03	5.24E-03	5.21E-03	1.13E-03	1.10E-02	4.97E-03	2.91E-03	2.14E-05	2.67E-05	7.5147E-02
551789.04	4172729.94	9998.78237	3785.81455	4366.88043	19645.35298	14675.11617	2074.15554	9864.26104	2149.78725	2173.08987	11817.60038	26952.37221	2804.73947	0.63823	0.63945	1.46E-02	3.30E-03	3.80E-03	1.25E-02	1.18E-02	1.66E-03	9.35E-03	1.80E-03	1.82E-03	6.29E-03	9.92E-03	1.03E-03	8.93E-06	1.08E-05	7.7878E-02
551476	4173037.26	6290.69977	15784.96449	1894.92147	17570.94366	1993.79769	11853.70974	6331.19835	9585.87258	1078.27489	16503.09804	6692.89516	14689.86809	1.37193	1.40208	9.18E-03	1.37E-02	1.65E-03	1.12E-02	1.60E-03	9.51E-03	6.00E-03	8.04E-03	9.05E-04	8.78E-03	2.46E-03	5.40E-03	1.92E-05	2.38E-05	7.8522E-02
551825.17	4172741.18	8612.60302	4189.42896	5905.8853	19862.12291	14166.21579	2018.80397	8475.43343	2360.10526	2812.00875	13547.2721	25332.67873	2723.33855	0.52637	0.52554	1.26E-02	3.65E-03	5.14E-03	1.26E-02	1.14E-02	1.62E-03	8.03E-03	1.98E-03	2.36E-03	7.21E-03	9.32E-03	1.00E-03	7.37E-06	8.91E-06	7.6919E-02
551931.58	4172795.19	16545.4777	7711.64915	5851.53961	15373.52973	5720.21521	3876.00541	16211.21989	4615.59927	3257.89759	13605.54916	11771.32332	5346.82061	0.36041	0.35932	2.42E-02	6.72E-03	5.10E-03	9.79E-03	4.59E-03	3.11E-03	1.54E-02	3.87E-03	2.73E-03	7.24E-03	4.33E-03	1.97E-03	5.04E-06	6.09E-06	8.8975E-02
551472.77	4173028.3	6260.41537	15730.66516	1899.27818	18144.80618	2038.77874	11277.82741	6296.88748	9369.18953	1079.03695	16630.31607	6994.98073	14022.75577	1.35489	1.3848	9.14E-03	1.37E-02	1.65E-03	1.16E-02	1.64E-03	9.05E-03	5.97E-03	7.86E-03	9.05E-04	8.85E-03	2.57E-03	5.16E-03	1.90E-05	2.35E-05	7.8093E-02
551469.55	4173019.35	6232.26241	15634.86996	1918.29207	18762.24152	2077.82561	10738.49877	6264.47467	9262.11669	1089.76063	17043.13763	7296.02109	13390.26236	1.35004	1.38029	9.10E-03	1.36E-02	1.67E-03	1.19E-02	1.67E-03	8.62E-03	5.94E-03	7.77E-03	9.14E-04	9.07E-03	2.68E-03	4.93E-03	1.89E-05	2.34E-05	7.7963E-02
551446.55	4172926.41	5735.82913	12223.75561	2270.58405	25368.60118	2543.43058	6940.70995	5727.35703	6859.26383	1284.40936	20469.46586	11380.33229	8779.86234	1.43366	1.47437	8.37E-03	1.06E-02	1.98E-03	1.62E-02	2.04E-03	5.57E-03	5.43E-03	5.76E-03	1.08E-03	1.09E-02	4.19E-03	3.23E-03	2.01E-05	2.50E-05	7.5378E-02
551466.32	4173010.4	6196.95977	15461.72395	1938.42712	19388.22443	2111.52477	10220.81511	6224.78584	9096.11215	1101.29424	17445.64295	7600.50252	12775.85222	1.34598	1.37651	9.05E-03	1.35E-02	1.69E-03	1.23E-02	1.69E-03	8.20E-03	5.90E-03	7.63E-03	9.24E-04	9.29E-03	2.80E-03	4.70E-03	1.88E-05	2.33E-05	7.7721E-02
551463.1	4173001.45	6153.31282	15209.50894	1959.8453	20014.17516	2145.02622	9726.80387	6176.63519	8877.29737	1113.65848	17823.50802	7909.18364	12183.70591	1.34196	1.37297	8.98E-03	1.32E-02	1.71E-03	1.27E-02	1.72E-03	7.80E-03	5.85E-03	7.45E-03	9.34E-04	9.49E-03	2.91E-03	4.48E-03	1.88E-05	2.33E-05	7.7363E-02
551606.57	4173200.98	7569.15441	11033.3003	1433.2616	7545.67082	1216.17121	25213.29155	7694.37459	6629.19495	836.66852	7802.52767	3036.20585	29034.09409	4.25094	4.42001	1.10E-02	9.61E-03	1.25E-03	4.80E-03	9.76E-04	2.02E-02	7.29E-03	5.56E-03	7.02E-04	4.15E-03	1.12E-03	1.07E-02	5.95E-05	7.49E-05	7.7559E-02
551459.87	4172992.5	6106.72505	14900.56677	1985.60413	20653.80414	2180.29987	9268.34079	6125.58524	8625.77903	1128.53236	18198.1691	8214.90428	11629.71612	1.34011	1.37188	8.91E-03	1.30E-02	1.73E-03	1.32E-02	1.75E-03	7.44E-03	5.81E-03	7.24E-03	9.47E-04	9.69E-03	3.02E-03	4.28E-03	1.88E-05	2.32E-05	7.6978E-02
551618.37	4172695.61	9058.75706	5691.5286	5557.51478	18043.59579	12020.0516	3293.64914	8932.24921	3415.74609	2933.48949	13029.11028	22435.74455	4444.73399	0.77442	0.79597	1.32E-02	4.96E-03	4.84E-03	1.15E-02	9.64E-03	2.64E-03	8.47E-03	2.87E-03	2.46E-03	6.94E-03	8.25E-03	1.64E-03	1.08E-05	1.35E-05	7.7438E-02
551511.94	4173109.23	6389.47271	14708.29246	1723.54552	12945.42574	1665.23261	17070.93342	6456.85044	8829.93078	987.54533	12844.26581	4841.15555	20369.52461	1.52646	1.5557	9.33E-03	1.28E-02	1.50E-03	8.24E-03	1.34E-03	1.37E-02	6.12E-03	7.41E-03	8.29E-04	6.84E-03	1.78E-03	7.49E-03	2.14E-05	2.64E-05	7.7430E-02
551533.77	4173140.81	6626.57339	13967.52022	1653.0081	10978.72355	1508.95873	19442.368	6704.5375	8504.20401	951.50691	11336.79984	4150.2628	22869.38221	1.78828	1.82626	9.67E-03	1.22E-02	1.44E-03	6.99E-03	1.21E-03	1.56E-02	6.35E-03	7.14E-03	7.98E-04	6.03E-03	1.53E-03	8.41E-03	2.50E-05	3.09E-05	7.7397E-02
551510.39	4172726.32	5739.81104	7029.76198	3051.07644	28974.90711	5186.56649	3815.70004	5697.5349	4014.91592	1667.56714	16738.93152	21705.59974	4995.92984	1.26688	1.3075	8.38E-03	6.12E-03	2.66E-03	1.84E-02	4.16E-03	3.06E-03	5.40E-03	3.37E-03	1.40E-03	8.91E-03	7.99E-03	1.84E-03	1.77E-05	2.22E-05	7.1772E-02
551456.65	4172983.54	6032.2384	14461.5899	2004.15699	21199.84502	2208.99508	8800.95447	6046.809	8310.17283	1139.25382	18421.24194	8537.81698	11061.25513	1.33176	1.36383	8.81E-03	1.26E-02	1.75E-03	1.35E-02	1.77E-03	7.06E-03	5.73E-03	6.97E-03	9.56E-04	9.81E-03	3.14E-03	4.07E-03	1.86E-05	2.31E-05	7.6196E-02
551697.72	4173203.68	10737.73029	9193.43565	1332.89925	5884.27679	1068.76896	25012.83388	11039.69585	5245.97422	788.12695	6018.61822	2523.95575	29279.75516	4.14918	3.96345	1.57E-02	8.01E-03	1.16E-03	3.75E-03	8.57E-04	2.01E-02	1.05E-02	4.40E-03	6.61E-04	3.20E-03	9.29E-04	1.08E-02	5.81E-05	6.72E-05	8.0070E-02
551484.9	4173062.29	6247.10577	15216.01935	1814.81875	15712.10132	1864.83981	13468.62917	6297.61219	9275.73185	1033.96041	14979.47367	5945.08957	16220.16096	1.36763	1.39593	9.12E-03	1.33E-02	1.58E-03	1.00E-02	1.50E-03	1.08E-02	5.97E-03	7.78E-03	8.68E-04	7.97E-03	2.19E-03	5.97E-03	1.91E-05	2.37E-05	7.7049E-02
551468.32	4172777	5094.68497	7857.48589	2543.63704	29999.63387	3954.97588	4271.38682	5067.25233	4422.95416	1394.80247	17554.46512	20200.10523	5526.32441	1.62182	1.7067	7.44E-03	6.84E-03	2.22E-03	1.91E-02	3.17E-03	3.43E-03	4.80E-03	3.71E-03	1.17E-03	9.34E-03	7.43E-03	2.03E-03	2.27E-05	2.89E-05	7.0743E-02
551880.67	4172764.43	10630.38966	5813.541	7459.58627	18595.60176	9335.3453	2467.7033	10322.49341	3413.93986	3833.94613	15116.14761	17458.28381	3357.53119	0.4149	0.41425	1.55E-02	5.06E-03	6.50E-03	1.18E-02	7.49E-03	1.98E-03	9.78E-03	2.86E-03	3.22E-03	8.05E-03	6.42E-03	1.24E-03	5.81E-06	7.02E-06	7.9970E-02
551453.43	4172974.59	5961.18719	14008.13098	2029.43773	21757.57555	2241.84635	8381.59929	5971.50993	7997.32277	1153.54318	18654.0044	8851.35981	10547.71805	1.32755	1.35968	8.70E-03	1.22E-02	1.77E-03	1.39E-02	1.80E-03	6.72E-03	5.66E-03	6.71E-03	9.68E-04	9.93E-03	3.26E-03	3.88E-03	1.86E-05	2.30E-05	7.5493E-02
551461.7	4172788.9	5043.7565	8048.44665	2494.97635	29765.85921	3794.79168	4392.91511	5017.57749	4522.60162	1370.62558	17679.20689	19611.70265	5668.38	1.63625	1.72246	7.36E-03	7.01E-03	2.17E-03	1.90E-02	3.04E-03	3.52E-03	4.76E-03	3.79E-03	1.15E-03	9.41E-03	7.22E-03	2.09E-03	2.29E-05	2.92E-05	7.0531E-02
551487.86	4173070.66	6221.64384	14928.96639	1787.11194	15119.62087	1819.87541	13884.56409	6274.82815	9094.3546	1018.84019	14478.91534	5708.45165	16952.03773	1.36723	1.39473	9.08E-03	1.30E-02	1.56E-03	9.63E-03	1.46E-03	1.11E-02	5.95E-03	7.63E-03	8.55E-04	7.71E-03	2.10E-03	6.24E-03	1.91E-05	2.36E-05	7.6388E-02
551449.38	4172827.76	5055.43101	8770.82781	2416.22981	29056.67502	3372.43962	4858.54367	5032.0837	4918.43079	1336.29653	18331.85288	17629.48692	6222.90575	1.60295	1.67677	7.38E-03	7.64E-03	2.10E-03	1.85E-02	2.71E-03	3.90E-03	4.77E-03	4.13E-03	1.12E-03	9.76E-03	6.49E-03	2.29E-03	2.24E-05	2.84E-05	7.0830E-02
551443.33	4172917.45	5578.138	11541.21237	2262.52751	25201.64848	2559.39299	6572.24105	5567.49348	6478.86164	1277.307	19969.74599	11598.80162	8319.1897	1.4058	1.44766	8.14E-03	1.01E-02	1.97E-03	1.60E-02	2.05E-03	5.27E-03	5.28E-03	5.44E-03	1.07E-03	1.06E-02	4.27E-03	3.06E-03	1.97E-05	2.45E-05	7.3325E-02
551920.98	4172783.03	14600.19351	7179.89815	6114.02684	15827.64703	6342.17672	3470.43672	14254.69149	4330.64045	3371.37341	13785.52458	12854.04557	4702.96703	0.36935	0.36839	2.13E-02	6.25E-03	5.33E-03	1.01E-02	5.09E-03	2.78E-03	1.35E-02	3.63E-03	2.83E-03	7.34E-03	4.73E-03	1.73E-03	5.17E-06	6.24E-06	8.4623E-02
551442.91	4172887.22	5357.95707	10408.22635	2344.55563	26804.20089	2793.00795	5876.88569	5341.15418	5837.70739	1313.45129	19788.19369	13364.12555	7463.23949	1.47439	1.52494	7.82E-03	9.07E-03	2.04E-03	1.71E-02	2.24E-03	4.71E-03	5.06E-03	4.90E-03	1.10E-03	1.05E-02	4.92E-03	2.75E-03	2.06E-05	2.58E-05	7.2256E-02
551515.24	4173118.39	6338.75432	14184.4071	1684.33748	12277.11682	1609.10681	17171.40271	6407.10498	8534.75605	965.94689	12270.10839	4615.46301	20417.77068	1.53431	1.56383	9.25E-03	1.24E-02	1.47E-03	7.82E-03	1.29E-03	1.38E-02	6.07E-03	7.16E-03	8.10E-04	6.53E-03	1.70E-03	7.51E-03	2.15E-05	2.65E-05	7.5792E-02
551457.43	4172797.2	4998.7499	8135.14991	2451.66888	29245.48679	3662.69448	4461.66763	4973.5167	4568.46959	1348.82273	17612.36056	18942.04237	5746.31793	1.61124	1.69423	7.30E-03	7.09E-03	2.14E-03	1.86E-02	2.94E-03	3.58E-03	4.71E-03	3.83E-03	1.13E-03	9.37E-03	6.97E-03	2.11E-03	2.25E-05	2.87E-05	6.9846E-02
551450.19	4172965.61	5868.91649	13473.95008	2049.36074	21794.96677	2270.41131	7965.6111	5875.20019	7653.98318	1164.62328	18752.09102	9173.7354	10035.18898	1.31815	1.35046	8.57E-03	1.17E-02	1.78E-03	1.39E-02	1.82E-03	6.39E-03	5.57E-03	6.42E-03	9.77E-04	9.98E-03	3.38E-03	3.69E-03	1.84E-05	2.29E-05	7.4235E-02
551569.42	4173180.69	6909.6376	12196.44165	1507.98805	8706.79599	1312.5436	22036.18849	7004.54157	7435.22186	876.39283	9077.1375	3404.55744	25517.98841	2.43693	2.50285	1.01E-02	1.06E-02	1.31E-03	5.54E-03	1.05E-03	1.77E-02	6.64E-03	6.24E-03	7.35E-04	4.83E-03	1.25E-03	9.39E-03	3.41E-05	4.24E-05	7.5461E-02
551482.36	4172752.63	5199.65395	7354.25814	2630.83171	29190.47752	4239.07476	3997.45691	5169.24686	4161.38952	1439.44653	16831.49293	20407.61224	5197.62888	1.45896	1.52466	7.59E-03	6.41E-03	2.29E-03	1.86E-02	3.40E-03	3.21E-03	4.90E-03	3.49E-03	1.21E-03	8.96E-03	7.51E-03	1.91E-03	2.04E-05	2.58E-05	6.9507E-02
551596.31	4172694.3	8071.55296	5920.78285	4873.46415	19816.87717	10143.34431	3368.0177	7970.32873	3519.58138	2601.46932	13837.68287	21079.59342	4518.77702	0.78171	0.80038	1.18E-02	5.16E-03	4.24E-03	1.26E-02	8.14E-03	2.70E-03	7.55E-03	2.95E-03	2.18E-03	7.37E-03	7.76E-03	1.66E-03	1.09E-05	1.36E-05	7.4140E-02
551583.34	4173190.78	7082.99793	11598.46002	1468.92782	8163.6528	1266.00781	22854.62015	7186.73458	7034.13931	854.21992	8477.53969	3232.59552	26405.58349	2.87704	2.9677	1.03E-02	1.01E-02	1.28E-03	5.20E-03	1.02E-03	1.83E-02	6.81E-03	5.90E-03	7.17E-04	4.51E-03	1.19E-03	9.72E-03	4.03E-05	5.03E-05	7.5208E-02
551895.55	4172767.68	11614.39717	6208.31896	6993.74259	17341.09525	7888.71236	2776.27739	11285.44293	3767.38969	3699.28053	14620.89069	15534.34851	3686.00574	0.39687	0.39612	1.70E-02	5.41E-03	6.09E-03	1.10E-02	6.33E-03	2.23E-03	1.07E-02	3.16E-03	3.10E-03	7.78E-03	5.72E-03	1.36E-03	5.55E-06	6.71E-06	7.9878E-02
551625.99	4172692.08	9170.78554	5424.1193	5537.53921	16659.95465	11900.27319	3176.45928	9039.8555	3263.3153	2908.78778	12162.71792	21686.50585	4292.69212	0.72359	0.74357	1.34E-02	4.72E-03	4.82E-03	1.06E-02	9.55E-03	2.55E-03	8.57E-03	2.74E-03	2.44E-03	6.47E-03	7.98E-03	1.58E-03	1.01E-05	1.26E-05	7.5440E-02
551777.98	4172725.38	10250.07148	3646.3354	3915.05899	18791.4448	13247.2002	2077.85586	10110.58769	2087.1964	1996.47938	10831.21013	25435.20422	2813.12332	0.68121	0.68486	1.50E-02	3.18E-03	3.41E-03	1.20E-02	1.06E-02	1.67E-03	9.58E-03	1.75E-03	1.68E-03	5.77E-03	9.36E-03	1.04E-03	9.53E-06	1.16E-05	7.4997E-02
551536.86	4173149.4	6528.82321	13308.32212	1604.30304	10419.60875	1457.91186	19057.84414	6606.58694	8107.27347	924.30848	10747.53524	3975.72159	22384.96395	1.78539	1.82341	9.53E-03	1.16E-02	1.40E-03	6.63E-03	1.17E-03	1.53E-02	6.26E-03	6.80E-03	7.76E-04	5.72E-03	1.46E-03	8.24E-03	2.50E-05	3.09E-05	7.4928E-02
551854.99	4172748.79	8471.74276	4717.61725	6741.94384	19031.885	11702.36146	2089.22009	8277.54587	2702.33905	3300.73189	14141.88859	21092.72007	2822.39689	0.44901	0.4481	1.24E-02	4.11E-03	5.87E-03	1.21E-02	9.39E-03	1.68E-03	7.85E-03	2.27E-03	2.77E-03	7.53E-03	7.76E-03	1.04E-03	6.28E-06	7.59E-06	7.4753E-02
551493.78	4173087.4	6155.90547	14520.94419	1729.17047	13974.96064	1728.3478	14576.05314	6213.41609	8669.37137	987.22665	13494.12559	5259.73555	17640.43079	1.3685	1.39441	8.99E-03	1.26E-02	1.51E-03	8.90E-03	1.39E-03	1.17E-02	5.89E-03	7.27E-03	8.28E-04	7.18E-03	1.94E-03	6.49E-03	1.91E-05	2.36E-05	7.4761E-02
551946.28	4172798.24	16378.15269	7566.70562	5288.40514	14308.1702	5082.00807	3952.18182	16089.92741	4528.48023	2963.60132	12748.85286	10570.56929	5438.00636	0.34293	0.34191	2.39E-02	6.59E-03	4.61E-03	9.11E-03	4.08E-03	3.17E-03	1.52E-02	3.80E-03	2.49E-03	6.79E-03	3.89E-03	2.00E-03	4.80E-06	5.79E-06	8.5685E-02
551446.96	4172956.64	5765.48951	12907.88212	2067.17323	22112.0713	2298.00547	7570.00564	5768.10118	7306.07512	1174.09455	18761.62912	9495.938	9545.84757	1.30708	1.3405	8.42E-03	1.12E-02	1.80E-03	1.41E-02	1.84E-03	6.07E-03	5.47E-03	6.13E-03	9.85E-04	9.99E-03	3.49E-03	3.51E-03	1.83E-05	2.27E-05	7.3071E-02
551450.48	4172816.19	4965.91976	8398.3541	2389.83474	28442.89353	3419.86014	4652.07318	4942.34838	4713.25418	1319.35342	17675.09931	17697.31005	5968.79491	1.56176	1.63599	7.25E-03	7.31E-03	2.08E-03	1.81E-02	2.74E-03	3.73E-03	4.68E-03	3.95E-03	1.11E-03	9.41E-03	6.51E-03	2.20E-03	2.19E-05	2.77E-05	6.9143E-02
551526.91	4172710.73	5997.76762	6620.76326	3269.98209	26355.02485	5755.4561	3631.13853	5947.23744	3811.82727	1785.04419	15777.51306	20607.11796	4775.53447	1.06086	1.08821	8.75E-03	5.77E-03	2.85E-03	1.68E-02	4.62E-03	2.91E-03	5.64E-03	3.20E-03	1.50E-03	8.40E-03	7.58E-03	1.76E-03	1.48E-05	1.84E-05	6.9785E-02
551453.16	4172805.5	4946.13902	8185.0271	2401.29153	28492.58361	3517.44419	4518.05658	4921.95956	4595.71434	1323.22455	17437.61442	18115.42466	5807.87554	1.56394	1.64118	7.22E-03	7.13E-03	2.09E-03	1.81E-02	2.82E-03	3.62E-03	4.66E-03	3.86E-03	1.11E-03	9.28E-03	6.67E-03	2.14E-03	2.19E-05	2.78E-05	6.8794E-02
551518.33	4173126.98	6298.93514	13719.17525	1649.25113	11661.21064	1555.95278	17202.56926	6367.98163	8279.89234	946.53671	11767.35055	4408.86552	20401.79005	1.54917	1.57923	9.19E-03	1.19E-02	1.44E-03	7.43E-03	1.25E-03	1.38E-02	6.04E-03	6.95E-03	7.94E-04	6.26E-03	1.62E-03	7.51E-03	2.17E-05	2.68E-05	7.4272E-02
551605.18	4172692.42	8322.45972	5722.79613	5020.48703	18490.23916	10542.14547	3289.39762	8214.29992	3415.75373	2670.4373	13175.7424	20813.06147	4422.84007	0.74355	0.76167	1.21E-02	4.98E-03	4.37E-03	1.18E-02	8.46E-03	2.64E-03	7.79E-03	2.87E-03	2.24E-03	7.01E-03	7.66E-03	1.63E-03	1.04E-05	1.29E-05	7.3589E-02
551586.14	4172694.13	7645.03361	5993.55071	4553.38025	20565.70695	9250.24996	3388.14136	7554.15288	3546.34513	2439.70917	14080.34987	20509.72715	4532.9642	0.78821	0.80588	1.12E-02	5.22E-03	3.97E-03	1.31E-02	7.42E-03	2.72E-03	7.16E-03	2.98E-03	2.05E-03	7.49E-03	7.55E-03	1.67E-03	1.10E-05	1.37E-05	7.2496E-02
551841.47	4172742.15	8023.92612	4283.57432	6083.76474	18958.34493	12546.68449	1982.14148	7874.00209	2425.20952	2927.28961	13437.4322	22759.44091	2673.25569	0.48333	0.48253	1.17E-02	3.73E-03	5.30E-03	1.21E-02	1.01E-02	1.59E-03	7.46E-03	2.03E-03	2.46E-03	7.15E-03	8.37E-03	9.84E-04	6.76E-06	8.18E-06	7.2949E-02
551440.1	4172908.48	5402.96566	10846.85743	2237.16202	24783.77405	2562.60432	6205.22293	5390.76298	6093.92451	1260.2119	19278.90118	11764.79105	7859.92509	1.36853	1.40909	7.89E-03	9.45E-03	1.95E-03	1.58E-02	2.06E-03	4.98E-03	5.11E-03	5.11E-03	1.06E-03	1.03E-02	4.33E-03	2.89E-03	1.91E-05	2.39E-05	7.0903E-02
551719.48	4173200.73	11537.44558	8596.59441	1285.90468	5524.39863	1026.09801	23092.64085	11903.9868	4864.19704	761.54894	5626.67021	2410.57351	27034.40015	2.55487	2.46848	1.68E-02	7.49E-03	1.12E-03	3.52E-03	8.23E-04	1.85E-02	1.13E-02	4.08E-03	6.39E-04	2.99E-03	8.87E-04	9.95E-03	3.57E-05	4.18E-05	7.8225E-02
551443.74	4172947.68	5652.95698	12328.39944	2082.17209	22343.51281	2325.5593	7195.74084	5652.20238	6961.47083	1181.55384	18683.76985	9785.99849	9081.45665	1.29422	1.32797	8.25E-03	1.07E-02	1.81E-03	1.42E-02	1.87E-03	5.77E-03	5.36E-03	5.84E-03	9.91E-04	9.94E-03	3.60E-03	3.34E-03	1.81E-05	2.25E-05	7.1786E-02
551615.92	4173209.29	7544.20726	10231.69395	1373.59005	7064.7792	1165.26859	23675.07265	7674.98891	6112.90517	802.67025	7257.24686	2886.12045	27366.37916	4.92358	5.14147	1.10E-02	8.91E-03	1.20E-03	4.50E-03	9.35E-04	1.90E-02	7.27E-03	5.13E-03	6.73E-04	3.86E-03	1.06E-03	1.01E-02	6.89E-05	8.71E-05	7.3774E-02
551935.71	4172786.11	14829.47101	7187.07719	5548.15167	14784.27912	5623.10629	3627.70712	14518.65477	4313.55044	3072.22108	12957.86151	11530.76643	4960.66391	0.35105	0.35014	2.16E-02	6.26E-03	4.83E-03	9.41E-03	4.51E-03	2.91E-03	1.38E-02	3.62E-03	2.58E-03	6.90E-03	4.24E-03	1.83E-03	4.91E-06	5.93E-06	8.2507E-02
551574.96	4172694.78	7232.31172	6079.30114	4238.82573	21474.52801	8376.0823	3414.57656	7151.241	3578.70086	2279.48066	14350.30074	20115.45664	4553.81176	0.80757	0.82494	1.06E-02	5.29E-03	3.69E-03	1.37E-02	6.72E-03	2.74E-03	6.78E-03	3.00E-03	1.91E-03	7.64E-03	7.40E-03	1.68E-03	1.13E-05	1.40E-05	7.1110E-02
551910.37	4172770.86	12329.85401	6526.83941	6415.88569	16131.50322	6959.64193	2977.26977	12002.41514	3917.29671	3458.42448	13929.69267	13893.92052	4048.59529	0.3774	0.37662	1.80E-02	5.68E-03	5.59E-03	1.03E-02	5.58E-03	2.39E-03	1.14E-02	3.29E-03	2.90E-03	7.41E-03	5.11E-03	1.49E-03	5.28E-06	6.38E-06	7.9106E-02
551517.71	4172713.46	5756.42796	6616.89123	3080.9825	26388.77302	5309.68712	3630.56577	5711.07298	3797.14707	1683.88743	15645.86741	20148.46046	4763.33283	1.09124	1.12139	8.40E-03	5.76E-03	2.68E-03	1.68E-02	4.26E-03	2.91E-03	5.41E-03	3.19E-03	1.41E-03	8.33E-03	7.41E-03	1.75E-03	1.53E-05	1.90E-05	6.8365E-02
551869.99	4172752.18	8809.36966	5012.67216	6811.9216	18369.80958	10337.06144	2168.60996	8579.54391	2902.31491	3410.17495	14135.26838	18760.56721	2936.15799	0.42162	0.42125	1.29E-02	4.37E-03	5.93E-03	1.17E-02	8.29E-03	1.74E-03	8.13E-03	2.44E-03	2.86E-03	7.52E-03	6.90E-03	1.08E-03	5.90E-06	7.14E-06	7.3836E-02
551593.04	4173199.92	7103.30151	10872.62938	1414.97413	7680.41221	1219.35458	22308.26665	7212.2713	6560.19087	823.9442	7911.6384	3083.0344	25800.65553	3.20072	3.30782	1.04E-02	9.47E-03	1.23E-03	4.89E-03	9.78E-04	1.79E-02	6.84E-03	5.50E-03	6.91E-04	4.21E-03	1.13E-03	9.49E-03	4.48E-05	5.61E-05	7.2808E-02
551439.69	4172878.25	5150.10556	9702.7703	2275.07371	25701.65184	2766.61106	5523.93335	5133.06683	5452.70546	1271.74766	18630.37033	13255.81442	7018.8119	1.39421	1.44435	7.52E-03	8.45E-03	1.98E-03	1.64E-02	2.22E-03	4.43E-03	4.87E-03	4.58E-03	1.07E-03	9.92E-03	4.88E-03	2.58E-03	1.95E-05	2.45E-05	6.8894E-02
551521.42	4173135.56	6285.50909	13235.35149	1612.15488	11080.03854	1504.58082	17125.58019	6355.66128	8008.89981	925.94087	11260.46447	4216.76281	20266.67528	1.5613	1.59167	9.17E-03	1.15E-02	1.40E-03	7.06E-03	1.21E-03	1.37E-02	6.02E-03	6.72E-03	7.77E-04	5.99E-03	1.55E-03	7.46E-03	2.18E-05	2.70E-05	7.2680E-02

551539.95	4173157.98	6432.04168	12675.52985	1556.65578	9890.41233	1408.00322	18602.79027	6509.45197	7723.56437	897.56671	10194.72266	3808.76187	21826.98364	1.78449	1.82275	9.39E-03	1.10E-02	1.36E-03	6.30E-03	1.13E-03	1.49E-02	6.17E-03	6.48E-03	7.53E-04	5.43E-03	1.40E-03	8.03E-03	2.50E-05	3.09E-05	7.2454E-02
551440.51	4172938.71	5525.09326	11725.6318	2089.48842	22427.46924	2349.94534	6830.60635	5521.38079	6612.57341	1184.27437	18475.36521	9975.19861	8627.11834	1.277	1.31087	8.06E-03	1.02E-02	1.82E-03	1.43E-02	1.89E-03	5.48E-03	5.23E-03	5.55E-03	9.94E-04	9.83E-03	3.67E-03	3.17E-03	1.79E-05	2.22E-05	7.0237E-02
551499.7	4173104.14	6038.53234	13646.44101	1661.81839	12798.02444	1638.97002	14948.83164	6098.78977	8153.75555	950.34975	12460.93139	4862.0977	17943.7938	1.35836	1.3831	8.81E-03	1.19E-02	1.45E-03	8.15E-03	1.31E-03	1.20E-02	5.78E-03	6.84E-03	7.97E-04	6.63E-03	1.79E-03	6.60E-03	1.90E-05	2.34E-05	7.2090E-02
551472.48	4172759.15	4980.86685	7260.74825	2477.50475	27658.95233	3919.87318	3979.17501	4953.62559	4102.98521	1356.89014	16233.25277	18889.59637	5161.35821	1.40479	1.47004	7.27E-03	6.32E-03	2.16E-03	1.76E-02	3.14E-03	3.19E-03	4.69E-03	3.44E-03	1.14E-03	8.64E-03	6.95E-03	1.90E-03	1.97E-05	2.49E-05	6.6512E-02
551821.5	4172731.87	7988.09805	3798.05011	4914.50193	18454.17687	12984.34105	1906.41267	7874.9066	2139.46615	2363.32765	12148.46744	23609.52765	2566.88924	0.53063	0.53056	1.17E-02	3.31E-03	4.28E-03	1.18E-02	1.04E-02	1.53E-03	7.46E-03	1.80E-03	1.98E-03	6.47E-03	8.69E-03	9.44E-04	7.42E-06	8.99E-06	7.0301E-02
551436.87	4172899.52	5230.61657	10206.34694	2204.78431	24286.21373	2565.81007	5867.78228	5217.24763	5737.39314	1239.1172	18535.69824	11725.63993	7438.4548	1.3274	1.36828	7.63E-03	8.89E-03	1.92E-03	1.55E-02	2.06E-03	4.71E-03	4.94E-03	4.81E-03	1.04E-03	9.87E-03	4.31E-03	2.74E-03	1.86E-05	2.32E-05	6.8433E-02
551466.73	4173040.59	5882.68122	14008.33013	1768.30531	16068.33825	1879.28219	10754.35743	5920.61732	8361.41145	997.80203	14908.14832	6310.32921	13321.3687	1.22304	1.24714	8.59E-03	1.22E-02	1.54E-03	1.02E-02	1.51E-03	8.63E-03	5.61E-03	7.02E-03	8.37E-04	7.94E-03	2.32E-03	4.90E-03	1.71E-05	2.11E-05	7.1356E-02
551463.51	4173031.64	5861.32406	13989.98599	1771.12064	16559.29882	1917.3876	10277.43638	5895.70057	8327.61577	1005.80047	15000.24152	6568.03973	12772.18193	1.21105	1.23558	8.56E-03	1.22E-02	1.54E-03	1.05E-02	1.54E-03	8.25E-03	5.59E-03	6.99E-03	8.44E-04	7.98E-03	2.42E-03	4.70E-03	1.69E-05	2.09E-05	7.1168E-02
551884.91	4172755.47	9530.13333	5370.41054	6725.41925	17589.50785	8847.68999	2313.6398	9265.70097	3146.65243	3446.21574	14022.20664	16507.36208	3140.92179	0.40002	0.39964	1.39E-02	4.68E-03	5.86E-03	1.12E-02	7.10E-03	1.86E-03	8.78E-03	2.64E-03	2.89E-03	7.46E-03	6.07E-03	1.16E-03	5.60E-06	6.77E-06	7.3620E-02
551960.95	4172801.24	15998.10519	7384.14283	4785.0156	13312.69937	4536.32122	4007.4093	15752.35937	4416.72488	2695.7939	11932.18852	9524.01437	5498.04021	0.32671	0.32574	2.34E-02	6.43E-03	4.17E-03	8.48E-03	3.64E-03	3.22E-03	1.49E-02	3.71E-03	2.26E-03	6.35E-03	3.50E-03	2.02E-03	4.57E-06	5.52E-06	8.2068E-02
551711.38	4173206.27	10853.64211	8488.52997	1273.35009	5520.82997	1021.93777	22001.58857	11178.43234	4821.01386	753.25886	5619.27346	2405.76833	25835.31522	3.07497	2.95679	1.58E-02	7.39E-03	1.11E-03	3.52E-03	8.20E-04	1.77E-02	1.06E-02	4.05E-03	6.32E-04	2.99E-03	8.85E-04	9.51E-03	4.30E-05	5.01E-05	7.5079E-02
551460.28	4173022.69	5829.37474	13896.08402	1784.15629	17043.13853	1945.61528	9801.47107	5859.96123	8237.53957	1013.18418	15298.11968	6830.57361	12215.71975	1.20356	1.2286	8.51E-03	1.21E-02	1.55E-03	1.09E-02	1.56E-03	7.86E-03	5.55E-03	6.91E-03	8.50E-04	8.14E-03	2.51E-03	4.49E-03	1.68E-05	2.08E-05	7.0947E-02
551457.06	4173013.74	5789.82533	13738.06066	1797.47236	17529.71607	1972.22426	9340.39759	5816.57592	8097.85215	1020.87161	15579.77605	7095.62897	11670.27232	1.19601	1.22177	8.45E-03	1.20E-02	1.57E-03	1.12E-02	1.58E-03	7.49E-03	5.51E-03	6.79E-03	8.57E-04	8.29E-03	2.61E-03	4.29E-03	1.67E-05	2.07E-05	7.0619E-02
551925.14	4172773.98	12815.14417	6635.55063	5834.75203	15143.69547	6174.23374	3159.01309	12502.57351	3993.25444	3190.34323	13172.10633	12485.86396	4286.37975	0.35895	0.35818	1.87E-02	5.78E-03	5.08E-03	9.64E-03	4.95E-03	2.53E-03	1.18E-02	3.35E-03	2.68E-03	7.01E-03	4.59E-03	1.58E-03	5.02E-06	6.07E-06	7.7768E-02
551453.83	4173004.78	5757.56916	13561.55827	1818.14836	18062.17512	2002.7935	8924.04199	5780.24256	7937.52767	1032.91861	15915.38474	7352.13814	11173.32755	1.19403	1.21967	8.40E-03	1.18E-02	1.58E-03	1.15E-02	1.61E-03	7.16E-03	5.48E-03	6.66E-03	8.67E-04	8.47E-03	2.71E-03	4.11E-03	1.67E-05	2.07E-05	7.0397E-02
551437.28	4172929.75	5390.6257	11131.93012	2091.10647	22410.76498	2344.92211	6485.42327	5384.41702	6274.29693	1183.36909	18176.78733	10164.49126	8196.76639	1.25613	1.28956	7.87E-03	9.70E-03	1.82E-03	1.43E-02	1.88E-03	5.20E-03	5.10E-03	5.26E-03	9.93E-04	9.68E-03	3.74E-03	3.02E-03	1.76E-05	2.19E-05	6.8571E-02
551502.88	4173113.14	5979.24961	13189.93137	1625.69049	12207.23014	1590.19313	15044.04964	6040.44248	7890.57961	930.54588	11937.72026	4656.52455	17992.98417	1.35634	1.3806	8.73E-03	1.15E-02	1.42E-03	7.77E-03	1.28E-03	1.21E-02	5.73E-03	6.62E-03	7.81E-04	6.35E-03	1.71E-03	6.62E-03	1.90E-05	2.34E-05	7.0607E-02
551524.51	4173144.15	6208.81439	12715.86598	1571.44614	10537.06403	1455.68374	16922.4555	6279.00785	7708.17078	903.31831	10740.15212	4040.40997	19989.85911	1.56519	1.59576	9.06E-03	1.11E-02	1.37E-03	6.71E-03	1.17E-03	1.36E-02	5.95E-03	6.47E-03	7.58E-04	5.72E-03	1.49E-03	7.35E-03	2.19E-05	2.70E-05	7.0745E-02
551484.22	4172739.84	5084.8246	6889.64383	2559.00749	26787.59244	4138.09616	3783.15185	5054.63164	3910.77231	1400.41769	15660.45603	18841.7108	4923.98008	1.26954	1.3198	7.42E-03	6.00E-03	2.23E-03	1.71E-02	3.32E-03	3.04E-03	4.79E-03	3.28E-03	1.18E-03	8.34E-03	6.93E-03	1.81E-03	1.78E-05	2.24E-05	6.5431E-02
551639.42	4172687.33	9330.02291	4987.68791	5423.92468	14613.4385	11414.42268	2979.31562	9192.65892	3009.60437	2825.62456	10770.15871	20347.01304	4036.07853	0.64579	0.66336	1.36E-02	4.34E-03	4.72E-03	9.31E-03	9.16E-03	2.39E-03	8.71E-03	2.53E-03	2.37E-03	5.73E-03	7.49E-03	1.48E-03	9.04E-06	1.12E-05	7.1873E-02
551450.61	4172995.83	5709.13075	13294.78591	1836.93574	18556.55259	2030.58851	8512.50025	5727.82447	7725.87231	1043.83556	16183.95964	7614.11349	10677.43259	1.18894	1.21537	8.33E-03	1.16E-02	1.60E-03	1.18E-02	1.63E-03	6.83E-03	5.43E-03	6.48E-03	8.76E-04	8.61E-03	2.80E-03	3.93E-03	1.66E-05	2.06E-05	6.9956E-02
551950.41	4172789.14	14819.18487	7103.84203	5048.23611	13809.41225	5015.96378	3703.89036	14545.29114	4247.25295	2814.34105	12192.4312	10396.48666	5087.95864	0.33444	0.33357	2.16E-02	6.19E-03	4.40E-03	8.79E-03	4.02E-03	2.97E-03	1.38E-02	3.56E-03	2.36E-03	6.49E-03	3.83E-03	1.87E-03	4.68E-06	5.65E-06	7.9912E-02
551616.47	4172686.42	8459.10969	5322.62775	5006.30897	16292.62897	10458.66486	3115.34303	8345.40791	3190.86677	2647.88512	11895.21523	19619.2464	4198.083	0.66498	0.68095	1.23E-02	4.64E-03	4.36E-03	1.04E-02	8.39E-03	2.50E-03	7.91E-03	2.68E-03	2.22E-03	6.33E-03	7.22E-03	1.54E-03	9.30E-06	1.15E-05	7.0533E-02
551507.17	4172717.02	5448.8946	6533.30209	2841.64766	25669.1706	4767.72421	3600.10426	5409.72409	3738.51797	1554.74671	15195.01132	19044.48258	4710.63114	1.08924	1.12133	7.95E-03	5.69E-03	2.48E-03	1.63E-02	3.83E-03	2.89E-03	5.13E-03	3.14E-03	1.30E-03	8.09E-03	7.01E-03	1.73E-03	1.52E-05	1.90E-05	6.5608E-02
551475.62	4173065.57	5843.83548	13534.97748	1700.32898	14526.67159	1766.51416	12118.36217	5890.52211	8228.16057	968.03492	13672.18787	5653.64343	14589.17805	1.22225	1.24522	8.53E-03	1.18E-02	1.48E-03	9.25E-03	1.42E-03	9.72E-03	5.58E-03	6.90E-03	8.12E-04	7.28E-03	2.08E-03	5.37E-03	1.71E-05	2.11E-05	7.0252E-02
551447.38	4172986.88	5648.87316	12958.53121	1855.43204	19017.12517	2056.96044	8115.18782	5663.67434	7479.36186	1054.57018	16397.99944	7877.15139	10194.35365	1.18249	1.2095	8.25E-03	1.13E-02	1.62E-03	1.21E-02	1.65E-03	6.51E-03	5.37E-03	6.28E-03	8.85E-04	8.73E-03	2.90E-03	3.75E-03	1.65E-05	2.05E-05	6.9361E-02
551785.55	4172720.64	9372.17226	3502.03898	3720.67751	17798.89623	12244.64722	1982.33885	9250.84428	2000.35423	1887.42276	10414.19234	23468.64481	2677.74639	0.62814	0.63115	1.37E-02	3.05E-03	3.24E-03	1.13E-02	9.82E-03	1.59E-03	8.77E-03	1.68E-03	1.58E-03	5.54E-03	8.63E-03	9.85E-04	8.79E-06	1.07E-05	6.9931E-02
551543.04	4173166.57	6339.59436	12080.71714	1511.32023	9384.79385	1358.57715	18122.99634	6416.73398	7362.35495	872.07427	9683.54887	3646.49169	21241.17396	1.78988	1.82801	9.25E-03	1.05E-02	1.32E-03	5.98E-03	1.09E-03	1.45E-02	6.08E-03	6.18E-03	7.32E-04	5.15E-03	1.34E-03	7.82E-03	2.50E-05	3.10E-05	7.0056E-02
551899.77	4172758.69	10302.22413	5695.04736	6436.20633	16506.06921	7532.35697	2500.84464	10017.68112	3384.22296	3374.73021	13697.68765	14831.22045	3393.13356	0.38136	0.38094	1.50E-02	4.96E-03	5.61E-03	1.05E-02	6.04E-03	2.01E-03	9.49E-03	2.84E-03	2.83E-03	7.29E-03	5.46E-03	1.25E-03	5.34E-06	6.46E-06	7.3337E-02
551602.74	4173209.05	7100.61183	10143.87172	1359.64835	7206.72322	1171.2149	21418.73257	7214.84601	6088.74858	792.72081	7373.3344	2934.85641	24819.13416	3.60857	3.73879	1.04E-02	8.84E-03	1.18E-03	4.59E-03	9.40E-04	1.72E-02	6.84E-03	5.11E-03	6.65E-04	3.92E-03	1.08E-03	9.13E-03	5.05E-05	6.34E-05	6.9959E-02
551436.46	4172869.29	4958.77896	9071.31456	2204.65551	24634.72382	2738.77354	5205.50382	4941.61165	5106.22059	1230.00814	17527.29716	13120.12609	6618.51497	1.31311	1.35863	7.24E-03	7.90E-03	1.92E-03	1.57E-02	2.20E-03	4.18E-03	4.68E-03	4.28E-03	1.03E-03	9.33E-03	4.83E-03	2.44E-03	1.84E-05	2.30E-05	6.5752E-02
551444.16	4172977.93	5584.12638	12584.80588	1876.55493	19116.48964	2084.36159	7744.38432	5595.08883	7219.61555	1066.60137	16586.50123	8137.76481	9740.60048	1.17718	1.20411	8.15E-03	1.10E-02	1.63E-03	1.22E-02	1.67E-03	6.21E-03	5.30E-03	6.06E-03	8.95E-04	8.83E-03	2.99E-03	3.58E-03	1.65E-05	2.04E-05	6.8503E-02
551649.03	4173219.73	8067.37501	9088.51102	1295.24785	6226.84092	1083.6585	22212.73882	8231.1134	5337.76289	760.08482	6335.25118	2623.81246	25923.78586	15.77533	13.10886	1.18E-02	7.92E-03	1.13E-03	3.96E-03	8.69E-04	1.78E-02	7.80E-03	4.48E-03	6.38E-04	3.37E-03	9.65E-04	9.54E-03	2.21E-04	2.22E-04	7.0711E-02
551505.97	4173121.73	5932.51294	12783.38216	1592.56727	11658.61533	1543.27971	15087.27923	5994.37476	7660.8778	912.33111	11470.22483	4464.47302	17992.94716	1.35937	1.38366	8.66E-03	1.11E-02	1.39E-03	7.42E-03	1.24E-03	1.21E-02	5.68E-03	6.43E-03	7.65E-04	6.11E-03	1.64E-03	6.62E-03	1.90E-05	2.34E-05	6.9232E-02
551434.06	4172920.78	5247.77813	10543.87594	2083.92624	22270.20223	2357.07065	6153.82633	5239.50759	5942.84579	1177.13028	17769.04379	10339.98095	7782.74351	1.23131	1.26561	7.66E-03	9.18E-03	1.82E-03	1.42E-02	1.89E-03	4.94E-03	4.97E-03	4.99E-03	9.88E-04	9.46E-03	3.80E-03	2.86E-03	1.72E-05	2.14E-05	6.6772E-02
551481.53	4173082.31	5797.85029	13055.68958	1652.74505	13549.40052	1686.18042	12758.42462	5848.86609	7917.05181	942.17332	12858.79799	5235.22987	15518.57993	1.22476	1.24762	8.46E-03	1.14E-02	1.44E-03	8.63E-03	1.35E-03	1.02E-02	5.54E-03	6.64E-03	7.91E-04	6.84E-03	1.93E-03	5.71E-03	1.71E-05	2.11E-05	6.8985E-02
551460.65	4172770.83	4780.95786	7249.51414	2338.77302	26253.09101	3610.00789	4012.5316	4756.51752	4090.01482	1283.04786	15761.01895	17438.141	5186.75236	1.35874	1.42269	6.98E-03	6.31E-03	2.04E-03	1.67E-02	2.90E-03	3.22E-03	4.51E-03	3.43E-03	1.08E-03	8.39E-03	6.42E-03	1.91E-03	1.90E-05	2.41E-05	6.3935E-02
551574.14	4173194.3	6651.80869	10945.27117	1417.56823	8012.70269	1239.35652	19806.2015	6744.59924	6638.80695	822.74455	8258.27468	3192.67289	23020.12207	2.38002	2.44564	9.71E-03	9.53E-03	1.23E-03	5.10E-03	9.94E-04	1.59E-02	6.39E-03	5.57E-03	6.90E-04	4.40E-03	1.17E-03	8.47E-03	3.33E-05	4.14E-05	6.9232E-02
551433.65	4172890.55	5050.78759	9581.30535	2159.08244	23602.02274	2558.43068	5542.48026	5036.66438	5393.14898	1210.69709	17687.36644	11747.51381	7029.70672	1.27628	1.31746	7.37E-03	8.35E-03	1.88E-03	1.50E-02	2.05E-03	4.45E-03	4.77E-03	4.53E-03	1.02E-03	9.41E-03	4.32E-03	2.59E-03	1.79E-05	2.23E-05	6.5804E-02
551440.92	4172968.94	5510.74462	12170.47834	1898.11186	19490.81297	2111.91955	7391.19632	5517.95567	6946.81096	1078.56157	16722.64861	8398.31911	9306.25716	1.1713	1.19863	8.04E-03	1.06E-02	1.65E-03	1.24E-02	1.69E-03	5.93E-03	5.23E-03	5.83E-03	9.05E-04	8.90E-03	3.09E-03	3.42E-03	1.64E-05	2.03E-05	6.7748E-02
551939.86	4172777.05	13285.17038	6681.9477	5260.87311	14201.26797	5503.1784	3342.3834	12998.15368	4018.62837	2910.31307	12363.12223	11257.35216	4524.13303	0.34176	0.34102	1.94E-02	5.82E-03	4.58E-03	9.04E-03	4.42E-03	2.68E-03	1.23E-02	3.37E-03	2.44E-03	6.58E-03	4.14E-03	1.66E-03	4.78E-06	5.78E-06	7.6464E-02
551703.28	4173211.81	10220.68921	8372.69735	1259.02113	5510.5656	1016.11959	21039.56482	10509.3288	4776.95537	743.87172	5609.77847	2397.75715	24750.72237	3.83807	3.66725	1.49E-02	7.29E-03	1.10E-03	3.51E-03	8.15E-04	1.69E-02	9.96E-03	4.01E-03	6.24E-04	2.99E-03	8.82E-04	9.11E-03	5.37E-05	6.21E-05	7.2195E-02
551524.13	4172701.31	5724.17628	6208.93029	3069.74309	23805.8665	5348.50139	3447.67841	5676.59561	3579.04453	1675.98199	14508.25419	18506.02025	4531.79402	0.94253	0.96533	8.36E-03	5.41E-03	2.67E-03	1.52E-02	4.29E-03	2.77E-03	5.38E-03	3.00E-03	1.41E-03	7.72E-03	6.81E-03	1.67E-03	1.32E-05	1.64E-05	6.4670E-02
551837.73	4172732.83	7357.38619	3869.15206	5159.78944	17765.00316	11808.90258	1861.00303	7237.72817	2183.77539	2485.27277	12170.52417	21666.6557	2504.22637	0.48784	0.48753	1.07E-02	3.37E-03	4.49E-03	1.13E-02	9.47E-03	1.49E-03	6.86E-03	1.83E-03	2.09E-03	6.48E-03	7.97E-03	9.21E-04	6.83E-06	8.26E-06	6.7046E-02
551527.6	4173152.73	6123.07036	12175.76763	1528.20261	10029.96494	1409.06697	16604.3595	6193.03545	7387.48853	879.20695	10220.59244	3877.40564	19590.0377	1.56153	1.59202	8.94E-03	1.06E-02	1.33E-03	6.39E-03	1.13E-03	1.33E-02	5.87E-03	6.20E-03	7.38E-04	5.44E-03	1.43E-03	7.21E-03	2.18E-05	2.70E-05	6.8641E-02
551859.31	4172739.92	7576.33696	4325.29464	5907.16897	17642.29523	10713.69648	1951.25665	7412.20652	2473.23526	2897.82711	12913.58649	19570.4491	2630.88488	0.43493	0.43432	1.11E-02	3.77E-03	5.14E-03	1.12E-02	8.60E-03	1.57E-03	7.03E-03	2.08E-03	2.43E-03	6.87E-03	7.20E-03	9.68E-04	6.09E-06	7.36E-06	6.7953E-02
551659.8	4172686.34	9858.81887	4585.38806	5414.67068	13239.09594	11129.50693	2791.90244	9705.60163	2770.42534	2784.46478	9522.3504	20014.48077	3796.70145	0.61431	0.63168	1.44E-02	3.99E-03	4.72E-03	8.43E-03	8.93E-03	2.24E-03	9.20E-03	2.32E-03	2.34E-03	5.07E-03	7.36E-03	1.40E-03	8.60E-06	1.07E-05	7.0408E-02
551452.33	4172786.01	4704.02056	7410.21562	2274.79879	25729.07967	3416.60825	4130.7924	4681.04027	4174.17607	1250.72264	15745.3106	16668.57961	5321.91351	1.35512	1.41854	6.87E-03	6.45E-03	1.98E-03	1.64E-02	2.74E-03	3.31E-03	4.44E-03	3.50E-03	1.05E-03	8.38E-03	6.13E-03	1.96E-03	1.90E-05	2.40E-05	6.3243E-02
551437.7	4172959.97	5420.53572	11705.47288	1914.76796	19761.49738	2136.56141	7044.19066	5424.38638	6656.51138	1087.50713	16751.11915	8655.52293	8877.61529	1.16158	1.18923	7.91E-03	1.02E-02	1.67E-03	1.26E-02	1.71E-03	5.65E-03	5.14E-03	5.59E-03	9.12E-04	8.92E-03	3.18E-03	3.27E-03	1.63E-05	2.02E-05	6.6766E-02
551914.57	4172761.85	10854.57147	5904.58505	5989.58919	15491.8632	6702.40052	2721.26439	10567.3198	3583.88485	3202.19767	13140.92971	13374.264	3609.32915	0.36503	0.36436	1.58E-02	5.14E-03	5.22E-03	9.86E-03	5.38E-03	2.18E-03	1.00E-02	3.01E-03	2.69E-03	6.99E-03	4.92E-03	1.33E-03	5.11E-06	6.17E-06	7.2593E-02
551509.06	4173130.31	5892.57774	12395.41068	1560.57983	11117.65672	1495.94402	15080.69694	5954.93701	7446.75512	894.6708	11029.10322	4276.73253	17943.57648	1.3672	1.39158	8.60E-03	1.08E-02	1.36E-03	7.08E-03	1.20E-03	1.21E-02	5.64E-03	6.25E-03	7.51E-04	5.87E-03	1.57E-03	6.60E-03	1.91E-05	2.36E-05	6.7867E-02
551474.81	4172746.05	4872.61996	6810.29515	2409.0887	25574.6721	3832.17068	3765.40428	4845.74348	3860.1497	1319.34485	15152.44082	17594.41698	4890.67159	1.23563	1.28681	7.11E-03	5.93E-03	2.10E-03	1.63E-02	3.07E-03	3.02E-03	4.59E-03	3.24E-03	1.11E-03	8.07E-03	6.47E-03	1.80E-03	1.73E-05	2.18E-05	6.2838E-02
551557.67	4172685.77	6456.89322	5834.8207	3639.13081	20885.97176	6869.35915	3284.51864	6390.68051	3411.49103	1964.62577	13621.37991	18207.82815	4358.8326	0.77628	0.79195	9.42E-03	5.08E-03	3.17E-03	1.33E-02	5.51E-03	2.64E-03	6.06E-03	2.86E-03	1.65E-03	7.25E-03	6.70E-03	1.60E-03	1.09E-05	1.34E-05	6.5267E-02
551636.31	4173221.58	7676.61709	9108.6633	1289.24916	6336.66208	1087.90305	21372.97101	7824.20274	5382.95046	755.122	6454.91898	2654.94846	24900.0491	8.22792	8.7747	1.12E-02	7.93E-03	1.12E-03	4.03E-03	8.73E-04	1.71E-02	7.42E-03	4.52E-03	6.34E-04	3.44E-03	9.77E-04	9.16E-03	1.15E-04	1.49E-04	6.8721E-02
551965.07	4172792.14	14688.10729	6958.24932	4594.33961	12889.20112	4490.45286	3761.73371	14457.39087	4157.34525	2575.62348	11454.79909	9393.8148	5154.0709	0.31884	0.318	2.14E-02	6.06E-03	4.00E-03	8.21E-03	3.60E-03	3.02E-03	1.37E-02	3.49E-03	2.16E-03	6.10E-03	3.46E-03	1.90E-03	4.46E-06	5.39E-06	7.7141E-02
551448	4172794.42	4662.00629	7470.96927	2236.67003	25267.82086	3302.75794	4187.91263	4639.83663	4206.91778	1231.51389	15654.41959	16128.90884	5385.54569	1.33529	1.39636	6.80E-03	6.51E-03	1.95E-03	1.61E-02	2.65E-03	3.36E-03	4.40E-03	3.53E-03	1.03E-03	8.33E-03	5.93E-03	1.98E-03	1.87E-05	2.37E-05	6.2610E-02
551434.47	4172951.01	5323.80597	11229.06908	1930.10105	19978.39256	2161.82814	6717.29458	5324.50329	6368.53896	1095.30601	16718.30962	8867.37965	8472.54072	1.1507	1.17837	7.77E-03	9.78E-03	1.68E-03	1.27E-02	1.73E-03	5.39E-03	5.05E-03	5.34E-03	9.19E-04	8.90E-03	3.26E-03	3.12E-03	1.61E-05	2.00E-05	6.5701E-02
551434.05	4172860.37	4811.5971	8592.21703	2153.48234	23915.8029	2735.30213	4954.46572	4794.21609	4839.40205	1199.34285	16688.65221	13106.15088	6305.39812	1.26307	1.30747	7.02E-03	7.48E-03	1.88E-03	1.52E-02	2.19E-03	3.97E-03	4.54E-03	4.06E-03	1.01E-03	8.88E-03	4.82E-03	2.32E-03	1.77E-05	2.22E-05	6.3456E-02
551874.27	4172743.26	7862.5137	4598.13073	6043.16055	17136.34208	9638.15029	2022.94242	7667.86448	2656.62573	3022.94486	12991.67271	17701.22432	2732.96997	0.40533	0.40484	1.15E-02	4.00E-03	5.26E-03	1.09E-02	7.73E-03	1.62E-03	7.27E-03	2.23E-03	2.54E-03	6.92E-03	6.51E-03	1.01E-03	5.67E-06	6.86E-06	6.7491E-02
551583.21	4173202.84	6673.31363	10368.80769	1371.88091	7599.13176	1200.42065	19487.27935	6770.26809	6262.92332	797.33401	7771.3106	3063.77236	22663.33343	2.5869	2.66575	9.74E-03	9.03E-03	1.19E-03	4.84E-03	9.63E-04	1.56E-02	6.42E-03	5.25E-03	6.69E-04	4.14E-03	1.13E-03	8.34E-03	3.62E-05	4.52E-05	6.7427E-02
551487.45	4173099.05	5710.32791	12411.04873	1597.61117	12537.60171	1606.10277	13167.67322	5764.30927	7521.80107	912.06632	12003.18805	4856.30612	15891.56289	1.21919	1.24044	8.34E-03	1.08E-02	1.39E-03	7.98E-03	1.29E-03	1.06E-02	5.46E-03	6.31E-03	7.65E-04	6.39E-03	1.79E-03	5.85E-03	1.71E-05	2.10E-05	6.6973E-02
551430.83	4172911.82	5083.40625	9931.05914	2058.52312	21870.79472	2354.38404	5816.28414	5073.66345	5598.8002	1160.41385	17169.46123	10461.24805	7361.62973	1.1954	1.22904	7.42E-03	8.65E-03	1.79E-03	1.39E-02	1.89E-03	4.67E-03	4.81E-03	4.70E-03	9.74E-04	9.14E-03	3.85E-03	2.71E-03	1.67E-05	2.08E-05	6.4558E-02
551546.45	4173176.22	6222.65924	11396.98894	1457.19014	8859.8113	1306.1526	17429.87915	6299.2234	6939.33739	841.75842	9120.81537	3479.08419	20422.37041	1.78124	1.8191	9.08E-03	9.93E-03	1.27E-03	5.64E-03	1.05E-03	1.40E-02	5.97E-03	5.82E-03	7.06E-04	4.85E-03	1.28E-03	7.51E-03	2.49E-05	3.08E-05	6.7156E-02
551974.56	4172799.99	15058.22563	7053.09209	4356.12058	12415.15547	4143.48368	3938.48001	14845.68691	4214.34322	2458.18549	11135.31742	8748.55701	5387.03703	0.31165	0.31077	2.20E-02	6.14E-03	3.79E-03	7.91E-03	3.32E-03	3.16E-03	1.41E-02	3.54E-03	2.06E-03	5.93E-03	3.22E-03	1.98E-03	4.36E-06	5.27E-06	7.7113E-02
551514.49	4172704.15	5452.88763	6154.69006	2859.34221	23445.91664	4855.81663	3427.22755	5410.98638	3537.61248	1564.05624	14209.90618	17729.36816	4493.23954	0.9474	0.97154	7.96E-03	5.36E-03	2.49E-03	1.49E-02	3.90E-03	2.75E-03	5.13E-03	2.97E-03	1.31E-03	7.56E-03	6.52E-03	1.65E-03	1.33E-05	1.65E-05	6.2564E-02
551626.93	4172681.43	8533.30395	4959.39648	4916.21508	14489.27582	10124.5336	2952.29594	8415.93528	2982.3455	2585.50145	10754.90493	18424.39583	3985.71486	0.59773	0.61183	1.25E-02	4.32E-03	4.28E-03	9.23E-03	8.12E-03	2.37E-03	7.98E-03	2.50E-03	2.17E-03	5.72E-03	6.78E-03	1.47E-03	8.36E-06	1.04E-05	6.7412E-02
551512.15	4173138.9	5891.55635	12017.65421	1529.07257	10592.70323	1448.57581	15021.66047	5954.87758	7240.00825	877.20316	10604.88813	4095.01195	17840.10444	1.3784	1.40318	8.60E-03	1.05E-02	1.33E-03	6.74E-03	1.16E-03	1.21E-02	5.64E-03	6.07E-03	7.36E-04	5.64E-03	1.51E-03	6.56E-03	1.93E-05	2.38E-05	6.6571E-02
551530.69	4173161.32	6034.55929	11640.36551	1484.52335	9549.38052	1363.65206	16210.54672	6104.15223	7065.69681	854.7798	9720.41214	3722.52787	19111.02818	1.55586	1.58624	8.81E-03	1.01E-02	1.29E-03	6.08E-03	1.09E-03	1.30E-02	5.79E-03	5.93E-03	7.17E-04	5.17E-03	1.37E-03	7.03E-03	2.18E-05	2.69E-05	6.6475E-02
551443.68	4172802.82	4613.97047	7499.77737	2192.57114	24640.15604	3178.80325	4233.83566	4592.68427	4223.46977	1209.10946	15480.79655	15478.3999	5434.53484	1.30097	1.35831	6.73E-03	6.53E-03	1.91E-03	1.57E-02	2.55E-03	3.40E-03	4.35E-03	3.54E-03	1.01E-03	8.24E-03	5.69E-03	2.00E-03	1.82E-05	2.30E-05	6.1700E-02
551431.24	4172942.04	5218.77508	10744.0576	1941.70175	20118.86464	2186.66122	6405.60464	5216.6416	6082.88973	1100.60884	16608.32884	9050.99485	8085.25558	1.13789	1.16636	7.62E-03	9.36E-03	1.69E-03	1.28E-02	1.75E-03	5.14E-03	4.94E-03	5.10E-03	9.23E-04	8.84E-03	3.33E-03	2.97E-03	1.59E-05	1.98E-05	6.4523E-02
551929.32	4172764.95	11402.93759	6140.62757	5516.85548	14471.30403	5982.04882	2896.18805	11123.1115	3683.84102	2994.05174	12522.27737	12081.25356	3934.1035	0.34832	0.34775	1.66E-02	5.35E-03	4.81E-03	9.21E-03	4.80E-03	2.32E-03	1.05E-02	3.09E-03	2.51E-03	6.67E-03	4.45E-03	1.45E-03	4.87E-06	5.89E-06	7.1849E-02
551954.55	4172780.08	13325.51094	6638.95263	4807.05191	13318.98528	4935.02868	3450.26205	13065.14636	3982.66206	2671.03589	11649.28804	10205.9592	4667.86309	0.32615	0.32542	1.95E-02	5.78E-03	4.19E-03	8.48E-03	3.96E-03	2.77E-03	1.24E-02	3.34E-03	2.24E-03	6.20E-03	3.76E-03	1.72E-03	4.56E-06	5.51E-06	7.4277E-02
551889.16	4172746.53	8544.11023	4954.02212	6059.37486	16539.68293	8378.67209	2164.06499	8316.8196	2895.79224	3097.5772	12997.96394	15580.23814	2931.61426	0.38523	0.38501	1.25E-02	4.31E-03	5.28E-03	1.05E-02	6.72E-03	1.74E-03	7.88E-03	2.43E-03	2.60E-03	6.92E-03	5.73E-03	1.08E-03	5.39E-06	6.52E-06	6.7707E-02
551430.42	4172881.59	4862.11395	8961.16446	2098.2357	22697.16516	2532.94926	5221.13426	4847.6295	5052.34954	1174.14413	16728.09677	11650.60027	6625.8158	1.2068	1.24639	7.10E-03	7.80E-03	1.83E-03	1.45E-02	2.03E-03	4.19E-03	4.59E-03	4.24E-03	9.85E-04	8.90E-03	4.29E-03	2.44E-03	1.69E-05	2.11E-05	6.2888E-02
551490.41	4173107.42	5661.14777	12074.86425	1568.66716	12048.41321	1565.74358	13284.5445	5716.1166	7318.65939	896.24557	11579.95409	4676.51082	15977.31717	1.21608	1.23692	8.26E-03	1.05E-02	1.37E-03	7.67E-03	1.26E-03	1.07E-02	5.42E-03	6.14E-03	7.52E-04	6.16E-03	1.72E-03	5.88E-03	1.70E-05	2.10E-05	6.5844E-02
551647.27	4172681.96	9184.29162	4639.00086	5122.42841	13143.78466	10470.84805	2811.49848	9048.83161	2800.24604	2659.38537	9725.66052	18637.95448	3812.33851	0.57763	0.59274	1.34E-02	4.04E-03	4.46E-03	8.37E-03	8.40E-03	2.26E-03	8.58E-03	2.35E-03	2.23E-03	5.18E-03	6.86E-03	1.40E-03	8.08E-06	1.00E-05	6.7546E-02
551725.04	4173208.86	10838.62271	7801.07971	1211.09144	5173.88517	974.45051	19306.86458	11179.75969	4420.99179	716.47567	5240.94745	2289.31084	22721.92659	2.4036	2.32247	1.58E-02	6.79E-03	1.05E-03	3.29E-03	7.82E-04	1.55E-02	1.06E-02	3.71E-03	6.01E-04	2.79E-03	8.42E-04	8.36E-03	3.36E-05	3.94E-05	7.0208E-02
551673.01	4172684.76	10017.53384	4295.99072	5185.77167	12514.26611	10355.57099	2646.63149	9859.06441	2591.73226	2650.24232	8721.32588	19179.81968	3604.96662	0.59215	0.60901	1.46E-02	3.74E-03	4.52E-03	7.97E-03	8.31E-03	2.12E-03	9.34E-03	2.17E-03	2.22E-03	4.64E-03	7.06E-03	1.33E-03	8.29E-06	1.03E-05	6.8067E-02
551817.89	4172722.56	7463.33608	3461.83923	4096.00944	17015.59658	11602.85311	1807.0699	7367.40222	1954.35737	1998.149	10847.06976	21544.57063	2429.25155	0.52932	0.53029	1.09E-02	3.02E-03	3.57E-03	1.08E-02	9.31E-03	1.45E-03	6.98E-03	1.64E-03	1.68E-03	5.77E-03	7.93E-03	8.94E-04	7.41E-06	8.99E-06	6.3980E-02
551451.02	4173026.03	5468.10641	12445.67401	1665.03838	15558.48063	1826.76376	8983.76181	5497.15332	7379.43876	945.2185	13826.94172	6395.27336	11191.96539	1.0815	1.10261	7.98E-03	1.08E-02	1.45E-03	9.91E-03	1.47E-03	7.21E-03	5.21E-03	6.19E-03	7.93E-04	7.36E-03	2.35E-03	4.12E-03	1.51E-05	1.87E-05	6.4911E-02
551427.61	4172902.85	4934.87256	9395.15517	2035.27029	21530.50199	2361.98498	5523.48718	4923.86603	5298.92482	1144.75398	16610.24392	10421.62217	6995.47343	1.16314	1.19683	7.20E-03	8.18E-03	1.77E-03	1.37E-02	1.90E-03	4.43E-03	4.67E-03	4.45E-03	9.61E-04	8.84E-03	3.83E-03	2.57E-03	1.63E-05	2.03E-05	6.2554E-02
551457.46	4173043.93	5501.30445	12478.68617	1637.93494	14706.69569	1772.87726	9772.26	5536.89586	7443.94155	929.86059	13272.81242	5955.58385	12100.93267	1.09102	1.11156	8.03E-03	1.09E-02	1.43E-03	9.36E-03	1.42E-03	7.84E-03	5.25E-03	6.25E-03	7.80E-04	7.06E-03	2.19E-03	4.45E-03	1.53E-05	1.88E-05	6.4969E-02
551454.24	4173034.98	5481.37212	12467.09742	1648.98123	15112.48317	1799.16104	9363.92674	5513.83379	7421.51107	935.98418	13525.73483	6178.78046	11632.7601	1.08408	1.1053	8.00E-03	1.09E-02	1.44E-03	9.62E-03	1.44E-03	7.51E-03	5.23E-03	6.23E-03	7.85E-04	7.20E-03	2.27E-03	4.28E-03	1.52E-05	1.87E-05	6.4900E-02
551465.4	4172752.27	4684.40326	6724.21852	2281.87632	24359.1625	3576.1706	3746.51343	4660.10955	3806.91027	1250.67511	14649.64205	16424.56408	4855.85284	1.19338	1.2439	6.84E-03	5.86E-03	1.99E-03	1.55E-02	2.87E-03	3.01E-03	4.42E-03	3.19E-03	1.05E-03	7.80E-03	6.04E-03	1.79E-03	1.67E-05	2.11E-05	6.0393E-02
551447.79	4173017.07	5437.48043	12335.89941	1677.95808	15974.57811	1851.01787	8592.08891	5463.05311	7278.48613	952.73247	14074.51876	6618.2809	10730.73235	1.07586	1.09735	7.94E-03	1.07E-02	1.46E-03	1.02E-02	1.49E-03	6.89E-03	5.18E-03	6.11E-03	7.99E-04	7.49E-03	2.44E-03	3.95E-03	1.51E-05	1.86E-05	6.4685E-02
551515.24	4173147.48	5827.88176	11606.04334	1494.20782	10100.67666	1403.56233	14861.80225	5891.26293	7006.40684	857.83181	10162.24093	3928.71649	17622.46967	1.38285	1.40787	8.51E-03	1.01E-02	1.30E-03	6.43E-03	1.13E-03	1.19E-02	5.58E-03	5.88E-03	7.20E-04	5.41E-03	1.45E-03	6.48E-03	1.93E-05	2.39E-05	6.4962E-02
551592.28	4173211.39	6609.16468	9780.39093	1325.24723	7186.67101	1159.49642	18963.36863	6709.61772	5882.43173	771.15983	7303.27959	2933.94071	22075.65297	2.85578	2.94866	9.65E-03	8.52E-03	1.15E-03	4.58E-03	9.30E-04	1.52E-02	6.36E-03	4.94E-03	6.47E-04	3.89E-03	1.08E-03	8.12E-03	4.00E-05	5.00E-05	6.5162E-02
551444.57	4173008.12	5400.69419	12172.92069	1692.20448	16386.80291	1874.94846	8215.34306	5422.66789	7140.2785	961.12716	14310.71652	6840.27213	10282.29606	1.07028	1.09241	7.88E-03	1.06E-02	1.47E-03	1.04E-02	1.50E-03	6.59E-03	5.14E-03	5.99E-03	8.06E-04	7.62E-03	2.52E-03	3.78E-03	1.50E-05	1.85E-05	6.4377E-02
551428.02	4172933.08	5088.35809	10209.97097	1938.8612	20042.95457	2176.81137	6082.87515	5083.95375	5776.26508	1097.50253	16319.55442	9178.57221	7683.16759	1.1156	1.1442	7.43E-03	8.89E-03	1.69E-03	1.28E-02	1.75E-03	4.88E-03	4.82E-03	4.85E-03	9.21E-04	8.69E-03	3.38E-03	2.83E-03	1.56E-05	1.94E-05	6.2909E-02
551493.61	4173116.48	5604.21866	11902.33235	1536.25832	11532.0362	1522.00968	13338.95981	5659.89374	7098.07598	878.50054	11125.43589	4489.34012	15991.09476	1.21253	1.23298	8.18E-03	1.04E-02	1.34E-03	7.34E-03	1.22E-03	1.07E-02	5.36E-03	5.96E-03	7.37E-04	5.92E-03	1.65E-03	5.88E-03	1.70E-05	2.09E-05	6.4703E-02
551772.98	4172714.29	9484.54022	3337.87004	3320.62417	16404.56866	10133.74152	1970.04483	9360.12721	1924.39274	1721.68479	9198.75858	21024.48152	2665.38571	0.65343	0.66091	1.38E-02	2.91E-03	2.89E-03	1.04E-02	8.13E-03	1.58E-03	8.87E-03	1.61E-03	1.44E-03	4.90E-03	7.74E-03	9.81E-04	9.14E-06	1.12E-05	6.5364E-02
551903.99	4172749.72	9128.98632	5215.50625	5872.4114	15680.0155	7316.12988	2297.87141	8883.55237	3080.17135	3060.28971	12762.88613	14129.40517	3115.85976	0.36726	0.36699	1.33E-02	4.54E-03	5.11E-03	9.98E-03	5.87E-03	1.84E-03	8.42E-03	2.58E-03	2.57E-03	6.79E-03	5.20E-03	1.15E-03	5.14E-06	6.22E-06	6.7402E-02
551944.03	4172768.01	12009.64058	6231.89346	5005.11107	13619.21744	5356.34422	3095.78995	11748.14795	3744.40252	2752.23212	11805.5698	10934.94347	4188.62743	0.33221	0.33162	1.75E-02	5.43E-03	4.36E-03	8.67E-03	4.30E-03	2.48E-03	1.11E-02	3.14E-03	2.31E-03	6.28E-03	4.02E-03	1.54E-03	4.65E-06	5.62E-06	7.1215E-02
551589.63	4172675.63	7158.25251	5298.05965	4102.90523	16993.47757	8139.47632	3065.01743	7073.94828	3141.36161	2194.79345	11970.22513	17238.67214	4100.55833	0.63513	0.64721	1.04E-02	4.61E-03	3.57E-03	1.08E-02	6.53E-03	2.46E-03	6.70E-03	2.64E-03	1.84E-03	6.37E-03	6.34E-03	1.51E-03	8.89E-06	1.10E-05	6.3871E-02
551441.34	4172999.17	5355.99817	11953.61987	1707.61603	16785.36005	1898.2653	7852.57935	5374.36875	6967.64286	970.17057	14524.06423	7060.80159	9845.82364	1.06462	1.08702	7.82E-03	1.04E-02	1.49E-03	1.07E-02	1.52E-03	6.30E-03	5.09E-03	5.85E-03	8.14E-04	7.73E-03	2.60E-03	3.62E-03	1.49E-05	1.84E-05	6.3966E-02
551430.64	4172839.5	4590.67254	7861.84823	2093.49106	23178.72118	2805.75272	4550.44524	4572.45705	4432.31974	1161.62015	15489.4611	13445.16998	5802.46046	1.21342	1.25848	6.70E-03	6.85E-03	1.82E-03	1.48E-02	2.25E-03	3.65E-03	4.33E-03	3.72E-03	9.75E-04	8.24E-03	4.95E-03	2.13E-03	1.70E-05	2.13E-05	6.0425E-02
551973.66	4172788.19	13847.06048	6663.31357	4316.05893	12295.35101	4264.59649	3650.12945	13635.63882	3978.09937	2418.33968	10901.31917	8940.24999	4991.46	0.3084	0.30766	2.02E-02	5.80E-03	3.76E-03	7.83E-03	3.42E-03	2.93E-03	1.29E-02	3.34E-03	2.03E-03	5.80E-03	3.29E-03	1.84E-03	4.32E-06	5.21E-06	7.3182E-02
551503.95	4172707.71	5177.94055	6085.77599	2651.07971	22897.71317	4392.71091	3402.13167	5141.58197	3488.49209	1451.86462	13847.22483	16841.54081	4448.72469	0.94833	0.9742	7.56E-03	5.30E-03	2.31E-03	1.46E-02	3.52E-03	2.73E-03	4.87E-03	2.93E-03	1.22E-03	7.37E-03	6.20E-03	1.64E-03	1.33E-05	1.65E-05	6.0253E-02
551533.78	4173169.91	5946.61761	11122.2535	1441.60943	9092.04869	1319.16014	15772.84752	6015.84671	6752.1875	830.67439	9247.76377	3573.87032	18586.24037	1.55122	1.5816	8.68E-03	9.69E-03	1.26E-03	5.79E-03	1.06E-03	1.27E-02	5.70E-03	5.67E-03	6.97E-04	4.92E-03	1.31E-03	6.84E-03	2.17E-05	2.68E-05	6.4313E-02
551477.82	4172732.5	4790.86519	6406.47824	2360.95101	23738.99196	3767.84456	3572.52432	4763.83037	3642.50931	1293.19303	14210.60433	16478.70736	4645.51148	1.09492	1.1352	6.99E-03	5.58E-03	2.06E-03	1.51E-02	3.02E-03	2.87E-03	4.52E-03	3.06E-03	1.09E-03	7.56E-03	6.06E-03	1.71E-03	1.53E-05	1.92E-05	5.9661E-02
551466.33	4173068.85	5467.3237	12083.01531	1593.97774	13426.73819	1675.21369	10740.71511	5510.58558	7224.08076	906.88709	12498.32026	5378.84001	13159.03805	1.0973	1.1178	7.98E-03	1.05E-02	1.39E-03	8.55E-03	1.34E-03	8.62E-03	5.22E-03	6.06E-03	7.61E-04	6.65E-03	1.98E-03	4.84E-03	1.54E-05	1.89E-05	6.3956E-02
551657.13	4172680.91	9349.68824	4425.13116	5043.8685	12416.18384	10134.35994	2708.63684	9208.95413	2671.93565	2604.83158	9089.27598	18169.28735	3678.89248	0.5571	0.572	1.36E-02	3.85E-03	4.39E-03	7.91E-03	8.13E-03	2.17E-03	8.73E-03	2.24E-03	2.19E-03	4.84E-03	6.69E-03	1.35E-03	7.80E-06	9.69E-06	6.6154E-02
551579.41	4172674.79	6817.17829	5355.01649	3869.88068	17608.59263	7542.13202	3079.93584	6740.52651	3161.78836	2076.09834	12169.95021	16931.00474	4110.07352	0.64896	0.66096	9.95E-03	4.66E-03	3.37E-03	1.12E-02	6.05E-03	2.47E-03	6.39E-03	2.65E-03	1.74E-03	6.48E-03	6.23E-03	1.51E-03	9.08E-06	1.12E-05	6.2743E-02
551438.12	4172990.22	5299.85581	11673.35521	1722.49617	16857.29682	1920.1087	7499.81456	5314.72835	6762.88207	978.84063	14691.40623	7282.33391	9417.44317	1.05772	1.08034	7.74E-03	1.02E-02	1.50E-03	1.07E-02	1.54E-03	6.02E-03	5.04E-03	5.67E-03	8.21E-04	7.82E-03	2.68E-03	3.46E-03	1.48E-05	1.83E-05	6.3225E-02
551469.29	4173077.22	5449.14551	11898.33958	1574.13726	13011.86212	1640.16844	11215.49903	5494.4257	7214.39647	896.10523	12164.03199	5189.88996	13457.57868	1.09744	1.11634	7.95E-03	1.04E-02	1.37E-03	8.29E-03	1.32E-03	9.00E-03	5.21E-03	6.05E-03	7.52E-04	6.47E-03	1.91E-03	4.95E-03	1.54E-05	1.89E-05	6.3670E-02
551496.7	4173125.06	5572.30589	11592.07917	1508.72636	11060.21576	1479.10548	13378.74221	5628.54388	6924.78754	863.39908	10742.68301	4309.34112	15999.06741	1.21718	1.2376	8.13E-03	1.01E-02	1.31E-03	7.04E-03	1.19E-03	1.07E-02	5.33E-03	5.81E-03	7.24E-04	5.72E-03	1.59E-03	5.89E-03	1.70E-05	2.10E-05	6.3605E-02
551568.15	4172675.45	6499.1789	5440.9176	3649.68792	18417.85653	6971.26328	3109.42413	6429.70106	3197.81976	1963.53401	12442.69525	16799.0257	4137.6244	0.67484	0.68731	9.49E-03	4.74E-03	3.18E-03	1.17E-02	5.59E-03	2.49E-03	6.09E-03	2.68E-03	1.65E-03	6.62E-03	6.18E-03	1.52E-03	9.44E-06	1.16E-05	6.1991E-02
551551.03	4173187.73	6098.0157	10646.58362	1395.22599	8279.94275	1246.80631	16638.75162	6174.35339	6472.97467	807.54452	8501.01827	3291.44995	19490.63067	1.78233	1.82066	8.90E-03	9.27E-03	1.22E-03	5.27E-03	1.00E-03	1.33E-02	5.85E-03	5.43E-03	6.78E-04	4.52E-03	1.21E-03	7.17E-03	2.49E-05	3.09E-05	6.3935E-02
551636.74	4172677.85	8621.62114	4669.33202	4829.42016	13194.06526	9793.0372	2818.27727	8500.45591	2813.27362	2526.26555	9867.32886	17547.35727	3811.31496	0.55183	0.56488	1.26E-02	4.07E-03	4.21E-03	8.40E-03	7.86E-03	2.26E-03	8.06E-03	2.36E-03	2.12E-03	5.25E-03	6.46E-03	1.40E-03	7.72E-06	9.57E-06	6.5042E-02
551716.94	4173214.4	10245.89272	7722.89255	1201.03982	5175.85832	971.67862	18528.0333	10550.9328	4388.95358	709.82977	5237.73352	2287.04003	21878.10189	2.874	2.76125	1.50E-02	6.73E-03	1.05E-03	3.30E-03	7.80E-04	1.49E-02	1.00E-02	3.68E-03	5.96E-04	2.79E-03	8.41E-04	8.05E-03	4.02E-05	4.68E-05	6.7713E-02
551427.2	4172872.62	4696.29779	8426.30094	2042.04701	21917.08372	2515.79432	4941.31998	4681.52344	4756.37253	1140.45723	15860.32438	11582.20137	6274.87142	1.14952	1.18666	6.86E-03	7.34E-03	1.78E-03	1.40E-02	2.02E-03	3.96E-03	4.44E-03	3.99E-03	9.57E-04	8.44E-03	4.26E-03	2.31E-03	1.61E-05	2.01E-05	6.0344E-02
551521.35	4172691.88	5467.19365	5834.56832	2885.21757	21611.09176	4978.74544	3278.00116	5422.3706	3366.93372	1575.21393	13384.09931	16711.71929	4306.51879	0.84404	0.86332	7.98E-03	5.08E-03	2.51E-03	1.38E-02	3.99E-03	2.63E-03	5.14E-03	2.83E-03	1.32E-03	7.12E-03	6.15E-03	1.58E-03	1.18E-05	1.46E-05	6.0130E-02
551434.89	4172981.27	5240.66069	11362.27841	1740.19402	17180.07368	1943.05556	7170.03117	5252.09433	6545.4699	988.9902	14845.01376	7499.13716	9014.57601	1.05197	1.07478	7.65E-03	9.90E-03	1.52E-03	1.09E-02	1.56E-03	5.75E-03	4.98E-03	5.49E-03	8.30E-04	7.90E-03	2.76E-03	3.32E-03	1.47E-05	1.82E-05	6.2622E-02
551424.79	4172924.11	4956.30786	9694.49001	1931.45315	19907.12514	2185.19745	5780.61542	4949.95533	5482.93991	1091.4267	15972.01162	9313.58693	7306.16642	1.09303	1.12151	7.23E-03	8.44E-03	1.68E-03	1.27E-02	1.75E-03	4.64E-03	4.69E-03	4.60E-03	9.16E-04	8.50E-03	3.43E-03	2.69E-03	1.53E-05	1.90E-05	6.1286E-02
551918.78	4172752.86	9680.41473	5434.14095	5575.20846	14818.54965	6423.8933	2449.00466	9427.8351	3238.17777	2956.59285	12391.15841	12822.0323	3320.61239	0.35122	0.35101	1.41E-02	4.73E-03	4.86E-03	9.44E-03	5.15E-03	1.96E-03	8.94E-03	2.72E-03	2.48E-03	6.60E-03	4.72E-03	1.22E-03	4.91E-06	5.95E-06	6.6952E-02
551557.34	4172675.93	6209.69049	5497.3166	3443.58783	19074.04001	6443.34211	3127.41171	6146.50259	3217.19972	1857.61926	12614.28756	16650.35802	4149.83454	0.7008	0.71398	9.06E-03	4.79E-03	3.00E-03	1.21E-02	5.17E-03	2.51E-03	5.83E-03	2.70E-03	1.56E-03	6.71E-03	6.13E-03	1.53E-03	9.81E-06	1.21E-05	6.1148E-02
551431.66	4172972.27	5181.87629	11037.45155	1762.12808	17523.14579	1968.86322	6866.94956	5189.80327	6326.62283	1001.19038	14996.8596	7710.39706	8642.70887	1.0477	1.07084	7.56E-03	9.61E-03	1.53E-03	1.12E-02	1.58E-03	5.51E-03	4.92E-03	5.31E-03	8.40E-04	7.98E-03	2.84E-03	3.18E-03	1.47E-05	1.81E-05	6.2058E-02
551495.46	4172711.26	5002.70044	6072.30703	2523.39535	22681.90199	4122.62913	3400.04504	4969.8239	3473.08559	1382.36131	13689.99814	16378.99775	4438.04476	0.96332	0.99154	7.30E-03	5.29E-03	2.20E-03	1.44E-02	3.31E-03	2.73E-03	4.71E-03	2.91E-03	1.16E-03	7.29E-03	6.03E-03	1.63E-03	1.35E-05	1.68E-05	5.9028E-02
551962.65	4172775.55	12581.41759	6356.77227	4510.68727	12701.35803	4680.65288	3343.47516	12343.36837	3808.8656	2505.3093	11081.7547	9700.91185	4518.47613	0.31526	0.31463	1.84E-02	5.54E-03	3.93E-03	8.09E-03	3.76E-03	2.68E-03	1.17E-02	3.20E-03	2.10E-03	5.90E-03	3.57E-03	1.66E-03	4.41E-06	5.33E-06	7.0492E-02
551518.33	4173156.07	5748.21688	11146.43861	1454.40741	9644.67885	1361.4988	14573.36562	5811.3238	6734.69087	835.71769	9694.03579	3779.03002	17264.38226	1.37537	1.40014	8.39E-03	9.71E-03	1.27E-03	6.14E-03	1.09E-03	1.17E-02	5.51E-03	5.65E-03	7.01E-04	5.16E-03	1.39E-03	6.35E-03	1.92E-05	2.37E-05	6.3096E-02
551834.05	4172723.51	6801.86376	3503.65161	4336.60986	16501.06934	10841.29338	1752.54116	6704.60509	1976.5709	2102.55019	10947.90221	20180.93154	2353.52979	0.48903	0.48952	9.93E-03	3.05E-03	3.78E-03	1.05E-02	8.70E-03	1.41E-03	6.35E-03	1.66E-03	1.76E-03	5.83E-03	7.43E-03	8.66E-04	6.84E-06	8.30E-06	6.1279E-02
551475.21	4173093.96	5410.08448	11503.13058	1533.29842	12218.65572	1567.31735	11673.21676	5458.49289	6947.55655	873.98899	11507.46923	4821.03944	14157.97738	1.10334	1.12181	7.90E-03	1.00E-02	1.34E-03	7.78E-03	1.26E-03	9.37E-03	5.17E-03	5.83E-03	7.33E-04	6.13E-03	1.77E-03	5.21E-03	1.54E-05	1.90E-05	6.2533E-02
551863.63	4172731.06	6769.80853	3961.57367	5164.22253	16316.22095	9746.43758	1818.66706	6631.37484	2257.78176	2538.57472	11760.18209	18209.07847	2448.57852	0.4228	0.42261	9.88E-03	3.45E-03	4.50E-03	1.04E-02	7.82E-03	1.46E-03	6.29E-03	1.89E-03	2.13E-03	6.26E-03	6.70E-03	9.01E-04	5.92E-06	7.16E-06	6.1681E-02
551424.38	4172893.89	4757.75161	8811.56158	1987.29718	20831.1488	2342.28996	5210.76381	4746.08431	4976.21292	1115.45505	15829.77137	10365.86619	6602.76629	1.11133	1.14475	6.94E-03	7.67E-03	1.73E-03	1.33E-02	1.88E-03	4.18E-03	4.50E-03	4.18E-03	9.36E-04	8.43E-03	3.81E-03	2.43E-03	1.56E-05	1.94E-05	5.9988E-02
551499.79	4173133.65	5534.61766	11269.73316	1479.99874	10581.73384	1436.55755	13354.43286	5591.22391	6746.71192	847.5788	10358.44343	4137.55024	15937.27701	1.22157	1.24199	8.08E-03	9.82E-03	1.29E-03	6.74E-03	1.15E-03	1.07E-02	5.30E-03	5.66E-03	7.11E-04	5.51E-03	1.52E-03	5.86E-03	1.71E-05	2.10E-05	6.2397E-02
551428.43	4172963.31	5101.77742	10649.36037	1777.07037	17747.36665	1990.39691	6559.48015	5106.63616	6081.19222	1009.24853	15030.69282	7899.93049	8263.38441	1.03852	1.06209	7.45E-03	9.28E-03	1.55E-03	1.13E-02	1.60E-03	5.26E-03	4.84E-03	5.10E-03	8.47E-04	8.00E-03	2.91E-03	3.04E-03	1.45E-05	1.80E-05	6.1199E-02
551452.97	4172764.65	4491.2152	6699.17062	2152.88551	23103.4301	3298.23432	3771.9156	4469.46512	3786.76244	1181.69109	14191.35118	15163.73854	4872.16457	1.1541	1.20346	6.56E-03	5.83E-03	1.88E-03	1.47E-02	2.65E-03	3.03E-03	4.24E-03	3.18E-03	9.92E-04	7.55E-03	5.58E-03	1.79E-03	1.61E-05	2.04E-05	5.8016E-02
551545.57	4172676.99	5890.5603	5517.28279	3208.81491	19488.56755	5846.8332	3131.62543	5834.19699	3215.06536	1736.86853	12639.01185	16291.35184	4142.20801	0.72195	0.73583	8.60E-03	4.81E-03	2.79E-03	1.24E-02	4.69E-03	2.51E-03	5.53E-03	2.70E-03	1.46E-03	6.73E-03	5.99E-03	1.52E-03	1.01E-05	1.25E-05	5.9764E-02
551429.66	4172828.01	4461.3216	7464.63486	2045.30832	22364.02465	2802.18461	4330.69988	4443.08479	4211.80586	1133.20628	14743.96046	13292.35129	5528.93924	1.16254	1.2065	6.51E-03	6.50E-03	1.78E-03	1.42E-02	2.25E-03	3.47E-03	4.21E-03	3.53E-03	9.51E-04	7.85E-03	4.89E-03	2.03E-03	1.63E-05	2.04E-05	5.8263E-02
551878.56	4172734.36	7098.27749	4244.29396	5386.3548	15994.90891	8928.71031	1899.02959	6931.18912	2448.34366	2695.14031	11971.04265	16566.59866	2560.61949	0.3907	0.39038	1.04E-02	3.70E-03	4.69E-03	1.02E-02	7.16E-03	1.52E-03	6.57E-03	2.05E-03	2.26E-03	6.37E-03	6.10E-03	9.42E-04	5.47E-06	6.62E-06	6.1927E-02
551622.14	4173227.33	6915.77288	8716.65113	1245.82166	6309.61703	1073.36334	18621.57799	7037.05798	5179.27891	727.70647	6377.17848	2649.27818	21736.18695	4.84135	5.06075	1.01E-02	7.59E-03	1.09E-03	4.02E-03	8.61E-04	1.49E-02	6.67E-03	4.35E-03	6.11E-04	3.39E-03	9.75E-04	8.00E-03	6.77E-05	8.58E-05	6.2737E-02
551933.52	4172755.95	10128.05736	5590.18663	5188.97856	13949.87201	5774.15258	2654.96009	9878.34415	3390.6498	2795.67553	11868.71436	11661.02566	3515.72965	0.33718	0.33669	1.48E-02	4.87E-03	4.52E-03	8.88E-03	4.63E-03	2.13E-03	9.36E-03	2.84E-03	2.35E-03	6.32E-03	4.29E-03	1.29E-03	4.72E-06	5.71E-06	6.6282E-02
551446.9	4172775.46	4433.63857	6783.70339	2109.90781	22747.63259	3177.07724	3840.77651	4412.81581	3831.38558	1159.68792	14145.79717	14692.43396	4949.4112	1.15174	1.20095	6.47E-03	5.91E-03	1.84E-03	1.45E-02	2.55E-03	3.08E-03	4.18E-03	3.21E-03	9.73E-04	7.53E-03	5.41E-03	1.82E-03	1.61E-05	2.04E-05	5.7496E-02
551537.33	4173179.94	5849.30969	10557.96601	1394.56794	8579.81558	1267.33498	15264.32149	5918.24848	6411.23991	804.1748	8742.41263	3403.94415	17973.20261	1.55344	1.58396	8.54E-03	9.20E-03	1.21E-03	5.46E-03	1.02E-03	1.22E-02	5.61E-03	5.38E-03	6.75E-04	4.65E-03	1.25E-03	6.61E-03	2.17E-05	2.68E-05	6.1905E-02
551468.16	4172738.88	4594.39284	6331.18009	2226.78208	22703.45291	3502.34033	3554.74035	4570.32938	3594.99083	1220.45987	13759.31273	15437.8918	4613.26535	1.06619	1.107	6.71E-03	5.51E-03	1.94E-03	1.45E-02	2.81E-03	2.85E-03	4.33E-03	3.02E-03	1.02E-03	7.32E-03	5.68E-03	1.70E-03	1.49E-05	1.88E-05	5.7385E-02
551782.09	4172711.34	8684.98841	3210.99339	3157.3612	15802.02183	9789.6449	1875.69267	8577.65461	1844.13948	1628.42283	9020.8852	19981.14643	2531.25638	0.60982	0.61619	1.27E-02	2.80E-03	2.75E-03	1.01E-02	7.85E-03	1.50E-03	8.13E-03	1.55E-03	1.37E-03	4.80E-03	7.35E-03	9.31E-04	8.53E-06	1.04E-05	6.1792E-02
551708.84	4173219.94	9681.00693	7632.47019	1188.9772	5173.96699	967.77495	17808.95379	9953.82575	4352.86406	701.94523	5230.23234	2283.15653	21081.44089	3.56256	3.40112	1.41E-02	6.65E-03	1.04E-03	3.29E-03	7.76E-04	1.43E-02	9.43E-03	3.65E-03	5.89E-04	2.78E-03	8.40E-04	7.76E-03	4.98E-05	5.76E-05	6.5337E-02
551425.2	4172954.34	5012.74194	10240.31965	1789.65755	17912.3072	2011.41794	6264.40422	5014.71798	5831.32166	1015.64634	15000.72376	8050.0463	7898.09796	1.02766	1.05136	7.32E-03	8.92E-03	1.56E-03	1.14E-02	1.61E-03	5.03E-03	4.75E-03	4.89E-03	8.52E-04	7.98E-03	2.96E-03	2.91E-03	1.44E-05	1.78E-05	6.0222E-02
551421.57	4172915.15	4806.08817	9160.41576	1908.83022	19567.44367	2181.57952	5475.13312	4798.32174	5180.23272	1076.63104	15471.77536	9409.21808	6925.75983	1.06127	1.0893	7.02E-03	7.98E-03	1.66E-03	1.25E-02	1.75E-03	4.39E-03	4.55E-03	4.35E-03	9.03E-04	8.24E-03	3.46E-03	2.55E-03	1.48E-05	1.85E-05	5.9335E-02
551951.63	4172762.91	11335.31514	5965.43623	4681.41911	12981.59099	5072.91723	3002.13435	11095.99284	3580.66021	2573.97841	11211.52059	10380.76646	4056.42602	0.32092	0.32042	1.65E-02	5.20E-03	4.08E-03	8.27E-03	4.07E-03	2.41E-03	1.05E-02	3.00E-03	2.16E-03	5.97E-03	3.82E-03	1.49E-03	4.49E-06	5.43E-06	6.7534E-02
551424.71	4172863.54	4556.19918	7987.43781	1994.66528	21284.01488	2509.45998	4705.25507	4541.1346	4510.59251	1112.07905	15123.59101	11554.41895	5980.85441	1.10751	1.14267	6.65E-03	6.96E-03	1.74E-03	1.36E-02	2.01E-03	3.77E-03	4.30E-03	3.78E-03	9.33E-04	8.05E-03	4.25E-03	2.20E-03	1.55E-05	1.94E-05	5.8244E-02
551988.57	4172791.46	13493.64447	6500.57642	3941.48732	11489.07899	3840.69712	3690.65799	13311.61051	3877.99715	2218.71993	10245.6316	8119.73165	5032.40648	0.29469	0.29397	1.97E-02	5.66E-03	3.43E-03	7.32E-03	3.08E-03	2.96E-03	1.26E-02	3.25E-03	1.86E-03	5.45E-03	2.99E-03	1.85E-03	4.12E-06	4.98E-06	7.0183E-02
551512.63	4172694.38	5217.549	5759.79167	2693.6306	21119.04432	4535.05026	3248.99397	5177.85706	3316.26467	1473.84123	13044.22126	15904.36104	4258.21996	0.83664	0.85643	7.62E-03	5.02E-03	2.35E-03	1.34E-02	3.64E-03	2.61E-03	4.91E-03	2.78E-03	1.24E-03	6.94E-03	5.85E-03	1.57E-03	1.17E-05	1.45E-05	5.7986E-02
551442.66	4172783.7	4399.22249	6845.39363	2081.63538	22471.74398	3090.19941	3894.37167	4379.00281	3864.73412	1145.51126	14106.4556	14344.72707	5009.64365	1.14623	1.19469	6.42E-03	5.96E-03	1.81E-03	1.43E-02	2.48E-03	3.12E-03	4.15E-03	3.24E-03	9.61E-04	7.51E-03	5.28E-03	1.84E-03	1.60E-05	2.02E-05	5.7129E-02
551578.97	4173211.03	6234.49847	9564.00965	1304.01042	7259.47706	1156.18395	17008.93152	6323.19527	5766.67151	757.16154	7349.68909	2961.25853	19885.41025	2.25759	2.31873	9.10E-03	8.33E-03	1.14E-03	4.62E-03	9.28E-04	1.36E-02	5.99E-03	4.84E-03	6.35E-04	3.91E-03	1.09E-03	7.32E-03	3.16E-05	3.93E-05	6.1618E-02
551850.22	4172724.47	6488.85934	3631.06208	4615.46497	16079.99581	10053.87554	1742.93904	6379.38691	2055.67722	2246.97827	11100.3998	18793.53642	2341.35345	0.44751	0.44766	9.47E-03	3.16E-03	4.02E-03	1.02E-02	8.07E-03	1.40E-03	6.05E-03	1.72E-03	1.89E-03	5.91E-03	6.91E-03	8.61E-04	6.26E-06	7.59E-06	5.9712E-02
551893.42	4172737.59	7600.448	4539.16145	5439.53644	15525.97568	7935.34792	2007.67883	7406.65769	2645.51156	2773.77008	12010.47563	14820.18705	2713.8486	0.37031	0.37031	1.11E-02	3.95E-03	4.74E-03	9.89E-03	6.37E-03	1.61E-03	7.02E-03	2.22E-03	2.33E-03	6.39E-03	5.45E-03	9.99E-04	5.18E-06	6.28E-06	6.2071E-02
551521.42	4173164.65	5670.11356	10702.05316	1415.358	9207.70178	1319.95036	14246.1952	5732.89769	6470.93795	813.91082	9250.78477	3634.38909	16867.27632	1.36932	1.39393	8.28E-03	9.32E-03	1.23E-03	5.86E-03	1.06E-03	1.14E-02	5.43E-03	5.43E-03	6.83E-04	4.92E-03	1.34E-03	6.21E-03	1.92E-05	2.36E-05	6.1238E-02
551502.88	4173142.23	5486.94255	10929.87609	1449.37007	10122.8733	1395.136	13258.55506	5543.67996	6556.53794	830.66109	9966.04946	3976.62649	15797.05636	1.22331	1.24381	8.01E-03	9.52E-03	1.26E-03	6.45E-03	1.12E-03	1.06E-02	5.25E-03	5.50E-03	6.97E-04	5.30E-03	1.46E-03	5.81E-03	1.71E-05	2.11E-05	6.1064E-02
551977.6	4172778.88	12640.91257	6285.71217	4141.87036	11909.52654	4212.67043	3430.53146	12434.11757	3750.08887	2310.49536	10469.74037	8810.19364	4685.14834	0.30117	0.30056	1.85E-02	5.47E-03	3.61E-03	7.58E-03	3.38E-03	2.75E-03	1.18E-02	3.15E-03	1.94E-03	5.57E-03	3.24E-03	1.72E-03	4.21E-06	5.09E-06	6.8667E-02
551554.98	4173196.77	5987.10321	10035.93846	1345.27818	7872.72383	1205.19488	15852.50789	6063.00175	6086.07461	778.17431	8019.83941	3163.06009	18598.50378	1.76968	1.80853	8.74E-03	8.74E-03	1.17E-03	5.01E-03	9.67E-04	1.27E-02	5.75E-03	5.11E-03	6.53E-04	4.27E-03	1.16E-03	6.84E-03	2.48E-05	3.06E-05	6.1187E-02
551481.13	4173110.7	5320.61598	10942.17637	1482.9251	11349.79567	1495.79331	11886.46041	5370.91983	6609.31785	846.49941	10780.28366	4492.45565	14322.59579	1.09655	1.11431	7.77E-03	9.53E-03	1.29E-03	7.23E-03	1.20E-03	9.54E-03	5.09E-03	5.55E-03	7.10E-04	5.74E-03	1.65E-03	5.27E-03	1.53E-05	1.89E-05	6.0593E-02
551643.28	4172673.99	8566.51657	4432.86005	4664.04764	12231.84984	9285.52435	2703.82864	8445.41655	2672.18945	2432.81469	9177.22156	16583.38364	3659.68194	0.51309	0.52504	1.25E-02	3.86E-03	4.06E-03	7.79E-03	7.45E-03	2.17E-03	8.00E-03	2.24E-03	2.04E-03	4.88E-03	6.10E-03	1.35E-03	7.18E-06	8.90E-06	6.2472E-02
551529.47	4172679.86	5497.21546	5530.00804	2917.65398	19851.02293	5125.29398	3135.26703	5449.2636	3204.73486	1587.3268	12588.00464	15772.02697	4129.01891	0.75267	0.76814	8.02E-03	4.82E-03	2.54E-03	1.26E-02	4.11E-03	2.52E-03	5.16E-03	2.69E-03	1.33E-03	6.70E-03	5.80E-03	1.52E-03	1.05E-05	1.30E-05	5.7881E-02
551438.43	4172791.94	4364.38273	6890.93096	2051.32	22120.77348	2998.81366	3943.1282	4344.79552	3890.01185	1130.31761	14027.10096	13947.77918	5063.42143	1.13348	1.18047	6.37E-03	6.00E-03	1.79E-03	1.41E-02	2.41E-03	3.16E-03	4.12E-03	3.26E-03	9.48E-04	7.47E-03	5.13E-03	1.86E-03	1.59E-05	2.00E-05	5.6641E-02
551421.98	4172945.38	4914.85553	9818.02267	1798.27084	18005.0413	2011.88804	5980.80812	4914.23327	5580.15981	1019.48025	14899.27813	8193.31287	7545.99616	1.01453	1.03858	7.17E-03	8.55E-03	1.57E-03	1.15E-02	1.61E-03	4.80E-03	4.66E-03	4.68E-03	8.55E-04	7.93E-03	3.01E-03	2.78E-03	1.42E-05	1.76E-05	5.9117E-02
551584.57	4172666.68	6730.60923	5056.10033	3770.05404	16022.75492	7315.38245	2942.63439	6654.14671	2992.41504	2019.81213	11281.26403	15786.08965	3930.26558	0.58755	0.59777	9.82E-03	4.40E-03	3.28E-03	1.02E-02	5.87E-03	2.36E-03	6.31E-03	2.51E-03	1.69E-03	6.00E-03	5.81E-03	1.45E-03	8.22E-06	1.01E-05	5.9734E-02
551421.15	4172884.92	4599.43922	8298.04389	1941.75584	20210.22353	2329.34479	4935.0393	4587.1942	4691.57016	1087.61928	15104.79902	10339.28887	6256.85443	1.06011	1.09226	6.71E-03	7.23E-03	1.69E-03	1.29E-02	1.87E-03	3.96E-03	4.35E-03	3.94E-03	9.13E-04	8.04E-03	3.80E-03	2.30E-03	1.48E-05	1.85E-05	5.7705E-02
551669.75	4172677.94	9351.87832	4101.02445	4744.59275	11423.6395	9195.63538	2544.41094	9209.80755	2472.97877	2439.23081	8195.33143	16898.77301	3460.76999	0.52134	0.53546	1.37E-02	3.57E-03	4.13E-03	7.27E-03	7.38E-03	2.04E-03	8.73E-03	2.07E-03	2.05E-03	4.36E-03	6.22E-03	1.27E-03	7.29E-06	9.07E-06	6.2768E-02
551463.9	4173082.37	5218.66755	11036.87416	1504.30118	12272.52322	1571.26344	10557.17275	5262.17211	6673.81429	856.16004	11402.86221	4954.23487	12665.67213	1.02582	1.04277	7.62E-03	9.61E-03	1.31E-03	7.81E-03	1.26E-03	8.47E-03	4.99E-03	5.60E-03	7.18E-04	6.07E-03	1.82E-03	4.66E-03	1.44E-05	1.77E-05	5.9975E-02
551908.23	4172740.76	8106.22748	4781.60682	5336.2094	14917.5691	7071.19902	2119.69162	7894.53308	2810.71875	2768.38061	11865.91395	13424.27869	2871.42655	0.35343	0.35337	1.18E-02	4.16E-03	4.65E-03	9.50E-03	5.67E-03	1.70E-03	7.48E-03	2.36E-03	2.32E-03	6.32E-03	4.94E-03	1.06E-03	4.95E-06	5.99E-06	6.2003E-02
551484.35	4173119.81	5274.11607	10814.28808	1455.07738	10905.96871	1456.02191	11927.16507	5325.01359	6432.81357	831.28467	10398.04468	4318.98745	14330.76448	1.09437	1.11181	7.70E-03	9.42E-03	1.27E-03	6.94E-03	1.17E-03	9.57E-03	5.05E-03	5.40E-03	6.97E-04	5.53E-03	1.59E-03	5.27E-03	1.53E-05	1.88E-05	5.9639E-02
551441.75	4173029.36	5126.11113	11172.96255	1552.43773	14221.80898	1714.96235	8236.23305	5153.71306	6627.69734	880.99937	12505.51908	5998.81554	10257.81178	0.97399	0.99188	7.48E-03	9.73E-03	1.35E-03	9.06E-03	1.38E-03	6.61E-03	4.88E-03	5.56E-03	7.39E-04	6.66E-03	2.21E-03	3.77E-03	1.36E-05	1.68E-05	5.9458E-02
551444.97	4173038.32	5141.01592	11193.2583	1540.26471	13857.91213	1691.88185	8570.43468	5171.66694	6661.10354	873.92927	12274.16002	5810.62649	10643.81843	0.97776	0.99556	7.50E-03	9.75E-03	1.34E-03	8.82E-03	1.36E-03	6.88E-03	4.90E-03	5.59E-03	7.33E-04	6.53E-03	2.14E-03	3.92E-03	1.37E-05	1.69E-05	5.9494E-02
551438.53	4173020.41	5103.68503	11102.03886	1564.95862	14578.6028	1737.09474	7904.98552	5128.21534	6557.41482	888.33745	12725.33755	6186.50079	9869.74876	0.96941	0.9881	7.45E-03	9.67E-03	1.36E-03	9.28E-03	1.39E-03	6.34E-03	4.86E-03	5.50E-03	7.45E-04	6.77E-03	2.28E-03	3.63E-03	1.36E-05	1.67E-05	5.9320E-02
551448.2	4173047.27	5149.75546	11169.67917	1528.49938	13494.18953	1668.21987	8904.11441	5183.24835	6660.27125	867.23823	12037.92309	5623.25479	11023.1874	0.98163	0.99949	7.52E-03	9.73E-03	1.33E-03	8.59E-03	1.34E-03	7.14E-03	4.91E-03	5.59E-03	7.28E-04	6.41E-03	2.07E-03	4.06E-03	1.37E-05	1.69E-05	5.9443E-02
551966.63	4172766.3	11473.28667	5961.16343	4305.63642	12232.44244	4577.40995	3112.88265	11252.85219	3571.61743	2386.56265	10622.96431	9466.85169	4203.65517	0.30692	0.30643	1.67E-02	5.19E-03	3.75E-03	7.79E-03	3.67E-03	2.50E-03	1.07E-02	3.00E-03	2.00E-03	5.65E-03	3.48E-03	1.55E-03	4.29E-06	5.19E-06	6.6006E-02
551418.75	4172936.41	4807.8803	9386.01437	1801.38405	18015.49342	2024.79433	5706.14539	4805.02117	5328.32906	1019.90574	14718.7098	8327.08463	7204.21559	0.99803	1.02221	7.02E-03	8.17E-03	1.57E-03	1.15E-02	1.62E-03	4.58E-03	4.55E-03	4.47E-03	8.56E-04	7.83E-03	3.06E-03	2.65E-03	1.40E-05	1.73E-05	5.7896E-02
551505.97	4173150.82	5426.82478	10567.65207	1416.16497	9687.14813	1355.19319	13083.27701	5483.49692	6348.97606	812.25316	9561.75198	3826.86122	15570.04768	1.22053	1.24096	7.92E-03	9.20E-03	1.23E-03	6.17E-03	1.09E-03	1.05E-02	5.20E-03	5.33E-03	6.82E-04	5.09E-03	1.41E-03	5.73E-03	1.71E-05	2.10E-05	5.9581E-02
551435.3	4173011.46	5074.32218	10981.45803	1578.42822	14927.36054	1758.51688	7581.27428	5095.58539	6452.75389	896.28372	12933.40629	6372.58018	9485.5164	0.96503	0.98372	7.41E-03	9.56E-03	1.37E-03	9.50E-03	1.41E-03	6.08E-03	4.83E-03	5.41E-03	7.52E-04	6.88E-03	2.34E-03	3.49E-03	1.35E-05	1.67E-05	5.9089E-02
551610.42	4173228.47	6541.58927	8618.95568	1231.15416	6386.18513	1074.02206	17317.47766	6649.76308	5140.70576	717.81963	6433.2915	2675.67296	20240.0582	3.60649	3.74061	9.55E-03	7.51E-03	1.07E-03	4.07E-03	8.62E-04	1.39E-02	6.30E-03	4.31E-03	6.02E-04	3.42E-03	9.84E-04	7.45E-03	5.05E-05	6.34E-05	6.0137E-02
551500.73	4172698.4	4950.03556	5713.14541	2496.35339	20764.11187	4100.16043	3232.64024	4915.7979	3279.12271	1368.03027	12770.26626	15185.51106	4224.99694	0.84586	0.86763	7.23E-03	4.98E-03	2.17E-03	1.32E-02	3.29E-03	2.59E-03	4.66E-03	2.75E-03	1.15E-03	6.80E-03	5.59E-03	1.55E-03	1.18E-05	1.47E-05	5.6004E-02
551595.84	4172664.39	6964.71385	4871.59172	3891.6297	14857.73017	7611.11793	2866.90081	6882.33889	2896.10819	2077.9472	10703.74281	15489.43711	3838.19044	0.55045	0.55998	1.02E-02	4.24E-03	3.39E-03	9.46E-03	6.11E-03	2.30E-03	6.52E-03	2.43E-03	1.74E-03	5.70E-03	5.70E-03	1.41E-03	7.70E-06	9.49E-06	5.9188E-02
551458.5	4172745.26	4425.03953	6259.19987	2116.55067	21734.09069	3287.56787	3539.66138	4403.21161	3549.92395	1160.80607	13341.60842	14513.13445	4584.40931	1.0358	1.07631	6.46E-03	5.45E-03	1.84E-03	1.38E-02	2.64E-03	2.84E-03	4.17E-03	2.98E-03	9.74E-04	7.10E-03	5.34E-03	1.69E-03	1.45E-05	1.82E-05	5.5357E-02
551588.33	4173219.84	6218.88424	9044.85995	1260.87795	6867.08051	1116.78933	16591.50775	6311.38712	5432.86476	732.97159	6917.50535	2835.27444	19411.18128	2.47957	2.55482	9.08E-03	7.88E-03	1.10E-03	4.37E-03	8.96E-04	1.33E-02	5.98E-03	4.56E-03	6.15E-04	3.68E-03	1.04E-03	7.14E-03	3.47E-05	4.33E-05	5.9734E-02
551814.31	4172713.25	7005.51462	3168.56196	3430.82838	15566.97602	10118.48237	1716.45626	6922.4717	1794.94488	1701.58163	9638.11583	19367.5393	2304.43644	0.52212	0.52474	1.02E-02	2.76E-03	2.99E-03	9.91E-03	8.12E-03	1.38E-03	6.56E-03	1.51E-03	1.43E-03	5.13E-03	7.13E-03	8.48E-04	7.31E-06	8.89E-06	5.7996E-02
551418.34	4172906.18	4641.3355	8616.45921	1871.53638	19029.62356	2164.66847	5171.72919	4632.59487	4875.86714	1053.60054	14844.8354	9246.03451	6545.68404	1.01919	1.0473	6.77E-03	7.50E-03	1.63E-03	1.21E-02	1.74E-03	4.15E-03	4.39E-03	4.09E-03	8.84E-04	7.90E-03	3.40E-03	2.41E-03	1.43E-05	1.77E-05	5.7022E-02
551432.08	4173002.51	5041.40988	10822.97669	1594.56568	15050.46968	1780.38667	7273.42971	5059.36843	6323.40354	905.75888	13140.68247	6556.07039	9116.38274	0.96142	0.98022	7.36E-03	9.43E-03	1.39E-03	9.58E-03	1.43E-03	5.84E-03	4.80E-03	5.31E-03	7.60E-04	6.99E-03	2.41E-03	3.35E-03	1.35E-05	1.66E-05	5.8673E-02
551524.51	4173173.24	5594.73743	10275.77781	1377.51272	8787.15272	1278.67112	13899.55751	5657.20865	6217.18066	792.7213	8834.00681	3493.45301	16450.1693	1.36604	1.39061	8.17E-03	8.95E-03	1.20E-03	5.60E-03	1.03E-03	1.12E-02	5.36E-03	5.22E-03	6.65E-04	4.70E-03	1.29E-03	6.05E-03	1.91E-05	2.36E-05	5.9415E-02
551923	4172743.88	8650.68205	5003.71061	5139.76543	14130.53679	6232.38611	2257.43073	8429.0382	2967.07539	2710.56014	11612.64049	12262.79618	3058.85865	0.33853	0.33847	1.26E-02	4.36E-03	4.48E-03	9.00E-03	5.00E-03	1.81E-03	7.99E-03	2.49E-03	2.27E-03	6.18E-03	4.51E-03	1.13E-03	4.74E-06	5.74E-06	6.1852E-02
551573.25	4172665.28	6337.52082	5061.26688	3498.02952	16336.92382	6633.06272	2934.90302	6269.5028	2983.06541	1879.9594	11307.43396	15211.9695	3909.06236	0.59075	0.60063	9.25E-03	4.41E-03	3.05E-03	1.04E-02	5.32E-03	2.35E-03	5.94E-03	2.50E-03	1.58E-03	6.02E-03	5.60E-03	1.44E-03	8.27E-06	1.02E-05	5.7879E-02
551457.05	4173072.14	5130.19947	10867.44134	1497.70542	12449.66562	1589.45136	9740.60157	5170.38624	6486.28144	846.06379	11315.2576	5111.93713	11935.99003	0.99058	1.00833	7.49E-03	9.47E-03	1.30E-03	7.93E-03	1.28E-03	7.81E-03	4.90E-03	5.44E-03	7.10E-04	6.02E-03	1.88E-03	4.39E-03	1.39E-05	1.71E-05	5.8654E-02

551421.34	4172842.87	4348.86067	7332.00229	1940.31539	20625.89265	2564.42532	4334.7794	4332.88705	4144.67352	1077.98066	14087.87147	11814.15665	5519.2747	1.06041	1.09652	6.35E-03	6.39E-03	1.69E-03	1.31E-02	2.06E-03	3.48E-03	4.11E-03	3.48E-03	9.04E-04	7.50E-03	4.35E-03	2.03E-03	1.48E-05	1.86E-05	5.5491E-02
551541.83	4173191.25	5736.4338	9917.06305	1339.09007	8058.13983	1214.15247	14604.03601	5804.96299	6014.93307	772.89506	8182.58607	3232.9741	17200.17893	1.54747	1.57811	8.37E-03	8.64E-03	1.17E-03	5.13E-03	9.74E-04	1.17E-02	5.50E-03	5.05E-03	6.49E-04	4.36E-03	1.19E-03	6.33E-03	2.17E-05	2.67E-05	5.9118E-02
551428.85	4172993.56	4988.52114	10585.03829	1606.39171	15300.707	1798.40034	6957.45182	5003.33557	6150.77294	912.66017	13269.96176	6742.90484	8733.43013	0.95412	0.97329	7.28E-03	9.22E-03	1.40E-03	9.74E-03	1.44E-03	5.58E-03	4.74E-03	5.16E-03	7.66E-04	7.06E-03	2.48E-03	3.21E-03	1.34E-05	1.65E-05	5.8123E-02
551487.44	4173128.4	5242.74561	10552.81116	1430.32389	10487.68843	1417.61376	11942.99632	5294.04881	6286.57173	817.7689	10064.59577	4155.63941	14317.99032	1.09666	1.11399	7.65E-03	9.19E-03	1.25E-03	6.68E-03	1.14E-03	9.58E-03	5.02E-03	5.27E-03	6.86E-04	5.36E-03	1.53E-03	5.27E-03	1.53E-05	1.89E-05	5.8654E-02
551471.35	4172725.21	4530.59899	5985.57604	2191.15088	21290.43148	3455.78267	3384.72789	4506.2253	3408.07889	1201.15093	12997.95976	14614.28753	4397.58005	0.96186	0.99512	6.61E-03	5.21E-03	1.91E-03	1.36E-02	2.77E-03	2.72E-03	4.27E-03	2.86E-03	1.01E-03	6.92E-03	5.38E-03	1.62E-03	1.35E-05	1.69E-05	5.4862E-02
551459.14	4173077.88	5121.25966	10770.51396	1486.67947	12212.42723	1568.69948	9912.54617	5162.71572	6426.67968	845.59409	11288.0121	4997.6241	12116.1204	0.99425	1.0095	7.48E-03	9.38E-03	1.29E-03	7.78E-03	1.26E-03	7.95E-03	4.89E-03	5.39E-03	7.10E-04	6.01E-03	1.84E-03	4.46E-03	1.39E-05	1.71E-05	5.8470E-02
551940.61	4172750.27	9534.95296	5341.55342	4841.91367	13279.75728	5457.77343	2566.69918	9306.18857	3237.73251	2609.22785	11257.90203	11052.31997	3394.09294	0.32548	0.3251	1.39E-02	4.65E-03	4.22E-03	8.46E-03	4.38E-03	2.06E-03	8.82E-03	2.72E-03	2.19E-03	5.99E-03	4.07E-03	1.25E-03	4.55E-06	5.51E-06	6.2725E-02
551562.13	4172665.95	6042.47987	5117.61132	3296.81864	16913.56069	6129.46719	2953.59049	5980.84015	3003.98104	1776.3834	11476.15714	15009.87056	3923.15804	0.61035	0.62061	8.82E-03	4.46E-03	2.87E-03	1.08E-02	4.92E-03	2.37E-03	5.67E-03	2.52E-03	1.49E-03	6.11E-03	5.52E-03	1.44E-03	8.54E-06	1.05E-05	5.6979E-02
551992.5	4172782.15	12507.79856	6151.96172	3798.82464	11151.64904	3798.88472	3473.67467	12334.70231	3666.75902	2129.47858	9869.12996	8007.75795	4732.10218	0.28769	0.28708	1.83E-02	5.36E-03	3.31E-03	7.10E-03	3.05E-03	2.79E-03	1.17E-02	3.08E-03	1.79E-03	5.25E-03	2.95E-03	1.74E-03	4.03E-06	4.86E-06	6.6363E-02
551517.79	4172682.65	5182.60775	5461.34677	2680.00947	19490.14209	4561.63604	3107.8034	5141.1866	3154.5294	1463.59488	12267.1473	14936.89166	4079.72014	0.75169	0.76781	7.56E-03	4.76E-03	2.33E-03	1.24E-02	3.66E-03	2.49E-03	4.87E-03	2.65E-03	1.23E-03	6.53E-03	5.50E-03	1.50E-03	1.05E-05	1.30E-05	5.5517E-02
551425.63	4172984.6	4937.53813	10332.71823	1622.71314	15575.96712	1818.79349	6667.57019	4949.23312	5972.36615	922.03577	13410.48767	6921.01832	8380.1879	0.9487	0.96834	7.21E-03	9.00E-03	1.41E-03	9.92E-03	1.46E-03	5.35E-03	4.69E-03	5.01E-03	7.74E-04	7.14E-03	2.55E-03	3.08E-03	1.33E-05	1.64E-05	5.7620E-02
551462.96	4173088.88	5108.09556	10589.82573	1465.22042	11782.49838	1525.8046	10368.17254	5151.50178	6391.86732	834.06768	10941.06303	4771.84342	12424.43039	0.99639	1.01309	7.46E-03	9.22E-03	1.28E-03	7.50E-03	1.22E-03	8.32E-03	4.88E-03	5.36E-03	7.00E-04	5.82E-03	1.76E-03	4.57E-03	1.39E-05	1.72E-05	5.8128E-02
551415.53	4172927.45	4687.44122	8937.70545	1794.6956	17897.00565	2031.18677	5432.97331	4682.75825	5070.77341	1014.49055	14429.00507	8436.28526	6863.85871	0.97747	1.00157	6.84E-03	7.78E-03	1.56E-03	1.14E-02	1.63E-03	4.36E-03	4.44E-03	4.25E-03	8.51E-04	7.68E-03	3.10E-03	2.53E-03	1.37E-05	1.70E-05	5.6458E-02
551491.86	4172702.15	4771.90973	5687.29614	2368.19041	20485.86393	3830.12313	3225.4212	4741.22313	3257.5618	1298.46126	12585.46201	14688.63348	4207.74085	0.85363	0.87706	6.97E-03	4.95E-03	2.06E-03	1.30E-02	3.07E-03	2.59E-03	4.49E-03	2.73E-03	1.09E-03	6.70E-03	5.40E-03	1.55E-03	1.19E-05	1.49E-05	5.4681E-02
551417.93	4172875.96	4442.58582	7811.2428	1888.63776	19505.54948	2307.13936	4672.69251	4430.01562	4419.43418	1055.87743	14338.67291	10245.05913	5929.01767	1.01113	1.04014	6.48E-03	6.80E-03	1.64E-03	1.24E-02	1.85E-03	3.75E-03	4.20E-03	3.71E-03	8.86E-04	7.63E-03	3.77E-03	2.18E-03	1.41E-05	1.76E-05	5.5361E-02
551509.06	4173159.4	5365.62003	10207.26312	1382.61079	9269.35381	1315.8853	12863.11632	5422.1269	6140.86679	793.59368	9168.2071	3683.38956	15296.1963	1.21739	1.23767	7.83E-03	8.89E-03	1.20E-03	5.90E-03	1.06E-03	1.03E-02	5.14E-03	5.15E-03	6.66E-04	4.88E-03	1.36E-03	5.63E-03	1.70E-05	2.10E-05	5.8063E-02
551688.86	4172679.19	9618.77682	3809.80395	4464.23239	11128.66244	8322.73766	2389.4922	9470.06371	2289.26149	2281.76421	7500.46714	16326.40824	3255.40514	0.52814	0.54305	1.40E-02	3.32E-03	3.89E-03	7.09E-03	6.68E-03	1.92E-03	8.98E-03	1.92E-03	1.91E-03	3.99E-03	6.01E-03	1.20E-03	7.39E-06	9.20E-06	6.0952E-02
551422.39	4172975.61	4876.5538	10039.68296	1638.21611	15814.22943	1838.55747	6385.32375	4885.09925	5776.2239	930.71187	13504.32204	7082.89303	8034.2205	0.94194	0.96175	7.12E-03	8.74E-03	1.43E-03	1.01E-02	1.48E-03	5.12E-03	4.63E-03	4.85E-03	7.81E-04	7.19E-03	2.61E-03	2.96E-03	1.32E-05	1.63E-05	5.6994E-02
551607.18	4172661.39	7163.94565	4649.26364	3962.5935	13626.46173	7761.80193	2771.54967	7076.09255	2775.28315	2106.50924	10021.60258	15049.00221	3718.5571	0.51171	0.52059	1.05E-02	4.05E-03	3.45E-03	8.68E-03	6.23E-03	2.22E-03	6.71E-03	2.33E-03	1.77E-03	5.33E-03	5.54E-03	1.37E-03	7.16E-06	8.82E-06	5.8143E-02
551490.53	4173136.98	5214.01701	10296.5766	1405.81414	10062.91577	1378.80734	11923.04538	5265.60839	6146.83856	804.29361	9742.10321	3996.09489	14267.93967	1.10094	1.11827	7.61E-03	8.97E-03	1.22E-03	6.41E-03	1.11E-03	9.57E-03	4.99E-03	5.16E-03	6.75E-04	5.19E-03	1.47E-03	5.25E-03	1.54E-05	1.89E-05	5.7646E-02
551955.66	4172753.71	10060.48135	5547.21391	4472.36424	12452.51453	4925.43173	2752.40995	9840.53828	3323.49449	2442.52532	10732.04643	10073.53827	3723.85468	0.31184	0.31151	1.47E-02	4.83E-03	3.90E-03	7.93E-03	3.95E-03	2.21E-03	9.33E-03	2.79E-03	2.05E-03	5.71E-03	3.71E-03	1.37E-03	4.36E-06	5.28E-06	6.2464E-02
551981.57	4172769.62	11494.91846	5912.8545	3963.09751	11520.3863	4145.624	3201.91739	11295.40837	3533.79653	2208.34676	10046.37372	8657.00016	4320.75231	0.29395	0.29344	1.68E-02	5.15E-03	3.45E-03	7.34E-03	3.33E-03	2.57E-03	1.07E-02	2.97E-03	1.85E-03	5.35E-03	3.19E-03	1.59E-03	4.11E-06	4.97E-06	6.4266E-02
551830.42	4172714.2	6356.74058	3193.36704	3649.50872	15237.56704	9744.46998	1659.27974	6275.37198	1803.88152	1788.36558	9816.25749	18515.0446	2224.72303	0.48433	0.48612	9.28E-03	2.78E-03	3.18E-03	9.70E-03	7.82E-03	1.33E-03	5.95E-03	1.51E-03	1.50E-03	5.22E-03	6.81E-03	8.19E-04	6.78E-06	8.24E-06	5.5923E-02
551654.45	4172671.43	8600.61685	4141.48606	4478.01432	11136.46916	8672.17539	2561.22416	8477.45259	2497.25996	2325.71525	8329.84306	15546.83742	3472.76141	0.47467	0.48594	1.26E-02	3.61E-03	3.90E-03	7.09E-03	6.96E-03	2.05E-03	8.03E-03	2.10E-03	1.95E-03	4.43E-03	5.72E-03	1.28E-03	6.64E-06	8.23E-06	5.9693E-02
551419.16	4172966.64	4808.20232	9721.42216	1652.99958	16017.90264	1858.23627	6115.77832	4813.89262	5571.87346	938.74088	13554.82259	7220.67182	7702.25749	0.93416	0.95429	7.02E-03	8.47E-03	1.44E-03	1.02E-02	1.49E-03	4.91E-03	4.56E-03	4.68E-03	7.88E-04	7.21E-03	2.66E-03	2.83E-03	1.31E-05	1.62E-05	5.6282E-02
551882.85	4172725.46	6421.10133	3918.76554	4802.49993	14917.00804	8241.55241	1782.02737	6277.34303	2255.97629	2404.39517	11024.33731	15471.29796	2398.70867	0.37754	0.3775	9.37E-03	3.41E-03	4.18E-03	9.50E-03	6.61E-03	1.43E-03	5.95E-03	1.89E-03	2.02E-03	5.87E-03	5.69E-03	8.83E-04	5.28E-06	6.40E-06	5.6823E-02
551415.11	4172897.22	4489.52995	8125.77669	1834.51448	18519.54845	2151.75602	4899.73185	4479.97903	4602.25573	1030.61295	14243.32363	9222.63881	6204.6216	0.9771	1.00445	6.55E-03	7.08E-03	1.60E-03	1.18E-02	1.73E-03	3.93E-03	4.25E-03	3.86E-03	8.65E-04	7.58E-03	3.39E-03	2.28E-03	1.37E-05	1.70E-05	5.4939E-02
551722.5	4173222.53	9640.50476	7041.15619	1133.29247	4863.34771	925.13015	15740.62937	9924.53817	4003.35811	669.13568	4887.42311	2177.98241	18702.04524	2.69307	2.58722	1.41E-02	6.13E-03	9.87E-04	3.10E-03	7.42E-04	1.26E-02	9.41E-03	3.36E-03	5.61E-04	2.60E-03	8.01E-04	6.88E-03	3.77E-05	4.38E-05	6.1351E-02
551468.88	4173105.62	5045.22225	10176.33414	1424.84496	11053.75151	1461.78595	10627.81272	5090.73984	6131.61482	812.13007	10347.72087	4461.0837	12863.7987	0.99528	1.01073	7.36E-03	8.86E-03	1.24E-03	7.04E-03	1.17E-03	8.53E-03	4.82E-03	5.14E-03	6.81E-04	5.51E-03	1.64E-03	4.73E-03	1.39E-05	1.71E-05	5.6771E-02
551528.21	4173183.65	5505.24231	9780.19937	1333.22986	8299.81783	1229.19991	13464.11822	5567.45774	5920.89117	767.80308	8361.32514	3328.13872	15926.65072	1.36505	1.38982	8.04E-03	8.52E-03	1.16E-03	5.28E-03	9.86E-04	1.08E-02	5.28E-03	4.97E-03	6.44E-04	4.45E-03	1.22E-03	5.86E-03	1.91E-05	2.36E-05	5.7255E-02
551897.69	4172728.67	6789.9915	4164.23279	4881.65856	14545.41663	7535.14398	1866.13611	6624.24893	2420.48881	2484.69566	11091.47584	14158.20945	2517.23056	0.35505	0.3552	9.91E-03	3.63E-03	4.25E-03	9.26E-03	6.05E-03	1.50E-03	6.28E-03	2.03E-03	2.08E-03	5.90E-03	5.21E-03	9.26E-04	4.97E-06	6.02E-06	5.7038E-02
551508.05	4172685.53	4944.99583	5404.14724	2503.25502	19130.14131	4159.88686	3086.02968	4908.4394	3113.32692	1370.50747	11994.16401	14269.27892	4041.1237	0.75066	0.76763	7.22E-03	4.71E-03	2.18E-03	1.22E-02	3.34E-03	2.48E-03	4.65E-03	2.61E-03	1.15E-03	6.38E-03	5.25E-03	1.49E-03	1.05E-05	1.30E-05	5.3659E-02
551415.94	4172957.68	4726.98141	9370.9347	1663.53582	16146.32171	1860.26865	5850.18218	4730.02833	5355.62682	944.10529	13530.00492	7343.59271	7373.86062	0.9236	0.94381	6.90E-03	8.16E-03	1.45E-03	1.03E-02	1.49E-03	4.69E-03	4.48E-03	4.49E-03	7.92E-04	7.20E-03	2.70E-03	2.71E-03	1.29E-05	1.60E-05	5.5392E-02
551445.3	4172758.48	4222.50933	6200.51874	1984.86041	20429.75739	3015.70925	3549.26612	4203.18576	3511.7242	1090.16247	12817.03118	13280.27597	4581.13466	0.99153	1.03032	6.16E-03	5.40E-03	1.73E-03	1.30E-02	2.42E-03	2.85E-03	3.98E-03	2.95E-03	9.15E-04	6.82E-03	4.89E-03	1.69E-03	1.39E-05	1.75E-05	5.2839E-02
551681.47	4172676.26	9278.81355	3820.04627	4403.46936	10698.77195	8200.7765	2396.67064	9138.3029	2298.35063	2259.26498	7475.57667	15633.29712	3262.61047	0.49579	0.50947	1.35E-02	3.33E-03	3.84E-03	6.81E-03	6.58E-03	1.92E-03	8.66E-03	1.93E-03	1.90E-03	3.98E-03	5.75E-03	1.20E-03	6.94E-06	8.63E-06	5.9453E-02
552052.84	4172923.97	15178.39659	7013.29662	2099.07079	7543.4505	1635.76878	5865.38607	15253.9674	4124.56298	1242.63018	7300.00916	3827.8542	7744.178	0.27197	0.27047	2.22E-02	6.11E-03	1.83E-03	4.80E-03	1.31E-03	4.71E-03	1.45E-02	3.46E-03	1.04E-03	3.89E-03	1.41E-03	2.85E-03	3.81E-06	4.58E-06	6.8026E-02
551461.47	4172731.74	4347.53053	5913.15778	2069.82848	20388.0242	3222.0682	3366.56712	4325.85721	3362.84204	1135.25259	12590.85959	13726.63952	4365.74616	0.93667	0.97018	6.35E-03	5.15E-03	1.80E-03	1.30E-02	2.59E-03	2.70E-03	4.10E-03	2.82E-03	9.53E-04	6.70E-03	5.05E-03	1.61E-03	1.31E-05	1.64E-05	5.2829E-02
551412.3	4172918.48	4545.56248	8459.53431	1772.11573	17573.27849	2024.03517	5150.36276	4539.54601	4797.59952	1000.02163	13985.23528	8382.07662	6512.35825	0.94761	0.97157	6.64E-03	7.37E-03	1.54E-03	1.12E-02	1.62E-03	4.13E-03	4.30E-03	4.03E-03	8.39E-04	7.44E-03	3.08E-03	2.40E-03	1.33E-05	1.65E-05	5.4613E-02
551772.5	4172704.09	8619.12961	3072.12705	2891.42501	14377.72385	8015.89943	1851.98043	8511.93601	1777.17721	1511.42219	8006.91066	17580.64697	2502.12506	0.60006	0.60895	1.26E-02	2.68E-03	2.52E-03	9.15E-03	6.43E-03	1.49E-03	8.07E-03	1.49E-03	1.27E-03	4.26E-03	6.47E-03	9.21E-04	8.40E-06	1.03E-05	5.7344E-02
551512.15	4173167.99	5330.88264	9840.29904	1347.9641	8870.46152	1277.55483	12591.9041	5387.60321	5925.97876	774.30421	8779.36661	3547.20552	14967.93436	1.21197	1.23208	7.78E-03	8.57E-03	1.17E-03	5.65E-03	1.02E-03	1.01E-02	5.11E-03	4.97E-03	6.50E-04	4.67E-03	1.31E-03	5.51E-03	1.70E-05	2.09E-05	5.6553E-02
551493.62	4173145.57	5158.62647	9989.29269	1376.24946	9660.64074	1342.51078	11803.64257	5210.18517	5971.53533	787.98567	9377.78219	3853.90346	14105.26893	1.09685	1.11398	7.53E-03	8.70E-03	1.20E-03	6.15E-03	1.08E-03	9.47E-03	4.94E-03	5.01E-03	6.61E-04	4.99E-03	1.42E-03	5.19E-03	1.53E-05	1.89E-05	5.6371E-02
551846.54	4172715.16	5985.57716	3292.4123	3928.64855	14969.12729	9277.54528	1639.70077	5897.01681	1861.73409	1919.71077	10035.35015	17579.24476	2198.06944	0.44687	0.44774	8.74E-03	2.87E-03	3.42E-03	9.53E-03	7.44E-03	1.32E-03	5.59E-03	1.56E-03	1.61E-03	5.34E-03	6.47E-03	8.09E-04	6.25E-06	7.59E-06	5.4711E-02
551415.38	4172866.69	4315.87456	7425.11985	1849.5721	19015.62433	2305.77386	4460.35346	4302.89865	4203.16571	1032.28559	13734.43895	10244.42093	5663.90861	0.97843	1.00729	6.30E-03	6.47E-03	1.61E-03	1.21E-02	1.85E-03	3.58E-03	4.08E-03	3.53E-03	8.66E-04	7.31E-03	3.77E-03	2.08E-03	1.37E-05	1.71E-05	5.3580E-02
551970.65	4172757.08	10508.594	5599.24864	4092.00936	11765.50162	4458.07638	2919.28991	10305.73695	3353.15189	2258.61132	10146.37904	9204.89579	3936.58052	0.29845	0.29809	1.53E-02	4.88E-03	3.56E-03	7.49E-03	3.58E-03	2.34E-03	9.77E-03	2.81E-03	1.90E-03	5.40E-03	3.39E-03	1.45E-03	4.18E-06	5.05E-06	6.1912E-02
551546.06	4173200.95	5633.1821	9361.73149	1289.23327	7651.09954	1172.47244	13952.21177	5701.50678	5666.13294	744.69093	7711.8758	3101.90539	16454.34522	1.53419	1.56447	8.22E-03	8.15E-03	1.12E-03	4.87E-03	9.41E-04	1.12E-02	5.40E-03	4.75E-03	6.25E-04	4.10E-03	1.14E-03	6.05E-03	2.15E-05	2.65E-05	5.6637E-02
551419.83	4172827.8	4182.24362	6851.72322	1878.67129	19640.38441	2547.93124	4064.38272	4166.2246	3877.53189	1041.79493	13199.91376	11588.53275	5182.35041	0.99985	1.03436	6.10E-03	5.97E-03	1.64E-03	1.25E-02	2.04E-03	3.26E-03	3.95E-03	3.25E-03	8.74E-04	7.03E-03	4.26E-03	1.91E-03	1.40E-05	1.75E-05	5.2824E-02
552007.35	4172785.37	12163.31998	6000.88561	3495.27995	10470.04722	3454.4537	3503.93373	12013.51592	3574.73147	1967.16997	9311.38474	7341.51619	4759.47261	0.27602	0.27542	1.78E-02	5.23E-03	3.04E-03	6.67E-03	2.77E-03	2.81E-03	1.14E-02	3.00E-03	1.65E-03	4.96E-03	2.70E-03	1.75E-03	3.86E-06	4.67E-06	6.3728E-02
551437.56	4172772.52	4158.54823	6290.93184	1938.7494	20062.63509	2888.58949	3627.76809	4140.15545	3559.2966	1066.52611	12756.45246	12801.67027	4669.08911	0.99055	1.02927	6.07E-03	5.48E-03	1.69E-03	1.28E-02	2.32E-03	2.91E-03	3.92E-03	2.99E-03	8.95E-04	6.79E-03	4.71E-03	1.72E-03	1.39E-05	1.74E-05	5.2295E-02
551912.48	4172731.82	7253.81871	4400.67744	4846.59716	14073.40353	6739.60912	1969.21604	7070.43604	2579.44696	2506.98977	11031.77527	12779.06218	2662.28196	0.34023	0.34027	1.06E-02	3.83E-03	4.22E-03	8.96E-03	5.41E-03	1.58E-03	6.70E-03	2.16E-03	2.10E-03	5.87E-03	4.70E-03	9.80E-04	4.76E-06	5.77E-06	5.7123E-02
551582.18	4172657.13	6337.06514	4749.89388	3456.1973	14636.24791	6547.48133	2793.39201	6267.54554	2810.08643	1854.02333	10390.17931	14164.36641	3726.78672	0.52693	0.53512	9.25E-03	4.14E-03	3.01E-03	9.32E-03	5.25E-03	2.24E-03	5.94E-03	2.36E-03	1.56E-03	5.53E-03	5.21E-03	1.37E-03	7.37E-06	9.07E-06	5.5194E-02
551412.71	4172948.71	4639.42526	9010.19669	1671.6409	16228.62538	1873.56675	5596.28468	4640.05654	5138.63222	947.78957	13454.33774	7465.50615	7058.98216	0.9109	0.93119	6.77E-03	7.85E-03	1.46E-03	1.03E-02	1.50E-03	4.49E-03	4.40E-03	4.31E-03	7.95E-04	7.16E-03	2.75E-03	2.60E-03	1.27E-05	1.58E-05	5.4441E-02
551929.59	4172737.63	8034.91564	4735.88274	4771.28204	13445.93617	5940.39769	2149.23738	7833.45987	2802.12183	2514.99088	10969.63428	11603.99617	2911.83513	0.32577	0.32575	1.17E-02	4.12E-03	4.16E-03	8.56E-03	4.77E-03	1.72E-03	7.42E-03	2.35E-03	2.11E-03	5.84E-03	4.27E-03	1.07E-03	4.56E-06	5.52E-06	5.8136E-02
551996.47	4172772.88	11507.93716	5826.37907	3658.80352	10831.70125	3757.65248	3276.03341	11336.31652	3471.51627	2042.95192	9507.57796	7909.60944	4457.779	0.28141	0.28092	1.68E-02	5.07E-03	3.19E-03	6.90E-03	3.01E-03	2.63E-03	1.07E-02	2.91E-03	1.71E-03	5.06E-03	2.91E-03	1.64E-03	3.94E-06	4.76E-06	6.2590E-02
551433.28	4172780.85	4129.58045	6340.20392	1915.75386	19847.14167	2817.27691	3675.12523	4111.65806	3586.54161	1055.0081	12719.69514	12530.35102	4721.78309	0.98762	1.02588	6.03E-03	5.52E-03	1.67E-03	1.26E-02	2.26E-03	2.95E-03	3.90E-03	3.01E-03	8.85E-04	6.77E-03	4.61E-03	1.74E-03	1.38E-05	1.74E-05	5.2006E-02
551527.47	4172670.25	5203.30756	5149.97806	2698.94894	17730.48166	4668.50987	2960.80029	5159.10876	2988.30185	1468.3188	11450.89498	13977.42474	3897.28374	0.66142	0.67379	7.60E-03	4.49E-03	2.35E-03	1.13E-02	3.75E-03	2.38E-03	4.89E-03	2.51E-03	1.23E-03	6.10E-03	5.14E-03	1.43E-03	9.25E-06	1.14E-05	5.3164E-02
551714.4	4173228.07	9166.2884	6961.78	1122.53896	4870.37304	923.62795	15141.97568	9416.36352	3968.7442	662.13079	4877.37773	2180.36077	18051.50952	3.32442	3.17269	1.34E-02	6.06E-03	9.78E-04	3.10E-03	7.41E-04	1.21E-02	8.92E-03	3.33E-03	5.56E-04	2.60E-03	8.02E-04	6.64E-03	4.65E-05	5.38E-05	5.9362E-02
551411.89	4172888.25	4352.98624	7689.51215	1798.77834	18068.0006	2144.86336	4658.13633	4342.74937	4358.31954	1008.4355	13673.47607	9222.87162	5901.98369	0.9397	0.96552	6.35E-03	6.70E-03	1.57E-03	1.15E-02	1.72E-03	3.74E-03	4.12E-03	3.66E-03	8.46E-04	7.28E-03	3.39E-03	2.17E-03	1.31E-05	1.64E-05	5.3072E-02
552055.99	4172932.77	14859.19377	6912.1911	1988.17177	7258.83718	1540.30498	5922.22519	14951.41033	4059.02191	1178.75199	7047.42362	3624.43138	7798.41089	0.27067	0.26913	2.17E-02	6.02E-03	1.73E-03	4.62E-03	1.24E-03	4.75E-03	1.42E-02	3.41E-03	9.89E-04	3.75E-03	1.33E-03	2.87E-03	3.79E-06	4.56E-06	6.6579E-02
551473.08	4172712.51	4429.4629	5633.02616	2130.13808	19674.12352	3354.98909	3215.34496	4405.17814	3215.37428	1168.38755	12152.86755	13575.07887	4180.1381	0.85883	0.88563	6.47E-03	4.91E-03	1.86E-03	1.25E-02	2.69E-03	2.58E-03	4.18E-03	2.70E-03	9.80E-04	6.47E-03	4.99E-03	1.54E-03	1.20E-05	1.50E-05	5.1908E-02
551497.51	4172689.09	4735.57885	5374.23554	2353.18678	18909.62986	3832.75239	3075.89273	4703.29879	3087.89038	1290.33207	11809.19819	13762.87022	4018.37302	0.75981	0.77833	6.91E-03	4.68E-03	2.05E-03	1.20E-02	3.07E-03	2.47E-03	4.46E-03	2.59E-03	1.08E-03	6.29E-03	5.06E-03	1.48E-03	1.06E-05	1.32E-05	5.2209E-02
551474.8	4173122.36	4963.02814	9712.95978	1379.68505	10318.39885	1397.08405	10704.63396	5009.60826	5853.20438	787.50646	9734.92967	4170.76105	12890.13749	0.99003	1.00498	7.24E-03	8.46E-03	1.20E-03	6.57E-03	1.12E-03	8.59E-03	4.75E-03	4.91E-03	6.61E-04	5.18E-03	1.53E-03	4.74E-03	1.39E-05	1.70E-05	5.4995E-02
551496.71	4173154.15	5105.56025	9689.01914	1346.7474	9270.31329	1306.23773	11650.33915	5157.01986	5800.64717	771.66769	9025.72234	3715.45532	13908.53484	1.09359	1.11059	7.45E-03	8.44E-03	1.17E-03	5.90E-03	1.05E-03	9.35E-03	4.89E-03	4.87E-03	6.47E-04	4.80E-03	1.37E-03	5.12E-03	1.53E-05	1.88E-05	5.5087E-02
551592.73	4172655.05	6547.08178	4602.89495	3564.39095	13734.8785	6802.75251	2732.46672	6472.44648	2733.76979	1906.32501	9943.19745	13974.29754	3653.23618	0.49846	0.50615	9.56E-03	4.01E-03	3.10E-03	8.75E-03	5.46E-03	2.19E-03	6.13E-03	2.29E-03	1.60E-03	5.29E-03	5.14E-03	1.34E-03	6.97E-06	8.58E-06	5.4887E-02
551572.67	4172655.45	6059.17928	4769.06914	3276.84057	14976.43229	6121.97047	2793.46798	5995.36705	2811.74339	1761.65383	10471.14057	13888.48007	3718.84905	0.53601	0.54429	8.84E-03	4.15E-03	2.85E-03	9.54E-03	4.91E-03	2.24E-03	5.68E-03	2.36E-03	1.48E-03	5.57E-03	5.11E-03	1.37E-03	7.50E-06	9.22E-06	5.4129E-02
551515.24	4173176.58	5276.00975	9517.60039	1317.58316	8476.23717	1237.87597	12364.59883	5332.6697	5740.85292	757.28761	8436.59028	3407.69316	14687.91548	1.21659	1.23691	7.70E-03	8.29E-03	1.15E-03	5.40E-03	9.93E-04	9.92E-03	5.05E-03	4.82E-03	6.35E-04	4.49E-03	1.25E-03	5.40E-03	1.70E-05	2.10E-05	5.5142E-02
551620.52	4172656.72	7294.98261	4330.16092	3931.91692	12078.46258	7620.26341	2627.12845	7202.57316	2594.99741	2078.12662	9068.79192	14182.67304	3532.7374	0.46014	0.46808	1.06E-02	3.77E-03	3.42E-03	7.69E-03	6.11E-03	2.11E-03	6.83E-03	2.18E-03	1.74E-03	4.83E-03	5.22E-03	1.30E-03	6.44E-06	7.93E-06	5.5864E-02
551944.69	4172741.13	8549.85391	4929.00963	4552.05358	12762.78396	5246.60655	2302.13181	8345.52761	2937.88703	2434.59878	10677.46619	10636.66882	3116.34619	0.3132	0.31308	1.25E-02	4.29E-03	3.96E-03	8.13E-03	4.21E-03	1.85E-03	7.91E-03	2.47E-03	2.04E-03	5.68E-03	3.91E-03	1.15E-03	4.38E-06	5.31E-06	5.8091E-02
551409.48	4172939.75	4547.77624	8649.57068	1677.06282	16269.33864	1887.16108	5356.01393	4546.29464	4925.65726	949.70093	13331.9851	7587.70887	6760.30044	0.89834	0.91865	6.64E-03	7.53E-03	1.46E-03	1.04E-02	1.51E-03	4.30E-03	4.31E-03	4.13E-03	7.97E-04	7.10E-03	2.79E-03	2.49E-03	1.26E-05	1.56E-05	5.3445E-02
551409.07	4172909.52	4405.5282	8006.63139	1745.25627	17200.99832	2015.79183	4888.86067	4398.44469	4542.35657	983.01809	13513.8781	8382.19271	6184.74395	0.91594	0.93948	6.43E-03	6.97E-03	1.52E-03	1.10E-02	1.62E-03	3.92E-03	4.17E-03	3.81E-03	8.25E-04	7.19E-03	3.08E-03	2.28E-03	1.28E-05	1.59E-05	5.2803E-02
551778.65	4172702.03	8131.40982	2987.19588	2775.88894	14049.65371	7870.72558	1790.48432	8034.36863	1723.58318	1448.03073	7901.11986	17049.74679	2415.04666	0.57506	0.58313	1.19E-02	2.60E-03	2.42E-03	8.95E-03	6.31E-03	1.44E-03	7.61E-03	1.45E-03	1.21E-03	4.21E-03	6.27E-03	8.89E-04	8.05E-06	9.88E-06	5.5247E-02
551985.58	4172760.39	10570.44768	5570.2165	3789.04336	11115.53346	4054.21804	3003.09132	10384.59106	3328.92249	2105.05082	9640.0368	8451.09198	4047.82199	0.28622	0.28584	1.54E-02	4.85E-03	3.30E-03	7.08E-03	3.25E-03	2.41E-03	9.84E-03	2.79E-03	1.77E-03	5.13E-03	3.11E-03	1.49E-03	4.00E-06	4.84E-06	6.0461E-02
551532.63	4173194.77	5405.97698	9241.53546	1283.50211	7828.05928	1181.06351	12930.47717	5467.85815	5590.69955	739.8149	7861.04993	3170.62318	15301.87405	1.35705	1.3816	7.89E-03	8.05E-03	1.12E-03	4.98E-03	9.48E-04	1.04E-02	5.18E-03	4.69E-03	6.21E-04	4.18E-03	1.17E-03	5.63E-03	1.90E-05	2.34E-05	5.4881E-02
551421.27	4172811.76	4082.27888	6527.90965	1849.95215	19116.39216	2575.9413	3863.26302	4065.99431	3695.9331	1023.63695	12655.47693	11566.26712	4935.60998	0.96527	0.99972	5.96E-03	5.69E-03	1.61E-03	1.22E-02	2.07E-03	3.10E-03	3.85E-03	3.10E-03	8.59E-04	6.74E-03	4.26E-03	1.82E-03	1.35E-05	1.69E-05	5.1246E-02
551478.17	4173131.73	4932.97989	9627.75557	1355.94296	9942.50395	1359.44685	10710.21971	4979.87806	5720.9708	774.56159	9422.47385	4007.97475	12869.86862	0.99138	1.0061	7.20E-03	8.39E-03	1.18E-03	6.33E-03	1.09E-03	8.59E-03	4.72E-03	4.80E-03	6.50E-04	5.02E-03	1.47E-03	4.74E-03	1.39E-05	1.70E-05	5.4207E-02
551451.59	4172738.26	4179.61096	5827.71539	1963.10671	19438.64424	3019.33849	3343.97399	4160.06184	3311.02372	1077.38013	12162.88351	12861.11602	4327.9688	0.90472	0.93753	6.10E-03	5.08E-03	1.71E-03	1.24E-02	2.42E-03	2.68E-03	3.94E-03	2.78E-03	9.04E-04	6.47E-03	4.73E-03	1.59E-03	1.27E-05	1.59E-05	5.0821E-02
551447.76	4173075.42	4823.16703	9827.31947	1401.12602	11568.20952	1508.44802	8869.58263	4860.57138	5856.95877	795.19618	10413.13163	4856.84454	10871.48506	0.89906	0.91308	7.04E-03	8.56E-03	1.22E-03	7.37E-03	1.21E-03	7.12E-03	4.61E-03	4.91E-03	6.67E-04	5.54E-03	1.79E-03	4.00E-03	1.26E-05	1.55E-05	5.4058E-02
551561.54	4172656.12	5766.41468	4805.71099	3080.81623	15384.58272	5645.1892	2804.59464	5708.79087	2822.71479	1660.51859	10572.4739	13600.86736	3723.87667	0.54889	0.55734	8.42E-03	4.19E-03	2.68E-03	9.80E-03	4.53E-03	2.25E-03	5.41E-03	2.37E-03	1.39E-03	5.63E-03	5.00E-03	1.37E-03	7.68E-06	9.44E-06	5.3053E-02
551412.04	4172846.2	4133.33033	6862.14581	1807.72904	18554.15796	2361.51128	4134.86233	4119.29115	3888.04547	1005.37095	12906.33262	10516.19899	5258.13567	0.94183	0.97151	6.03E-03	5.98E-03	1.57E-03	1.18E-02	1.89E-03	3.32E-03	3.90E-03	3.26E-03	8.44E-04	6.87E-03	3.87E-03	1.93E-03	1.32E-05	1.65E-05	5.1324E-02
551666.48	4172668.65	8573.83237	3845.92397	4216.75562	10189.94629	7887.46409	2409.87495	8450.24556	2316.49542	2182.55575	7525.36315	14402.57638	3272.41653	0.4429	0.45377	1.25E-02	3.35E-03	3.67E-03	6.49E-03	6.33E-03	1.93E-03	8.01E-03	1.94E-03	1.83E-03	4.01E-03	5.30E-03	1.20E-03	6.20E-06	7.69E-06	5.6594E-02
552062.11	4172920.65	14307.84459	6701.82069	2031.50837	7303.16064	1603.7687	5605.26287	14377.39568	3941.61341	1200.0616	7042.65933	3746.50223	7393.71561	0.2643	0.26287	2.09E-02	5.84E-03	1.77E-03	4.65E-03	1.29E-03	4.50E-03	1.36E-02	3.31E-03	1.01E-03	3.75E-03	1.38E-03	2.72E-03	3.70E-06	4.45E-06	6.4722E-02
551959.72	4172744.55	8999.96949	5083.02681	4249.2011	12013.26575	4766.65437	2521.59333	8800.04552	3075.06904	2304.94508	10237.23769	9753.95156	3333.20404	0.30234	0.30215	1.31E-02	4.43E-03	3.70E-03	7.65E-03	3.82E-03	2.02E-03	8.34E-03	2.58E-03	1.93E-03	5.45E-03	3.59E-03	1.23E-03	4.23E-06	5.12E-06	5.7890E-02
551514.96	4172673.24	4926.83371	5117.67805	2499.15227	17616.46974	4203.0288	2948.76513	4888.31118	2958.92298	1365.01506	11264.34432	13413.41709	3868.78487	0.67124	0.68473	7.19E-03	4.46E-03	2.18E-03	1.12E-02	3.37E-03	2.37E-03	4.63E-03	2.48E-03	1.15E-03	6.00E-03	4.94E-03	1.42E-03	9.39E-06	1.16E-05	5.1417E-02
551603.79	4172652.14	6739.60025	4417.38023	3638.89014	12732.73426	6965.5015	2652.20687	6659.85646	2633.512	1938.12768	9390.5375	13667.05988	3553.16422	0.46763	0.47487	9.84E-03	3.85E-03	3.17E-03	8.11E-03	5.59E-03	2.13E-03	6.31E-03	2.21E-03	1.63E-03	5.00E-03	5.03E-03	1.31E-03	6.54E-06	8.05E-06	5.4175E-02
551555.69	4173213.47	5527.81994	8764.1847	1232.99818	7174.37455	1126.5412	13479.28949	5598.07186	5285.56371	713.26284	7152.56845	2949.42544	15915.5942	1.58464	1.61714	8.07E-03	7.63E-03	1.07E-03	4.57E-03	9.04E-04	1.08E-02	5.31E-03	4.43E-03	5.98E-04	3.81E-03	1.09E-03	5.86E-03	2.22E-05	2.74E-05	5.4199E-02
551453.68	4173092.16	4797.01998	9577.95416	1380.91407	10982.52317	1453.49522	9396.7551	4837.2076	5777.68389	785.53332	10110.29827	4558.42463	11261.30821	0.90421	0.91734	7.00E-03	8.34E-03	1.20E-03	6.99E-03	1.17E-03	7.54E-03	4.58E-03	4.85E-03	6.59E-04	5.38E-03	1.68E-03	4.14E-03	1.27E-05	1.55E-05	5.3567E-02
551463.57	4172718.79	4268.70052	5595.03438	2023.50605	19103.10141	3151.35457	3208.67068	4247.04126	3189.45583	1110.18892	11884.05139	12947.65177	4164.61375	0.85023	0.8781	6.23E-03	4.87E-03	1.76E-03	1.22E-02	2.53E-03	2.57E-03	4.03E-03	2.68E-03	9.32E-04	6.33E-03	4.76E-03	1.53E-03	1.19E-05	1.49E-05	5.0414E-02
551499.8	4173162.74	5054.04844	9392.81683	1317.21267	8891.5213	1270.061	11468.07598	5105.33938	5631.70632	755.29398	8684.27537	3580.80906	13682.06513	1.09092	1.10788	7.38E-03	8.18E-03	1.15E-03	5.66E-03	1.02E-03	9.20E-03	4.84E-03	4.73E-03	6.34E-04	4.62E-03	1.32E-03	5.03E-03	1.53E-05	1.88E-05	5.3793E-02
551406.26	4172930.78	4433.41983	8247.89386	1668.80833	16137.11917	1889.3894	5102.66549	4430.21984	4692.92659	943.62575	13067.64948	7669.4555	6445.06172	0.87827	0.8987	6.47E-03	7.18E-03	1.45E-03	1.03E-02	1.52E-03	4.09E-03	4.20E-03	3.94E-03	7.92E-04	6.96E-03	2.82E-03	2.37E-03	1.23E-05	1.52E-05	5.2098E-02
551855.07	4173168.6	10517.50119	6397.41406	926.75561	4009.42103	754.18258	14123.18734	10939.15602	3579.78355	547.56256	4096.27573	1792.08661	16938.9123	0.68066	0.67013	1.54E-02	5.57E-03	8.07E-04	2.55E-03	6.05E-04	1.13E-02	1.04E-02	3.00E-03	4.59E-04	2.18E-03	6.59E-04	6.23E-03	9.52E-06	1.14E-05	5.9144E-02
551810.77	4172703.94	6616.926	2922.92646	2916.65623	14179.73972	8670.14548	1637.28199	6543.34947	1662.06735	1470.51963	8559.12753	17218.54442	2196.35141	0.50599	0.51007	9.66E-03	2.55E-03	2.54E-03	9.03E-03	6.96E-03	1.31E-03	6.20E-03	1.39E-03	1.23E-03	4.56E-03	6.34E-03	8.08E-04	7.08E-06	8.64E-06	5.2588E-02
551702.91	4173235.84	8499.33987	6857.88914	1106.52967	4868.27319	918.15752	14570.39136	8714.74838	3930.87236	651.68234	4871.66812	2175.31074	17378.54858	4.79692	4.51996	1.24E-02	5.97E-03	9.64E-04	3.10E-03	7.37E-04	1.17E-02	8.26E-03	3.30E-03	5.47E-04	2.59E-03	8.00E-04	6.39E-03	6.71E-05	7.66E-05	5.6905E-02
552011.31	4172776.09	11333.21727	5696.55077	3374.9605	10175.3296	3413.426	3306.88588	11189.75893	3390.92622	1892.48025	8986.12361	7236.81276	4488.5299	0.26952	0.26902	1.65E-02	4.96E-03	2.94E-03	6.48E-03	2.74E-03	2.65E-03	1.06E-02	2.85E-03	1.59E-03	4.78E-03	2.66E-03	1.65E-03	3.77E-06	4.56E-06	6.0459E-02
551481.26	4173140.32	4907.51273	9415.32972	1334.07604	9571.49216	1324.45187	10683.42317	4954.59309	5604.46741	762.59937	9143.04097	3861.75557	12816.85639	0.99381	1.00862	7.16E-03	8.20E-03	1.16E-03	6.09E-03	1.06E-03	8.57E-03	4.70E-03	4.70E-03	6.40E-04	4.87E-03	1.42E-03	4.72E-03	1.39E-05	1.71E-05	5.3327E-02
551408.66	4172879.29	4207.81624	7255.20345	1750.96458	17462.43537	2122.76717	4417.91693	4197.20651	4113.44965	979.91443	13015.20156	9127.74571	5602.54737	0.89934	0.92365	6.14E-03	6.32E-03	1.53E-03	1.11E-02	1.70E-03	3.54E-03	3.98E-03	3.45E-03	8.22E-04	6.93E-03	3.36E-03	2.06E-03	1.26E-05	1.57E-05	5.0980E-02
551974.69	4172747.9	9594.82357	5248.60295	3906.5491	11310.55423	4331.43682	2714.92645	9407.67168	3141.09932	2145.71563	9718.40896	8937.58015	3660.45417	0.29018	0.28994	1.40E-02	4.57E-03	3.40E-03	7.20E-03	3.48E-03	2.18E-03	8.92E-03	2.64E-03	1.80E-03	5.17E-03	3.29E-03	1.35E-03	4.06E-06	4.91E-06	5.8004E-02
551444.24	4172744.93	4073.86139	5793.47324	1896.91968	18836.92082	2889.62125	3344.47558	4055.57568	3288.96618	1041.64989	11907.42151	12301.99797	4321.25152	0.88625	0.91854	5.95E-03	5.05E-03	1.65E-03	1.20E-02	2.32E-03	2.68E-03	3.84E-03	2.76E-03	8.74E-04	6.34E-03	4.53E-03	1.59E-03	1.24E-05	1.56E-05	4.9600E-02
552065.26	4172929.45	14019.64148	6608.5717	1927.83076	7035.4693	1512.41377	5656.74905	14104.21154	3881.26717	1140.55156	6806.84278	3552.07992	7442.84203	0.26302	0.26154	2.05E-02	5.76E-03	1.68E-03	4.48E-03	1.21E-03	4.54E-03	1.34E-02	3.26E-03	9.57E-04	3.62E-03	1.31E-03	2.74E-03	3.68E-06	4.43E-06	6.3389E-02
551519.09	4173187.37	5191.20309	9074.02499	1275.13169	8016.58035	1191.14094	11975.69925	5247.5273	5477.20749	733.47534	7990.09986	3249.07031	14223.10361	1.21157	1.2318	7.58E-03	7.90E-03	1.11E-03	5.10E-03	9.56E-04	9.61E-03	4.97E-03	4.60E-03	6.15E-04	4.25E-03	1.20E-03	5.23E-03	1.70E-05	2.09E-05	5.3163E-02
552000.46	4172763.65	10573.30693	5511.81526	3511.19448	10493.22186	3695.3573	3089.7773	10406.82558	3283.92153	1953.37339	9140.53418	7768.50212	4159.50323	0.27462	0.27423	1.54E-02	4.80E-03	3.06E-03	6.68E-03	2.96E-03	2.48E-03	9.86E-03	2.76E-03	1.64E-03	4.87E-03	2.86E-03	1.53E-03	3.84E-06	4.65E-06	5.8938E-02
551405.85	4172900.55	4261.02308	7557.93725	1709.13284	16723.03728	1998.78646	4633.3406	4253.17352	4290.77893	960.80364	12974.70436	8336.10494	5864.53783	0.87669	0.8996	6.22E-03	6.58E-03	1.49E-03	1.06E-02	1.60E-03	3.72E-03	4.03E-03	3.60E-03	8.06E-04	6.91E-03	3.07E-03	2.16E-03	1.23E-05	1.52E-05	5.0856E-02
551459.6	4173108.9	4753.63151	9273.12337	1347.89432	10385.14994	1395.55433	9619.28995	4795.60481	5575.6526	767.70574	9630.65809	4272.67164	11659.08023	0.9049	0.9188	6.94E-03	8.08E-03	1.17E-03	6.61E-03	1.12E-03	7.72E-03	4.55E-03	4.68E-03	6.44E-04	5.13E-03	1.57E-03	4.29E-03	1.27E-05	1.56E-05	5.2523E-02
551564.84	4173222.09	5539.56515	8428.01253	1202.04037	6842.97647	1094.91748	13426.29301	5613.04812	5071.94671	696.2136	6807.9215	2839.5454	15845.887	1.69364	1.73062	8.09E-03	7.34E-03	1.05E-03	4.36E-03	8.78E-04	1.08E-02	5.32E-03	4.26E-03	5.84E-04	3.62E-03	1.04E-03	5.83E-03	2.37E-05	2.93E-05	5.3192E-02
551887.15	4172716.57	5767.63376	3598.6903	4255.23074	13860.50424	7568.91668	1661.45822	5645.19384	2064.28523	2130.91479	10099.15674	14525.6458	2233.35404	0.36718	0.3674	8.42E-03	3.13E-03	3.71E-03	8.83E-03	6.07E-03	1.33E-03	5.35E-03	1.73E-03	1.79E-03	5.38E-03	5.34E-03	8.22E-04	5.14E-06	6.23E-06	5.1914E-02
551826.83	4172704.89	6015.16434	2943.02419	3111.56159	14051.29156	8639.64276	1583.94991	5944.70279	1666.64047	1544.40398	8818.79129	16829.10446	2121.2699	0.47233	0.47523	8.78E-03	2.56E-03	2.71E-03	8.95E-03	6.93E-03	1.27E-03	5.63E-03	1.40E-03	1.30E-03	4.69E-03	6.19E-03	7.80E-04	6.61E-06	8.05E-06	5.1213E-02
551918.58	4172724.99	6697.44615	4143.45601	4462.14188	13313.11225	6410.13223	1869.90123	6532.25531	2426.31238	2309.14158	10363.09144	12188.80053	2524.80644	0.32694	0.32717	9.78E-03	3.61E-03	3.89E-03	8.48E-03	5.14E-03	1.50E-03	6.19E-03	2.04E-03	1.94E-03	5.52E-03	4.48E-03	9.29E-04	4.57E-06	5.54E-06	5.3496E-02
551652.86	4173246.06	6801.57218	7147.01915	1119.20655	5326.08036	963.8603	14937.43879	6935.34664	4235.58615	655.27125	5330.26856	2339.42545	17323.80806	11.72829	12.86	9.93E-03	6.22E-03	9.75E-04	3.39E-03	7.73E-04	1.20E-02	6.57E-03	3.55E-03	5.50E-04	2.84E-03	8.61E-04	6.37E-03	1.64E-04	2.18E-04	5.4407E-02
551542.34	4172657.54	5290.49595	4814.08149	2752.29803	15767.16226	4857.01881	2803.39982	5242.49629	2810.49515	1490.21784	10551.8573	12994.97367	3704.40657	0.56783	0.57685	7.72E-03	4.19E-03	2.40E-03	1.00E-02	3.90E-03	2.25E-03	4.97E-03	2.36E-03	1.25E-03	5.62E-03	4.78E-03	1.36E-03	7.95E-06	9.78E-06	5.0854E-02
551901.96	4172719.75	6084.81876	3820.00579	4374.07274	13600.06068	7035.87057	1734.34525	5942.85541	2213.25809	2223.0536	10225.91908	13414.50398	2335.23412	0.34488	0.34493	8.88E-03	3.33E-03	3.81E-03	8.66E-03	5.64E-03	1.39E-03	5.63E-03	1.86E-03	1.87E-03	5.44E-03	4.94E-03	8.59E-04	4.83E-06	5.85E-06	5.2318E-02
551502.89	4173171.33	5033.20465	9104.09938	1288.21731	8524.23686	1233.94045	11269.93974	5084.8593	5466.69688	739.13859	8357.16558	3449.43962	13439.33687	1.08968	1.1066	7.35E-03	7.93E-03	1.12E-03	5.43E-03	9.90E-04	9.04E-03	4.82E-03	4.59E-03	6.20E-04	4.45E-03	1.27E-03	4.94E-03	1.52E-05	1.88E-05	5.2580E-02
551594.12	4173237.48	5818.43748	7920.64565	1159.01492	6179.93745	1036.73209	14141.01303	5907.17055	4727.37868	673.79558	6166.62096	2618.55443	16635.10318	2.40828	2.48283	8.49E-03	6.90E-03	1.01E-03	3.94E-03	8.32E-04	1.13E-02	5.60E-03	3.97E-03	5.65E-04	3.28E-03	9.63E-04	6.12E-03	3.37E-05	4.21E-05	5.3086E-02
551504.84	4172676.23	4712.45106	5076.6511	2345.41288	17376.22736	3856.77054	2933.75041	4678.30341	2927.69274	1284.53348	11060.63719	12889.13288	3839.35763	0.67433	0.68877	6.88E-03	4.42E-03	2.04E-03	1.11E-02	3.09E-03	2.35E-03	4.43E-03	2.46E-03	1.08E-03	5.89E-03	4.74E-03	1.41E-03	9.44E-06	1.17E-05	4.9887E-02
551484.35	4173148.9	4861.18426	9164.99336	1308.41127	9212.00799	1291.31455	10582.07323	4908.2197	5462.9158	748.4677	8832.18451	3729.72487	12679.89801	0.99063	1.00524	7.10E-03	7.98E-03	1.14E-03	5.87E-03	1.04E-03	8.49E-03	4.65E-03	4.58E-03	6.28E-04	4.70E-03	1.37E-03	4.67E-03	1.39E-05	1.70E-05	5.2243E-02
551537.15	4173205.13	5269.83943	8720.74759	1233.67082	7429.4021	1140.52537	12343.10756	5331.24785	5264.94603	711.7216	7394.65062	3041.60179	14629.12514	1.33956	1.36368	7.69E-03	7.60E-03	1.07E-03	4.73E-03	9.15E-04	9.90E-03	5.05E-03	4.42E-03	5.97E-04	3.94E-03	1.12E-03	5.38E-03	1.87E-05	2.31E-05	5.2458E-02
551933.72	4172728.54	7225.02772	4376.02571	4385.24504	12841.9997	5719.40503	1996.59866	7047.71215	2581.40211	2303.16109	10264.88532	11070.01592	2700.97959	0.31411	0.31424	1.05E-02	3.81E-03	3.82E-03	8.18E-03	4.59E-03	1.60E-03	6.68E-03	2.17E-03	1.93E-03	5.46E-03	4.07E-03	9.94E-04	4.40E-06	5.32E-06	5.3863E-02
551685.6	4172669.9	8811.47403	3575.67429	3992.55969	9807.97758	7183.38555	2264.50335	8681.93674	2147.59694	2054.96397	6878.03987	13883.58309	3080.32569	0.44936	0.46146	1.29E-02	3.11E-03	3.48E-03	6.25E-03	5.76E-03	1.82E-03	8.23E-03	1.80E-03	1.72E-03	3.66E-03	5.11E-03	1.13E-03	6.29E-06	7.82E-06	5.4950E-02
551454.05	4172725.07	4108.58808	5528.17537	1920.97448	18351.06488	2958.94757	3190.74355	4089.19566	3148.19588	1054.40292	11534.28085	12228.88072	4134.32659	0.82867	0.85656	6.00E-03	4.81E-03	1.67E-03	1.17E-02	2.37E-03	2.56E-03	3.88E-03	2.64E-03	8.85E-04	6.14E-03	4.50E-03	1.52E-03	1.16E-05	1.45E-05	4.8692E-02
551403.03	4172921.82	4292.54548	7803.29816	1642.36559	15776.29513	1874.21111	4833.2001	4288.15761	4438.20455	927.31529	12637.12127	7572.37075	6109.6832	0.84762	0.86783	6.27E-03	6.80E-03	1.43E-03	1.00E-02	1.50E-03	3.88E-03	4.06E-03	3.72E-03	7.78E-04	6.73E-03	2.79E-03	2.25E-03	1.19E-05	1.47E-05	5.0273E-02
551989.61	4172751.2	9740.65583	5251.12877	3615.24087	10714.62363	3952.35742	2823.95579	9568.07618	3137.47848	2000.93903	9234.5921	8228.33372	3801.54549	0.2785	0.27823	1.42E-02	4.57E-03	3.15E-03	6.82E-03	3.17E-03	2.27E-03	9.07E-03	2.63E-03	1.68E-03	4.92E-03	3.03E-03	1.40E-03	3.90E-06	4.71E-06	5.6930E-02
551579.79	4172647.57	5987.96452	4478.31803	3186.87164	13467.20147	5912.82414	2658.87933	5924.41746	2648.18879	1711.6015	9625.15502	12821.98468	3543.65679	0.47836	0.48511	8.74E-03	3.90E-03	2.78E-03	8.58E-03	4.74E-03	2.13E-03	5.62E-03	2.22E-03	1.44E-03	5.12E-03	4.72E-03	1.30E-03	6.69E-06	8.22E-06	5.1302E-02
551842.9	4172705.84	5585.98332	3003.37983	3342.13641	13864.90508	8404.66511	1551.28103	5512.55972	1699.01193	1645.37453	9043.66764	16223.67916	2076.05878	0.44058	0.4425	8.15E-03	2.62E-03	2.91E-03	8.83E-03	6.74E-03	1.24E-03	5.22E-03	1.43E-03	1.38E-03	4.81E-03	5.97E-03	7.64E-04	6.16E-06	7.50E-06	5.0088E-02
551437.62	4172752.32	3982.1872	5763.29511	1839.1111	18248.05824	2771.43743	3349.5149	3964.94175	3270.09341	1010.66997	11660.85834	11770.52547	4320.0578	0.86622	0.8976	5.81E-03	5.02E-03	1.60E-03	1.16E-02	2.22E-03	2.69E-03	3.76E-03	2.74E-03	8.48E-04	6.21E-03	4.33E-03	1.59E-03	1.21E-05	1.52E-05	4.8468E-02
551406.05	4172869.85	4086.10937	6896.60929	1714.67678	17013.79568	2117.41689	4217.7587	4075.05481	3912.84167	957.99616	12479.64509	9105.48929	5351.81845	0.86783	0.89227	5.96E-03	6.01E-03	1.49E-03	1.08E-02	1.70E-03	3.38E-03	3.86E-03	3.28E-03	8.04E-04	6.64E-03	3.35E-03	1.97E-03	1.21E-05	1.51E-05	4.9319E-02
552071.38	4172917.34	13507.77083	6409.69079	1965.54877	7070.81948	1570.90694	5361.16528	13571.9169	3769.77059	1158.74496	6796.07998	3663.59612	7065.59136	0.25687	0.25551	1.97E-02	5.58E-03	1.71E-03	4.50E-03	1.26E-03	4.30E-03	1.29E-02	3.16E-03	9.72E-04	3.62E-03	1.35E-03	2.60E-03	3.59E-06	4.33E-06	6.1647E-02
551678.21	4172666.97	8572.13447	3614.7034	3982.04558	9638.3302	7217.72196	2286.28454	8448.08114	2173.01026	2055.51936	6950.20475	13587.85525	3107.63803	0.42984	0.44089	1.25E-02	3.15E-03	3.47E-03	6.14E-03	5.79E-03	1.83E-03	8.01E-03	1.82E-03	1.72E-03	3.70E-03	5.00E-03	1.14E-03	6.01E-06	7.47E-06	5.4302E-02
551589.61	4172645.7	6192.82598	4374.66598	3298.01798	12840.76657	6172.32979	2615.85207	6124.43737	2595.57601	1766.16749	9322.54584	12793.37819	3492.99418	0.45965	0.46615	9.04E-03	3.81E-03	2.87E-03	8.18E-03	4.95E-03	2.10E-03	5.80E-03	2.18E-03	1.48E-03	4.96E-03	4.71E-03	1.29E-03	6.43E-06	7.90E-06	5.1382E-02
551948.79	4172732.01	7694.31337	4559.56195	4232.17201	12206.6836	5129.85655	2125.65149	7512.20333	2706.29594	2252.39849	10054.98872	10209.67289	2876.58416	0.30212	0.30224	1.12E-02	3.97E-03	3.69E-03	7.77E-03	4.12E-03	1.71E-03	7.12E-03	2.27E-03	1.89E-03	5.35E-03	3.76E-03	1.06E-03	4.23E-06	5.12E-06	5.3939E-02
551728.06	4173230.66	9035.71393	6414.65505	1068.49796	4583.59504	883.40264	13344.84929	9291.15062	3646.69646	630.24272	4556.11837	2082.84605	15988.43958	2.55309	2.45287	1.32E-02	5.59E-03	9.31E-04	2.92E-03	7.09E-04	1.07E-02	8.81E-03	3.06E-03	5.29E-04	2.43E-03	7.66E-04	5.88E-03	3.57E-05	4.16E-05	5.5587E-02
551432.52	4172761.22	3942.98097	5812.08883	1812.85889	18056.42208	2703.86674	3393.45112	3926.25248	3295.52014	997.09355	11622.96112	11525.25339	4369.05371	0.86716	0.89864	5.76E-03	5.06E-03	1.58E-03	1.15E-02	2.17E-03	2.72E-03	3.72E-03	2.77E-03	8.37E-04	6.19E-03	4.24E-03	1.61E-03	1.21E-05	1.52E-05	4.8171E-02
551529.92	4172659.57	5014.15419	4803.76314	2559.71125	15859.09778	4400.80259	2799.16801	4971.67873	2794.39833	1390.84132	10466.44219	12575.72623	3686.63844	0.57969	0.58936	7.32E-03	4.18E-03	2.23E-03	1.01E-02	3.53E-03	2.25E-03	4.71E-03	2.34E-03	1.17E-03	5.57E-03	4.63E-03	1.36E-03	8.11E-06	9.99E-06	4.9403E-02
551465.51	4173125.64	4686.79302	8905.71145	1309.24799	9759.00401	1336.99004	9678.41019	4729.60451	5350.20552	746.69598	9116.96486	4006.39053	11677.17891	0.90264	0.91562	6.84E-03	7.76E-03	1.14E-03	6.21E-03	1.07E-03	7.76E-03	4.48E-03	4.49E-03	6.27E-04	4.85E-03	1.47E-03	4.30E-03	1.26E-05	1.55E-05	5.1039E-02
551494.3	4172679.79	4523.16651	5051.92039	2213.1636	17203.88406	3570.5252	2925.56709	4492.8835	2906.09516	1214.2755	10908.36005	12461.97111	3819.89835	0.68266	0.69838	6.60E-03	4.40E-03	1.93E-03	1.10E-02	2.86E-03	2.35E-03	4.26E-03	2.44E-03	1.02E-03	5.81E-03	4.59E-03	1.41E-03	9.55E-06	1.18E-05	4.8630E-02
551466.74	4172705.13	4204.9929	5292.49291	1987.39382	17868.13213	3096.52671	3057.98434	4182.92874	3023.90446	1090.95914	11209.93385	12211.61636	3972.55396	0.77053	0.79346	6.14E-03	4.61E-03	1.73E-03	1.14E-02	2.48E-03	2.45E-03	3.96E-03	2.54E-03	9.15E-04	5.97E-03	4.49E-03	1.46E-03	1.08E-05	1.34E-05	4.8156E-02
551487.44	4173157.49	4818.55909	8921.32379	1282.89339	8859.54247	1257.8492	10457.88857	4865.4961	5326.04505	734.38398	8531.75604	3599.67265	12520.18699	0.9886	1.00307	7.03E-03	7.77E-03	1.12E-03	5.64E-03	1.01E-03	8.39E-03	4.61E-03	4.47E-03	6.16E-04	4.54E-03	1.32E-03	4.61E-03	1.38E-05	1.70E-05	5.1161E-02
551505.98	4173179.91	4981.81535	8823.89747	1259.9705	8168.64894	1198.02659	11065.60705	5033.32241	5306.25122	723.38254	8045.46157	3321.44241	13189.91117	1.09021	1.10718	7.27E-03	7.69E-03	1.10E-03	5.20E-03	9.61E-04	8.88E-03	4.77E-03	4.45E-03	6.07E-04	4.28E-03	1.22E-03	4.85E-03	1.53E-05	1.88E-05	5.1316E-02
552015.3	4172766.85	10541.34491	5410.80619	3255.14673	9887.95698	3368.78761	3125.67781	10401.7563	3219.05771	1819.09432	8669.65976	7131.70067	4238.89927	0.2634	0.263	1.54E-02	4.71E-03	2.84E-03	6.30E-03	2.70E-03	2.51E-03	9.86E-03	2.70E-03	1.53E-03	4.61E-03	2.62E-03	1.56E-03	3.69E-06	4.46E-06	5.7334E-02
551428.2	4172769.62	3914.56247	5856.72081	1792.15576	17886.42896	2644.2017	3435.97127	3898.20722	3319.59622	986.63993	11589.92595	11308.64804	4416.55668	0.86691	0.89827	5.71E-03	5.10E-03	1.56E-03	1.14E-02	2.12E-03	2.76E-03	3.69E-03	2.79E-03	8.28E-04	6.17E-03	4.16E-03	1.62E-03	1.21E-05	1.52E-05	4.7933E-02
551402.62	4172891.59	4127.52261	7148.59253	1671.93268	16265.27338	1983.37599	4401.0531	4119.04036	4060.18677	938.09759	12442.06107	8291.31066	5574.01284	0.84116	0.86321	6.02E-03	6.23E-03	1.46E-03	1.04E-02	1.59E-03	3.53E-03	3.90E-03	3.41E-03	7.87E-04	6.62E-03	3.05E-03	2.05E-03	1.18E-05	1.46E-05	4.9035E-02
551409.97	4172827.9	3933.08271	6314.02909	1733.13451	17427.64394	2328.67009	3823.18943	3918.99014	3582.76202	961.86487	11903.57855	10209.95251	4869.31253	0.87304	0.90088	5.74E-03	5.50E-03	1.51E-03	1.11E-02	1.87E-03	3.07E-03	3.71E-03	3.01E-03	8.07E-04	6.34E-03	3.76E-03	1.79E-03	1.22E-05	1.53E-05	4.8222E-02
551617.49	4172647.36	6848.4123	4109.84735	3600.68424	11264.36356	6815.93343	2511.9219	6764.83902	2460.10932	1907.54095	8490.45074	12820.11096	3372.59348	0.41843	0.42478	1.00E-02	3.58E-03	3.14E-03	7.17E-03	5.47E-03	2.02E-03	6.41E-03	2.06E-03	1.60E-03	4.52E-03	4.72E-03	1.24E-03	5.85E-06	7.20E-06	5.1935E-02
551704.71	4172673.61	9030.26629	3378.17692	3729.19757	10078.12275	6526.08335	2149.87116	8897.06497	2019.57964	1917.47332	6549.27416	13744.37006	2925.47768	0.48011	0.49352	1.32E-02	2.94E-03	3.25E-03	6.42E-03	5.24E-03	1.72E-03	8.43E-03	1.69E-03	1.61E-03	3.49E-03	5.06E-03	1.08E-03	6.72E-06	8.36E-06	5.4120E-02
551545.36	4172652.37	5239.09899	4660.77272	2709.9534	14949.49879	4780.40918	2730.96262	5191.33041	2725.14829	1466.30686	10123.27946	12435.90109	3611.21118	0.53362	0.54164	7.65E-03	4.06E-03	2.36E-03	9.52E-03	3.84E-03	2.19E-03	4.92E-03	2.29E-03	1.23E-03	5.39E-03	4.58E-03	1.33E-03	7.47E-06	9.18E-06	4.9359E-02
551523.44	4173198.3	5095.21051	8596.59308	1227.85581	7598.29248	1148.87843	11490.76276	5151.12271	5184.25198	706.93617	7525.9767	3109.58513	13661.2079	1.19579	1.21556	7.44E-03	7.49E-03	1.07E-03	4.84E-03	9.22E-04	9.22E-03	4.88E-03	4.35E-03	5.93E-04	4.01E-03	1.14E-03	5.03E-03	1.67E-05	2.06E-05	5.1012E-02
552074.53	4172926.14	13250.37629	6325.04798	1869.35063	6821.66489	1484.42569	5409.50718	13328.15549	3715.21443	1103.74218	6577.67589	3480.40156	7112.05311	0.2557	0.25429	1.93E-02	5.51E-03	1.63E-03	4.34E-03	1.19E-03	4.34E-03	1.26E-02	3.12E-03	9.26E-04	3.50E-03	1.28E-03	2.62E-03	3.58E-06	4.31E-06	6.0435E-02
551963.8	4172735.41	8106.75581	4705.74964	4028.3023	11597.51745	4595.30607	2263.36645	7925.83483	2807.36975	2169.88443	9762.62932	9414.82084	3060.20403	0.29118	0.29121	1.18E-02	4.10E-03	3.51E-03	7.38E-03	3.69E-03	1.82E-03	7.51E-03	2.36E-03	1.82E-03	5.20E-03	3.46E-03	1.13E-03	4.07E-06	4.93E-06	5.3811E-02
551566.39	4172645.96	5625.85703	4497.25457	2957.25872	13829.82862	5381.63764	2657.95506	5569.5972	2647.38352	1593.1198	9696.7818	12437.71672	3532.23554	0.48844	0.49529	8.21E-03	3.92E-03	2.58E-03	8.81E-03	4.32E-03	2.13E-03	5.28E-03	2.22E-03	1.34E-03	5.16E-03	4.58E-03	1.30E-03	6.83E-06	8.39E-06	4.9850E-02
551694.62	4172670.33	8821.23308	3439.93509	3810.17142	9688.00901	6708.40249	2188.40126	8691.97682	2061.63292	1960.43898	6594.34312	13466.296	2977.39278	0.45201	0.46445	1.29E-02	3.00E-03	3.32E-03	6.17E-03	5.38E-03	1.76E-03	8.24E-03	1.73E-03	1.64E-03	3.51E-03	4.95E-03	1.10E-03	6.32E-06	7.87E-06	5.3685E-02
551521.02	4172661.7	4841.75841	4804.01654	2440.33026	15932.7639	4121.48282	2800.56662	4802.78906	2787.42539	1329.56983	10420.46453	12327.54663	3679.94162	0.591	0.60144	7.07E-03	4.18E-03	2.13E-03	1.01E-02	3.31E-03	2.25E-03	4.55E-03	2.34E-03	1.12E-03	5.55E-03	4.54E-03	1.35E-03	8.27E-06	1.02E-05	4.8537E-02
551468.9	4173135.07	4654.03269	8824.01985	1287.35903	9424.71353	1303.32129	9665.65538	4697.0696	5232.63184	734.78124	8837.21081	3859.99278	11639.58932	0.90191	0.91469	6.79E-03	7.69E-03	1.12E-03	6.00E-03	1.05E-03	7.75E-03	4.45E-03	4.39E-03	6.17E-04	4.70E-03	1.42E-03	4.28E-03	1.26E-05	1.55E-05	5.0295E-02
551769.11	4172694.79	8088.02253	2885.62654	2619.7452	12737.61455	6494.84925	1775.6588	7990.34158	1676.79348	1378.01493	7079.16705	15009.32584	2397.38579	0.5552	0.56525	1.18E-02	2.51E-03	2.28E-03	8.11E-03	5.21E-03	1.42E-03	7.57E-03	1.41E-03	1.16E-03	3.77E-03	5.52E-03	8.82E-04	7.77E-06	9.58E-06	5.1673E-02
551399.81	4172912.85	4168.53632	7412.83349	1620.75096	15483.90976	1867.97739	4600.2918	4163.07107	4216.53585	913.44801	12259.46046	7575.18458	5818.10774	0.82113	0.8413	6.08E-03	6.46E-03	1.41E-03	9.86E-03	1.50E-03	3.69E-03	3.95E-03	3.54E-03	7.66E-04	6.53E-03	2.79E-03	2.14E-03	1.15E-05	1.43E-05	4.8730E-02
552004.49	4172754.44	9762.68015	5209.1244	3360.35333	10145.38923	3617.18498	2895.30486	9605.64122	3105.45171	1869.03735	8781.05935	7594.76563	3894.647	0.26766	0.26736	1.43E-02	4.54E-03	2.93E-03	6.46E-03	2.90E-03	2.32E-03	9.10E-03	2.61E-03	1.57E-03	4.67E-03	2.79E-03	1.43E-03	3.75E-06	4.53E-06	5.5587E-02
551600.39	4172642.9	6344.40447	4197.26154	3346.0498	11899.96144	6265.88194	2538.25116	6272.02438	2499.39539	1785.5465	8800.67942	12434.13215	3395.65461	0.42911	0.43507	9.26E-03	3.66E-03	2.91E-03	7.58E-03	5.03E-03	2.04E-03	5.94E-03	2.10E-03	1.50E-03	4.68E-03	4.57E-03	1.25E-03	6.00E-06	7.37E-06	5.0533E-02
551719.96	4173236.2	8559.01049	6362.2782	1060.0645	4586.62487	882.35255	13010.85699	8788.07263	3628.70043	624.69542	4556.24808	2085.36313	15609.04838	3.11629	2.97432	1.25E-02	5.54E-03	9.23E-04	2.92E-03	7.08E-04	1.04E-02	8.33E-03	3.04E-03	5.24E-04	2.43E-03	7.67E-04	5.74E-03	4.36E-05	5.04E-05	5.3953E-02
551402.73	4172849.5	3928.48492	6417.98383	1684.98189	16731.3836	2176.67981	3935.56892	3916.22135	3644.05	938.0335	11834.70629	9397.64063	4999.67575	0.8411	0.86571	5.73E-03	5.59E-03	1.47E-03	1.07E-02	1.75E-03	3.16E-03	3.71E-03	3.06E-03	7.87E-04	6.30E-03	3.46E-03	1.84E-03	1.18E-05	1.47E-05	4.7529E-02
551490.53	4173166.07	4775.48848	8677.33206	1257.02528	8517.81601	1224.66805	10308.10074	4822.28776	5188.36284	720.04569	8236.05594	3474.08083	12333.6317	0.98642	1.00083	6.97E-03	7.56E-03	1.09E-03	5.42E-03	9.83E-04	8.27E-03	4.57E-03	4.35E-03	6.04E-04	4.38E-03	1.28E-03	4.54E-03	1.38E-05	1.70E-05	5.0058E-02
551556.37	4172646.4	5382.94826	4515.31878	2798.65742	14086.28285	5009.94896	2662.59507	5331.58567	2649.85026	1510.85837	9740.44384	12182.84239	3530.19911	0.4977	0.50473	7.86E-03	3.93E-03	2.44E-03	8.97E-03	4.02E-03	2.14E-03	5.05E-03	2.22E-03	1.27E-03	5.18E-03	4.48E-03	1.30E-03	6.96E-06	8.55E-06	4.8878E-02
551444.54	4172731.36	3950.85453	5434.65128	1822.97848	17466.98379	2776.62528	3162.28757	3933.37875	3092.73507	1001.17386	11119.10559	11454.38096	4090.07989	0.79719	0.82414	5.77E-03	4.73E-03	1.59E-03	1.11E-02	2.23E-03	2.54E-03	3.73E-03	2.59E-03	8.40E-04	5.92E-03	4.21E-03	1.50E-03	1.12E-05	1.40E-05	4.6801E-02
551978.76	4172738.75	8490.08446	4828.66234	3756.2353	10914.84686	4202.57342	2471.28177	8315.67484	2914.12297	2048.40548	9341.33987	8680.42129	3341.72709	0.28193	0.28191	1.24E-02	4.21E-03	3.27E-03	6.95E-03	3.37E-03	1.98E-03	7.88E-03	2.45E-03	1.72E-03	4.97E-03	3.19E-03	1.23E-03	3.94E-06	4.78E-06	5.3624E-02
551551.38	4173221.59	5216.36522	8109.52096	1172.7133	6845.0956	1085.9298	12052.30625	5281.32503	4880.33541	677.92867	6756.06782	2852.48267	14291.14602	1.42294	1.45016	7.61E-03	7.06E-03	1.02E-03	4.36E-03	8.71E-04	9.67E-03	5.01E-03	4.09E-03	5.69E-04	3.60E-03	1.05E-03	5.26E-03	1.99E-05	2.46E-05	5.0216E-02
551457.04	4172711.54	4055.62137	5256.04366	1891.08055	17368.49056	2916.62483	3050.93335	4035.96809	2999.62051	1038.29797	10969.21786	11670.00573	3957.17758	0.76247	0.7862	5.92E-03	4.58E-03	1.65E-03	1.11E-02	2.34E-03	2.45E-03	3.83E-03	2.52E-03	8.71E-04	5.84E-03	4.29E-03	1.46E-03	1.07E-05	1.33E-05	4.6818E-02
551512.12	4172663.83	4673.64226	4790.26427	2324.14374	15902.48301	3856.58478	2795.91921	4638.05367	2772.79052	1269.63564	10329.95475	12028.33582	3665.65311	0.59929	0.61056	6.82E-03	4.17E-03	2.02E-03	1.01E-02	3.09E-03	2.24E-03	4.40E-03	2.33E-03	1.07E-03	5.50E-03	4.43E-03	1.35E-03	8.39E-06	1.03E-05	4.7561E-02
551471.99	4173143.65	4624.78605	8635.56811	1266.94786	9099.84703	1272.40364	9623.56138	4667.88438	5127.54003	723.63101	8584.6183	3729.86503	11572.75255	0.9016	0.91428	6.75E-03	7.52E-03	1.10E-03	5.79E-03	1.02E-03	7.72E-03	4.42E-03	4.30E-03	6.07E-04	4.57E-03	1.37E-03	4.26E-03	1.26E-05	1.55E-05	4.9473E-02
552077.68	4172934.94	12952.77477	6226.38865	1775.21917	6571.47977	1401.91502	5443.4364	13043.26446	3652.56035	1049.61011	6355.58623	3303.83626	7139.24665	0.25443	0.25297	1.89E-02	5.42E-03	1.55E-03	4.18E-03	1.12E-03	4.37E-03	1.24E-02	3.06E-03	8.81E-04	3.38E-03	1.22E-03	2.63E-03	3.56E-06	4.29E-06	5.9093E-02
552080.65	4172914.02	12774.79162	6137.13781	1902.37835	6850.00916	1538.58629	5133.46853	12834.10341	3609.5035	1119.34772	6562.4823	3583.02481	6759.84372	0.24979	0.24849	1.86E-02	5.35E-03	1.66E-03	4.36E-03	1.23E-03	4.12E-03	1.22E-02	3.03E-03	9.39E-04	3.49E-03	1.32E-03	2.49E-03	3.50E-06	4.21E-06	5.8802E-02
551534.13	4172653.22	4974.598	4632.23946	2528.64671	14947.60682	4357.59053	2717.47854	4931.91115	2700.18583	1372.05554	10002.80667	11995.23901	3582.78646	0.53923	0.5476	7.26E-03	4.03E-03	2.20E-03	9.52E-03	3.50E-03	2.18E-03	4.67E-03	2.27E-03	1.15E-03	5.32E-03	4.41E-03	1.32E-03	7.55E-06	9.28E-06	4.7856E-02
551411.53	4172810.28	3830.45533	6002.98255	1702.56871	16902.15169	2351.63321	3626.16399	3816.08032	3407.4258	942.77498	11373.93555	10151.99002	4627.63726	0.83824	0.86588	5.59E-03	5.23E-03	1.48E-03	1.08E-02	1.89E-03	2.91E-03	3.62E-03	2.86E-03	7.91E-04	6.05E-03	3.74E-03	1.70E-03	1.17E-05	1.47E-05	4.6646E-02
551415.24	4172794.84	3817.10762	5888.84724	1714.74588	17006.14689	2429.81221	3526.81559	3802.18136	3340.43637	947.37844	11286.44136	10422.4301	4511.05323	0.83756	0.86627	5.57E-03	5.13E-03	1.49E-03	1.08E-02	1.95E-03	2.83E-03	3.60E-03	2.80E-03	7.95E-04	6.01E-03	3.83E-03	1.66E-03	1.17E-05	1.47E-05	4.6532E-02
551509.97	4173191.09	4902.12707	8428.55717	1219.6837	7734.74116	1153.68716	10720.43824	4953.28237	5072.84688	700.81756	7626.94665	3168.72427	12778.78559	1.08311	1.0999	7.16E-03	7.34E-03	1.06E-03	4.93E-03	9.26E-04	8.60E-03	4.69E-03	4.26E-03	5.88E-04	4.06E-03	1.17E-03	4.70E-03	1.52E-05	1.86E-05	4.9511E-02
552030.11	4172770.01	10314.36791	5286.99208	3019.47517	9323.51461	3084.12565	3147.66006	10194.88192	3143.34868	1693.61441	8217.79956	6574.9181	4257.94528	0.25312	0.25271	1.51E-02	4.60E-03	2.63E-03	5.94E-03	2.47E-03	2.53E-03	9.66E-03	2.64E-03	1.42E-03	4.37E-03	2.42E-03	1.57E-03	3.54E-06	4.28E-06	5.5315E-02
551993.67	4172742.03	8937.75849	4938.52996	3470.27651	10322.96608	3845.42152	2628.97432	8776.826	2950.13374	1911.88324	8879.33887	8003.35149	3539.60242	0.27103	0.27086	1.30E-02	4.30E-03	3.02E-03	6.57E-03	3.09E-03	2.11E-03	8.32E-03	2.48E-03	1.60E-03	4.73E-03	2.94E-03	1.30E-03	3.79E-06	4.59E-06	5.3517E-02
551399.4	4172882.62	3986.3202	6743.00357	1624.82588	15680.43274	1954.75329	4172.76782	3977.47366	3831.05203	910.26511	11839.01048	8162.88886	5289.31432	0.80475	0.82504	5.82E-03	5.87E-03	1.42E-03	9.98E-03	1.57E-03	3.35E-03	3.77E-03	3.21E-03	7.64E-04	6.30E-03	3.00E-03	1.95E-03	1.13E-05	1.40E-05	4.7032E-02
551907.56	4172712.35	5615.05241	3588.93178	3993.85564	12793.22807	6533.62659	1645.44803	5487.97541	2075.29859	2032.13676	9550.12665	12594.11744	2213.8156	0.33335	0.33365	8.20E-03	3.13E-03	3.48E-03	8.15E-03	5.24E-03	1.32E-03	5.20E-03	1.74E-03	1.71E-03	5.08E-03	4.63E-03	8.15E-04	4.66E-06	5.65E-06	4.8698E-02
551775.23	4172692.73	7658.94631	2805.82607	2505.95874	12503.38132	6414.40487	1718.39615	7570.11083	1626.40628	1317.04633	6997.58104	14631.53751	2316.34384	0.53501	0.54415	1.12E-02	2.44E-03	2.18E-03	7.96E-03	5.15E-03	1.38E-03	7.17E-03	1.36E-03	1.11E-03	3.72E-03	5.38E-03	8.52E-04	7.49E-06	9.22E-06	4.9914E-02
551922.75	4172715.96	6024.29126	3817.11277	4050.57167	12524.96398	6052.81621	1740.24434	5880.73567	2229.14985	2091.38262	9624.79108	11661.32627	2345.35803	0.31492	0.31508	8.79E-03	3.32E-03	3.53E-03	7.98E-03	4.86E-03	1.40E-03	5.57E-03	1.87E-03	1.75E-03	5.12E-03	4.29E-03	8.63E-04	4.41E-06	5.34E-06	4.9359E-02
551527.09	4173206.89	4985.93249	8231.52722	1191.07531	7287.55029	1117.06099	11107.35596	5041.47515	4958.66196	686.21721	7178.23651	3006.44352	13218.58674	1.18421	1.20365	7.28E-03	7.17E-03	1.04E-03	4.64E-03	8.96E-04	8.91E-03	4.78E-03	4.16E-03	5.76E-04	3.82E-03	1.11E-03	4.86E-03	1.66E-05	2.04E-05	4.9275E-02
551560.73	4173230.4	5243.26825	7816.82759	1146.24568	6528.27082	1054.90196	12056.6569	5311.61219	4705.6461	663.41476	6452.36423	2743.13868	14280.33865	1.52504	1.5562	7.65E-03	6.81E-03	9.98E-04	4.16E-03	8.46E-04	9.67E-03	5.03E-03	3.95E-03	5.57E-04	3.43E-03	1.01E-03	5.25E-03	2.13E-05	2.64E-05	4.9421E-02

551475.08	4173152.24	4593.01034	8441.61313	1245.6415	8777.41697	1241.47017	9550.43766	4636.09312	5020.00392	711.94267	8329.39935	3603.90801	11472.0612	0.90084	0.91344	6.70E-03	7.35E-03	1.08E-03	5.59E-03	9.96E-04	7.66E-03	4.39E-03	4.21E-03	5.97E-04	4.43E-03	1.33E-03	4.22E-03	1.26E-05	1.55E-05	4.8601E-02
551937.87	4172719.48	6452.32314	4021.53515	4014.74131	12158.57428	5548.70836	1842.74569	6297.25017	2365.1592	2101.22347	9575.23274	10695.31951	2488.44876	0.30234	0.30255	9.42E-03	3.50E-03	3.50E-03	7.74E-03	4.45E-03	1.48E-03	5.97E-03	1.98E-03	1.76E-03	5.10E-03	3.94E-03	9.16E-04	4.23E-06	5.13E-06	4.9762E-02
551541.12	4172647.77	5033.58637	4515.68212	2565.45609	14305.85207	4464.42895	2660.68622	4989.06319	2638.66453	1389.48339	9707.76327	11735.89795	3514.27653	0.51005	0.5175	7.35E-03	3.93E-03	2.23E-03	9.11E-03	3.58E-03	2.13E-03	4.73E-03	2.21E-03	1.17E-03	5.17E-03	4.32E-03	1.29E-03	7.14E-06	8.77E-06	4.7243E-02
552083.8	4172922.82	12542.26191	6059.2122	1812.5858	6616.06787	1456.20581	5177.89635	12613.90227	3559.3992	1068.1868	6358.71824	3408.78395	6802.64628	0.24866	0.24732	1.83E-02	5.28E-03	1.58E-03	4.21E-03	1.17E-03	4.15E-03	1.20E-02	2.99E-03	8.96E-04	3.38E-03	1.25E-03	2.50E-03	3.48E-06	4.19E-06	5.7686E-02
552080.83	4172943.74	12620.30368	6115.24826	1683.75218	6322.28991	1323.68805	5463.30163	12722.36834	3582.78933	996.74378	6131.75299	3134.87226	7147.77584	0.25309	0.25158	1.84E-02	5.33E-03	1.47E-03	4.03E-03	1.06E-03	4.38E-03	1.21E-02	3.01E-03	8.36E-04	3.26E-03	1.15E-03	2.63E-03	3.54E-06	4.26E-06	5.7641E-02
551577.41	4172638.02	5688.3364	4245.99878	2964.29015	12520.41834	5406.28919	2541.31918	5629.66876	2509.22068	1593.6273	8993.10274	11757.45491	3383.91888	0.44085	0.44662	8.30E-03	3.70E-03	2.58E-03	7.97E-03	4.34E-03	2.04E-03	5.34E-03	2.11E-03	1.34E-03	4.79E-03	4.33E-03	1.25E-03	6.17E-06	7.57E-06	4.8081E-02
551435.94	4172739.46	3829.22129	5382.76489	1748.71853	16776.35209	2634.42981	3156.56482	3813.14084	3061.0353	960.99142	10810.65731	10843.50477	4074.625	0.7746	0.80077	5.59E-03	4.69E-03	1.52E-03	1.07E-02	2.11E-03	2.53E-03	3.61E-03	2.57E-03	8.06E-04	5.75E-03	3.99E-03	1.50E-03	1.08E-05	1.36E-05	4.5385E-02
551952.92	4172722.92	6941.93216	4223.70761	3921.6718	11714.55519	4970.42121	1971.67626	6779.7073	2499.0061	2079.06842	9451.98477	9777.87803	2666.02277	0.29143	0.29162	1.01E-02	3.68E-03	3.42E-03	7.46E-03	3.99E-03	1.58E-03	6.43E-03	2.10E-03	1.74E-03	5.03E-03	3.60E-03	9.81E-04	4.08E-06	4.94E-06	5.0142E-02
552086.78	4172901.9	12269.85401	5938.92314	1925.28642	6852.21445	1586.76296	4865.55847	12312.88419	3496.70007	1128.83111	6522.69991	3670.84715	6416.04736	0.24386	0.24267	1.79E-02	5.17E-03	1.68E-03	4.36E-03	1.27E-03	3.90E-03	1.17E-02	2.93E-03	9.47E-04	3.47E-03	1.35E-03	2.36E-03	3.41E-06	4.11E-06	5.7041E-02
551586.5	4172636.36	5865.14902	4161.3349	3057.97767	12021.00468	5618.57795	2505.95783	5802.39677	2466.65343	1639.7721	8752.22489	11742.81089	3342.32722	0.42558	0.43114	8.56E-03	3.62E-03	2.66E-03	7.65E-03	4.51E-03	2.01E-03	5.50E-03	2.07E-03	1.38E-03	4.66E-03	4.32E-03	1.23E-03	5.95E-06	7.31E-06	4.8189E-02
551401.07	4172839.32	3806.29225	6096.24146	1638.42912	16073.19484	2146.33696	3753.98118	3794.00189	3464.91172	911.15626	11254.2403	9191.96308	4772.45273	0.80083	0.82425	5.56E-03	5.31E-03	1.43E-03	1.02E-02	1.72E-03	3.01E-03	3.60E-03	2.91E-03	7.65E-04	5.99E-03	3.38E-03	1.76E-03	1.12E-05	1.40E-05	4.5682E-02
551494.81	4172669.19	4383.43102	4766.71966	2125.41578	15779.21754	3418.57216	2789.17616	4353.76908	2747.32419	1165.89065	10155.93916	11473.41179	3642.57268	0.61511	0.62822	6.40E-03	4.15E-03	1.85E-03	1.00E-02	2.74E-03	2.24E-03	4.13E-03	2.31E-03	9.78E-04	5.41E-03	4.22E-03	1.34E-03	8.61E-06	1.06E-05	4.5826E-02
551447.33	4172717.95	3898.33532	5180.38596	1792.29836	16634.783	2734.88086	3027.90361	3880.84121	2954.02141	984.48201	10616.35965	10992.15418	3920.90255	0.73964	0.7631	5.69E-03	4.51E-03	1.56E-03	1.06E-02	2.19E-03	2.43E-03	3.68E-03	2.48E-03	8.26E-04	5.65E-03	4.04E-03	1.44E-03	1.03E-05	1.29E-05	4.5123E-02
551592.28	4173247.93	5475.22783	7284.74974	1098.83013	5837.08117	992.59674	12532.44716	5557.88115	4350.9431	638.32147	5796.38875	2510.65841	14533.91724	2.16984	2.23163	7.99E-03	6.34E-03	9.57E-04	3.72E-03	7.96E-04	1.01E-02	5.27E-03	3.65E-03	5.36E-04	3.09E-03	9.24E-04	5.35E-03	3.04E-05	3.78E-05	4.8740E-02
551640.12	4172644.2	7111.93019	3725.17312	3556.09908	9635.49951	6579.81137	2329.94661	7020.52406	2238.27778	1868.20394	7383.61922	11950.25537	3140.6359	0.37115	0.37725	1.04E-02	3.24E-03	3.10E-03	6.14E-03	5.28E-03	1.87E-03	6.65E-03	1.88E-03	1.57E-03	3.93E-03	4.40E-03	1.16E-03	5.19E-06	6.39E-06	4.9600E-02
551614.45	4172638	6467.49165	3922.0515	3329.70534	10614.55855	6184.69934	2411.69792	6391.0961	2344.86621	1767.38454	8015.35487	11753.74356	3233.41857	0.38727	0.39256	9.44E-03	3.42E-03	2.90E-03	6.76E-03	4.96E-03	1.93E-03	6.06E-03	1.97E-03	1.48E-03	4.27E-03	4.32E-03	1.19E-03	5.42E-06	6.65E-06	4.8713E-02
552008.54	4172745.27	9046.84056	4927.59422	3213.30421	9797.8143	3528.99604	2731.04493	8899.89075	2937.43702	1782.72894	8431.28383	7402.44288	3669.35189	0.26059	0.26038	1.32E-02	4.29E-03	2.80E-03	6.24E-03	2.83E-03	2.19E-03	8.44E-03	2.46E-03	1.50E-03	4.49E-03	2.72E-03	1.35E-03	3.65E-06	4.41E-06	5.2522E-02
551478.17	4173160.82	4555.19083	8237.03927	1222.93682	8462.62518	1211.10479	9441.57636	4598.13712	4905.44771	699.44183	8066.88038	3484.36128	11332.69325	0.89849	0.91094	6.65E-03	7.17E-03	1.07E-03	5.39E-03	9.72E-04	7.57E-03	4.36E-03	4.12E-03	5.87E-04	4.29E-03	1.28E-03	4.17E-03	1.26E-05	1.54E-05	4.7658E-02
551967.91	4172726.3	7364.16906	4380.2384	3771.50663	11120.6687	4472.63601	2102.91767	7200.76872	2605.46176	2023.02738	9236.34015	9060.55369	2841.57264	0.28143	0.28159	1.07E-02	3.82E-03	3.28E-03	7.08E-03	3.59E-03	1.69E-03	6.82E-03	2.19E-03	1.70E-03	4.92E-03	3.33E-03	1.05E-03	3.94E-06	4.77E-06	5.0218E-02
551396.71	4172873	3874.40895	6420.71653	1594.16922	15315.68217	1951.5113	3989.52477	3865.04735	3650.33263	891.49334	11388.72851	8151.94503	5059.44248	0.77612	0.79653	5.66E-03	5.59E-03	1.39E-03	9.75E-03	1.57E-03	3.20E-03	3.66E-03	3.06E-03	7.48E-04	6.06E-03	3.00E-03	1.86E-03	1.09E-05	1.35E-05	4.5576E-02
551496.71	4173183.25	4679.15601	8172.40655	1202.78482	7869.92739	1160.00963	9926.29709	4725.60621	4898.19042	689.8852	7647.62545	3238.82144	11872.38213	0.97855	0.99275	6.83E-03	7.12E-03	1.05E-03	5.01E-03	9.31E-04	7.96E-03	4.48E-03	4.11E-03	5.79E-04	4.07E-03	1.19E-03	4.37E-03	1.37E-05	1.68E-05	4.7730E-02
551682.33	4172660.6	8158.77712	3390.72205	3629.95527	8866.93967	6377.75164	2164.16585	8044.02508	2034.9929	1878.87288	6411.55434	12162.64693	2939.70094	0.39168	0.40145	1.19E-02	2.95E-03	3.16E-03	5.65E-03	5.12E-03	1.74E-03	7.62E-03	1.71E-03	1.58E-03	3.41E-03	4.48E-03	1.08E-03	5.48E-06	6.80E-06	5.0413E-02
552086.95	4172931.62	12273.50214	5968.61485	1724.55519	6381.2084	1377.49307	5209.33889	12356.72608	3501.94647	1017.71676	6151.48949	3240.78226	6828.04657	0.24745	0.24606	1.79E-02	5.20E-03	1.50E-03	4.06E-03	1.11E-03	4.18E-03	1.17E-02	2.94E-03	8.54E-04	3.27E-03	1.19E-03	2.51E-03	3.46E-06	4.17E-06	5.6454E-02
552089.93	4172910.7	12097.15566	5880.52214	1840.88425	6636.38711	1505.73244	4918.93344	12152.03766	3458.40817	1081.19573	6338.3843	3501.62719	6472.33591	0.24292	0.24168	1.77E-02	5.12E-03	1.60E-03	4.23E-03	1.21E-03	3.95E-03	1.15E-02	2.90E-03	9.07E-04	3.37E-03	1.29E-03	2.38E-03	3.40E-06	4.10E-06	5.6141E-02
551460.34	4172697.79	3990.17639	4971.80011	1853.15213	16234.67383	2855.13469	2907.82749	3970.21554	2843.40236	1018.17202	10338.8816	10995.83659	3774.67828	0.69255	0.71219	5.82E-03	4.33E-03	1.61E-03	1.03E-02	2.29E-03	2.33E-03	3.76E-03	2.39E-03	8.54E-04	5.50E-03	4.05E-03	1.39E-03	9.69E-06	1.21E-05	4.4692E-02
551429.94	4172746.15	3755.33655	5357.78656	1704.06655	16337.24194	2545.49933	3160.59383	3740.00552	3045.47916	937.0023	10619.22763	10457.84173	4073.4379	0.76084	0.78643	5.48E-03	4.67E-03	1.48E-03	1.04E-02	2.04E-03	2.54E-03	3.54E-03	2.56E-03	7.86E-04	5.65E-03	3.85E-03	1.50E-03	1.06E-05	1.33E-05	4.4522E-02
551420.4	4173057.28	4313.25001	8378.24711	1270.46424	10710.86745	1409.98431	6941.04048	4341.19628	4981.70058	720.09257	9336.76867	4720.48448	8589.61525	0.74646	0.75829	6.30E-03	7.30E-03	1.11E-03	6.82E-03	1.13E-03	5.57E-03	4.11E-03	4.18E-03	6.04E-04	4.97E-03	1.74E-03	3.16E-03	1.04E-05	1.28E-05	4.7009E-02
551514.24	4173201.82	4783.01787	8012.52414	1175.78371	7362.23962	1116.29277	10296.46975	4833.52454	4818.13454	676.21439	7202.85164	3044.27203	12289.46865	1.06498	1.08119	6.98E-03	6.98E-03	1.02E-03	4.69E-03	8.96E-04	8.26E-03	4.58E-03	4.04E-03	5.67E-04	3.83E-03	1.12E-03	4.52E-03	1.49E-05	1.83E-05	4.7529E-02
551417.18	4173048.33	4295.95222	8372.50118	1273.14179	10906.18636	1423.3064	6707.27232	4321.93204	4975.65701	721.73065	9428.39802	4846.91488	8324.96184	0.74023	0.75191	6.27E-03	7.29E-03	1.11E-03	6.94E-03	1.14E-03	5.38E-03	4.10E-03	4.17E-03	6.06E-04	5.02E-03	1.78E-03	3.06E-03	1.04E-05	1.27E-05	4.6904E-02
551596.99	4172633.65	6005.08238	4007.40348	3103.75458	11220.42224	5708.57537	2438.07588	5938.75435	2383.47585	1658.8531	8309.04521	11451.60017	3257.39273	0.39953	0.40464	8.77E-03	3.49E-03	2.70E-03	7.14E-03	4.58E-03	1.96E-03	5.63E-03	2.00E-03	1.39E-03	4.42E-03	4.21E-03	1.20E-03	5.59E-06	6.86E-06	4.7507E-02
551839.3	4172696.53	5237.10587	2747.68569	2836.26969	12748.49003	7457.99415	1469.90708	5175.28377	1555.69666	1410.87646	8100.49673	14761.43184	1965.04179	0.42929	0.43218	7.64E-03	2.39E-03	2.47E-03	8.12E-03	5.98E-03	1.18E-03	4.91E-03	1.31E-03	1.18E-03	4.31E-03	5.43E-03	7.23E-04	6.01E-06	7.32E-06	4.5662E-02
551537.69	4173220.88	4934.82519	7781.67675	1143.69572	6825.02843	1072.69266	10867.85258	4992.53556	4680.23342	659.94058	6686.89257	2851.91364	12938.70449	1.22389	1.2447	7.20E-03	6.78E-03	9.96E-04	4.35E-03	8.61E-04	8.72E-03	4.73E-03	3.93E-03	5.54E-04	3.56E-03	1.05E-03	4.76E-03	1.71E-05	2.11E-05	4.7523E-02
551413.95	4173039.38	4283.8587	8365.96241	1279.7259	10981.51095	1437.88221	6484.28414	4307.63368	4963.42753	725.6839	9550.76316	4967.21542	8069.81673	0.73622	0.74807	6.25E-03	7.29E-03	1.11E-03	6.99E-03	1.15E-03	5.20E-03	4.08E-03	4.16E-03	6.09E-04	5.08E-03	1.83E-03	2.97E-03	1.03E-05	1.27E-05	4.6762E-02
551422.77	4172759.08	3714.40407	5430.70045	1677.80306	16178.30488	2474.83841	3223.73151	3699.5439	3084.16312	923.57075	10605.53821	10228.7629	4144.68305	0.76669	0.79264	5.42E-03	4.73E-03	1.46E-03	1.03E-02	1.99E-03	2.59E-03	3.51E-03	2.59E-03	7.75E-04	5.65E-03	3.76E-03	1.52E-03	1.07E-05	1.34E-05	4.4313E-02
551644.19	4173256.28	6051.82971	6563.728	1089.84882	5124.79716	931.56945	12643.92657	6163.91212	3925.88212	635.69663	5085.75893	2286.28388	14837.05468	6.80891	7.28786	8.83E-03	5.72E-03	9.49E-04	3.26E-03	7.47E-04	1.01E-02	5.84E-03	3.29E-03	5.33E-04	2.71E-03	8.41E-04	5.46E-03	9.53E-05	1.23E-04	4.8550E-02
551410.73	4173030.42	4269.00691	8336.33056	1287.79377	11168.48671	1452.31839	6263.12082	4290.46565	4932.97765	730.51737	9678.48613	5085.37816	7813.1268	0.73253	0.74424	6.23E-03	7.26E-03	1.12E-03	7.11E-03	1.17E-03	5.02E-03	4.07E-03	4.14E-03	6.13E-04	5.15E-03	1.87E-03	2.87E-03	1.02E-05	1.26E-05	4.6654E-02
552034.12	4172760.8	9658.17111	5034.2078	2915.81819	9064.41398	3038.46572	2981.30896	9543.51171	2991.29886	1630.62943	7938.67107	6468.00378	4030.3668	0.24721	0.24688	1.41E-02	4.38E-03	2.54E-03	5.77E-03	2.44E-03	2.39E-03	9.05E-03	2.51E-03	1.37E-03	4.23E-03	2.38E-03	1.48E-03	3.46E-06	4.18E-06	5.2643E-02
551393.35	4172894.92	3909.15625	6638.46806	1551.49555	14636.54402	1830.24171	4147.89775	3902.30548	3777.2082	871.30367	11312.65821	7453.7928	5253.35324	0.75605	0.77343	5.71E-03	5.78E-03	1.35E-03	9.32E-03	1.47E-03	3.33E-03	3.70E-03	3.17E-03	7.31E-04	6.02E-03	2.74E-03	1.93E-03	1.06E-05	1.31E-05	4.5275E-02
551982.85	4172729.62	7734.65051	4507.64293	3553.56817	10540.37112	4060.14077	2303.57948	7574.93463	2723.33983	1929.8814	8898.73306	8392.29186	3030.26077	0.27293	0.27294	1.13E-02	3.93E-03	3.10E-03	6.71E-03	3.26E-03	1.85E-03	7.18E-03	2.29E-03	1.62E-03	4.74E-03	3.09E-03	1.11E-03	3.82E-06	4.63E-06	5.0160E-02
551721	4172671.33	8580.32588	3087.94634	3197.28458	9779.25881	5477.40489	1978.30761	8459.93433	1836.21278	1657.30178	6060.76186	12407.93625	2686.72573	0.46749	0.48018	1.25E-02	2.69E-03	2.78E-03	6.23E-03	4.39E-03	1.59E-03	8.02E-03	1.54E-03	1.39E-03	3.23E-03	4.57E-03	9.89E-04	6.54E-06	8.14E-06	4.9951E-02
551520.77	4172651.67	4638.59032	4509.81576	2300.42856	14467.77307	3851.48344	2660.10936	4601.77213	2620.88605	1252.51716	9611.07517	11189.48145	3495.08654	0.53005	0.53868	6.77E-03	3.93E-03	2.00E-03	9.21E-03	3.09E-03	2.13E-03	4.36E-03	2.20E-03	1.05E-03	5.12E-03	4.12E-03	1.29E-03	7.42E-06	9.13E-06	4.5286E-02
551407.5	4173021.47	4250.82094	8280.75803	1297.45826	11357.35743	1466.57153	6045.75848	4269.88703	4883.24834	736.28857	9808.98312	5198.68134	7557.66839	0.72869	0.74118	6.20E-03	7.21E-03	1.13E-03	7.23E-03	1.18E-03	4.85E-03	4.05E-03	4.10E-03	6.18E-04	5.22E-03	1.91E-03	2.78E-03	1.02E-05	1.26E-05	4.6505E-02
551404.28	4173012.52	4233.2286	8208.89839	1310.47047	11565.09318	1481.83436	5839.8463	4249.8602	4820.74209	743.91615	9955.14404	5309.38718	7313.49485	0.72608	0.7388	6.18E-03	7.15E-03	1.14E-03	7.36E-03	1.19E-03	4.69E-03	4.03E-03	4.04E-03	6.24E-04	5.30E-03	1.95E-03	2.69E-03	1.02E-05	1.25E-05	4.6371E-02
551565.8	4172636.13	5344.71798	4216.21971	2744.09991	12557.14042	4904.20676	2520.71187	5292.83948	2483.15162	1479.82403	8910.06917	11221.4799	3347.96484	0.43896	0.44453	7.80E-03	3.67E-03	2.39E-03	8.00E-03	3.93E-03	2.02E-03	5.02E-03	2.08E-03	1.24E-03	4.74E-03	4.13E-03	1.23E-03	6.14E-06	7.53E-06	4.6275E-02
551429.19	4173081.98	4293.32995	8170.95014	1247.06449	10062.72977	1360.15475	7448.53397	4325.90629	4857.4346	707.00619	8917.4909	4380.83852	9136.35911	0.75327	0.76463	6.27E-03	7.12E-03	1.09E-03	6.41E-03	1.09E-03	5.98E-03	4.10E-03	4.08E-03	5.93E-04	4.75E-03	1.61E-03	3.36E-03	1.05E-05	1.30E-05	4.6457E-02
551481.26	4173169.41	4516.46565	8030.06336	1199.66294	8155.2677	1180.83579	9310.50441	4559.24257	4789.10533	686.57825	7805.79491	3368.33759	11169.93843	0.8958	0.90813	6.59E-03	6.99E-03	1.04E-03	5.19E-03	9.47E-04	7.47E-03	4.32E-03	4.02E-03	5.76E-04	4.15E-03	1.24E-03	4.11E-03	1.25E-05	1.54E-05	4.6689E-02
551400.14	4172827.72	3704.34617	5825.48581	1602.86132	15560.70252	2137.4658	3595.03476	3691.91893	3313.38098	890.20291	10774.86212	9061.65558	4574.51318	0.76941	0.79227	5.41E-03	5.07E-03	1.40E-03	9.91E-03	1.71E-03	2.88E-03	3.50E-03	2.78E-03	7.47E-04	5.74E-03	3.33E-03	1.68E-03	1.08E-05	1.34E-05	4.4187E-02
552093.08	4172919.5	11886.56714	5808.65503	1757.05146	6416.62091	1427.31374	4959.82062	11952.67706	3412.32232	1033.57546	6148.12985	3336.00555	6511.75929	0.24183	0.24054	1.74E-02	5.06E-03	1.53E-03	4.09E-03	1.15E-03	3.98E-03	1.13E-02	2.86E-03	8.67E-04	3.27E-03	1.23E-03	2.40E-03	3.38E-06	4.08E-06	5.5112E-02
551401.05	4173003.57	4197.75656	8077.8143	1319.33788	11715.78299	1494.14131	5621.63251	4211.96518	4724.43111	749.15163	10044.70074	5399.92136	7051.13335	0.72056	0.73325	6.13E-03	7.04E-03	1.15E-03	7.46E-03	1.20E-03	4.51E-03	3.99E-03	3.96E-03	6.29E-04	5.35E-03	1.99E-03	2.59E-03	1.01E-05	1.24E-05	4.6016E-02
552090.1	4172940.42	11973.20584	5866.53956	1638.84819	6147.23464	1302.7296	5228.10311	12066.98242	3437.99276	968.3434	5942.4781	3079.85863	6836.59815	0.24617	0.24474	1.75E-02	5.11E-03	1.43E-03	3.91E-03	1.05E-03	4.19E-03	1.14E-02	2.88E-03	8.12E-04	3.16E-03	1.13E-03	2.52E-03	3.44E-06	4.15E-06	5.5121E-02
552023.36	4172748.46	9073.70957	4878.64542	3006.54568	9292.60029	3244.72228	2797.03704	8942.69733	2899.47151	1669.95807	8039.18428	6855.69093	3777.15272	0.25076	0.25054	1.32E-02	4.25E-03	2.62E-03	5.92E-03	2.60E-03	2.24E-03	8.48E-03	2.43E-03	1.40E-03	4.28E-03	2.52E-03	1.39E-03	3.51E-06	4.25E-06	5.1385E-02
551659.95	4172647.6	7445.72763	3491.76639	3531.0671	8822.17412	6363.80298	2214.97208	7346.15718	2099.1799	1843.34193	6710.42149	11585.77652	2996.54661	0.35727	0.36421	1.09E-02	3.04E-03	3.08E-03	5.62E-03	5.11E-03	1.78E-03	6.96E-03	1.76E-03	1.55E-03	3.57E-03	4.26E-03	1.10E-03	5.00E-06	6.17E-06	4.8704E-02
551556.05	4172636.55	5139.09298	4244.32913	2618.13021	12840.11454	4619.07078	2530.30313	5091.24049	2492.58874	1414.37106	8989.45516	11071.33045	3353.59858	0.44979	0.45561	7.50E-03	3.70E-03	2.28E-03	8.18E-03	3.71E-03	2.03E-03	4.83E-03	2.09E-03	1.19E-03	4.78E-03	4.07E-03	1.23E-03	6.29E-06	7.72E-06	4.5600E-02
551997.75	4172732.89	8062.36789	4635.84057	3327.64818	9938.7446	3733.03448	2438.20395	7910.89236	2766.9113	1824.32205	8531.55266	7772.9204	3286.15064	0.26356	0.2635	1.18E-02	4.04E-03	2.90E-03	6.33E-03	2.99E-03	1.96E-03	7.50E-03	2.32E-03	1.53E-03	4.54E-03	2.86E-03	1.21E-03	3.69E-06	4.47E-06	4.9952E-02
552096.05	4172898.58	11630.41108	5694.47662	1860.66876	6635.72345	1550.43542	4669.15916	11670.55361	3352.44955	1089.04928	6297.87997	3582.98239	6151.86367	0.23727	0.23613	1.70E-02	4.96E-03	1.62E-03	4.23E-03	1.24E-03	3.75E-03	1.11E-02	2.81E-03	9.14E-04	3.35E-03	1.32E-03	2.26E-03	3.32E-06	4.00E-06	5.4501E-02
551631.15	4173258.18	5759.42178	6585.28031	1081.61011	5208.50098	935.38277	12254.95809	5860.73696	3955.69232	629.45101	5190.96704	2314.62436	14367.6902	4.47657	4.70593	8.41E-03	5.74E-03	9.42E-04	3.32E-03	7.50E-04	9.83E-03	5.55E-03	3.32E-03	5.28E-04	2.76E-03	8.52E-04	5.29E-03	6.26E-05	7.97E-05	4.7429E-02
551435.11	4173098.72	4270.81073	7990.24279	1234.46757	9627.49371	1320.11806	7712.12124	4305.50031	4744.28273	698.22756	8633.47899	4146.549	9405.11023	0.75904	0.76866	6.23E-03	6.96E-03	1.08E-03	6.13E-03	1.06E-03	6.19E-03	4.08E-03	3.98E-03	5.86E-04	4.60E-03	1.53E-03	3.46E-03	1.06E-05	1.30E-05	4.5898E-02
551393.41	4172852.77	3728.24373	5988.16315	1567.97421	15077.21653	2001.89637	3732.38766	3717.64121	3406.82105	873.78161	10833.81581	8397.33435	4738.0138	0.75191	0.77235	5.44E-03	5.22E-03	1.37E-03	9.60E-03	1.61E-03	2.99E-03	3.52E-03	2.86E-03	7.33E-04	5.77E-03	3.09E-03	1.74E-03	1.05E-05	1.31E-05	4.3962E-02
551397.83	4172994.62	4152.63448	7910.52456	1326.87638	11836.29783	1505.16295	5404.32367	4164.46322	4608.1213	753.52739	10103.14879	5474.40084	6787.67708	0.71349	0.72617	6.06E-03	6.89E-03	1.16E-03	7.54E-03	1.21E-03	4.34E-03	3.95E-03	3.87E-03	6.32E-04	5.38E-03	2.01E-03	2.50E-03	9.98E-06	1.23E-05	4.5544E-02
551508.61	4172654.58	4440.24136	4506.70046	2168.55852	14513.60926	3554.55503	2660.45301	4407.33013	2610.74959	1184.77857	9546.97223	10902.07044	3485.33584	0.54338	0.55312	6.48E-03	3.93E-03	1.89E-03	9.24E-03	2.85E-03	2.13E-03	4.18E-03	2.19E-03	9.94E-04	5.08E-03	4.01E-03	1.28E-03	7.60E-06	9.37E-06	4.4277E-02
551450.46	4172704.32	3851.16988	4936.32891	1765.79979	15794.01764	2695.92079	2899.97002	3833.3995	2820.03416	970.28843	10120.9521	10524.08815	3759.0645	0.68489	0.70513	5.62E-03	4.30E-03	1.54E-03	1.01E-02	2.16E-03	2.33E-03	3.63E-03	2.37E-03	8.14E-04	5.39E-03	3.87E-03	1.38E-03	9.58E-06	1.19E-05	4.3483E-02
551547.22	4173229.86	4929.67083	7458.1195	1116.97518	6506.40787	1046.53172	10865.78055	4989.94133	4521.3801	645.31414	6388.83315	2757.03232	12678.2895	1.29408	1.31534	7.20E-03	6.50E-03	9.73E-04	4.14E-03	8.40E-04	8.72E-03	4.73E-03	3.79E-03	5.41E-04	3.40E-03	1.01E-03	4.66E-03	1.81E-05	2.23E-05	4.6549E-02
551400.85	4172818.2	3655.43723	5683.37727	1590.25865	15355.42103	2152.3885	3502.86206	3642.78503	3232.81883	882.16518	10541.18362	9065.02172	4461.46746	0.75566	0.77857	5.34E-03	4.95E-03	1.39E-03	9.78E-03	1.73E-03	2.81E-03	3.45E-03	2.71E-03	7.40E-04	5.61E-03	3.34E-03	1.64E-03	1.06E-05	1.32E-05	4.3502E-02
551701.44	4172664.32	8291.18644	3174.56824	3363.93996	8835.38303	5691.77334	2040.05099	8174.79377	1897.59032	1739.7382	5991.1383	11744.54519	2772.52291	0.41044	0.42159	1.21E-02	2.76E-03	2.93E-03	5.63E-03	4.57E-03	1.64E-03	7.75E-03	1.59E-03	1.46E-03	3.19E-03	4.32E-03	1.02E-03	5.74E-06	7.14E-06	4.8969E-02
551437.62	4172724.36	3739.36632	5073.73135	1695.18453	15753.49556	2557.9854	2992.1243	3723.76838	2891.64453	931.65821	10186.73648	10244.70997	3867.73352	0.70706	0.72943	5.46E-03	4.42E-03	1.48E-03	1.00E-02	2.05E-03	2.40E-03	3.53E-03	2.43E-03	7.82E-04	5.42E-03	3.77E-03	1.42E-03	9.89E-06	1.24E-05	4.3212E-02
551500.85	4173194.8	4603.72739	7817.17374	1164.20792	7463.46398	1118.33457	9611.58331	4649.88032	4689.27458	668.34656	7254.48825	3093.47751	11499.99046	0.96916	0.98311	6.72E-03	6.81E-03	1.01E-03	4.75E-03	8.97E-04	7.71E-03	4.41E-03	3.93E-03	5.61E-04	3.86E-03	1.14E-03	4.23E-03	1.36E-05	1.67E-05	4.6067E-02
551601.42	4173256.54	5404.61906	6864.48888	1061.17458	5516.9059	957.38732	11794.84255	5489.30441	4129.15339	616.88121	5471.29707	2405.07632	13860.67898	2.40007	2.47596	7.89E-03	5.98E-03	9.24E-04	3.51E-03	7.68E-04	9.46E-03	5.20E-03	3.46E-03	5.18E-04	2.91E-03	8.85E-04	5.10E-03	3.36E-05	4.20E-05	4.6693E-02
551394.59	4172985.61	4107.51443	7732.0277	1337.14829	11969.30933	1506.40059	5200.12115	4117.01106	4486.43443	759.32165	10165.4021	5557.67684	6538.9122	0.70715	0.72009	6.00E-03	6.73E-03	1.16E-03	7.62E-03	1.21E-03	4.17E-03	3.90E-03	3.76E-03	6.37E-04	5.41E-03	2.04E-03	2.41E-03	9.89E-06	1.22E-05	4.5084E-02
551410	4172783.92	3619.32279	5452.81643	1608.71791	15428.9307	2291.9154	3301.10801	3605.6366	3098.23987	888.33359	10322.13045	9502.21241	4224.23054	0.74558	0.76985	5.28E-03	4.75E-03	1.40E-03	9.82E-03	1.84E-03	2.65E-03	3.42E-03	2.60E-03	7.45E-04	5.49E-03	3.50E-03	1.55E-03	1.04E-05	1.30E-05	4.3075E-02
551518.17	4173211.07	4701.02135	7675.71779	1139.86012	7053.17636	1084.54416	9959.26662	4751.36182	4611.87715	656.0515	6864.33747	2939.92613	11899.82655	1.05368	1.0696	6.86E-03	6.69E-03	9.93E-04	4.49E-03	8.70E-04	7.99E-03	4.50E-03	3.87E-03	5.50E-04	3.65E-03	1.08E-03	4.38E-03	1.47E-05	1.81E-05	4.5961E-02
552096.23	4172928.3	11643.41442	5725.30157	1674.7379	6196.1139	1352.30122	4988.9971	11720.07554	3359.54488	986.53153	5954.66096	3176.3324	6535.50981	0.24067	0.23934	1.70E-02	4.99E-03	1.46E-03	3.95E-03	1.08E-03	4.00E-03	1.11E-02	2.82E-03	8.28E-04	3.17E-03	1.17E-03	2.40E-03	3.37E-06	4.06E-06	5.3979E-02
551709.18	4172666.4	8339.56061	3107.75032	3256.42485	8999.46683	5466.59722	1998.9409	8223.01393	1853.99989	1685.96937	5910.80335	11724.00596	2716.07948	0.42445	0.43615	1.22E-02	2.71E-03	2.84E-03	5.73E-03	4.39E-03	1.60E-03	7.79E-03	1.56E-03	1.41E-03	3.15E-03	4.31E-03	9.99E-04	5.94E-06	7.39E-06	4.8672E-02
551484.35	4173178	4473.90806	7816.39521	1175.43158	7857.81718	1151.08422	9154.20214	4516.52331	4667.52081	673.13469	7542.65011	3257.45057	10980.17429	0.89186	0.90406	6.53E-03	6.81E-03	1.02E-03	5.00E-03	9.24E-04	7.34E-03	4.28E-03	3.92E-03	5.65E-04	4.01E-03	1.20E-03	4.04E-03	1.25E-05	1.53E-05	4.5676E-02
551926.94	4172706.94	5461.51457	3531.6196	3679.9285	11774.87334	5679.30145	1627.29896	5336.0902	2056.0782	1896.91248	8943.3831	11062.29683	2189.81659	0.30531	0.30561	7.97E-03	3.08E-03	3.21E-03	7.50E-03	4.56E-03	1.31E-03	5.06E-03	1.73E-03	1.59E-03	4.76E-03	4.07E-03	8.06E-04	4.27E-06	5.18E-06	4.5633E-02
551498.4	4172657.61	4297.86496	4514.41252	2074.84656	14576.29666	3347.46741	2665.43777	4267.86605	2608.31749	1136.51521	9521.00759	10714.53613	3484.1523	0.55679	0.56764	6.27E-03	3.93E-03	1.81E-03	9.28E-03	2.69E-03	2.14E-03	4.05E-03	2.19E-03	9.54E-04	5.07E-03	3.94E-03	1.28E-03	7.79E-06	9.62E-06	4.3615E-02
551539.9	4172638.01	4822.42773	4270.50165	2418.18822	13190.01746	4164.55478	2539.62683	4780.59734	2496.9175	1309.96019	9044.65922	10790.68343	3353.57067	0.46763	0.47405	7.04E-03	3.72E-03	2.11E-03	8.40E-03	3.34E-03	2.04E-03	4.53E-03	2.10E-03	1.10E-03	4.81E-03	3.97E-03	1.23E-03	6.54E-06	8.03E-06	4.4400E-02
552099.2	4172907.38	11473.75801	5640.49045	1781.96786	6432.96096	1473.4905	4718.37019	11524.64865	3317.14072	1044.79052	6125.77087	3422.4009	6203.79397	0.23636	0.23517	1.67E-02	4.91E-03	1.55E-03	4.10E-03	1.18E-03	3.79E-03	1.09E-02	2.78E-03	8.77E-04	3.26E-03	1.26E-03	2.28E-03	3.31E-06	3.99E-06	5.3669E-02
551441.03	4173115.46	4237.15362	7780.39721	1209.88197	9182.32002	1273.99672	7978.39243	4273.10793	4664.77611	688.18733	8380.66755	3916.62045	9556.95349	0.75812	0.76783	6.18E-03	6.78E-03	1.05E-03	5.85E-03	1.02E-03	6.40E-03	4.05E-03	3.91E-03	5.77E-04	4.46E-03	1.44E-03	3.52E-03	1.06E-05	1.30E-05	4.5268E-02
551664.88	4173262.23	6400.04341	6174.39717	1023.10186	4753.87904	885.57937	12086.58918	6527.89591	3654.42425	598.87402	4726.56089	2139.07866	14127.89596	16.7204	13.84824	9.34E-03	5.38E-03	8.91E-04	3.03E-03	7.10E-04	9.70E-03	6.19E-03	3.07E-03	5.02E-04	2.52E-03	7.87E-04	5.20E-03	2.34E-04	2.35E-04	4.7771E-02
552012.61	4172736.12	8344.22027	4650.80113	3098.55541	9458.8045	3437.92572	2548.1113	8205.78825	2773.24956	1711.76344	8135.23052	7210.9772	3424.60684	0.25383	0.25372	1.22E-02	4.05E-03	2.70E-03	6.02E-03	2.76E-03	2.04E-03	7.78E-03	2.33E-03	1.44E-03	4.33E-03	2.65E-03	1.26E-03	3.55E-06	4.30E-06	4.9546E-02
551390.13	4172885.96	3786.92167	6294.10858	1515.1459	14201.04284	1811.11419	3950.29664	3779.58422	3582.85709	849.52085	10840.91655	7371.40938	5005.72034	0.72617	0.74413	5.53E-03	5.48E-03	1.32E-03	9.04E-03	1.45E-03	3.17E-03	3.58E-03	3.01E-03	7.13E-04	5.77E-03	2.71E-03	1.84E-03	1.02E-05	1.26E-05	4.3642E-02
551911.78	4172703.37	5074.06233	3308.34928	3582.56552	11942.76982	6049.07704	1537.53088	4964.39102	1908.88122	1821.81911	8806.24879	11899.50507	2064.83114	0.32364	0.32409	7.41E-03	2.88E-03	3.12E-03	7.60E-03	4.85E-03	1.23E-03	4.71E-03	1.60E-03	1.53E-03	4.69E-03	4.38E-03	7.60E-04	4.53E-06	5.49E-06	4.4770E-02
551578.63	4172628.6	5478.4574	4009.04143	2799.03347	11510.19735	5034.92148	2423.45645	5422.80889	2370.63588	1505.16076	8351.38858	10818.38761	3226.15612	0.40267	0.40755	8.00E-03	3.49E-03	2.44E-03	7.33E-03	4.04E-03	1.94E-03	5.14E-03	1.99E-03	1.26E-03	4.45E-03	3.98E-03	1.19E-03	5.63E-06	6.91E-06	4.5256E-02
551401.79	4172808.81	3612.22655	5557.90695	1578.5657	15152.22645	2166.20568	3418.79346	3599.42879	3161.09916	874.67177	10330.93079	9056.68607	4359.05862	0.74176	0.76462	5.27E-03	4.84E-03	1.37E-03	9.65E-03	1.74E-03	2.74E-03	3.41E-03	2.65E-03	7.34E-04	5.50E-03	3.33E-03	1.60E-03	1.04E-05	1.30E-05	4.2873E-02
551391.36	4172976.65	4052.84652	7524.67195	1345.17698	12063.74101	1514.09339	4998.35122	4060.16497	4351.2163	763.73329	10186.21478	5632.96795	6291.71589	0.69853	0.71157	5.92E-03	6.55E-03	1.17E-03	7.68E-03	1.21E-03	4.01E-03	3.85E-03	3.65E-03	6.41E-04	5.42E-03	2.07E-03	2.31E-03	9.77E-06	1.21E-05	4.4519E-02
551646.43	4172638.95	6947.726	3510.59525	3359.70943	8862.7283	6077.20246	2219.01869	6859.01436	2109.23085	1764.05055	6820.31849	11046.06135	2992.58336	0.34172	0.34721	1.01E-02	3.06E-03	2.93E-03	5.64E-03	4.88E-03	1.78E-03	6.50E-03	1.77E-03	1.48E-03	3.63E-03	4.06E-03	1.10E-03	4.78E-06	5.88E-06	4.6982E-02
551737.74	4172672.32	8202.65783	2897.88879	2812.14357	10026.72919	5006.22406	1854.34409	8093.7813	1713.23769	1470.12732	5920.85253	11986.92765	2512.11878	0.47404	0.48602	1.20E-02	2.52E-03	2.45E-03	6.38E-03	4.02E-03	1.49E-03	7.67E-03	1.44E-03	1.23E-03	3.15E-03	4.41E-03	9.24E-04	6.63E-06	8.24E-06	4.7678E-02
552038.16	4172751.61	9032.32807	4793.64739	2810.45261	8802.82394	2985.41827	2825.64099	8920.79374	2846.60003	1567.21164	7661.87384	6348.54418	3817.41948	0.24132	0.24107	1.32E-02	4.18E-03	2.45E-03	5.61E-03	2.40E-03	2.27E-03	8.46E-03	2.39E-03	1.31E-03	4.08E-03	2.34E-03	1.40E-03	3.38E-06	4.09E-06	5.0059E-02
551405.75	4172792.19	3584.09081	5430.57722	1581.12132	15095.92645	2222.25487	3314.45954	3570.89521	3087.51411	874.18891	10179.57486	9204.65641	4235.08091	0.73208	0.75534	5.23E-03	4.73E-03	1.38E-03	9.61E-03	1.78E-03	2.66E-03	3.38E-03	2.59E-03	7.33E-04	5.42E-03	3.39E-03	1.56E-03	1.02E-05	1.28E-05	4.2488E-02
551611.42	4172628.63	6114.26151	3744.20812	3084.51078	10008.62365	5627.28266	2316.22092	6044.35204	2236.01236	1640.28119	7570.73807	10801.70242	3101.18547	0.3598	0.36425	8.92E-03	3.26E-03	2.69E-03	6.37E-03	4.51E-03	1.86E-03	5.73E-03	1.88E-03	1.38E-03	4.03E-03	3.97E-03	1.14E-03	5.03E-06	6.17E-06	4.5756E-02
551972.03	4172717.21	6698.7788	4080.2904	3522.25945	10639.46179	4341.38392	1957.90859	6551.34656	2419.90581	1882.42048	8725.98607	8704.24847	2644.53771	0.27181	0.27203	9.78E-03	3.55E-03	3.07E-03	6.77E-03	3.48E-03	1.57E-03	6.21E-03	2.03E-03	1.58E-03	4.64E-03	3.20E-03	9.73E-04	3.80E-06	4.61E-06	4.6876E-02
551388.14	4172967.68	3995.0013	7307.0206	1353.31812	12146.85047	1522.82508	4806.47229	4000.23328	4212.92604	768.00121	10188.09937	5710.65192	6055.70803	0.69073	0.70382	5.83E-03	6.36E-03	1.18E-03	7.73E-03	1.22E-03	3.86E-03	3.79E-03	3.53E-03	6.44E-04	5.42E-03	2.10E-03	2.23E-03	9.67E-06	1.19E-05	4.3931E-02
552102.35	4172916.18	11284.2031	5574.82074	1703.992	6227.66449	1399.25524	4756.83567	11345.34784	3275.16394	1000.61578	5948.87466	3266.16445	6241.11598	0.23536	0.23413	1.65E-02	4.86E-03	1.48E-03	3.97E-03	1.12E-03	3.82E-03	1.08E-02	2.75E-03	8.40E-04	3.17E-03	1.20E-03	2.30E-03	3.29E-06	3.97E-06	5.2728E-02
551652.44	4173264.04	6022.94153	6191.24193	1049.54447	4845.25317	894.37692	11737.68029	6136.75394	3679.36926	613.02294	4794.22684	2178.88313	13851.48481	8.41785	9.16379	8.79E-03	5.39E-03	9.14E-04	3.09E-03	7.18E-04	9.42E-03	5.82E-03	3.09E-03	5.14E-04	2.55E-03	8.02E-04	5.10E-03	1.18E-04	1.55E-04	4.6459E-02
552099.37	4172937.1	11373.04516	5632.04696	1594.65578	5977.16591	1281.15663	5007.30825	11459.40957	3301.22922	940.55226	5760.04917	3023.81122	6544.75843	0.2395	0.23812	1.66E-02	4.91E-03	1.39E-03	3.81E-03	1.03E-03	4.02E-03	1.09E-02	2.77E-03	7.89E-04	3.07E-03	1.11E-03	2.41E-03	3.35E-06	4.04E-06	5.2760E-02
551487.86	4172661.17	4136.88519	4490.564	1967.16611	14428.92441	3117.31065	2657.41887	4110.11359	2588.72311	1080.02961	9394.25025	10369.57317	3466.01689	0.56188	0.57355	6.04E-03	3.91E-03	1.71E-03	9.19E-03	2.50E-03	2.13E-03	3.90E-03	2.17E-03	9.06E-04	5.00E-03	3.82E-03	1.28E-03	7.86E-06	9.72E-06	4.2566E-02
551391.76	4172842.66	3618.25691	5703.78291	1528.06559	14548.98676	1978.35703	3570.06856	3607.53851	3248.10465	850.62545	10342.4673	8238.9515	4534.73585	0.71894	0.73855	5.28E-03	4.97E-03	1.33E-03	9.26E-03	1.59E-03	2.86E-03	3.42E-03	2.73E-03	7.14E-04	5.51E-03	3.03E-03	1.67E-03	1.01E-05	1.25E-05	4.2381E-02
551487.44	4173186.58	4422.61088	7588.84472	1149.39497	7573.43017	1122.44549	8963.18286	4464.97341	4535.44625	658.6881	7271.69264	3153.77843	10753.16648	0.88498	0.89695	6.46E-03	6.61E-03	1.00E-03	4.82E-03	9.01E-04	7.19E-03	4.23E-03	3.81E-03	5.53E-04	3.87E-03	1.16E-03	3.96E-03	1.24E-05	1.52E-05	4.4585E-02
551446.94	4173132.2	4186.52811	7529.70056	1180.66921	8711.74692	1226.58869	8004.05847	4222.9873	4507.4576	672.39263	8006.76147	3697.56815	9690.34131	0.7562	0.76607	6.11E-03	6.56E-03	1.03E-03	5.55E-03	9.84E-04	6.42E-03	4.00E-03	3.78E-03	5.64E-04	4.26E-03	1.36E-03	3.57E-03	1.06E-05	1.30E-05	4.4210E-02
552105.32	4172895.26	11040.85945	5465.46479	1798.90701	6429.65792	1514.93156	4485.02298	11078.34943	3217.3718	1051.19837	6084.61993	3497.75491	5904.45311	0.23097	0.22988	1.61E-02	4.76E-03	1.57E-03	4.09E-03	1.22E-03	3.60E-03	1.05E-02	2.70E-03	8.82E-04	3.24E-03	1.29E-03	2.17E-03	3.23E-06	3.90E-06	5.2138E-02
551523.8	4173219.98	4647.67009	7332.97197	1109.80248	6761.19696	1057.47209	9762.17777	4698.75054	4445.23051	639.28432	6568.84991	2847.54584	11669.8979	1.06014	1.07625	6.78E-03	6.39E-03	9.67E-04	4.31E-03	8.48E-04	7.83E-03	4.45E-03	3.73E-03	5.36E-04	3.50E-03	1.05E-03	4.29E-03	1.48E-05	1.82E-05	4.4714E-02
551428.29	4172733.26	3617.2212	5019.34541	1623.02426	15101.13025	2423.383	2984.94597	3602.93291	2858.75324	892.5088	9885.29645	9681.00529	3850.43061	0.68644	0.7081	5.28E-03	4.37E-03	1.41E-03	9.62E-03	1.94E-03	2.39E-03	3.41E-03	2.40E-03	7.49E-04	5.26E-03	3.56E-03	1.42E-03	9.61E-06	1.20E-05	4.1844E-02
551986.96	4172720.52	7085.51443	4219.42054	3372.80478	10136.65534	3912.3723	2098.77165	6939.5688	2514.78545	1822.30136	8501.57225	8095.70948	2829.03307	0.26354	0.26367	1.03E-02	3.68E-03	2.94E-03	6.45E-03	3.14E-03	1.68E-03	6.58E-03	2.11E-03	1.53E-03	4.53E-03	2.98E-03	1.04E-03	3.69E-06	4.47E-06	4.7001E-02
552027.43	4172739.3	8449.93237	4631.07453	2881.55279	8989.98242	3168.30353	2648.59999	8326.1442	2751.96238	1596.40971	7730.19042	6689.76017	3566.87745	0.24429	0.24414	1.23E-02	4.03E-03	2.51E-03	5.72E-03	2.54E-03	2.12E-03	7.89E-03	2.31E-03	1.34E-03	4.11E-03	2.46E-03	1.31E-03	3.42E-06	4.14E-06	4.8704E-02
551440.58	4172710.84	3693.71872	4848.30372	1668.51966	15052.64969	2520.13114	2870.16347	3678.06936	2767.95571	917.25578	9752.6791	9864.89505	3714.57952	0.65996	0.67966	5.39E-03	4.22E-03	1.45E-03	9.58E-03	2.02E-03	2.30E-03	3.49E-03	2.32E-03	7.70E-04	5.19E-03	3.63E-03	1.37E-03	9.23E-06	1.15E-05	4.1763E-02
551505.04	4173205.34	4522.48668	7482.04547	1126.86081	7122.81458	1083.57498	9290.57378	4568.4166	4487.33732	647.45731	6892.04786	2975.48064	11127.19476	0.95677	0.9703	6.60E-03	6.52E-03	9.81E-04	4.54E-03	8.69E-04	7.45E-03	4.33E-03	3.77E-03	5.43E-04	3.67E-03	1.09E-03	4.09E-03	1.34E-05	1.64E-05	4.4483E-02
551566.3	4173247.83	4947.53929	6952.67112	1064.63053	5916.13212	986.59036	10749.80586	5014.02119	4187.82515	616.35679	5823.14374	2549.62065	12486.13113	1.48566	1.51401	7.22E-03	6.06E-03	9.27E-04	3.77E-03	7.92E-04	8.62E-03	4.75E-03	3.51E-03	5.17E-04	3.10E-03	9.38E-04	4.59E-03	2.08E-05	2.57E-05	4.4849E-02
551387.38	4172876.15	3683.98078	6003.20132	1488.96619	13905.25749	1809.7511	3781.746	3676.07569	3419.10109	833.318	10459.16496	7371.3413	4794.10657	0.70182	0.71919	5.38E-03	5.23E-03	1.30E-03	8.85E-03	1.45E-03	3.03E-03	3.48E-03	2.87E-03	6.99E-04	5.57E-03	2.71E-03	1.76E-03	9.82E-06	1.22E-05	4.2360E-02
551384.91	4172958.72	3926.3204	7066.09847	1357.17383	12174.1994	1528.66247	4614.71183	3929.65753	4064.4513	769.68066	10135.32194	5778.12932	5819.02562	0.68061	0.694	5.73E-03	6.15E-03	1.18E-03	7.75E-03	1.23E-03	3.70E-03	3.72E-03	3.41E-03	6.46E-04	5.39E-03	2.13E-03	2.14E-03	9.52E-06	1.18E-05	4.3212E-02
551411.14	4173060.62	4069.81191	7654.91855	1195.37584	9947.73842	1334.91014	6410.16205	4096.2119	4549.5187	677.32952	8603.86867	4462.83768	7932.45443	0.6849	0.69538	5.94E-03	6.67E-03	1.04E-03	6.33E-03	1.07E-03	5.14E-03	3.88E-03	3.82E-03	5.68E-04	4.58E-03	1.64E-03	2.92E-03	9.58E-06	1.18E-05	4.3627E-02
551591.71	4172624.36	5614.96407	3815.37332	2835.90188	10530.41888	5102.81759	2336.21789	5555.78253	2265.49252	1519.68858	7807.11847	10405.82517	3116.29643	0.36945	0.37371	8.20E-03	3.32E-03	2.47E-03	6.71E-03	4.09E-03	1.87E-03	5.27E-03	1.90E-03	1.28E-03	4.16E-03	3.83E-03	1.15E-03	5.17E-06	6.33E-06	4.4246E-02
552105.5	4172924.98	11064.14798	5498.20011	1627.05246	6020.73205	1327.90007	4784.21185	11134.93082	3226.75835	956.79907	5768.28665	3114.62133	6263.64363	0.23427	0.23299	1.61E-02	4.79E-03	1.42E-03	3.83E-03	1.07E-03	3.84E-03	1.06E-02	2.71E-03	8.03E-04	3.07E-03	1.15E-03	2.30E-03	3.28E-06	3.95E-06	5.1685E-02
551452.4	4172691.47	3772.79888	4676.12888	1720.74078	14768.12259	2618.96076	2768.1483	3755.02996	2676.47342	946.19259	9542.80205	9899.73786	3589.96557	0.62601	0.6431	5.51E-03	4.07E-03	1.50E-03	9.40E-03	2.10E-03	2.22E-03	3.56E-03	2.25E-03	7.94E-04	5.08E-03	3.64E-03	1.32E-03	8.76E-06	1.09E-05	4.1465E-02
551450.37	4173141.74	4163.98618	7403.72233	1163.98908	8459.65669	1198.66764	7989.17119	4200.53952	4426.44313	663.36812	7800.92888	3573.48635	9657.94234	0.75652	0.76631	6.08E-03	6.45E-03	1.01E-03	5.39E-03	9.62E-04	6.41E-03	3.98E-03	3.71E-03	5.57E-04	4.15E-03	1.31E-03	3.55E-03	1.06E-05	1.30E-05	4.3594E-02
551656.68	4172638.3	7022.51922	3360.43049	3287.85688	8372.22043	5848.24643	2141.27859	6931.51512	2018.6141	1721.88749	6420.0779	10663.94355	2892.20955	0.33031	0.33603	1.03E-02	2.93E-03	2.86E-03	5.33E-03	4.69E-03	1.72E-03	6.57E-03	1.69E-03	1.44E-03	3.42E-03	3.92E-03	1.06E-03	4.62E-06	5.69E-06	4.5905E-02
551640.01	4173265.85	5678.97766	6174.08392	1042.94521	4923.14008	898.56595	11380.76831	5780.99891	3696.54625	607.50949	4878.96383	2212.16785	13391.70778	5.31372	5.64386	8.29E-03	5.38E-03	9.08E-04	3.13E-03	7.21E-04	9.13E-03	5.48E-03	3.10E-03	5.10E-04	2.60E-03	8.14E-04	4.93E-03	7.44E-05	9.56E-05	4.5160E-02
551771.82	4172683.44	7182.71091	2632.02811	2272.35488	11015.85509	5211.83375	1643.51406	7102.11023	1531.79165	1201.20061	6187.97469	12470.58174	2214.02385	0.48956	0.49931	1.05E-02	2.29E-03	1.98E-03	7.01E-03	4.18E-03	1.32E-03	6.73E-03	1.29E-03	1.01E-03	3.29E-03	4.59E-03	8.15E-04	6.85E-06	8.46E-06	4.5007E-02
552001.85	4172723.77	7364.96957	4306.22298	3172.88301	9611.56142	3614.60672	2269.67535	7224.63143	2593.78952	1731.83623	8168.7462	7533.24202	3060.09351	0.25576	0.25579	1.08E-02	3.75E-03	2.76E-03	6.12E-03	2.90E-03	1.82E-03	6.85E-03	2.18E-03	1.45E-03	4.35E-03	2.77E-03	1.13E-03	3.58E-06	4.33E-06	4.6836E-02
551404.69	4173042.71	4042.62637	7647.27734	1202.35434	10147.76945	1359.03823	6010.42842	4065.28477	4537.86078	681.66055	8775.6357	4676.15157	7478.5256	0.67534	0.68533	5.90E-03	6.66E-03	1.05E-03	6.46E-03	1.09E-03	4.82E-03	3.85E-03	3.81E-03	5.72E-04	4.67E-03	1.72E-03	2.75E-03	9.45E-06	1.16E-05	4.3379E-02
551407.91	4173051.67	4048.39587	7637.75383	1195.14441	9979.1527	1345.47348	6198.22075	4073.03374	4539.07631	677.30817	8657.96378	4573.31249	7692.08026	0.6778	0.68836	5.91E-03	6.65E-03	1.04E-03	6.35E-03	1.08E-03	4.97E-03	3.86E-03	3.81E-03	5.68E-04	4.61E-03	1.68E-03	2.83E-03	9.48E-06	1.17E-05	4.3389E-02
552108.47	4172904.06	10898.95643	5415.71281	1725.64589	6239.46601	1441.98976	4530.71233	10946.28937	3184.93816	1010.09726	5924.06874	3345.75463	5952.73472	0.23011	0.22897	1.59E-02	4.72E-03	1.50E-03	3.97E-03	1.16E-03	3.63E-03	1.04E-02	2.67E-03	8.48E-04	3.15E-03	1.23E-03	2.19E-03	3.22E-06	3.88E-06	5.1370E-02
551401.46	4173033.76	4030.21839	7626.79752	1209.5589	10305.33558	1371.58046	5816.81083	4050.78665	4515.5665	686.00552	8884.92204	4774.09796	7254.54641	0.67149	0.6824	5.88E-03	6.64E-03	1.05E-03	6.56E-03	1.10E-03	4.67E-03	3.84E-03	3.79E-03	5.76E-04	4.73E-03	1.76E-03	2.67E-03	9.40E-06	1.16E-05	4.3288E-02
551422.26	4172739.98	3551.29167	4998.35219	1585.03792	14743.30718	2349.45699	2989.42539	3537.627	2845.66276	872.03904	9724.70578	9372.8283	3850.28256	0.67632	0.69761	5.18E-03	4.35E-03	1.38E-03	9.39E-03	1.88E-03	2.40E-03	3.35E-03	2.39E-03	7.32E-04	5.18E-03	3.45E-03	1.42E-03	9.46E-06	1.18E-05	4.1124E-02
551398.24	4173024.81	4013.94249	7582.5245	1217.89819	10461.86344	1383.89848	5624.44688	4032.34826	4475.85503	691.00217	8994.61635	4861.06801	7029.12163	0.66809	0.67869	5.86E-03	6.60E-03	1.06E-03	6.66E-03	1.11E-03	4.51E-03	3.82E-03	3.76E-03	5.80E-04	4.79E-03	1.79E-03	2.59E-03	9.35E-06	1.15E-05	4.3149E-02
551533.5	4173229.12	4646.55226	7096.72497	1086.89263	6464.83466	1034.66105	9808.56336	4699.96618	4323.97391	626.84603	6301.64519	2760.42354	11476.27033	1.11531	1.13165	6.78E-03	6.18E-03	9.47E-04	4.12E-03	8.30E-04	7.87E-03	4.45E-03	3.63E-03	5.26E-04	3.35E-03	1.02E-03	4.22E-03	1.56E-05	1.92E-05	4.3962E-02
551395.01	4173015.86	3997.38024	7522.17145	1228.98661	10632.14143	1396.7704	5439.78905	4013.5762	4423.75662	697.51119	9116.35081	4946.14198	6810.74685	0.66509	0.67613	5.83E-03	6.55E-03	1.07E-03	6.77E-03	1.12E-03	4.36E-03	3.80E-03	3.71E-03	5.85E-04	4.85E-03	1.82E-03	2.51E-03	9.31E-06	1.15E-05	4.3012E-02
551381.68	4172949.75	3852.95969	6819.67344	1358.90792	12170.97803	1534.34483	4430.38473	3854.57855	3914.95687	769.96569	10049.66567	5845.31952	5591.17625	0.66949	0.68296	5.62E-03	5.94E-03	1.18E-03	7.75E-03	1.23E-03	3.55E-03	3.65E-03	3.28E-03	6.46E-04	5.35E-03	2.15E-03	2.06E-03	9.37E-06	1.16E-05	4.2445E-02
552052.92	4172754.73	8860.25967	4693.58352	2628.28414	8342.99633	2756.21639	2843.58957	8763.65777	2785.85391	1470.6393	7298.4119	5898.72423	3832.82878	0.23263	0.23237	1.29E-02	4.09E-03	2.29E-03	5.31E-03	2.21E-03	2.28E-03	8.31E-03	2.34E-03	1.23E-03	3.88E-03	2.17E-03	1.41E-03	3.26E-06	3.94E-06	4.8465E-02
551419.9	4173085.26	4043.26334	7452.41447	1173.86187	9380.09173	1289.63555	6831.65764	4073.7738	4427.51887	665.0979	8234.98919	4168.74163	8382.11014	0.68989	0.69955	5.90E-03	6.49E-03	1.02E-03	5.97E-03	1.03E-03	5.48E-03	3.86E-03	3.71E-03	5.58E-04	4.38E-03	1.53E-03	3.08E-03	9.65E-06	1.19E-05	4.3060E-02
551391.79	4173006.9	3973.79841	7431.2123	1240.07908	10790.28561	1409.23481	5255.65978	3987.73213	4353.04329	704.0243	9223.50372	5027.80569	6590.64098	0.6616	0.67266	5.80E-03	6.47E-03	1.08E-03	6.87E-03	1.13E-03	4.22E-03	3.78E-03	3.65E-03	5.91E-04	4.91E-03	1.85E-03	2.42E-03	9.26E-06	1.14E-05	4.2798E-02
551422.86	4173093.63	4043.31208	7401.03191	1170.25255	9208.54284	1275.89257	6967.07363	4074.82556	4393.32879	663.34594	8145.84597	4061.58096	8524.9002	0.6942	0.70412	5.90E-03	6.45E-03	1.02E-03	5.86E-03	1.02E-03	5.59E-03	3.86E-03	3.69E-03	5.57E-04	4.34E-03	1.49E-03	3.14E-03	9.71E-06	1.19E-05	4.2937E-02
551610.57	4173265.16	5251.88818	6376.02744	1040.84551	5198.45653	920.49697	10952.28114	5336.7635	3840.13307	603.70914	5198.96873	2305.83444	12875.33039	2.65361	2.75383	7.67E-03	5.55E-03	9.07E-04	3.31E-03	7.39E-04	8.79E-03	5.06E-03	3.22E-03	5.07E-04	2.77E-03	8.48E-04	4.74E-03	3.71E-05	4.67E-05	4.4185E-02
551453.46	4173150.32	4141.26875	7355.70098	1148.03912	8218.49678	1173.36553	7950.46275	4177.79738	4352.03855	654.7158	7611.24682	3465.02255	9600.93641	0.75568	0.76526	6.04E-03	6.41E-03	1.00E-03	5.23E-03	9.41E-04	6.38E-03	3.96E-03	3.65E-03	5.49E-04	4.05E-03	1.27E-03	3.53E-03	1.06E-05	1.30E-05	4.3047E-02
551601.52	4172621.5	5734.35957	3684.93333	2868.19445	9921.96371	5161.93747	2276.55548	5671.96371	2194.27931	1531.57645	7451.60177	10193.7015	3041.15142	0.35061	0.35462	8.37E-03	3.21E-03	2.50E-03	6.32E-03	4.14E-03	1.83E-03	5.38E-03	1.84E-03	1.29E-03	3.97E-03	3.75E-03	1.12E-03	4.91E-06	6.01E-06	4.3712E-02
552042.22	4172742.44	8446.89171	4564.90935	2704.55895	8538.78213	2925.07035	2679.73183	8339.50237	2708.87916	1504.19757	7388.02874	6215.79761	3617.89911	0.2354	0.23523	1.23E-02	3.98E-03	2.36E-03	5.44E-03	2.35E-03	2.15E-03	7.90E-03	2.27E-03	1.26E-03	3.93E-03	2.29E-03	1.33E-03	3.29E-06	3.99E-06	4.7592E-02
552016.7	4172726.99	7615.09833	4390.63804	2971.16039	9123.25162	3340.60497	2386.65757	7483.61439	2617.24219	1635.15939	7822.20852	7008.73073	3207.74817	0.24698	0.24696	1.11E-02	3.82E-03	2.59E-03	5.81E-03	2.68E-03	1.91E-03	7.09E-03	2.20E-03	1.37E-03	4.16E-03	2.58E-03	1.18E-03	3.46E-06	4.18E-06	4.6523E-02
551505.73	4172645.18	4234.68875	4250.2656	2034.27553	13311.45012	3301.32065	2535.68881	4204.00407	2464.21553	1111.28629	8859.00549	9948.03519	3320.05777	0.49534	0.5038	6.18E-03	3.70E-03	1.77E-03	8.48E-03	2.65E-03	2.03E-03	3.98E-03	2.07E-03	9.32E-04	4.72E-03	3.66E-03	1.22E-03	6.93E-06	8.54E-06	4.1411E-02
552111.62	4172912.86	10726.7822	5355.07226	1652.76975	6046.46461	1371.41499	4566.38115	10783.47535	3146.23329	968.94537	5758.68822	3197.42021	5987.43251	0.22915	0.22797	1.57E-02	4.66E-03	1.44E-03	3.85E-03	1.10E-03	3.66E-03	1.02E-02	2.64E-03	8.13E-04	3.07E-03	1.18E-03	2.20E-03	3.21E-06	3.86E-06	5.0500E-02
551627.58	4173267.66	5419.68481	6177.21816	1033.96318	4993.09248	901.19653	11015.86452	5512.63063	3712.33158	600.97876	4964.67499	2236.87855	12953.27606	3.7515	3.92255	7.91E-03	5.38E-03	9.01E-04	3.18E-03	7.23E-04	8.84E-03	5.22E-03	3.11E-03	5.04E-04	2.64E-03	8.23E-04	4.77E-03	5.25E-05	6.65E-05	4.4126E-02
551390.28	4172827.82	3504.4632	5407.99577	1491.31489	14049.55952	1976.213	3393.61804	3493.45856	3081.76855	828.77959	9841.55534	8140.4143	4314.88058	0.68815	0.70736	5.12E-03	4.71E-03	1.30E-03	8.95E-03	1.59E-03	2.72E-03	3.31E-03	2.59E-03	6.95E-04	5.24E-03	3.00E-03	1.59E-03	9.63E-06	1.20E-05	4.0814E-02
551409.14	4172764.49	3476.8153	5085.20311	1538.25438	14371.72835	2225.22925	3085.18208	3463.89487	2892.82831	848.11457	9626.25717	8952.44592	3955.609	0.67857	0.69991	5.07E-03	4.43E-03	1.34E-03	9.15E-03	1.79E-03	2.48E-03	3.28E-03	2.43E-03	7.12E-04	5.12E-03	3.29E-03	1.46E-03	9.49E-06	1.19E-05	4.0572E-02
551388.56	4172997.95	3935.83982	7295.05204	1247.89223	10902.1053	1410.70367	5064.12813	3947.56276	4257.24445	708.55104	9284.92008	5095.6026	6359.11216	0.65524	0.66672	5.75E-03	6.35E-03	1.09E-03	6.94E-03	1.13E-03	4.06E-03	3.74E-03	3.57E-03	5.95E-04	4.94E-03	1.87E-03	2.34E-03	9.17E-06	1.13E-05	4.2407E-02
551384.09	4172856.02	3553.60144	5621.64092	1468.75194	13746.86057	1858.51327	3552.38821	3544.40764	3203.52577	819.14144	10004.73166	7605.27512	4506.95168	0.68224	0.69969	5.19E-03	4.90E-03	1.28E-03	8.75E-03	1.49E-03	2.85E-03	3.36E-03	2.69E-03	6.87E-04	5.33E-03	2.80E-03	1.66E-03	9.55E-06	1.19E-05	4.0995E-02
552108.65	4172933.78	10816.51275	5411.28147	1551.55876	5813.18853	1259.48944	4800.45728	10896.19796	3172.39354	913.56673	5585.01602	2968.08375	6271.47483	0.23309	0.23177	1.58E-02	4.71E-03	1.35E-03	3.70E-03	1.01E-03	3.85E-03	1.03E-02	2.66E-03	7.67E-04	2.97E-03	1.09E-03	2.31E-03	3.26E-06	3.93E-06	5.0551E-02
551491.73	4173198.52	4349.68915	7270.82783	1112.74674	7191.72356	1083.09717	8679.57767	4391.69841	4349.19986	638.23592	6904.22894	3015.00233	10418.88625	0.87466	0.88634	6.35E-03	6.33E-03	9.69E-04	4.58E-03	8.69E-04	6.96E-03	4.16E-03	3.65E-03	5.36E-04	3.67E-03	1.11E-03	3.83E-03	1.22E-05	1.50E-05	4.3055E-02
552004.89	4173097.63	10297.12437	5722.61531	875.94405	4042.9137	680.88835	7746.1173	10629.56328	3258.94457	521.92451	4119.00285	1683.04071	9711.24297	0.33383	0.33025	1.50E-02	4.98E-03	7.63E-04	2.57E-03	5.46E-04	6.21E-03	1.01E-02	2.73E-03	4.38E-04	2.19E-03	6.19E-04	3.57E-03	4.67E-06	5.60E-06	4.9755E-02
551575.84	4173256.81	4918.34135	6641.9941	1034.38802	5619.99802	955.3275	10320.41123	4987.41922	4006.99657	603.81592	5532.44604	2448.28007	12183.06753	1.60488	1.64108	7.18E-03	5.79E-03	9.01E-04	3.58E-03	7.66E-04	8.28E-03	4.73E-03	3.36E-03	5.07E-04	2.94E-03	9.01E-04	4.48E-03	2.25E-05	2.78E-05	4.3464E-02
551428.78	4173110.37	4023.30959	7248.66564	1158.8812	8837.19187	1239.15957	7155.04209	4056.27367	4297.7912	656.08286	7983.18072	3852.15394	8711.80555	0.69923	0.70798	5.87E-03	6.31E-03	1.01E-03	5.63E-03	9.94E-04	5.74E-03	3.84E-03	3.61E-03	5.50E-04	4.25E-03	1.42E-03	3.21E-03	9.78E-06	1.20E-05	4.2452E-02
551509.26	4173215.25	4437.80386	7164.83837	1091.29309	6809.83215	1052.40503	8983.60145	4483.57351	4295.58077	627.50091	6559.89671	2872.14645	10772.43889	0.94452	0.95773	6.48E-03	6.24E-03	9.50E-04	4.34E-03	8.44E-04	7.21E-03	4.25E-03	3.60E-03	5.27E-04	3.49E-03	1.06E-03	3.96E-03	1.32E-05	1.62E-05	4.2978E-02
551598.15	4173265.64	5105.02238	6414.78033	1014.57417	5277.96142	923.07671	10618.50095	5183.60076	3859.52512	598.89453	5291.71168	2324.4973	12511.49173	2.1247	2.18537	7.45E-03	5.59E-03	8.84E-04	3.36E-03	7.41E-04	8.52E-03	4.91E-03	3.24E-03	5.03E-04	2.82E-03	8.55E-04	4.60E-03	2.97E-05	3.70E-05	4.3539E-02
551497.06	4172647.66	4122.0837	4254.14621	1962.20644	13348.04079	3143.42595	2538.83102	4093.62916	2461.28455	1074.35345	8834.52591	9798.59421	3317.9569	0.50461	0.51384	6.02E-03	3.71E-03	1.71E-03	8.50E-03	2.52E-03	2.04E-03	3.88E-03	2.07E-03	9.01E-04	4.70E-03	3.61E-03	1.22E-03	7.06E-06	8.71E-06	4.0880E-02
551442.82	4172697.8	3640.78143	4628.25007	1639.38892	14308.67161	2473.60701	2753.62002	3625.00815	2646.8262	901.61629	9309.42156	9445.17769	3566.47037	0.61456	0.63182	5.31E-03	4.03E-03	1.43E-03	9.11E-03	1.98E-03	2.21E-03	3.44E-03	2.22E-03	7.57E-04	4.96E-03	3.48E-03	1.31E-03	8.60E-06	1.07E-05	4.0253E-02
551378.46	4172940.79	3766.00176	6551.24424	1352.80813	12078.42244	1533.84261	4242.84877	3766.22908	3755.69206	765.62993	9889.40098	5817.81924	5358.43041	0.6548	0.66825	5.50E-03	5.71E-03	1.18E-03	7.69E-03	1.23E-03	3.40E-03	3.57E-03	3.15E-03	6.42E-04	5.26E-03	2.14E-03	1.97E-03	9.16E-06	1.13E-05	4.1467E-02
551456.55	4173158.91	4116.33033	7217.6743	1131.20817	7965.70218	1147.94	7890.13399	4152.75947	4275.55902	645.53023	7417.37692	3359.38032	9519.80495	0.75424	0.76377	6.01E-03	6.29E-03	9.85E-04	5.07E-03	9.21E-04	6.33E-03	3.94E-03	3.59E-03	5.42E-04	3.95E-03	1.24E-03	3.50E-03	1.06E-05	1.29E-05	4.2379E-02
551385.32	4172988.95	3883.35269	7116.41156	1251.73181	10961.19595	1413.93549	4865.57029	3893.02889	4138.7184	710.76126	9295.00601	5150.3176	6117.12505	0.64599	0.65727	5.67E-03	6.20E-03	1.09E-03	6.98E-03	1.13E-03	3.90E-03	3.69E-03	3.47E-03	5.96E-04	4.95E-03	1.89E-03	2.25E-03	9.04E-06	1.11E-05	4.1846E-02
551430.7	4172717.37	3541.85002	4743.53963	1578.09097	14251.93407	2358.86594	2833.56772	3527.95214	2706.87016	867.99498	9351.15535	9200.05624	3660.93381	0.63073	0.64946	5.17E-03	4.13E-03	1.37E-03	9.07E-03	1.89E-03	2.27E-03	3.34E-03	2.27E-03	7.28E-04	4.98E-03	3.38E-03	1.35E-03	8.83E-06	1.10E-05	3.9989E-02
551390.96	4172818.7	3457.98438	5282.51944	1478.53987	13847.88878	1984.90649	3312.63422	3446.77412	3010.23866	820.84913	9628.62594	8126.23251	4215.57267	0.67492	0.69409	5.05E-03	4.60E-03	1.29E-03	8.82E-03	1.59E-03	2.66E-03	3.27E-03	2.53E-03	6.89E-04	5.13E-03	2.99E-03	1.55E-03	9.44E-06	1.18E-05	4.0173E-02
551431.74	4173118.74	4001.02426	7142.45085	1147.00945	8630.8287	1218.64668	7199.69369	4034.42376	4234.52946	652.01278	7826.07414	3752.42626	8746.93085	0.69822	0.70696	5.84E-03	6.22E-03	9.99E-04	5.50E-03	9.78E-04	5.78E-03	3.82E-03	3.55E-03	5.47E-04	4.17E-03	1.38E-03	3.22E-03	9.77E-06	1.20E-05	4.2020E-02
552031.51	4172730.16	7867.30174	4395.59028	2758.60445	8691.88312	3087.91328	2510.19524	7750.30536	2612.82631	1524.48743	7429.40259	6518.48829	3364.38518	0.2379	0.23784	1.15E-02	3.83E-03	2.40E-03	5.53E-03	2.48E-03	2.01E-03	7.35E-03	2.19E-03	1.28E-03	3.95E-03	2.40E-03	1.24E-03	3.33E-06	4.03E-06	4.6156E-02
551552.9	4173247.39	4701.65179	6732.34636	1044.02236	5928.53604	980.07311	9712.94356	4761.141	4072.2282	603.4194	5802.63871	2561.3036	11516.3555	1.2672	1.28906	6.86E-03	5.86E-03	9.09E-04	3.77E-03	7.86E-04	7.79E-03	4.51E-03	3.42E-03	5.06E-04	3.09E-03	9.42E-04	4.24E-03	1.77E-05	2.18E-05	4.2733E-02
552114.77	4172921.66	10526.85718	5284.38401	1580.75439	5851.79029	1303.45311	4591.94722	10592.38494	3101.64397	928.04007	5589.76264	3053.31588	6008.61124	0.22811	0.22689	1.54E-02	4.60E-03	1.38E-03	3.73E-03	1.05E-03	3.68E-03	1.00E-02	2.60E-03	7.79E-04	2.98E-03	1.12E-03	2.21E-03	3.19E-06	3.84E-06	4.9538E-02
551998.09	4173105.85	9982.81252	5635.3206	847.80188	3926.55145	664.35101	7853.484	10319.75361	3203.75281	504.46187	4003.29119	1639.20149	9814.74731	0.34241	0.33862	1.46E-02	4.91E-03	7.38E-04	2.50E-03	5.33E-04	6.30E-03	9.78E-03	2.69E-03	4.23E-04	2.13E-03	6.03E-04	3.61E-03	4.79E-06	5.74E-06	4.8800E-02
551404.85	4172772.83	3430.12136	5051.32058	1506.82952	13986.43916	2152.4508	3091.20278	3417.69194	2875.2809	831.72315	9445.53996	8638.73986	3957.01229	0.66345	0.68385	5.01E-03	4.40E-03	1.31E-03	8.91E-03	1.73E-03	2.48E-03	3.24E-03	2.41E-03	6.98E-04	5.03E-03	3.18E-03	1.46E-03	9.28E-06	1.16E-05	3.9864E-02
551717.7	4172662.03	7880.24546	2895.27477	2894.15696	8484.89255	4747.37935	1874.78305	7774.97324	1722.29499	1507.40034	5492.32012	10558.02837	2543.42834	0.40057	0.41147	1.15E-02	2.52E-03	2.52E-03	5.40E-03	3.81E-03	1.50E-03	7.37E-03	1.45E-03	1.26E-03	2.92E-03	3.88E-03	9.36E-04	5.60E-06	6.97E-06	4.5096E-02
551675.8	4172642.02	7229.08395	3144.94852	3165.09994	7814.72094	5438.34423	2026.55748	7133.5962	1886.0349	1650.52661	5861.05422	10190.38624	2744.41068	0.32536	0.3321	1.06E-02	2.74E-03	2.76E-03	4.98E-03	4.36E-03	1.63E-03	6.76E-03	1.58E-03	1.38E-03	3.12E-03	3.75E-03	1.01E-03	4.55E-06	5.63E-06	4.4630E-02
551488.37	4172650.57	4011.36421	4252.0333	1890.75906	13333.48199	2989.74366	2539.65261	3985.16145	2455.30509	1037.38842	8789.93341	9619.48815	3313.18578	0.51215	0.52208	5.86E-03	3.70E-03	1.65E-03	8.49E-03	2.40E-03	2.04E-03	3.78E-03	2.06E-03	8.70E-04	4.68E-03	3.54E-03	1.22E-03	7.17E-06	8.85E-06	4.0292E-02
551862.74	4173191.13	8176.45784	5031.51337	811.21138	3474.86747	674.93099	10510.27635	8452.18997	2873.32045	477.70799	3501.69718	1602.62135	12625.38932	0.65844	0.64708	1.19E-02	4.38E-03	7.07E-04	2.21E-03	5.41E-04	8.43E-03	8.01E-03	2.41E-03	4.01E-04	1.86E-03	5.90E-04	4.65E-03	9.21E-06	1.10E-05	4.6152E-02
551382.1	4172979.98	3831.63899	6933.32808	1257.71143	11028.17882	1419.0682	4680.76481	3839.34786	4019.04528	714.03044	9305.67702	5211.57712	5891.14935	0.63832	0.64972	5.59E-03	6.04E-03	1.10E-03	7.02E-03	1.14E-03	3.76E-03	3.64E-03	3.37E-03	5.99E-04	4.95E-03	1.92E-03	2.17E-03	8.93E-06	1.10E-05	4.1311E-02
551698.18	4172655.03	7670.9103	3005.61937	3067.79405	7894.28362	5069.03262	1947.87972	7568.01515	1795.82578	1594.55053	5551.5063	10256.6144	2644.19276	0.35578	0.3649	1.12E-02	2.62E-03	2.67E-03	5.03E-03	4.07E-03	1.56E-03	7.17E-03	1.51E-03	1.34E-03	2.95E-03	3.77E-03	9.73E-04	4.98E-06	6.18E-06	4.4873E-02
551991.09	4172711.43	6490.177	3947.43137	3172.59418	9737.28127	3791.57174	1959.22969	6357.00478	2347.3794	1708.22631	8070.22721	7798.27367	2639.45572	0.25485	0.25504	9.47E-03	3.44E-03	2.76E-03	6.20E-03	3.04E-03	1.57E-03	6.03E-03	1.97E-03	1.43E-03	4.30E-03	2.87E-03	9.71E-04	3.57E-06	4.32E-06	4.4061E-02
551656.69	4173272.39	5816.70987	5793.38834	1005.95532	4602.73441	859.20202	10680.29741	5926.46005	3436.9173	587.51096	4532.76865	2090.54691	12649.6886	8.89717	9.78506	8.49E-03	5.05E-03	8.76E-04	2.93E-03	6.89E-04	8.57E-03	5.62E-03	2.88E-03	4.93E-04	2.41E-03	7.69E-04	4.65E-03	1.24E-04	1.66E-04	4.3721E-02
551643.76	4172629.47	6497.88151	3329.87095	3071.34252	8245.00081	5435.51444	2120.82258	6418.21245	1999.07687	1617.99017	6388.86719	9943.43838	2855.7076	0.3098	0.3141	9.48E-03	2.90E-03	2.68E-03	5.25E-03	4.36E-03	1.70E-03	6.08E-03	1.68E-03	1.36E-03	3.40E-03	3.66E-03	1.05E-03	4.33E-06	5.32E-06	4.3610E-02
551559.19	4172616.79	4862.78945	3840.0381	2416.28517	11124.25475	4206.68103	2325.09739	4817.96908	2258.61576	1305.1258	7940.39232	9711.69604	3082.66452	0.38727	0.39179	7.10E-03	3.34E-03	2.10E-03	7.08E-03	3.37E-03	1.87E-03	4.57E-03	1.90E-03	1.10E-03	4.23E-03	3.57E-03	1.13E-03	5.42E-06	6.64E-06	4.1373E-02
551459.64	4173167.49	4088.46205	7074.14422	1113.47293	7713.67575	1122.63502	7809.20623	4124.75658	4195.87626	635.80701	7219.03487	3257.47233	9416.49151	0.75213	0.76154	5.97E-03	6.16E-03	9.70E-04	4.91E-03	9.01E-04	6.27E-03	3.91E-03	3.52E-03	5.33E-04	3.84E-03	1.20E-03	3.46E-03	1.05E-05	1.29E-05	4.1669E-02
551382.45	4172845.96	3462.39068	5386.51509	1439.09199	13382.10256	1848.18463	3415.48449	3452.94393	3071.74713	801.69189	9627.00946	7526.28188	4335.45365	0.65859	0.67559	5.05E-03	4.69E-03	1.25E-03	8.52E-03	1.48E-03	2.74E-03	3.27E-03	2.58E-03	6.73E-04	5.12E-03	2.77E-03	1.60E-03	9.22E-06	1.14E-05	3.9775E-02
552056.98	4172745.56	8332.11663	4479.9341	2537.70624	8110.36781	2707.1877	2700.80403	8239.30025	2657.5276	1416.27011	7054.88653	5788.62717	3638.47737	0.2271	0.22691	1.22E-02	3.90E-03	2.21E-03	5.16E-03	2.17E-03	2.17E-03	7.81E-03	2.23E-03	1.19E-03	3.76E-03	2.13E-03	1.34E-03	3.18E-06	3.85E-06	4.6235E-02
551375.23	4172931.82	3677.07845	6285.43597	1344.04068	11955.19171	1532.60753	4063.94522	3676.07368	3600.31345	759.6377	9703.1799	5833.28965	5135.28469	0.63929	0.65255	5.37E-03	5.47E-03	1.17E-03	7.61E-03	1.23E-03	3.26E-03	3.48E-03	3.02E-03	6.37E-04	5.16E-03	2.15E-03	1.89E-03	8.95E-06	1.11E-05	4.0478E-02
551514.43	4173223.34	4394.84228	6863.08182	1067.04566	6549.61305	1029.88049	8848.96087	4441.12444	4170.49568	614.05225	6320.78977	2793.83126	10454.75785	0.95167	0.96522	6.42E-03	5.98E-03	9.29E-04	4.17E-03	8.26E-04	7.10E-03	4.21E-03	3.50E-03	5.15E-04	3.36E-03	1.03E-03	3.85E-03	1.33E-05	1.64E-05	4.1911E-02
551643.97	4173274.24	5557.2823	5849.34312	1005.2188	4690.73664	865.53704	10571.19444	5657.33052	3488.14742	585.87228	4641.73457	2121.56094	12493.04776	5.4606	5.8157	8.11E-03	5.09E-03	8.76E-04	2.99E-03	6.94E-04	8.48E-03	5.36E-03	2.93E-03	4.92E-04	2.47E-03	7.81E-04	4.60E-03	7.64E-05	9.86E-05	4.3047E-02
551495.84	4173208.86	4280.0915	6992.42445	1080.09312	6881.9766	1051.34438	8422.98784	4321.92768	4183.76403	620.01045	6588.7065	2905.64617	10120.47825	0.86456	0.87593	6.25E-03	6.09E-03	9.41E-04	4.38E-03	8.43E-04	6.76E-03	4.10E-03	3.51E-03	5.20E-04	3.51E-03	1.07E-03	3.72E-03	1.21E-05	1.48E-05	4.1715E-02
551378.87	4172971.02	3776.69	6740.10918	1263.67886	11083.87213	1424.96295	4504.19993	3782.46877	3895.69135	717.12946	9299.44902	5274.10641	5674.45984	0.63039	0.64212	5.51E-03	5.87E-03	1.10E-03	7.06E-03	1.14E-03	3.61E-03	3.58E-03	3.27E-03	6.02E-04	4.95E-03	1.94E-03	2.09E-03	8.82E-06	1.09E-05	4.0752E-02
551400.56	4172781.18	3391.99851	5022.4335	1479.81561	13663.50875	2087.23832	3099.59194	3380.00477	2860.68955	817.75545	9295.24775	8367.8939	3961.76972	0.65109	0.67068	4.95E-03	4.37E-03	1.29E-03	8.70E-03	1.67E-03	2.49E-03	3.20E-03	2.40E-03	6.86E-04	4.95E-03	3.08E-03	1.46E-03	9.11E-06	1.14E-05	3.9271E-02

551392.06	4172807.34	3399.83235	5130.98608	1460.35859	13543.29535	1988.71022	3214.57887	3388.52386	2924.64775	809.75178	9360.35278	8063.44766	4094.87957	0.6555	0.67437	4.96E-03	4.47E-03	1.27E-03	8.62E-03	1.60E-03	2.58E-03	3.21E-03	2.45E-03	6.79E-04	4.98E-03	2.97E-03	1.51E-03	9.17E-06	1.14E-05	3.9323E-02
551478.34	4172654.76	3888.33111	4247.79467	1810.76895	13278.69314	2821.6086	2540.482	3864.69451	2447.89283	995.39227	8727.8532	9394.25928	3308.09429	0.51987	0.53057	5.68E-03	3.70E-03	1.58E-03	8.46E-03	2.26E-03	2.04E-03	3.66E-03	2.05E-03	8.35E-04	4.65E-03	3.46E-03	1.22E-03	7.27E-06	8.99E-06	3.9597E-02
551437.66	4173135.48	3957.2783	6935.76861	1121.77164	8222.48123	1176.04333	7312.80787	3991.0455	4150.52269	638.42347	7507.7334	3554.03876	8752.46995	0.6943	0.70261	5.78E-03	6.04E-03	9.77E-04	5.24E-03	9.44E-04	5.87E-03	3.78E-03	3.48E-03	5.36E-04	4.00E-03	1.31E-03	3.22E-03	9.72E-06	1.19E-05	4.1187E-02
552005.96	4172714.68	6772.41412	4043.06311	3008.70945	9278.46895	3491.5331	2129.29844	6642.89064	2437.75464	1637.00046	7798.15126	7284.08831	2793.2954	0.24785	0.24798	9.89E-03	3.52E-03	2.62E-03	5.91E-03	2.80E-03	1.71E-03	6.30E-03	2.05E-03	1.37E-03	4.15E-03	2.68E-03	1.03E-03	3.47E-06	4.20E-06	4.4026E-02
551547.92	4172617.54	4662.68206	3867.33362	2299.88028	11379.22908	3953.72691	2335.45102	4621.62024	2268.22085	1244.43905	8013.44505	9577.36268	3089.43427	0.39826	0.40308	6.81E-03	3.37E-03	2.00E-03	7.25E-03	3.17E-03	1.87E-03	4.38E-03	1.90E-03	1.04E-03	4.27E-03	3.52E-03	1.14E-03	5.57E-06	6.83E-06	4.0735E-02
552117.92	4172930.46	10300.83534	5203.77359	1509.75886	5655.7423	1237.9309	4606.86582	10374.54236	3051.25509	887.48763	5417.61382	2913.19204	6015.83066	0.22696	0.2257	1.50E-02	4.53E-03	1.31E-03	3.60E-03	9.93E-04	3.70E-03	9.83E-03	2.56E-03	7.45E-04	2.88E-03	1.07E-03	2.21E-03	3.18E-06	3.82E-06	4.8487E-02
551763.58	4172677.42	7153.66003	2580.22803	2225.40118	10082.68524	4545.8558	1637.04186	7072.37918	1508.78694	1179.29144	5714.50487	11266.59381	2207.31724	0.4632	0.47365	1.04E-02	2.25E-03	1.94E-03	6.42E-03	3.65E-03	1.31E-03	6.70E-03	1.27E-03	9.89E-04	3.04E-03	4.15E-03	8.12E-04	6.48E-06	8.03E-06	4.2980E-02
552046.29	4172733.3	7901.87149	4347.92385	2599.1094	8275.74905	2859.62651	2543.30482	7798.87857	2578.39529	1442.17214	7119.60993	6074.15782	3431.42238	0.22952	0.22942	1.15E-02	3.79E-03	2.26E-03	5.27E-03	2.29E-03	2.04E-03	7.39E-03	2.16E-03	1.21E-03	3.79E-03	2.23E-03	1.26E-03	3.21E-06	3.89E-06	4.5248E-02
551562.6	4173256.53	4680.22974	6461.90232	1021.44267	5646.1255	951.26188	9552.14155	4742.27359	3901.326	589.1452	5616.36346	2464.77274	11309.75283	1.36032	1.38569	6.83E-03	5.63E-03	8.90E-04	3.60E-03	7.63E-04	7.66E-03	4.49E-03	3.27E-03	4.94E-04	2.99E-03	9.07E-04	4.16E-03	1.90E-05	2.35E-05	4.1734E-02
551396.27	4172789.52	3368.92083	5013.76518	1460.92282	13462.86944	2036.39944	3116.55417	3357.25684	2857.06388	808.24511	9212.41454	8175.03445	3978.09769	0.64485	0.66393	4.92E-03	4.37E-03	1.27E-03	8.57E-03	1.63E-03	2.50E-03	3.18E-03	2.40E-03	6.78E-04	4.90E-03	3.01E-03	1.46E-03	9.02E-06	1.13E-05	3.8916E-02
551420.64	4172727.06	3425.62264	4696.60015	1511.94209	13687.41386	2238.9072	2829.13768	3412.889	2678.12461	831.98139	9084.38522	8714.49285	3647.3537	0.61456	0.63281	5.00E-03	4.09E-03	1.32E-03	8.72E-03	1.80E-03	2.27E-03	3.23E-03	2.25E-03	6.98E-04	4.84E-03	3.21E-03	1.34E-03	8.60E-06	1.07E-05	3.8772E-02
551401.87	4173063.96	3852.48193	7035.60903	1128.80912	9271.96655	1266.7663	5944.83766	3877.43563	4178.9147	639.43346	7972.20267	4219.86672	7356.82567	0.63204	0.64079	5.62E-03	6.13E-03	9.83E-04	5.90E-03	1.02E-03	4.77E-03	3.67E-03	3.51E-03	5.37E-04	4.24E-03	1.55E-03	2.71E-03	8.84E-06	1.09E-05	4.0664E-02
551375.64	4172962.05	3719.80581	6543.00489	1269.73031	11132.63989	1432.41496	4337.141	3723.78312	3772.13704	720.13591	9278.70201	5340.22042	5468.8937	0.62238	0.63397	5.43E-03	5.70E-03	1.11E-03	7.09E-03	1.15E-03	3.48E-03	3.53E-03	3.17E-03	6.04E-04	4.94E-03	1.96E-03	2.01E-03	8.71E-06	1.07E-05	4.0186E-02
551441.1	4173145.07	3945.2115	6848.99358	1108.04226	8014.63701	1150.1822	7306.13988	3979.0254	4088.83015	631.04962	7338.71712	3437.18617	8847.55735	0.69632	0.70492	5.76E-03	5.97E-03	9.65E-04	5.10E-03	9.23E-04	5.86E-03	3.77E-03	3.43E-03	5.29E-04	3.91E-03	1.26E-03	3.26E-03	9.74E-06	1.19E-05	4.0756E-02
551523.78	4173232.15	4408.65486	6697.6764	1049.38954	6302.33594	1009.86377	8787.00577	4457.27507	4047.2494	604.5324	6103.443	2714.27431	10481.72761	1.00434	1.01648	6.44E-03	5.83E-03	9.14E-04	4.01E-03	8.10E-04	7.05E-03	4.22E-03	3.40E-03	5.07E-04	3.25E-03	9.99E-04	3.86E-03	1.41E-05	1.72E-05	4.1318E-02
552020.8	4172717.88	7075.38635	4157.50356	2827.11782	8792.12947	3237.19217	2259.6992	6953.2308	2476.88258	1552.06484	7487.65733	6793.77565	3033.46387	0.24006	0.24012	1.03E-02	3.62E-03	2.46E-03	5.60E-03	2.60E-03	1.81E-03	6.59E-03	2.08E-03	1.30E-03	3.99E-03	2.50E-03	1.12E-03	3.36E-06	4.07E-06	4.3999E-02
551462.73	4173176.08	4054.95015	6920.64302	1094.3276	7467.18069	1097.73388	7703.52287	4091.01332	4109.62473	625.272	7012.26282	3160.25646	9286.46582	0.74852	0.75777	5.92E-03	6.03E-03	9.53E-04	4.75E-03	8.81E-04	6.18E-03	3.88E-03	3.45E-03	5.25E-04	3.73E-03	1.16E-03	3.42E-03	1.05E-05	1.28E-05	4.0901E-02
551445.95	4172684.17	3594.80645	4414.41073	1615.72534	13566.96218	2434.84139	2640.96963	3578.62393	2528.96235	889.09113	8874.08361	9032.82182	3422.76665	0.57092	0.58587	5.25E-03	3.84E-03	1.41E-03	8.64E-03	1.95E-03	2.12E-03	3.39E-03	2.12E-03	7.46E-04	4.72E-03	3.32E-03	1.26E-03	7.99E-06	9.93E-06	3.8794E-02
551536.7	4172618.56	4468.94241	3877.97989	2182.96521	11544.09991	3698.81999	2339.58028	4431.38998	2268.48603	1183.0875	8030.96737	9397.6443	3087.41699	0.40769	0.41287	6.52E-03	3.38E-03	1.90E-03	7.35E-03	2.97E-03	1.88E-03	4.20E-03	1.90E-03	9.93E-04	4.27E-03	3.46E-03	1.14E-03	5.70E-06	7.00E-06	3.9974E-02
551395.42	4173046.05	3828.86807	7034.26572	1134.68157	9428.71855	1287.85256	5595.37949	3850.43345	4173.38559	643.16948	8116.12631	4402.8826	6960.96305	0.62284	0.63239	5.59E-03	6.13E-03	9.88E-04	6.00E-03	1.03E-03	4.49E-03	3.65E-03	3.50E-03	5.40E-04	4.32E-03	1.62E-03	2.56E-03	8.72E-06	1.07E-05	4.0441E-02
551631.25	4173276.08	5282.03994	5846.50909	997.66092	4761.23469	868.74943	10253.92589	5372.81197	3504.08763	580.0968	4724.18911	2148.88749	12098.75118	3.80224	3.98862	7.71E-03	5.09E-03	8.69E-04	3.03E-03	6.97E-04	8.23E-03	5.09E-03	2.94E-03	4.87E-04	2.51E-03	7.91E-04	4.45E-03	5.32E-05	6.76E-05	4.2023E-02
551398.65	4173055	3830.35067	7015.68588	1127.17229	9275.69092	1275.49325	5755.6564	3853.70395	4168.09931	638.65657	8005.81812	4316.64406	7142.09907	0.62538	0.63397	5.59E-03	6.11E-03	9.82E-04	5.91E-03	1.02E-03	4.62E-03	3.65E-03	3.50E-03	5.36E-04	4.26E-03	1.59E-03	2.63E-03	8.75E-06	1.07E-05	4.0413E-02
551653.41	4172629.01	6567.43734	3202.33788	3018.35349	7821.7037	5264.84614	2054.2745	6485.73211	1922.36509	1586.6497	6052.97139	9637.7267	2770.2816	0.29985	0.30434	9.59E-03	2.79E-03	2.63E-03	4.98E-03	4.22E-03	1.65E-03	6.15E-03	1.61E-03	1.33E-03	3.22E-03	3.55E-03	1.02E-03	4.20E-06	5.16E-06	4.2745E-02
551433.24	4172704.13	3485.73295	4525.01588	1545.28658	13553.61361	2305.77866	2715.48853	3471.9745	2586.83482	850.29573	8923.27242	8804.89574	3511.78027	0.58706	0.60353	5.09E-03	3.94E-03	1.35E-03	8.63E-03	1.85E-03	2.18E-03	3.29E-03	2.17E-03	7.13E-04	4.75E-03	3.24E-03	1.29E-03	8.21E-06	1.02E-05	3.8508E-02
551392.2	4173037.1	3812.45596	7007.04444	1138.89599	9542.30101	1297.72704	5417.216	3832.16002	4150.16968	645.78486	8190.29222	4475.95448	6754.64525	0.61853	0.628	5.56E-03	6.10E-03	9.92E-04	6.08E-03	1.04E-03	4.35E-03	3.63E-03	3.48E-03	5.42E-04	4.36E-03	1.65E-03	2.49E-03	8.65E-06	1.06E-05	4.0290E-02
551631.73	4172621.44	6096.94461	3325.93926	2904.71358	8307.95751	5132.58739	2111.76213	6025.58346	1993.59514	1537.02064	6432.76876	9512.0026	2835.34774	0.30276	0.30635	8.90E-03	2.90E-03	2.53E-03	5.29E-03	4.12E-03	1.69E-03	5.71E-03	1.67E-03	1.29E-03	3.42E-03	3.50E-03	1.04E-03	4.24E-06	5.19E-06	4.2078E-02
551567	4172610.17	4893.72964	3695.5128	2416.90262	10452.81922	4212.40766	2254.23921	4847.59387	2178.39071	1303.71634	7564.17423	9369.98094	2992.40535	0.36288	0.36691	7.14E-03	3.22E-03	2.11E-03	6.66E-03	3.38E-03	1.81E-03	4.59E-03	1.83E-03	1.09E-03	4.03E-03	3.45E-03	1.10E-03	5.08E-06	6.22E-06	4.0413E-02
551388.97	4173028.15	3798.08424	6971.8963	1146.18788	9673.54156	1308.27689	5246.46958	3815.82295	4118.43394	650.18342	8284.0026	4544.88781	6555.16545	0.6152	0.62458	5.54E-03	6.07E-03	9.98E-04	6.16E-03	1.05E-03	4.21E-03	3.62E-03	3.46E-03	5.46E-04	4.41E-03	1.67E-03	2.41E-03	8.61E-06	1.06E-05	4.0163E-02
551607.5	4173274.45	4983.72418	5996.52793	996.84396	4981.88261	887.22567	9951.90465	5062.78137	3609.26483	577.68134	4970.75509	2226.73698	11734.47614	2.32104	2.40616	7.27E-03	5.22E-03	8.68E-04	3.17E-03	7.12E-04	7.98E-03	4.80E-03	3.03E-03	4.85E-04	2.65E-03	8.19E-04	4.32E-03	3.25E-05	4.08E-05	4.1401E-02
551444.19	4173153.66	3926.07796	6815.1555	1094.02951	7811.8297	1127.18889	7270.73567	3959.83589	4026.41916	623.47315	7174.85545	3337.70666	8796.70449	0.69544	0.7039	5.73E-03	5.94E-03	9.53E-04	4.97E-03	9.04E-04	5.83E-03	3.75E-03	3.38E-03	5.23E-04	3.82E-03	1.23E-03	3.24E-03	9.73E-06	1.19E-05	4.0291E-02
551372.01	4172922.86	3576.78205	6001.67289	1325.69812	11731.76173	1522.12989	3879.98712	3574.82402	3436.35959	748.16656	9442.55905	5809.65456	4905.57892	0.61898	0.63186	5.22E-03	5.23E-03	1.15E-03	7.47E-03	1.22E-03	3.11E-03	3.39E-03	2.88E-03	6.28E-04	5.03E-03	2.14E-03	1.80E-03	8.66E-06	1.07E-05	3.9294E-02
551410.62	4173088.55	3814.79305	6826.17833	1106.63432	8765.29851	1224.86902	6287.33751	3843.41117	4053.27188	626.69666	7626.52796	3966.47737	7716.91284	0.63408	0.64299	5.57E-03	5.95E-03	9.64E-04	5.58E-03	9.83E-04	5.04E-03	3.64E-03	3.40E-03	5.26E-04	4.06E-03	1.46E-03	2.84E-03	8.87E-06	1.09E-05	4.0033E-02
551385.75	4173019.19	3776.52958	6907.75421	1153.20687	9790.79789	1311.65801	5073.11561	3792.28478	4067.84308	654.37134	8364.97189	4609.55791	6349.99906	0.61051	0.62029	5.51E-03	6.02E-03	1.00E-03	6.23E-03	1.05E-03	4.07E-03	3.59E-03	3.41E-03	5.49E-04	4.45E-03	1.70E-03	2.34E-03	8.54E-06	1.05E-05	3.9950E-02
552035.61	4172721.04	7347.0543	4175.68594	2637.97196	8396.11296	3002.10471	2381.10229	7237.26325	2481.69322	1454.57209	7136.38564	6337.5178	3188.70829	0.23155	0.23155	1.07E-02	3.64E-03	2.30E-03	5.35E-03	2.41E-03	1.91E-03	6.86E-03	2.08E-03	1.22E-03	3.80E-03	2.33E-03	1.17E-03	3.24E-06	3.92E-06	4.3797E-02
551414.59	4172733.81	3364.49749	4674.6148	1477.89101	13373.04704	2174.54184	2832.00285	3352.29036	2664.75482	813.55245	8937.76465	8449.61794	3645.52256	0.606	0.62394	4.91E-03	4.07E-03	1.29E-03	8.52E-03	1.74E-03	2.27E-03	3.18E-03	2.24E-03	6.83E-04	4.76E-03	3.11E-03	1.34E-03	8.48E-06	1.06E-05	3.8124E-02
551499.44	4173217.32	4216.71373	6684.36404	1052.8682	6621.99116	1026.52915	8210.33895	4258.44778	4046.01779	604.79836	6334.40915	2822.02794	9872.24947	0.85575	0.86685	6.15E-03	5.82E-03	9.17E-04	4.22E-03	8.24E-04	6.59E-03	4.04E-03	3.39E-03	5.07E-04	3.37E-03	1.04E-03	3.63E-03	1.20E-05	1.47E-05	4.0528E-02
551372.42	4172953.09	3649.15996	6320.09872	1269.34566	11106.79545	1434.83206	4165.72813	3651.57844	3636.39372	719.35246	9191.5427	5334.02691	5257.31165	0.61153	0.62309	5.33E-03	5.50E-03	1.11E-03	7.07E-03	1.15E-03	3.34E-03	3.46E-03	3.05E-03	6.04E-04	4.89E-03	1.96E-03	1.93E-03	8.56E-06	1.06E-05	3.9426E-02
551577.15	4172608.33	5033.07668	3613.93717	2480.22166	10004.332	4344.65141	2218.57043	4983.9225	2136.38938	1334.81328	7338.95226	9290.30559	2949.78406	0.34722	0.35096	7.35E-03	3.15E-03	2.16E-03	6.37E-03	3.49E-03	1.78E-03	4.72E-03	1.79E-03	1.12E-03	3.91E-03	3.42E-03	1.09E-03	4.86E-06	5.95E-06	4.0347E-02
551734.37	4172663.02	7544.58245	2709.76404	2549.97232	8634.04176	4253.13478	1755.47271	7449.10925	1603.74117	1338.52204	5300.54464	10134.16734	2376.06435	0.40998	0.42083	1.10E-02	2.36E-03	2.22E-03	5.50E-03	3.41E-03	1.41E-03	7.06E-03	1.35E-03	1.12E-03	2.82E-03	3.73E-03	8.74E-04	5.74E-06	7.13E-06	4.2878E-02
551382.52	4173010.24	3752.2573	6824.96368	1161.66052	9909.95903	1319.33969	4904.3734	3765.93964	4004.87234	659.38843	8446.20216	4675.03134	6148.57758	0.60619	0.61576	5.48E-03	5.94E-03	1.01E-03	6.31E-03	1.06E-03	3.93E-03	3.57E-03	3.36E-03	5.53E-04	4.50E-03	1.72E-03	2.26E-03	8.48E-06	1.04E-05	3.9716E-02
551524.41	4172620.54	4271.64686	3881.5877	2061.13116	11654.58897	3432.3796	2342.36462	4237.64179	2264.36372	1119.16807	8013.49873	9177.45281	3082.35254	0.41727	0.42297	6.24E-03	3.38E-03	1.80E-03	7.42E-03	2.75E-03	1.88E-03	4.02E-03	1.90E-03	9.39E-04	4.27E-03	3.38E-03	1.13E-03	5.84E-06	7.17E-06	3.9110E-02
551374.77	4172859.26	3393.91815	5293.13054	1380.27875	12607.78288	1733.38023	3385.02376	3385.96388	3020.65155	770.35093	9278.72258	6937.6702	4292.90007	0.62389	0.639	4.95E-03	4.61E-03	1.20E-03	8.03E-03	1.39E-03	2.72E-03	3.21E-03	2.53E-03	6.46E-04	4.94E-03	2.55E-03	1.58E-03	8.73E-06	1.08E-05	3.8381E-02
551416.54	4173105.29	3813.11431	6733.68994	1101.04527	8465.05361	1199.69467	6500.62387	3843.32044	3991.68873	624.05395	7478.40163	3777.29735	7939.02232	0.64203	0.65072	5.57E-03	5.86E-03	9.59E-04	5.39E-03	9.63E-04	5.22E-03	3.64E-03	3.35E-03	5.24E-04	3.98E-03	1.39E-03	2.92E-03	8.98E-06	1.10E-05	3.9785E-02
551465.82	4173184.67	4019.13336	6762.52953	1074.42564	7226.1274	1073.02904	7582.03759	4054.97885	4020.08996	614.27998	6803.17597	3066.3491	9139.78956	0.7441	0.75319	5.87E-03	5.89E-03	9.36E-04	4.60E-03	8.61E-04	6.08E-03	3.84E-03	3.37E-03	5.15E-04	3.62E-03	1.13E-03	3.36E-03	1.04E-05	1.28E-05	4.0105E-02
551379.3	4173001.29	3721.12129	6716.12024	1169.64745	10014.00478	1326.19615	4736.39392	3732.76814	3926.85774	664.03288	8510.21673	4737.03893	5946.25876	0.60034	0.61018	5.43E-03	5.85E-03	1.02E-03	6.38E-03	1.06E-03	3.80E-03	3.54E-03	3.29E-03	5.57E-04	4.53E-03	1.74E-03	2.19E-03	8.40E-06	1.03E-05	3.9409E-02
551380.43	4172827.9	3327.47785	5046.84619	1395.1452	12807.20961	1839.4882	3212.87921	3317.66477	2880.24147	775.7447	9058.52506	7394.41496	4082.64593	0.6231	0.63959	4.86E-03	4.40E-03	1.22E-03	8.15E-03	1.48E-03	2.58E-03	3.14E-03	2.42E-03	6.51E-04	4.82E-03	2.72E-03	1.50E-03	8.72E-06	1.08E-05	3.7952E-02
551572.3	4173265.66	4639.67844	6170.76411	994.80322	5367.53453	920.48975	9300.77975	4703.94573	3724.44667	574.06738	5341.04951	2368.43683	11001.93146	1.45684	1.48581	6.77E-03	5.37E-03	8.66E-04	3.42E-03	7.39E-04	7.46E-03	4.46E-03	3.13E-03	4.82E-04	2.84E-03	8.71E-04	4.05E-03	2.04E-05	2.52E-05	4.0505E-02
551447.28	4173162.24	3903.50882	6697.47032	1079.02124	7587.24341	1104.20008	7215.26677	3937.14521	3961.04827	615.32373	7005.00286	3241.53183	8723.10273	0.69382	0.70216	5.70E-03	5.83E-03	9.40E-04	4.83E-03	8.86E-04	5.79E-03	3.73E-03	3.32E-03	5.16E-04	3.73E-03	1.19E-03	3.21E-03	9.71E-06	1.19E-05	3.9701E-02
551404.08	4172753.23	3304.0589	4728.16599	1443.05434	13092.13435	2088.07415	2897.57642	3292.36517	2694.20595	795.49619	8850.87612	8155.11151	3716.46988	0.60713	0.62511	4.82E-03	4.12E-03	1.26E-03	8.34E-03	1.68E-03	2.32E-03	3.12E-03	2.26E-03	6.67E-04	4.71E-03	3.00E-03	1.37E-03	8.50E-06	1.06E-05	3.7681E-02
551618.54	4173277.93	5025.68377	5808.6877	985.01653	4815.82519	869.34965	9819.84685	5108.19437	3493.83098	571.43623	4785.45536	2170.42122	11582.25339	2.7989	2.91863	7.34E-03	5.06E-03	8.58E-04	3.07E-03	6.97E-04	7.88E-03	4.84E-03	2.93E-03	4.79E-04	2.55E-03	7.99E-04	4.26E-03	3.92E-05	4.95E-05	4.0844E-02
551585.86	4172605.56	5118.09261	3510.26485	2504.15782	9506.13764	4390.12896	2170.9783	5066.79376	2080.21121	1344.54822	7058.96135	9098.82059	2890.04437	0.33037	0.33381	7.47E-03	3.06E-03	2.18E-03	6.05E-03	3.52E-03	1.74E-03	4.80E-03	1.75E-03	1.13E-03	3.76E-03	3.35E-03	1.06E-03	4.62E-06	5.66E-06	3.9881E-02
551995.23	4172702.36	5951.2846	3695.26659	2978.50949	9336.56848	3678.49172	1831.54145	5829.87566	2191.99794	1598.8129	7652.03297	7501.60146	2466.56261	0.24625	0.24654	8.69E-03	3.22E-03	2.59E-03	5.95E-03	2.95E-03	1.47E-03	5.53E-03	1.84E-03	1.34E-03	4.07E-03	2.76E-03	9.08E-04	3.45E-06	4.18E-06	4.1320E-02
551672.53	4172632.73	6796.90108	3020.55307	2945.23687	7342.92498	4995.33127	1956.61946	6710.13945	1810.66071	1541.43789	5584.93908	9322.58866	2645.80561	0.29709	0.30257	9.92E-03	2.63E-03	2.57E-03	4.68E-03	4.01E-03	1.57E-03	6.36E-03	1.52E-03	1.29E-03	2.97E-03	3.43E-03	9.73E-04	4.16E-06	5.13E-06	4.1928E-02
551436.21	4172690.6	3457.17705	4347.92732	1531.78552	13044.56365	2286.01848	2617.34257	3443.03347	2489.37906	843.11636	8601.99694	8548.40024	3387.76102	0.55492	0.56973	5.05E-03	3.79E-03	1.33E-03	8.31E-03	1.83E-03	2.10E-03	3.26E-03	2.09E-03	7.07E-04	4.58E-03	3.15E-03	1.25E-03	7.76E-06	9.65E-06	3.7455E-02
551376.05	4172992.28	3675.37025	6566.15192	1173.60439	10067.84008	1328.94833	4559.69024	3685.14328	3826.42495	666.33574	8525.5529	4786.61526	5731.48934	0.59298	0.60291	5.36E-03	5.72E-03	1.02E-03	6.41E-03	1.07E-03	3.66E-03	3.49E-03	3.21E-03	5.59E-04	4.54E-03	1.76E-03	2.11E-03	8.30E-06	1.02E-05	3.8930E-02
551369.19	4172944.12	3568.71744	6081.48964	1263.42943	11017.53205	1432.87162	3993.97927	3569.82517	3494.55694	715.26679	9052.13787	5345.87531	5043.79541	0.59756	0.60956	5.21E-03	5.30E-03	1.10E-03	7.02E-03	1.15E-03	3.20E-03	3.38E-03	2.93E-03	6.00E-04	4.82E-03	1.97E-03	1.86E-03	8.36E-06	1.03E-05	3.8551E-02
551511.9	4172623.53	4091.63591	3883.88789	1948.60158	11721.21638	3185.66775	2345.98286	4060.88589	2259.36148	1060.62322	7978.42723	8953.3381	3078.06206	0.4269	0.43328	5.97E-03	3.38E-03	1.70E-03	7.46E-03	2.56E-03	1.88E-03	3.85E-03	1.90E-03	8.90E-04	4.25E-03	3.29E-03	1.13E-03	5.97E-06	7.34E-06	3.8275E-02
551422.45	4173122.03	3782.19802	6574.65242	1085.59944	8120.93439	1166.03881	6603.30036	3813.82269	3894.90774	616.00419	7250.23618	3594.75627	8030.37141	0.64392	0.65233	5.52E-03	5.73E-03	9.45E-04	5.17E-03	9.36E-04	5.30E-03	3.61E-03	3.27E-03	5.17E-04	3.86E-03	1.32E-03	2.95E-03	9.01E-06	1.11E-05	3.9152E-02
551457.36	4172663.43	3617.25864	4175.79638	1637.49721	12791.20791	2482.96584	2512.87796	3598.82167	2399.36257	901.71381	8423.66551	8714.42384	3261.67339	0.51947	0.53137	5.28E-03	3.64E-03	1.43E-03	8.14E-03	1.99E-03	2.02E-03	3.41E-03	2.01E-03	7.57E-04	4.48E-03	3.21E-03	1.20E-03	7.27E-06	9.00E-06	3.7583E-02
551771.22	4172674.3	6661.6584	2469.04999	2066.60839	9792.79373	4381.18246	1562.6034	6590.09408	1440.1202	1096.51456	5561.96594	10789.64669	2102.743	0.44345	0.45301	9.72E-03	2.15E-03	1.80E-03	6.24E-03	3.51E-03	1.25E-03	6.25E-03	1.21E-03	9.20E-04	2.96E-03	3.97E-03	7.74E-04	6.20E-06	7.68E-06	4.0771E-02
551368.78	4172913.89	3482.49907	5734.59469	1306.22851	11513.44359	1512.74763	3709.4371	3479.72039	3281.88789	735.97889	9176.61565	5788.32002	4692.80575	0.59977	0.61255	5.08E-03	4.99E-03	1.14E-03	7.33E-03	1.21E-03	2.98E-03	3.30E-03	2.75E-03	6.18E-04	4.88E-03	2.13E-03	1.73E-03	8.39E-06	1.04E-05	3.8165E-02
551661.08	4173280.71	5616.27426	5425.16077	964.14904	4375.44212	825.68325	9739.39565	5721.92005	3213.35366	563.03154	4287.93709	2006.64873	11575.69503	9.49217	10.56209	8.20E-03	4.73E-03	8.40E-04	2.79E-03	6.62E-04	7.81E-03	5.42E-03	2.70E-03	4.72E-04	2.28E-03	7.38E-04	4.26E-03	1.33E-04	1.79E-04	4.1208E-02
551555.07	4172607.02	4610.16679	3654.27455	2249.55754	10421.23068	3856.12354	2228.36892	4569.10831	2147.96363	1216.47338	7464.39622	8964.57434	2951.2943	0.36207	0.36609	6.73E-03	3.18E-03	1.96E-03	6.64E-03	3.09E-03	1.79E-03	4.33E-03	1.80E-03	1.02E-03	3.97E-03	3.30E-03	1.09E-03	5.07E-06	6.20E-06	3.8911E-02
551481.42	4172642.56	3802.6685	4027.52815	1761.94421	12322.5093	2751.73574	2428.88735	3778.81501	2325.5669	967.45044	8197.30901	8800.6479	3165.16263	0.47395	0.48296	5.55E-03	3.51E-03	1.53E-03	7.85E-03	2.21E-03	1.95E-03	3.58E-03	1.95E-03	8.12E-04	4.36E-03	3.24E-03	1.16E-03	6.63E-06	8.18E-06	3.7721E-02
552005.11	4173111.94	9122.22683	5263.71584	802.1407	3714.14146	634.46698	7364.78811	9424.55122	2995.70347	476.57166	3775.9384	1565.01039	9190.67155	0.33322	0.32944	1.33E-02	4.58E-03	6.99E-04	2.36E-03	5.09E-04	5.91E-03	8.93E-03	2.51E-03	4.00E-04	2.01E-03	5.76E-04	3.38E-03	4.66E-06	5.58E-06	4.5205E-02
551399.76	4172761.64	3266.65212	4711.70811	1419.13111	12821.13622	2032.42826	2909.54289	3255.3061	2685.87591	783.03854	8724.30314	7930.70664	3725.97409	0.59851	0.61599	4.77E-03	4.10E-03	1.24E-03	8.16E-03	1.63E-03	2.33E-03	3.09E-03	2.25E-03	6.57E-04	4.64E-03	2.92E-03	1.37E-03	8.37E-06	1.04E-05	3.7184E-02
552010.1	4172705.6	6267.72496	3810.28721	2845.44827	8919.53304	3365.43361	1958.37903	6148.41282	2269.20665	1544.40814	7435.16671	7028.83066	2631.53009	0.24017	0.24023	9.15E-03	3.32E-03	2.48E-03	5.68E-03	2.70E-03	1.57E-03	5.83E-03	1.90E-03	1.30E-03	3.96E-03	2.59E-03	9.68E-04	3.36E-06	4.07E-06	4.1443E-02
551468.91	4173193.25	3979.44426	6598.00377	1053.52406	6991.94371	1048.78571	7444.29046	4015.0787	3925.91033	602.7278	6590.84566	2976.50921	8976.00168	0.73851	0.7474	5.81E-03	5.75E-03	9.18E-04	4.45E-03	8.41E-04	5.97E-03	3.81E-03	3.29E-03	5.06E-04	3.51E-03	1.10E-03	3.30E-03	1.03E-05	1.27E-05	3.9273E-02
551648.11	4173282.59	5387.4581	5503.16469	966.24005	4466.28085	833.0301	9727.93614	5484.35027	3275.05417	563.20143	4402.51976	2037.87076	11536.26683	5.63995	6.04368	7.86E-03	4.79E-03	8.42E-04	2.84E-03	6.68E-04	7.80E-03	5.20E-03	2.75E-03	4.73E-04	2.34E-03	7.50E-04	4.24E-03	7.89E-05	1.02E-04	4.0753E-02
551641.09	4172619.99	6115.86563	3176.40569	2835.77563	7755.07564	4933.51617	2035.84444	6043.51904	1905.31549	1497.9971	6035.11062	9082.85486	2737.32128	0.28591	0.28939	8.93E-03	2.77E-03	2.47E-03	4.94E-03	3.96E-03	1.63E-03	5.73E-03	1.60E-03	1.26E-03	3.21E-03	3.34E-03	1.01E-03	4.00E-06	4.90E-06	4.0847E-02
551373.14	4172849.24	3317.10203	5095.27826	1358.04438	12353.99859	1731.69888	3267.88337	3308.79169	2909.32114	757.04347	8983.8337	6909.00085	4146.04112	0.6065	0.62137	4.84E-03	4.44E-03	1.18E-03	7.87E-03	1.39E-03	2.62E-03	3.14E-03	2.44E-03	6.35E-04	4.78E-03	2.54E-03	1.53E-03	8.49E-06	1.05E-05	3.7421E-02
551449.33	4172670.38	3542.91472	4200.25361	1589.5626	12782.877	2392.64823	2529.43065	3526.20308	2410.56816	875.27868	8420.17741	8587.60477	3279.87015	0.52731	0.54007	5.17E-03	3.66E-03	1.38E-03	8.14E-03	1.92E-03	2.03E-03	3.34E-03	2.02E-03	7.34E-04	4.48E-03	3.16E-03	1.21E-03	7.38E-06	9.15E-06	3.7267E-02
551450.37	4173170.83	3876.21925	6571.49252	1062.75938	7364.2573	1081.36957	7138.43063	3909.67064	3890.7823	606.42532	6827.14943	3149.03865	8626.05932	0.69108	0.6993	5.66E-03	5.72E-03	9.26E-04	4.69E-03	8.68E-04	5.73E-03	3.71E-03	3.26E-03	5.09E-04	3.63E-03	1.16E-03	3.17E-03	9.67E-06	1.19E-05	3.9058E-02
551551.85	4173258.58	4446.26296	6184.45938	989.41764	5580.49171	937.20441	8776.93091	4502.50321	3734.42717	569.86949	5509.27044	2450.42181	10421.23743	1.1921	1.21279	6.49E-03	5.39E-03	8.62E-04	3.55E-03	7.52E-04	7.04E-03	4.27E-03	3.13E-03	4.78E-04	2.93E-03	9.02E-04	3.83E-03	1.67E-05	2.06E-05	3.9670E-02
551423.66	4172710.46	3355.39992	4439.05494	1470.40142	12924.15064	2175.82425	2685.18382	3343.05754	2536.48668	809.38715	8599.93199	8287.05894	3467.1823	0.56531	0.58111	4.90E-03	3.87E-03	1.28E-03	8.23E-03	1.75E-03	2.15E-03	3.17E-03	2.13E-03	6.79E-04	4.58E-03	3.05E-03	1.28E-03	7.91E-06	9.85E-06	3.7070E-02
551381.08	4172819.11	3275.47975	4917.42688	1377.99468	12546.38565	1835.90442	3133.22044	3265.55645	2807.08886	765.60317	8826.12591	7327.97345	3984.10007	0.6069	0.62311	4.78E-03	4.28E-03	1.20E-03	7.99E-03	1.47E-03	2.51E-03	3.10E-03	2.36E-03	6.42E-04	4.70E-03	2.70E-03	1.47E-03	8.49E-06	1.06E-05	3.7212E-02
551372.83	4172983.32	3630.61489	6413.06105	1179.76286	10131.71397	1333.91756	4395.54186	3638.57937	3725.13871	669.73426	8544.16961	4841.67128	5531.34852	0.58634	0.5967	5.30E-03	5.59E-03	1.03E-03	6.45E-03	1.07E-03	3.53E-03	3.45E-03	3.13E-03	5.62E-04	4.55E-03	1.78E-03	2.04E-03	8.20E-06	1.01E-05	3.8480E-02
551425.41	4173130.4	3763.69272	6489.75897	1077.89061	7943.96684	1147.29763	6623.16554	3794.96872	3844.87046	611.09261	7185.15248	3504.66089	8040.78017	0.64374	0.65114	5.49E-03	5.65E-03	9.39E-04	5.06E-03	9.20E-04	5.31E-03	3.60E-03	3.23E-03	5.13E-04	3.82E-03	1.29E-03	2.96E-03	9.01E-06	1.10E-05	3.8806E-02
551510.06	4173231.4	4172.84994	6363.21822	1018.61141	6222.9965	992.84791	7989.6534	4216.09861	3840.08296	585.9191	5978.68173	2698.70085	9564.96937	0.88656	0.90041	6.09E-03	5.54E-03	8.87E-04	3.96E-03	7.97E-04	6.41E-03	4.00E-03	3.22E-03	4.92E-04	3.18E-03	9.93E-04	3.52E-03	1.24E-05	1.53E-05	3.9121E-02
551714.4	4172652.74	7345.10014	2756.00026	2680.44839	7594.04168	4294.48038	1798.5808	7250.71269	1639.44273	1400.74163	5104.00912	9318.93505	2437.90712	0.35147	0.36074	1.07E-02	2.40E-03	2.33E-03	4.84E-03	3.45E-03	1.44E-03	6.87E-03	1.38E-03	1.18E-03	2.72E-03	3.43E-03	8.97E-04	4.92E-06	6.11E-06	4.1657E-02
551499.38	4172626.52	3929.93287	3880.24844	1848.27304	11737.47533	2967.90905	2346.51765	3902.11848	2250.95936	1008.9189	7925.82892	8731.05997	3070.25181	0.43564	0.44279	5.74E-03	3.38E-03	1.61E-03	7.47E-03	2.38E-03	1.88E-03	3.70E-03	1.89E-03	8.47E-04	4.22E-03	3.21E-03	1.13E-03	6.10E-06	7.50E-06	3.7471E-02
551594.72	4172603.01	5192.73988	3398.78638	2514.70027	8995.20469	4402.58508	2119.38784	5139.39538	2019.08646	1346.63757	6759.2223	8873.25989	2824.70629	0.31348	0.31666	7.58E-03	2.96E-03	2.19E-03	5.73E-03	3.53E-03	1.70E-03	4.87E-03	1.69E-03	1.13E-03	3.60E-03	3.26E-03	1.04E-03	4.39E-06	5.37E-06	3.9297E-02
551428.75	4173139.82	3744.94785	6400.10587	1065.60217	7748.21233	1125.35272	6705.96815	3776.30013	3828.13116	606.10859	7033.99773	3403.00509	8035.1195	0.64054	0.64762	5.47E-03	5.57E-03	9.28E-04	4.93E-03	9.03E-04	5.38E-03	3.58E-03	3.21E-03	5.09E-04	3.74E-03	1.25E-03	2.96E-03	8.96E-06	1.10E-05	3.8458E-02
551365.97	4172935.16	3490.53884	5852.42183	1257.0514	10925.27256	1432.65909	3833.93949	3490.45133	3359.57543	710.72385	8904.89626	5361.94772	4844.48742	0.58487	0.59648	5.10E-03	5.10E-03	1.09E-03	6.96E-03	1.15E-03	3.08E-03	3.31E-03	2.82E-03	5.96E-04	4.74E-03	1.97E-03	1.78E-03	8.18E-06	1.01E-05	3.7706E-02
551635.15	4173284.48	5136.04246	5524.07118	961.67863	4540.27788	837.32745	9522.35661	5224.34537	3303.47919	559.30014	4491.79046	2065.53913	11272.19419	3.86465	4.06572	7.50E-03	4.81E-03	8.38E-04	2.89E-03	6.72E-04	7.64E-03	4.95E-03	2.77E-03	4.69E-04	2.39E-03	7.60E-04	4.15E-03	5.41E-05	6.89E-05	3.9962E-02
551395.43	4172770.04	3229.31057	4684.58639	1394.474	12535.03418	1974.72319	2916.92958	3218.33804	2671.9967	770.23213	8585.34395	7697.91837	3729.74453	0.58846	0.60533	4.71E-03	4.08E-03	1.21E-03	7.98E-03	1.58E-03	2.34E-03	3.05E-03	2.24E-03	6.46E-04	4.57E-03	2.83E-03	1.37E-03	8.23E-06	1.03E-05	3.6646E-02
551582	4173274.8	4611.92745	5906.24328	970.72879	5102.02302	889.30001	9051.96314	4678.3599	3560.12729	560.66191	5080.51532	2270.20793	10708.54366	1.56686	1.60204	6.73E-03	5.14E-03	8.45E-04	3.25E-03	7.13E-04	7.26E-03	4.43E-03	2.99E-03	4.70E-04	2.70E-03	8.35E-04	3.94E-03	2.19E-05	2.71E-05	3.9366E-02
551369.6	4172974.35	3575.47675	6235.27778	1182.59075	10152.60539	1336.16557	4229.60539	3581.70749	3611.44029	671.10101	8520.83239	4889.1926	5328.24052	0.5777	0.58813	5.22E-03	5.43E-03	1.03E-03	6.46E-03	1.07E-03	3.39E-03	3.39E-03	3.03E-03	5.63E-04	4.54E-03	1.80E-03	1.96E-03	8.08E-06	9.97E-06	3.7911E-02
551630.69	4172612.69	5821.57714	3186.21341	2724.62773	7873.28042	4748.84819	2034.21493	5755.02835	1908.34269	1443.83634	6108.63254	8850.2658	2728.62275	0.28434	0.28745	8.50E-03	2.78E-03	2.37E-03	5.01E-03	3.81E-03	1.63E-03	5.45E-03	1.60E-03	1.21E-03	3.25E-03	3.26E-03	1.00E-03	3.98E-06	4.87E-06	3.9889E-02
551453.46	4173179.41	3847.19974	6441.87657	1045.7807	7143.45517	1058.59561	7047.25562	3880.42875	3818.26874	597.09932	6646.3555	3059.32567	8513.99924	0.68777	0.69585	5.62E-03	5.61E-03	9.11E-04	4.55E-03	8.49E-04	5.65E-03	3.68E-03	3.20E-03	5.01E-04	3.54E-03	1.13E-03	3.13E-03	9.62E-06	1.18E-05	3.8389E-02
551535.45	4172608.8	4280.44099	3674.734	2057.26426	10690.95376	3446.64028	2236.4362	4245.37268	2150.58007	1115.69522	7504.77656	8667.2284	2950.23506	0.37612	0.38062	6.25E-03	3.20E-03	1.79E-03	6.81E-03	2.77E-03	1.79E-03	4.02E-03	1.80E-03	9.36E-04	3.99E-03	3.19E-03	1.09E-03	5.26E-06	6.45E-06	3.7652E-02
551519.56	4173240.35	4185.04351	6214.02827	991.9494	5998.53141	973.05295	8023.76792	4230.48077	3754.24867	570.02125	5803.02586	2621.97926	9586.59076	0.93899	0.95153	6.11E-03	5.41E-03	8.64E-04	3.82E-03	7.81E-04	6.44E-03	4.01E-03	3.15E-03	4.78E-04	3.09E-03	9.65E-04	3.53E-03	1.31E-05	1.61E-05	3.8671E-02
551569.28	4172600.57	4740.89522	3498.82513	2301.48095	9652.68465	3966.51553	2154.13116	4696.70441	2064.24655	1241.44987	7057.06933	8692.87067	2859.35511	0.33379	0.33723	6.92E-03	3.05E-03	2.00E-03	6.15E-03	3.18E-03	1.73E-03	4.45E-03	1.73E-03	1.04E-03	3.76E-03	3.20E-03	1.05E-03	4.67E-06	5.71E-06	3.8271E-02
551431.84	4173148.41	3731.35023	6326.14845	1054.21632	7575.6996	1104.84014	6690.94671	3762.68037	3777.95244	600.00706	6897.63414	3310.26798	8020.0149	0.64023	0.64797	5.45E-03	5.51E-03	9.18E-04	4.82E-03	8.86E-04	5.37E-03	3.57E-03	3.17E-03	5.03E-04	3.67E-03	1.22E-03	2.95E-03	8.96E-06	1.10E-05	3.8053E-02
551439.45	4172676.9	3423.85909	4166.11174	1516.36112	12467.63095	2262.06308	2518.86667	3409.18236	2388.93077	835.0263	8251.34493	8244.18854	3262.38448	0.52118	0.53427	5.00E-03	3.63E-03	1.32E-03	7.94E-03	1.81E-03	2.02E-03	3.23E-03	2.00E-03	7.01E-04	4.39E-03	3.03E-03	1.20E-03	7.29E-06	9.05E-06	3.6300E-02
551365.55	4172904.93	3383.62877	5469.28789	1280.72365	11235.85553	1497.33989	3543.01205	3380.21282	3128.14416	720.56108	8869.36031	5733.91927	4485.8896	0.58017	0.59193	4.94E-03	4.76E-03	1.12E-03	7.15E-03	1.20E-03	2.84E-03	3.20E-03	2.62E-03	6.05E-04	4.72E-03	2.11E-03	1.65E-03	8.12E-06	1.00E-05	3.6949E-02
551561.2	4173267.39	4422.92322	5955.66763	967.52848	5333.51414	909.09812	8623.56461	4481.42941	3595.23797	557.52068	5274.28566	2362.06396	10227.93213	1.25888	1.28141	6.46E-03	5.19E-03	8.43E-04	3.40E-03	7.29E-04	6.92E-03	4.25E-03	3.02E-03	4.68E-04	2.81E-03	8.69E-04	3.76E-03	1.76E-05	2.17E-05	3.8741E-02
551392.6	4173067.29	3639.50285	6460.01131	1063.25421	8546.21851	1201.45022	5508.81712	3663.13617	3836.81242	602.14113	7369.16793	3997.02807	6817.44696	0.58222	0.59051	5.31E-03	5.63E-03	9.26E-04	5.44E-03	9.64E-04	4.42E-03	3.47E-03	3.22E-03	5.05E-04	3.92E-03	1.47E-03	2.51E-03	8.15E-06	1.00E-05	3.7806E-02
551604.45	4173283.76	4757.47242	5672.55079	957.37402	4782.28692	856.3694	9139.76005	4831.56789	3409.18242	554.48909	4765.13056	2150.09674	10810.45692	2.07007	2.13456	6.94E-03	4.94E-03	8.34E-04	3.05E-03	6.87E-04	7.33E-03	4.58E-03	2.86E-03	4.65E-04	2.54E-03	7.91E-04	3.98E-03	2.90E-05	3.62E-05	3.9059E-02
551382.3	4172805.94	3208.64226	4753.79028	1356.6241	12203.10693	1834.39625	3028.78939	3198.61279	2715.01108	752.68672	8534.39054	7241.92724	3854.87394	0.58553	0.60138	4.68E-03	4.14E-03	1.18E-03	7.77E-03	1.47E-03	2.43E-03	3.03E-03	2.28E-03	6.32E-04	4.54E-03	2.66E-03	1.42E-03	8.19E-06	1.02E-05	3.6263E-02
551366.38	4172965.39	3522.69694	6061.85726	1187.41838	10186.68621	1341.73339	4077.06173	3527.2635	3502.1123	673.53618	8500.9375	4896.81673	5140.92494	0.57001	0.58052	5.14E-03	5.28E-03	1.03E-03	6.49E-03	1.08E-03	3.27E-03	3.34E-03	2.94E-03	5.65E-04	4.52E-03	1.80E-03	1.89E-03	7.98E-06	9.84E-06	3.7372E-02
551650.15	4172619.72	6158.51825	3056.70171	2781.47649	7343.37485	4768.40046	1973.50807	6084.86827	1833.72021	1467.00014	5721.27587	8768.29243	2657.25201	0.2749	0.27846	8.99E-03	2.66E-03	2.42E-03	4.68E-03	3.83E-03	1.58E-03	5.77E-03	1.54E-03	1.23E-03	3.05E-03	3.23E-03	9.78E-04	3.85E-06	4.72E-06	3.9953E-02
551389.38	4173058.34	3629.16249	6465.70128	1064.7595	8641.17095	1210.63625	5356.70602	3651.3456	3840.19671	603.16921	7423.28691	4075.78931	6646.53112	0.57805	0.58646	5.30E-03	5.63E-03	9.27E-04	5.50E-03	9.71E-04	4.30E-03	3.46E-03	3.22E-03	5.06E-04	3.95E-03	1.50E-03	2.45E-03	8.09E-06	9.94E-06	3.7731E-02
551391.11	4172778.45	3195.51621	4654.68921	1371.12032	12267.05827	1918.85281	2922.77152	3184.8983	2656.70978	758.1645	8454.75517	7476.62021	3731.8674	0.57875	0.59503	4.66E-03	4.05E-03	1.19E-03	7.81E-03	1.54E-03	2.34E-03	3.02E-03	2.23E-03	6.36E-04	4.50E-03	2.75E-03	1.37E-03	8.10E-06	1.01E-05	3.6134E-02
551384.34	4172796.44	3197.01277	4710.19376	1359.86027	12210.79762	1861.71738	2988.29589	3186.73694	2689.57162	753.5818	8488.17162	7323.19596	3806.89121	0.58323	0.59931	4.67E-03	4.10E-03	1.18E-03	7.78E-03	1.49E-03	2.40E-03	3.02E-03	2.26E-03	6.32E-04	4.52E-03	2.69E-03	1.40E-03	8.16E-06	1.02E-05	3.6161E-02
551684.5	4172633.81	6804.74954	2873.30442	2802.41587	7023.73486	4632.06787	1873.62384	6718.17419	1719.06001	1465.2625	5245.82787	8882.56699	2535.71396	0.29369	0.2997	9.93E-03	2.50E-03	2.44E-03	4.47E-03	3.72E-03	1.50E-03	6.37E-03	1.44E-03	1.23E-03	2.79E-03	3.27E-03	9.33E-04	4.11E-06	5.08E-06	4.0610E-02
551386.16	4173049.39	3622.41385	6471.51151	1069.21886	8752.32931	1220.40812	5208.19839	3642.9829	3840.17542	605.93734	7498.78526	4140.92879	6478.19626	0.57497	0.58328	5.29E-03	5.64E-03	9.31E-04	5.57E-03	9.79E-04	4.18E-03	3.45E-03	3.22E-03	5.08E-04	3.99E-03	1.52E-03	2.38E-03	8.05E-06	9.88E-06	3.7686E-02
551371.5	4172839.22	3233.05852	4888.71847	1329.08292	11997.02597	1717.87892	3146.74278	3224.56502	2793.09644	740.19956	8642.62432	6801.82812	3994.22774	0.58437	0.59882	4.72E-03	4.26E-03	1.16E-03	7.64E-03	1.38E-03	2.52E-03	3.06E-03	2.34E-03	6.21E-04	4.60E-03	2.50E-03	1.47E-03	8.18E-06	1.01E-05	3.6288E-02
551412.98	4172720.87	3244.26833	4396.33238	1409.10398	12422.51544	2068.13974	2682.06719	3232.97046	2510.12239	775.92269	8356.78234	7860.88767	3455.5586	0.55197	0.56741	4.74E-03	3.83E-03	1.23E-03	7.91E-03	1.66E-03	2.15E-03	3.06E-03	2.11E-03	6.51E-04	4.45E-03	2.89E-03	1.27E-03	7.72E-06	9.62E-06	3.5963E-02
551382.93	4173040.44	3609.2659	6453.44997	1073.29373	8850.70692	1229.08467	5052.41093	3628.13649	3823.6715	608.46692	7565.59222	4197.30944	6298.46587	0.571	0.57913	5.27E-03	5.62E-03	9.35E-04	5.64E-03	9.86E-04	4.05E-03	3.44E-03	3.21E-03	5.11E-04	4.03E-03	1.54E-03	2.32E-03	7.99E-06	9.81E-06	3.7563E-02
551434.93	4173156.99	3725.14408	6267.23847	1043.21762	7417.68668	1083.35399	6671.91089	3756.39803	3733.90022	594.12679	6768.04923	3215.21979	8086.35569	0.64183	0.64933	5.44E-03	5.46E-03	9.09E-04	4.72E-03	8.69E-04	5.35E-03	3.56E-03	3.13E-03	4.99E-04	3.60E-03	1.18E-03	2.98E-03	8.98E-06	1.10E-05	3.7722E-02
551473.49	4173205.95	3911.13242	6340.32954	1020.65082	6655.61151	1013.85435	7212.08281	3946.35417	3776.57935	584.46735	6270.33604	2851.27903	8703.79495	0.72757	0.73611	5.71E-03	5.52E-03	8.89E-04	4.24E-03	8.13E-04	5.79E-03	3.74E-03	3.17E-03	4.90E-04	3.34E-03	1.05E-03	3.20E-03	1.02E-05	1.25E-05	3.7969E-02
551622.18	4173286.37	4887.55608	5500.91496	951.34172	4598.19517	838.83642	9175.22315	4967.94132	3302.75546	552.02673	4557.82902	2088.43631	10851.68674	2.81718	2.94141	7.13E-03	4.79E-03	8.29E-04	2.93E-03	6.73E-04	7.36E-03	4.71E-03	2.77E-03	4.63E-04	2.43E-03	7.68E-04	3.99E-03	3.94E-05	4.98E-05	3.8935E-02
551379.71	4173031.48	3594.15052	6420.50605	1078.72886	8951.99332	1231.92064	4897.70986	3611.27072	3795.63455	611.76528	7637.81244	4254.48265	6117.92046	0.56657	0.57551	5.25E-03	5.59E-03	9.40E-04	5.70E-03	9.88E-04	3.93E-03	3.42E-03	3.18E-03	5.13E-04	4.07E-03	1.57E-03	2.25E-03	7.93E-06	9.75E-06	3.7416E-02
551401.33	4173091.83	3611.96451	6291.68173	1046.86309	8216.88699	1166.0438	5813.6777	3638.84975	3733.68989	592.61314	7099.96861	3772.71669	7138.7467	0.58652	0.59378	5.27E-03	5.48E-03	9.12E-04	5.23E-03	9.36E-04	4.66E-03	3.45E-03	3.13E-03	4.97E-04	3.78E-03	1.39E-03	2.63E-03	8.21E-06	1.01E-05	3.7387E-02
551376.48	4173022.53	3578.95246	6375.99653	1086.44465	9064.52352	1239.154	4747.96537	3594.20332	3758.24784	616.37628	7721.08495	4314.19562	5941.62766	0.56296	0.57183	5.22E-03	5.55E-03	9.46E-04	5.77E-03	9.94E-04	3.81E-03	3.41E-03	3.15E-03	5.17E-04	4.11E-03	1.59E-03	2.19E-03	7.88E-06	9.69E-06	3.7277E-02
551362.74	4172926.19	3399.85156	5600.42485	1240.61891	10732.92842	1422.35725	3665.76409	3398.82514	3212.95362	700.46404	8680.18334	5337.82821	4634.8155	0.56658	0.57815	4.96E-03	4.88E-03	1.08E-03	6.83E-03	1.14E-03	2.94E-03	3.22E-03	2.70E-03	5.88E-04	4.62E-03	1.96E-03	1.71E-03	7.93E-06	9.80E-06	3.6649E-02
551518.38	4172611.9	4040.70442	3691.03273	1913.89011	10874.73378	3140.65046	2245.98121	4009.80583	2152.14873	1040.2998	7513.94992	8444.02931	2951.76215	0.39028	0.39552	5.90E-03	3.21E-03	1.67E-03	6.92E-03	2.52E-03	1.80E-03	3.80E-03	1.81E-03	8.73E-04	4.00E-03	3.11E-03	1.09E-03	5.46E-06	6.70E-06	3.6710E-02
551456.55	4173188	3810.03033	6299.62792	1027.0553	6927.06589	1036.44425	6931.16743	3842.95008	3737.48648	586.77785	6454.18929	2974.88782	8375.22789	0.68244	0.69032	5.56E-03	5.49E-03	8.95E-04	4.41E-03	8.32E-04	5.56E-03	3.64E-03	3.14E-03	4.92E-04	3.44E-03	1.09E-03	3.08E-03	9.55E-06	1.17E-05	3.7649E-02
551578.79	4172597.4	4829.08514	3396.77442	2329.02733	9161.87786	4020.62981	2106.79417	4782.74786	2009.19211	1253.51723	6785.39977	8511.58147	2800.18738	0.31663	0.31977	7.05E-03	2.96E-03	2.03E-03	5.83E-03	3.23E-03	1.69E-03	4.53E-03	1.69E-03	1.05E-03	3.61E-03	3.13E-03	1.03E-03	4.43E-06	5.42E-06	3.7840E-02
551386.79	4172786.86	3170.01833	4633.51604	1351.90756	12060.04864	1870.01855	2931.60208	3159.72187	2646.07524	748.38442	8359.48645	7292.87748	3738.33933	0.57178	0.58758	4.63E-03	4.04E-03	1.18E-03	7.68E-03	1.50E-03	2.35E-03	2.99E-03	2.22E-03	6.28E-04	4.45E-03	2.68E-03	1.38E-03	8.00E-06	9.96E-06	3.5741E-02
551426.47	4172697.04	3301.37042	4235.05821	1438.79124	12296.52408	2122.82125	2573.48085	3289.19352	2424.37327	792.36709	8207.85096	7928.21166	3326.03603	0.52688	0.54082	4.82E-03	3.69E-03	1.25E-03	7.83E-03	1.70E-03	2.06E-03	3.12E-03	2.03E-03	6.65E-04	4.37E-03	2.92E-03	1.22E-03	7.37E-06	9.16E-06	3.5701E-02
551751.03	4172664.01	6936.4808	2499.54893	2178.97658	8580.53135	3821.48256	1617.30714	6856.43826	1470.85281	1154.24781	5077.01727	9538.65191	2182.48115	0.40443	0.41466	1.01E-02	2.18E-03	1.90E-03	5.46E-03	3.07E-03	1.30E-03	6.50E-03	1.23E-03	9.68E-04	2.70E-03	3.51E-03	8.03E-04	5.66E-06	7.03E-06	3.9756E-02
551404.29	4173100.2	3605.14113	6237.13477	1043.3934	8078.20323	1153.85451	5901.88863	3632.81212	3698.51821	590.74849	7024.89596	3691.94523	7228.53787	0.5886	0.59645	5.26E-03	5.43E-03	9.09E-04	5.14E-03	9.26E-04	4.74E-03	3.44E-03	3.10E-03	4.96E-04	3.74E-03	1.36E-03	2.66E-03	8.24E-06	1.01E-05	3.7226E-02
551365.45	4172862.48	3242.93788	4988.18001	1298.54133	11591.75632	1619.11519	3224.47039	3236.09926	2850.42887	725.22448	8618.517	6349.10943	4088.28638	0.57257	0.58574	4.73E-03	4.34E-03	1.13E-03	7.38E-03	1.30E-03	2.59E-03	3.07E-03	2.39E-03	6.09E-04	4.59E-03	2.34E-03	1.50E-03	8.01E-06	9.93E-06	3.5989E-02
551373.26	4173013.58	3554.60623	6300.87952	1092.79197	9154.54822	1244.5079	4593.62484	3567.9666	3702.26043	620.18919	7782.64755	4367.66541	5757.60145	0.55801	0.56659	5.19E-03	5.49E-03	9.52E-04	5.83E-03	9.98E-04	3.69E-03	3.38E-03	3.11E-03	5.20E-04	4.14E-03	1.61E-03	2.12E-03	7.81E-06	9.60E-06	3.7035E-02
551538.56	4173258.25	4229.35989	5953.01831	962.3658	5563.2067	927.3276	8092.23668	4279.78021	3594.07491	553.56189	5439.63328	2453.51474	9639.05391	1.03796	1.05352	6.17E-03	5.18E-03	8.38E-04	3.54E-03	7.44E-04	6.49E-03	4.06E-03	3.02E-03	4.64E-04	2.90E-03	9.03E-04	3.55E-03	1.45E-05	1.79E-05	3.7889E-02
551438.02	4173165.58	3706.02026	6228.93099	1029.96544	7227.83098	1062.38189	6622.65294	3737.15069	3678.82209	586.93904	6620.39755	3126.76188	8021.76489	0.64033	0.64766	5.41E-03	5.43E-03	8.97E-04	4.60E-03	8.52E-04	5.31E-03	3.54E-03	3.09E-03	4.92E-04	3.52E-03	1.15E-03	2.95E-03	8.96E-06	1.10E-05	3.7267E-02
551999.39	4172693.31	5483.2519	3468.78223	2793.0406	8937.07306	3543.81478	1722.34038	5372.51189	2053.90194	1495.71879	7252.7389	7205.75306	2317.52145	0.23803	0.23846	8.00E-03	3.02E-03	2.43E-03	5.69E-03	2.84E-03	1.38E-03	5.09E-03	1.72E-03	1.25E-03	3.86E-03	2.65E-03	8.53E-04	3.33E-06	4.04E-06	3.8815E-02
551363.15	4172956.42	3452.13157	5854.06494	1184.08206	10128.63103	1339.65123	3914.63044	3455.28531	3376.03457	671.19041	8404.49239	4907.17412	4939.83628	0.55844	0.5686	5.04E-03	5.10E-03	1.03E-03	6.45E-03	1.07E-03	3.14E-03	3.27E-03	2.83E-03	5.63E-04	4.47E-03	1.81E-03	1.82E-03	7.81E-06	9.64E-06	3.6619E-02
552014.24	4172696.53	5805.89245	3591.39616	2703.43742	8571.64325	3239.17733	1847.16796	5696.05064	2136.21772	1461.41122	7111.473	6775.30988	2479.5772	0.23243	0.23273	8.47E-03	3.13E-03	2.35E-03	5.46E-03	2.60E-03	1.48E-03	5.40E-03	1.79E-03	1.23E-03	3.79E-03	2.49E-03	9.12E-04	3.25E-06	3.94E-06	3.9111E-02
551370.03	4173004.63	3521.60396	6197.74211	1097.72576	9221.58019	1248.07468	4436.58811	3533.15421	3629.85745	623.09533	7821.375	4415.37925	5568.57193	0.55246	0.56115	5.14E-03	5.40E-03	9.56E-04	5.87E-03	1.00E-03	3.56E-03	3.35E-03	3.05E-03	5.23E-04	4.16E-03	1.62E-03	2.05E-03	7.73E-06	9.51E-06	3.6698E-02
551410.21	4173116.94	3589.4827	6126.43976	1035.34142	7795.67979	1128.39168	6034.45013	3618.20833	3628.40461	586.68991	6868.64575	3527.02738	7358.55351	0.59402	0.60056	5.24E-03	5.34E-03	9.02E-04	4.96E-03	9.05E-04	4.84E-03	3.43E-03	3.04E-03	4.92E-04	3.66E-03	1.30E-03	2.71E-03	8.31E-06	1.02E-05	3.6833E-02
551362.33	4172895.96	3294.39009	5232.69559	1259.21286	11002.46469	1488.43289	3397.22375	3290.39547	2992.85306	707.30746	8596.05111	5701.63123	4303.00983	0.5617	0.57368	4.81E-03	4.56E-03	1.10E-03	7.01E-03	1.19E-03	2.73E-03	3.12E-03	2.51E-03	5.93E-04	4.58E-03	2.10E-03	1.58E-03	7.86E-06	9.72E-06	3.5886E-02
551570.55	4173276.2	4392.99107	5723.73391	945.78328	5091.17899	880.90558	8426.55171	4453.45833	3453.41203	545.3098	5040.85263	2273.22794	9989.12086	1.33436	1.35959	6.41E-03	4.99E-03	8.24E-04	3.24E-03	7.07E-04	6.76E-03	4.22E-03	2.90E-03	4.58E-04	2.68E-03	8.36E-04	3.68E-03	1.87E-05	2.30E-05	3.7743E-02
551665.6	4173289.01	5447.22639	5101.03399	924.83758	4164.29923	794.02407	8937.90449	5549.50743	3014.30045	540.09382	4065.14929	1925.69729	10663.05961	10.23691	11.53143	7.95E-03	4.44E-03	8.06E-04	2.65E-03	6.37E-04	7.17E-03	5.26E-03	2.53E-03	4.53E-04	2.16E-03	7.09E-04	3.92E-03	1.43E-04	1.95E-04	3.9035E-02
551370.59	4172827.76	3159.62228	4710.24177	1305.88235	11693.6755	1713.77753	3038.60375	3150.89032	2691.77082	726.49206	8345.15354	6733.60712	3859.56292	0.56569	0.5799	4.61E-03	4.10E-03	1.14E-03	7.45E-03	1.37E-03	2.44E-03	2.99E-03	2.26E-03	6.10E-04	4.44E-03	2.48E-03	1.42E-03	7.92E-06	9.83E-06	3.5322E-02
551398.65	4172742.7	3144.629	4412.27667	1355.07223	11971.35222	1957.67199	2730.40211	3134.08238	2517.47383	747.03812	8166.1056	7448.74474	3503.20549	0.54682	0.56214	4.59E-03	3.84E-03	1.18E-03	7.62E-03	1.57E-03	2.19E-03	2.97E-03	2.11E-03	6.27E-04	4.35E-03	2.74E-03	1.29E-03	7.65E-06	9.53E-06	3.5100E-02
551452.84	4172654.71	3464.37838	3951.04634	1548.14697	11818.70799	2328.15397	2400.74556	3447.16933	2272.09662	853.09304	7865.14397	8017.93785	3114.52638	0.47715	0.4876	5.06E-03	3.44E-03	1.35E-03	7.53E-03	1.87E-03	1.93E-03	3.27E-03	1.91E-03	7.16E-04	4.19E-03	2.95E-03	1.15E-03	6.68E-06	8.26E-06	3.5353E-02
551652.41	4173290.93	5217.15942	5176.07612	928.46149	4254.11263	801.81056	8953.88291	5310.7603	3075.0682	541.18042	4175.70772	1958.26381	10653.0926	5.86557	6.32681	7.62E-03	4.51E-03	8.09E-04	2.71E-03	6.43E-04	7.18E-03	5.03E-03	2.58E-03	4.54E-04	2.22E-03	7.21E-04	3.92E-03	8.21E-05	1.07E-04	3.8588E-02
551505.24	4172615.04	3866.30578	3686.84212	1807.17366	10894.50089	2911.79307	2246.99689	3838.45034	2143.9287	984.65461	7461.05803	8213.00809	2944.25147	0.39793	0.40383	5.64E-03	3.21E-03	1.57E-03	6.94E-03	2.34E-03	1.80E-03	3.64E-03	1.80E-03	8.26E-04	3.97E-03	3.02E-03	1.08E-03	5.57E-06	6.84E-06	3.5857E-02
551558.02	4172597.13	4462.61686	3446.01162	2140.15332	9547.23196	3626.7015	2122.99607	4423.44172	2027.98403	1157.62461	6925.77104	8262.05187	2812.06055	0.32978	0.33311	6.51E-03	3.00E-03	1.86E-03	6.08E-03	2.91E-03	1.70E-03	4.19E-03	1.70E-03	9.71E-04	3.69E-03	3.04E-03	1.03E-03	4.61E-06	5.64E-06	3.6708E-02
551459.64	4173196.59	3777.0996	6161.69143	1008.63322	6713.50272	1013.90475	6816.88749	3809.83128	3659.26376	576.59529	6268.93423	2890.31224	8239.03466	0.67778	0.68549	5.51E-03	5.37E-03	8.78E-04	4.27E-03	8.13E-04	5.47E-03	3.61E-03	3.07E-03	4.84E-04	3.34E-03	1.06E-03	3.03E-03	9.48E-06	1.16E-05	3.6934E-02
551609.91	4172598.09	5258.34357	3178.18907	2478.96119	8066.71912	4297.77821	2013.52128	5202.61454	1894.94946	1322.02303	6176.00642	8339.73485	2688.82736	0.28318	0.2859	7.68E-03	2.77E-03	2.16E-03	5.14E-03	3.45E-03	1.62E-03	4.93E-03	1.59E-03	1.11E-03	3.29E-03	3.07E-03	9.89E-04	3.96E-06	4.84E-06	3.7787E-02
551366.79	4172995.62	3484.33735	6077.74857	1102.93093	9281.66607	1251.64185	4282.48718	3494.14033	3547.89861	626.15576	7850.27875	4462.86325	5381.9941	0.54653	0.5557	5.09E-03	5.29E-03	9.61E-04	5.91E-03	1.00E-03	3.44E-03	3.31E-03	2.98E-03	5.25E-04	4.18E-03	1.64E-03	1.98E-03	7.65E-06	9.42E-06	3.6322E-02
551441.11	4173174.16	3683.03941	6123.18237	1015.67636	7028.79805	1041.52019	6556.6183	3713.97118	3620.03697	579.15051	6466.0982	3041.53865	7938.43403	0.63791	0.64514	5.38E-03	5.33E-03	8.85E-04	4.48E-03	8.36E-04	5.26E-03	3.52E-03	3.04E-03	4.86E-04	3.44E-03	1.12E-03	2.92E-03	8.93E-06	1.09E-05	3.6710E-02
551731	4172653.72	7037.90345	2571.61589	2364.9787	7637.54488	3792.31585	1681.44293	6952.17101	1523.03438	1244.62829	4869.68766	8854.05524	2274.15457	0.35976	0.36929	1.03E-02	2.24E-03	2.06E-03	4.86E-03	3.04E-03	1.35E-03	6.59E-03	1.28E-03	1.04E-03	2.59E-03	3.26E-03	8.37E-04	5.03E-06	6.26E-06	3.9437E-02
551591.33	4172593.72	4943.4449	3262.73872	2356.21879	8552.93505	4069.62792	2044.50393	4894.1604	1936.27745	1263.57075	6432.39779	8280.62796	2721.90185	0.2965	0.29933	7.22E-03	2.84E-03	2.05E-03	5.45E-03	3.27E-03	1.64E-03	4.64E-03	1.62E-03	1.06E-03	3.42E-03	3.05E-03	1.00E-03	4.15E-06	5.07E-06	3.7266E-02
551669.26	4172623.44	6343.31515	2875.82379	2706.01847	6817.49213	4505.09642	1876.18512	6265.69897	1723.2283	1421.97914	5255.9086	8399.04359	2533.33006	0.26748	0.27175	9.26E-03	2.50E-03	2.36E-03	4.34E-03	3.61E-03	1.51E-03	5.94E-03	1.45E-03	1.19E-03	2.80E-03	3.09E-03	9.32E-04	3.74E-06	4.60E-06	3.8987E-02
551477.45	4173215.91	3853.69087	6070.13821	994.44458	6389.89007	988.0059	7030.4384	3888.70873	3658.43404	569.89416	6022.43561	2760.66138	8491.18667	0.71878	0.72706	5.63E-03	5.29E-03	8.66E-04	4.07E-03	7.93E-04	5.64E-03	3.69E-03	3.07E-03	4.78E-04	3.21E-03	1.02E-03	3.12E-03	1.01E-05	1.23E-05	3.6881E-02
551363.82	4172852.5	3174.70095	4813.45713	1280.22593	11395.45212	1620.61261	3119.86854	3167.48181	2751.78682	714.1342	8372.83915	6339.04911	3956.99593	0.55837	0.57137	4.63E-03	4.19E-03	1.12E-03	7.26E-03	1.30E-03	2.50E-03	3.00E-03	2.31E-03	5.99E-04	4.46E-03	2.33E-03	1.46E-03	7.81E-06	9.68E-06	3.5173E-02
551600.5	4172594.79	5078.56521	3208.34179	2405.67635	8267.21806	4161.45004	2022.4422	5026.40956	1908.48053	1286.582	6276.84908	8260.04037	2696.33068	0.28799	0.29072	7.41E-03	2.79E-03	2.10E-03	5.26E-03	3.34E-03	1.62E-03	4.76E-03	1.60E-03	1.08E-03	3.34E-03	3.04E-03	9.92E-04	4.03E-06	4.93E-06	3.7354E-02
551639.22	4173292.85	4984.17869	5213.59242	926.40146	4330.66242	807.06203	8830.64485	5069.74898	3112.34037	538.85461	4269.23247	1986.65166	10485.07092	3.93951	4.15835	7.28E-03	4.54E-03	8.07E-04	2.76E-03	6.48E-04	7.08E-03	4.81E-03	2.61E-03	4.52E-04	2.27E-03	7.31E-04	3.86E-03	5.51E-05	7.05E-05	3.7968E-02
551548.07	4173267.2	4215.58197	5759.40508	942.5822	5332.0526	901.33603	8001.2218	4268.32512	3476.90849	542.3746	5227.35743	2369.66894	9517.19509	1.0895	1.10601	6.15E-03	5.02E-03	8.21E-04	3.40E-03	7.23E-04	6.42E-03	4.05E-03	2.92E-03	4.55E-04	2.78E-03	8.72E-04	3.50E-03	1.52E-05	1.87E-05	3.7136E-02
551394.38	4172751	3114.37517	4407.28005	1336.95214	11781.29543	1915.72333	2745.54286	3104.07268	2515.22538	737.60172	8078.5729	7288.92391	3517.31579	0.54235	0.55741	4.55E-03	3.84E-03	1.16E-03	7.50E-03	1.54E-03	2.20E-03	2.94E-03	2.11E-03	6.19E-04	4.30E-03	2.68E-03	1.29E-03	7.59E-06	9.45E-06	3.4755E-02
551359.92	4172947.46	3375.90426	5637.78479	1177.02042	10029.15486	1334.64152	3754.53572	3377.85249	3247.04677	666.56788	8273.5226	4903.67694	4741.10274	0.54575	0.55595	4.93E-03	4.91E-03	1.03E-03	6.39E-03	1.07E-03	3.01E-03	3.20E-03	2.72E-03	5.59E-04	4.40E-03	1.80E-03	1.74E-03	7.64E-06	9.42E-06	3.5787E-02
551416.13	4173133.68	3565.75989	6003.21029	1022.67546	7500.11176	1099.24474	6093.83253	3594.90396	3553.98697	580.28717	6682.58081	3361.80566	7406.72444	0.5967	0.60338	5.20E-03	5.23E-03	8.91E-04	4.78E-03	8.82E-04	4.89E-03	3.41E-03	2.98E-03	4.87E-04	3.56E-03	1.24E-03	2.73E-03	8.35E-06	1.02E-05	3.6285E-02
551429.57	4172683.43	3275.77987	4074.55067	1426.54898	11856.11689	2104.30787	2482.96942	3263.2348	2335.81282	785.88699	7923.76962	7707.77417	3211.68774	0.49975	0.51237	4.78E-03	3.55E-03	1.24E-03	7.55E-03	1.69E-03	1.99E-03	3.09E-03	1.96E-03	6.59E-04	4.22E-03	2.84E-03	1.18E-03	6.99E-06	8.68E-06	3.4766E-02
551759.53	4172664.38	6602.68142	2409.83769	2029.43799	8595.55193	3721.05211	1554.6979	6530.32769	1413.8302	1078.4177	5017.69152	9376.57627	2094.47933	0.40156	0.41134	9.64E-03	2.10E-03	1.77E-03	5.47E-03	2.99E-03	1.25E-03	6.19E-03	1.19E-03	9.05E-04	2.67E-03	3.45E-03	7.71E-04	5.62E-06	6.97E-06	3.8395E-02
551359.51	4172917.23	3303.86515	5344.35624	1217.33943	10477.86923	1404.9098	3498.25461	3302.13716	3063.16692	686.39491	8406.8318	5279.6373	4427.08241	0.54805	0.55816	4.82E-03	4.65E-03	1.06E-03	6.67E-03	1.13E-03	2.81E-03	3.13E-03	2.57E-03	5.76E-04	4.47E-03	1.94E-03	1.63E-03	7.67E-06	9.46E-06	3.5482E-02
551441.29	4172664.13	3358.61122	3966.58161	1481.74775	11740.92032	2205.08102	2414.41984	3343.72386	2277.94342	816.50635	7823.64643	7812.08517	3128.0098	0.48326	0.49461	4.90E-03	3.45E-03	1.29E-03	7.48E-03	1.77E-03	1.94E-03	3.17E-03	1.91E-03	6.85E-04	4.16E-03	2.87E-03	1.15E-03	6.76E-06	8.38E-06	3.4800E-02
551496.48	4172617.13	3762.61641	3682.91676	1744.46599	10893.07676	2777.97019	2246.769	3736.57731	2137.75349	952.25856	7423.57728	8069.95973	2938.40572	0.40291	0.40928	5.49E-03	3.21E-03	1.52E-03	6.94E-03	2.23E-03	1.80E-03	3.54E-03	1.79E-03	7.99E-04	3.95E-03	2.97E-03	1.08E-03	5.64E-06	6.94E-06	3.5335E-02
551363.56	4172986.65	3444.55192	5947.3377	1108.78961	9338.51041	1256.06306	4134.85484	3452.6705	3460.69281	629.38792	7871.21037	4511.30351	5202.52851	0.54048	0.54938	5.03E-03	5.18E-03	9.66E-04	5.95E-03	1.01E-03	3.32E-03	3.27E-03	2.90E-03	5.28E-04	4.19E-03	1.66E-03	1.91E-03	7.56E-06	9.31E-06	3.5930E-02
551505.81	4173239.58	3968.18147	5914.97472	961.60886	5921.13295	956.41311	7331.72946	4008.70299	3569.58212	552.06435	5660.70268	2605.80208	8789.8971	0.83328	0.84327	5.79E-03	5.15E-03	8.38E-04	3.77E-03	7.67E-04	5.88E-03	3.80E-03	3.00E-03	4.63E-04	3.01E-03	9.59E-04	3.23E-03	1.17E-05	1.43E-05	3.6691E-02
551546.53	4172597.92	4264.69567	3454.96165	2028.84062	9677.1697	3395.2866	2125.77186	4229.12316	2028.16932	1099.63605	6944.10825	8072.81538	2809.77108	0.33565	0.33913	6.22E-03	3.01E-03	1.77E-03	6.16E-03	2.72E-03	1.71E-03	4.01E-03	1.70E-03	9.23E-04	3.70E-03	2.97E-03	1.03E-03	4.70E-06	5.75E-06	3.5936E-02
551416.74	4172703.47	3185.15414	4163.97478	1374.31103	11786.2839	2014.08962	2548.45274	3174.1775	2382.33974	757.04873	7940.8024	7510.47204	3288.86405	0.51043	0.52391	4.65E-03	3.63E-03	1.20E-03	7.50E-03	1.62E-03	2.04E-03	3.01E-03	2.00E-03	6.35E-04	4.23E-03	2.76E-03	1.21E-03	7.14E-06	8.88E-06	3.4497E-02
551371.29	4172818.38	3107.17209	4584.50823	1288.92475	11438.771	1708.2368	2962.0259	3098.31498	2621.06017	716.47839	8123.35507	6665.70577	3764.20387	0.55004	0.56399	4.54E-03	3.99E-03	1.12E-03	7.28E-03	1.37E-03	2.38E-03	2.94E-03	2.20E-03	6.01E-04	4.32E-03	2.45E-03	1.38E-03	7.70E-06	9.56E-06	3.4597E-02
551390.11	4172759.3	3087.9481	4399.80918	1320.59727	11608.04442	1875.46925	2759.94605	3077.85987	2511.95799	729.17762	7997.11173	7141.71277	3530.5683	0.53825	0.55306	4.51E-03	3.83E-03	1.15E-03	7.39E-03	1.50E-03	2.21E-03	2.92E-03	2.11E-03	6.12E-04	4.26E-03	2.63E-03	1.30E-03	7.53E-06	9.37E-06	3.4437E-02
551419.48	4173143.16	3555.01669	5941.07704	1015.11654	7336.0453	1079.42251	6104.99251	3584.20132	3517.164	577.05479	6620.8156	3266.94313	7411.24232	0.59551	0.6019	5.19E-03	5.17E-03	8.84E-04	4.67E-03	8.66E-04	4.90E-03	3.40E-03	2.95E-03	4.84E-04	3.52E-03	1.20E-03	2.73E-03	8.33E-06	1.02E-05	3.5987E-02
551444.2	4173182.75	3655.60619	6009.89689	1000.19663	6831.00129	1020.82398	6473.47067	3686.29375	3556.60745	570.68426	6304.34019	2959.55584	7836.69289	0.63443	0.64152	5.34E-03	5.23E-03	8.71E-04	4.35E-03	8.19E-04	5.19E-03	3.49E-03	2.98E-03	4.79E-04	3.36E-03	1.09E-03	2.88E-03	8.88E-06	1.09E-05	3.6108E-02
551767.7	4172665	6329.84853	2353.53636	1936.32448	8743.49968	3761.5866	1509.8299	6263.30754	1376.7647	1030.03322	5051.8796	9451.09296	2030.83784	0.40279	0.4121	9.24E-03	2.05E-03	1.69E-03	5.57E-03	3.02E-03	1.21E-03	5.94E-03	1.16E-03	8.64E-04	2.69E-03	3.48E-03	7.47E-04	5.64E-06	6.98E-06	3.7654E-02
551646.88	4172610.43	5831.40831	2944.75872	2601.99972	7012.28349	4411.06724	1909.30883	5763.81158	1765.14163	1375.74585	5480.99531	8152.46002	2567.15484	0.25834	0.26131	8.51E-03	2.56E-03	2.27E-03	4.47E-03	3.54E-03	1.53E-03	5.46E-03	1.48E-03	1.15E-03	2.92E-03	3.00E-03	9.45E-04	3.61E-06	4.43E-06	3.7847E-02
551359.34	4172885.37	3203.49357	4993.45693	1237.45344	10779.31877	1482.94696	3250.50139	3198.88792	2856.59625	693.78099	8314.60096	5684.85704	4118.73229	0.5424	0.55396	4.68E-03	4.35E-03	1.08E-03	6.86E-03	1.19E-03	2.61E-03	3.03E-03	2.40E-03	5.82E-04	4.43E-03	2.09E-03	1.52E-03	7.59E-06	9.39E-06	3.4825E-02
551626.04	4173294.77	4752.15333	5210.07381	918.71766	4392.20767	809.60422	8574.20873	4830.32457	3122.84049	533.19341	4341.52905	2010.38989	10168.3715	2.84666	2.97297	6.94E-03	4.54E-03	8.00E-04	2.80E-03	6.50E-04	6.88E-03	4.58E-03	2.62E-03	4.47E-04	2.31E-03	7.40E-04	3.74E-03	3.98E-05	5.04E-05	3.7128E-02
551360.34	4172977.69	3393.37624	5790.8279	1110.73216	9349.10244	1257.16259	3983.77145	3399.91993	3360.13588	630.30885	7848.63238	4511.11244	5017.97718	0.53232	0.54165	4.95E-03	5.04E-03	9.67E-04	5.95E-03	1.01E-03	3.20E-03	3.22E-03	2.82E-03	5.29E-04	4.18E-03	1.66E-03	1.85E-03	7.45E-06	9.18E-06	3.5393E-02
551422.57	4173151.74	3549.3867	5893.09747	1005.94203	7194.58767	1060.5875	6169.1172	3578.51924	3513.45499	572.20552	6510.29085	3180.46613	7409.74206	0.59382	0.6007	5.18E-03	5.13E-03	8.76E-04	4.58E-03	8.51E-04	4.95E-03	3.39E-03	2.95E-03	4.80E-04	3.47E-03	1.17E-03	2.73E-03	8.31E-06	1.02E-05	3.5771E-02
551579.91	4173285.01	4354.74228	5486.21916	923.56363	4853.5251	852.58962	8185.59655	4416.87318	3307.70833	532.8575	4808.03253	2184.83693	9704.25206	1.41769	1.4498	6.36E-03	4.78E-03	8.04E-04	3.09E-03	6.84E-04	6.57E-03	4.19E-03	2.78E-03	4.47E-04	2.56E-03	8.04E-04	3.57E-03	1.98E-05	2.46E-05	3.6668E-02
551356.7	4172938.49	3301.04783	5425.77021	1168.55229	9920.42078	1329.81018	3602.57257	3301.89802	3121.56216	661.02532	8128.12165	4900.04103	4552.24461	0.53207	0.54244	4.82E-03	4.73E-03	1.02E-03	6.32E-03	1.07E-03	2.89E-03	3.13E-03	2.62E-03	5.55E-04	4.33E-03	1.80E-03	1.67E-03	7.45E-06	9.19E-06	3.4960E-02
551525.09	4173257.74	4025.00277	5714.67346	935.47179	5528.38168	915.49911	7460.60351	4070.1621	3448.34903	537.54586	5348.20987	2450.10434	8915.83856	0.91324	0.92562	5.88E-03	4.98E-03	8.15E-04	3.52E-03	7.34E-04	5.99E-03	3.86E-03	2.89E-03	4.51E-04	2.85E-03	9.01E-04	3.28E-03	1.28E-05	1.57E-05	3.6167E-02
551362.19	4172842.52	3099.17601	4629.25812	1255.48798	11105.04505	1610.53912	3010.77374	3091.71014	2647.8239	699.67852	8082.17941	6259.43959	3820.15375	0.53988	0.55258	4.52E-03	4.03E-03	1.09E-03	7.07E-03	1.29E-03	2.42E-03	2.93E-03	2.22E-03	5.87E-04	4.30E-03	2.30E-03	1.41E-03	7.55E-06	9.36E-06	3.4194E-02
551557.57	4173276.15	4194.22476	5560.42573	922.98974	5103.07068	875.14136	7867.22774	4249.00836	3355.83494	531.33764	5014.69521	2284.62855	9349.17618	1.14433	1.16483	6.12E-03	4.84E-03	8.04E-04	3.25E-03	7.02E-04	6.31E-03	4.03E-03	2.82E-03	4.46E-04	2.67E-03	8.41E-04	3.44E-03	1.60E-05	1.97E-05	3.6306E-02
551534.19	4172599.04	4070.46368	3458.61914	1917.12578	9785.10868	3165.11275	2127.2906	4038.32058	2025.23755	1040.82552	6942.22211	7881.72164	2804.90504	0.34253	0.34629	5.94E-03	3.01E-03	1.67E-03	6.23E-03	2.54E-03	1.71E-03	3.83E-03	1.70E-03	8.73E-04	3.70E-03	2.90E-03	1.03E-03	4.79E-06	5.87E-06	3.5138E-02

Construction Health Risk Assessment Files

551464.37	4173209.67	3720.38538	5940.88056	979.01371	6396.44887	980.3069	6624.10903	3752.80881	3532.63834	560.18987	5982.15045	2767.98931	8011.80881	0.66894	0.67633	5.43E-03	5.17E-03	8.53E-04	4.07E-03	7.86E-04	5.31E-03	3.56E-03	2.96E-03	4.70E-04	3.18E-03	1.02E-03	2.95E-03	9.36E-06	1.15E-05	3.5794E-02
551356.29	4172908.26	3225.65447	5133.26021	1202.79201	10322.81112	1401.61149	3361.78786	3223.18209	2940.80131	677.13561	8200.57786	5274.02749	4256.4237	0.53456	0.54545	4.71E-03	4.47E-03	1.05E-03	6.57E-03	1.12E-03	2.70E-03	3.05E-03	2.47E-03	5.68E-04	4.36E-03	1.94E-03	1.57E-03	7.48E-06	9.24E-06	3.4600E-02
551383.34	4173070.63	3448.2149	5961.87915	1004.75453	7976.67807	1141.86367	5124.14472	3470.60689	3540.17318	568.88896	6844.38993	3786.13784	6341.64758	0.53945	0.54689	5.03E-03	5.19E-03	8.75E-04	5.08E-03	9.16E-04	4.11E-03	3.29E-03	2.97E-03	4.77E-04	3.64E-03	1.39E-03	2.33E-03	7.55E-06	9.27E-06	3.5331E-02
551425.66	4173160.33	3542.11001	5839.45311	995.99716	7051.00371	1041.21716	6147.88473	3571.14361	3474.20526	566.86228	6394.78603	3094.69493	7463.41692	0.59466	0.60133	5.17E-03	5.09E-03	8.67E-04	4.49E-03	8.35E-04	4.93E-03	3.38E-03	2.92E-03	4.76E-04	3.40E-03	1.14E-03	2.75E-03	8.32E-06	1.02E-05	3.5464E-02
551376.89	4173052.73	3440.12154	5990.15071	1012.16222	8169.38596	1159.352	4868.41876	3459.72792	3553.79073	573.50187	6973.47064	3901.71101	6054.98462	0.53335	0.54102	5.02E-03	5.22E-03	8.82E-04	5.20E-03	9.30E-04	3.91E-03	3.28E-03	2.98E-03	4.81E-04	3.71E-03	1.44E-03	2.23E-03	7.46E-06	9.17E-06	3.5292E-02
551380.11	4173061.68	3440.92556	5972.27725	1006.48987	8060.39496	1150.12045	4992.9869	3462.00966	3546.45192	570.03965	6894.10551	3844.27282	6194.89836	0.53589	0.54321	5.02E-03	5.20E-03	8.77E-04	5.13E-03	9.23E-04	4.01E-03	3.28E-03	2.98E-03	4.78E-04	3.67E-03	1.41E-03	2.28E-03	7.50E-06	9.21E-06	3.5277E-02
551385.84	4172767.6	3048.32926	4358.90322	1295.13737	11312.64444	1819.23576	2758.96283	3038.60494	2490.33811	715.86195	7843.3165	6913.94637	3524.20696	0.5272	0.54141	4.45E-03	3.80E-03	1.13E-03	7.20E-03	1.46E-03	2.21E-03	2.88E-03	2.09E-03	6.01E-04	4.17E-03	2.54E-03	1.30E-03	7.38E-06	9.17E-06	3.3852E-02
551481.5	4173225.42	3783.42425	5828.80594	967.97817	6119.29479	964.5688	6844.28964	3818.29296	3537.82165	555.12472	5781.0505	2681.37156	8154.25343	0.71237	0.72071	5.52E-03	5.08E-03	8.43E-04	3.90E-03	7.74E-04	5.49E-03	3.62E-03	2.97E-03	4.66E-04	3.08E-03	9.87E-04	3.00E-03	9.97E-06	1.22E-05	3.5743E-02
551373.67	4173043.77	3427.40951	5974.16185	1015.28889	8248.72195	1162.45077	4728.81257	3445.45857	3539.97456	575.47346	7027.10982	3949.88237	5894.18913	0.52944	0.53702	5.00E-03	5.20E-03	8.84E-04	5.25E-03	9.33E-04	3.79E-03	3.27E-03	2.97E-03	4.83E-04	3.74E-03	1.45E-03	2.17E-03	7.41E-06	9.10E-06	3.5167E-02
551447.29	4173191.34	3624.86618	5890.89189	983.77101	6635.28831	1000.30855	6376.88387	3655.29142	3489.52289	561.64396	6137.53238	2880.50068	7720.85576	0.63005	0.63697	5.29E-03	5.13E-03	8.57E-04	4.22E-03	8.03E-04	5.12E-03	3.46E-03	2.93E-03	4.71E-04	3.27E-03	1.06E-03	2.84E-03	8.82E-06	1.08E-05	3.5473E-02
551357.11	4172968.72	3334.79213	5618.55038	1110.18901	9325.86505	1256.15697	3833.79921	3339.875	3252.80023	629.79679	7795.18454	4524.91379	4833.24901	0.5231	0.532	4.87E-03	4.89E-03	9.67E-04	5.94E-03	1.01E-03	3.08E-03	3.17E-03	2.73E-03	5.28E-04	4.15E-03	1.66E-03	1.78E-03	7.32E-06	9.02E-06	3.4782E-02
551370.44	4173034.82	3414.68976	5948.97072	1020.36828	8336.5732	1167.88197	4591.72873	3431.14183	3518.0177	578.56324	7091.7298	3999.93278	5734.66926	0.52553	0.53328	4.98E-03	5.18E-03	8.89E-04	5.31E-03	9.37E-04	3.68E-03	3.25E-03	2.95E-03	4.85E-04	3.77E-03	1.47E-03	2.11E-03	7.35E-06	9.04E-06	3.5046E-02
551570.92	4172589.64	4511.67308	3261.62557	2135.90571	8707.64643	3613.00106	2033.46098	4470.83185	1926.12173	1152.90561	6446.33679	7827.76394	2697.85095	0.29905	0.30179	6.59E-03	2.84E-03	1.86E-03	5.54E-03	2.90E-03	1.63E-03	4.24E-03	1.62E-03	9.67E-04	3.43E-03	2.88E-03	9.93E-04	4.18E-06	5.11E-06	3.5495E-02
551612.85	4173296.68	4564.0853	5202.84898	908.8276	4443.84405	810.46209	8293.35357	4636.13228	3123.56723	526.50255	4404.83591	2027.39153	9837.08422	2.15158	2.22874	6.66E-03	4.53E-03	7.92E-04	2.83E-03	6.50E-04	6.65E-03	4.39E-03	2.62E-03	4.42E-04	2.34E-03	7.46E-04	3.62E-03	3.01E-05	3.78E-05	3.6353E-02
551372.57	4172804.46	3041.67475	4430.43777	1268.3578	11121.71644	1705.47535	2863.98569	3032.7032	2534.37388	704.05564	7850.90642	6582.80895	3642.54522	0.53029	0.5439	4.44E-03	3.86E-03	1.10E-03	7.08E-03	1.37E-03	2.30E-03	2.87E-03	2.13E-03	5.91E-04	4.18E-03	2.42E-03	1.34E-03	7.42E-06	9.22E-06	3.3700E-02
551431.66	4172670.48	3237.36047	3912.67204	1408.13997	11355.49833	2075.57135	2394.03729	3224.44733	2245.74988	776.09	7613.30166	7437.56656	3098.22703	0.47215	0.4835	4.73E-03	3.41E-03	1.23E-03	7.23E-03	1.67E-03	1.92E-03	3.06E-03	1.88E-03	6.51E-04	4.05E-03	2.74E-03	1.14E-03	6.61E-06	8.19E-06	3.3711E-02
551392.05	4173095.11	3423.09044	5813.58298	991.0414	7643.26003	1110.99812	5387.8323	3448.38384	3448.61329	560.83733	6619.64458	3590.58845	6618.71795	0.54323	0.55033	5.00E-03	5.06E-03	8.63E-04	4.87E-03	8.91E-04	4.32E-03	3.27E-03	2.89E-03	4.71E-04	3.52E-03	1.32E-03	2.44E-03	7.60E-06	9.33E-06	3.4933E-02
551381.57	4172775.9	3026.13566	4342.9303	1279.74363	11152.94581	1779.35803	2768.73851	3016.63928	2482.59747	708.02609	7766.92731	6772.94634	3532.08994	0.52277	0.53668	4.42E-03	3.78E-03	1.11E-03	7.10E-03	1.43E-03	2.22E-03	2.86E-03	2.08E-03	5.94E-04	4.13E-03	2.49E-03	1.30E-03	7.31E-06	9.09E-06	3.3543E-02
551367.22	4173025.87	3397.69947	5905.02468	1025.83094	8419.57439	1172.7336	4453.51036	3412.43975	3483.25391	581.89549	7152.73286	4048.18342	5571.94926	0.52104	0.52858	4.96E-03	5.14E-03	8.93E-04	5.36E-03	9.41E-04	3.57E-03	3.23E-03	2.92E-03	4.88E-04	3.81E-03	1.49E-03	2.05E-03	7.29E-06	8.96E-06	3.4879E-02
551419.69	4172689.95	3150.43594	4000.03954	1354.82114	11345.15029	1982.87599	2454.80721	3139.42299	2292.05288	746.59629	7650.99515	7275.3473	3171.19586	0.48272	0.49493	4.60E-03	3.48E-03	1.18E-03	7.22E-03	1.59E-03	1.97E-03	2.98E-03	1.92E-03	6.26E-04	4.07E-03	2.68E-03	1.17E-03	6.75E-06	8.39E-06	3.3503E-02
551688.38	4172627.16	6437.25883	2695.02333	2552.50578	6467.97535	4108.30129	1772.323	6358.36393	1610.1404	1338.74763	4848.75905	7970.73321	2396.6879	0.26869	0.27397	9.40E-03	2.35E-03	2.22E-03	4.12E-03	3.30E-03	1.42E-03	6.03E-03	1.35E-03	1.12E-03	2.58E-03	2.93E-03	8.82E-04	3.76E-06	4.64E-06	3.7708E-02
551428.75	4173168.91	3523.77818	5807.50178	984.03666	6887.33709	1022.31047	6101.30451	3552.66352	3425.86422	560.40472	6263.80275	3014.74017	7403.15149	0.5929	0.59942	5.14E-03	5.06E-03	8.57E-04	4.39E-03	8.20E-04	4.90E-03	3.37E-03	2.87E-03	4.70E-04	3.33E-03	1.11E-03	2.72E-03	8.30E-06	1.02E-05	3.5057E-02
551374.62	4172794.89	3025.56579	4383.10432	1268.14295	11084.8035	1724.53225	2824.39442	3016.40385	2507.14735	703.1562	7785.39899	6624.80491	3595.0667	0.52587	0.53956	4.42E-03	3.82E-03	1.10E-03	7.06E-03	1.38E-03	2.27E-03	2.86E-03	2.10E-03	5.90E-04	4.14E-03	2.44E-03	1.32E-03	7.36E-06	9.14E-06	3.3519E-02
551517.54	4172602.01	3857.48827	3478.03083	1794.75414	9967.61203	2911.44087	2138.54923	3828.89647	2029.90494	976.18041	6967.07389	7712.22144	2809.82216	0.35567	0.3601	5.63E-03	3.03E-03	1.56E-03	6.35E-03	2.34E-03	1.72E-03	3.63E-03	1.70E-03	8.19E-04	3.71E-03	2.84E-03	1.03E-03	4.98E-06	6.10E-06	3.4364E-02
551534.72	4173266.82	4021.27973	5554.73095	917.68189	5315.31677	891.88212	7421.90704	4068.79134	3351.98513	527.45342	5159.84626	2371.3049	8855.1621	0.95398	0.96664	5.87E-03	4.84E-03	7.99E-04	3.38E-03	7.16E-04	5.95E-03	3.86E-03	2.81E-03	4.43E-04	2.75E-03	8.72E-04	3.26E-03	1.33E-05	1.64E-05	3.5580E-02
551355.89	4172864.24	3091.27313	4682.24376	1220.86388	10662.46144	1515.36564	3057.40585	3085.39734	2679.09734	682.14446	7987.97108	5829.52463	3876.16002	0.52548	0.537	4.51E-03	4.08E-03	1.06E-03	6.79E-03	1.22E-03	2.45E-03	2.92E-03	2.25E-03	5.72E-04	4.25E-03	2.14E-03	1.43E-03	7.35E-06	9.10E-06	3.3696E-02
551363.99	4173016.92	3375.11881	5839.9732	1031.17188	8492.93639	1176.85558	4313.99582	3388.12918	3434.98636	585.09478	7204.51232	4093.47932	5405.94323	0.51686	0.52448	4.93E-03	5.09E-03	8.98E-04	5.41E-03	9.44E-04	3.46E-03	3.21E-03	2.88E-03	4.91E-04	3.83E-03	1.51E-03	1.99E-03	7.23E-06	8.89E-06	3.4655E-02
551580.01	4172587.43	4610.06313	3189.91431	2171.68973	8367.79445	3684.45667	2000.33457	4566.97606	1888.0351	1169.47137	6259.70284	7746.87615	2657.22786	0.28754	0.29011	6.73E-03	2.78E-03	1.89E-03	5.33E-03	2.96E-03	1.60E-03	4.33E-03	1.58E-03	9.81E-04	3.33E-03	2.85E-03	9.78E-04	4.02E-06	4.92E-06	3.5351E-02
551397.97	4173111.85	3411.61111	5721.76403	986.15629	7474.03553	1089.21158	5528.17803	3438.13703	3388.67597	558.25588	6498.9813	3446.24517	6760.02828	0.54831	0.55424	4.98E-03	4.98E-03	8.59E-04	4.76E-03	8.74E-04	4.44E-03	3.26E-03	2.84E-03	4.68E-04	3.46E-03	1.27E-03	2.49E-03	7.67E-06	9.39E-06	3.4692E-02
551353.47	4172929.53	3226.1473	5217.79368	1157.67964	9795.32549	1324.34719	3457.34216	3226.04695	2998.6133	653.99172	7963.11262	4891.42772	4371.8754	0.51867	0.52871	4.71E-03	4.54E-03	1.01E-03	6.24E-03	1.06E-03	2.77E-03	3.06E-03	2.52E-03	5.49E-04	4.24E-03	1.80E-03	1.61E-03	7.26E-06	8.96E-06	3.4121E-02
551747.6	4172654.71	6592.46359	2405.04112	2075.25013	7746.35136	3466.37289	1569.66223	6517.91621	1417.54983	1100.14435	4722.98627	8547.67844	2117.0472	0.36511	0.37447	9.62E-03	2.09E-03	1.81E-03	4.93E-03	2.78E-03	1.26E-03	6.18E-03	1.19E-03	9.23E-04	2.51E-03	3.14E-03	7.79E-04	5.11E-06	6.35E-06	3.7237E-02
551377.3	4172784.21	3009.80786	4332.8872	1266.94525	11032.15672	1743.63483	2780.1739	3000.52151	2478.06734	701.64744	7715.01764	6653.94195	3542.51556	0.51993	0.5336	4.39E-03	3.77E-03	1.10E-03	7.02E-03	1.40E-03	2.23E-03	2.84E-03	2.08E-03	5.89E-04	4.11E-03	2.45E-03	1.30E-03	7.28E-06	9.04E-06	3.3311E-02
551673.23	4173296.86	5334.39798	4779.68189	885.13555	3944.6983	761.63493	8193.52619	5435.48944	2814.26339	517.10815	3831.21529	1840.5286	9817.93377	13.26704	15.28695	7.79E-03	4.16E-03	7.71E-04	2.51E-03	6.11E-04	6.57E-03	5.15E-03	2.36E-03	4.34E-04	2.04E-03	6.77E-04	3.61E-03	1.86E-04	2.59E-04	3.7137E-02
551607.23	4172588.61	5002.18346	3046.34748	2319.62039	7653.97788	3967.80372	1940.02717	4950.70795	1814.63875	1238.93219	5868.0228	7762.19825	2587.85766	0.26696	0.26935	7.30E-03	2.65E-03	2.02E-03	4.87E-03	3.18E-03	1.56E-03	4.69E-03	1.52E-03	1.04E-03	3.12E-03	2.86E-03	9.52E-04	3.74E-06	4.56E-06	3.5783E-02
551660.52	4173298.71	5105.31983	4847.6338	890.87032	4030.25867	769.77587	8239.32882	5197.66304	2871.82238	519.49343	3931.72772	1873.99498	9840.15717	7.06568	7.75297	7.45E-03	4.22E-03	7.76E-04	2.57E-03	6.18E-04	6.61E-03	4.93E-03	2.41E-03	4.36E-04	2.09E-03	6.90E-04	3.62E-03	9.89E-05	1.31E-04	3.6649E-02
551447.97	4172646.12	3324.7853	3752.87599	1468.74955	10994.16483	2192.92987	2300.00838	3308.65839	2159.50994	809.80291	7383.07256	7432.50852	2982.42133	0.4422	0.45155	4.85E-03	3.27E-03	1.28E-03	7.00E-03	1.76E-03	1.85E-03	3.14E-03	1.81E-03	6.79E-04	3.93E-03	2.73E-03	1.10E-03	6.19E-06	7.65E-06	3.3409E-02
551353.88	4172959.76	3277.42233	5449.05618	1110.36413	9306.37021	1257.24046	3693.1855	3281.1379	3148.71494	629.47244	7738.88311	4543.18224	4659.67762	0.51449	0.52373	4.78E-03	4.75E-03	9.67E-04	5.93E-03	1.01E-03	2.96E-03	3.11E-03	2.64E-03	5.28E-04	4.12E-03	1.67E-03	1.71E-03	7.20E-06	8.87E-06	3.4196E-02
551400.92	4173120.22	3406.67423	5679.58135	983.50656	7352.94913	1077.99278	5580.63303	3433.5671	3361.53289	557.00199	6438.66613	3371.60265	6811.30049	0.55069	0.55721	4.97E-03	4.95E-03	8.57E-04	4.68E-03	8.65E-04	4.48E-03	3.25E-03	2.82E-03	4.67E-04	3.43E-03	1.24E-03	2.51E-03	7.71E-06	9.44E-06	3.4533E-02
551567.07	4173285.1	4170.33496	5363.09874	904.05156	4878.23165	848.9829	7706.1649	4227.01548	3234.88614	520.76063	4804.86556	2199.01503	9154.44222	1.20991	1.23151	6.09E-03	4.67E-03	7.87E-04	3.11E-03	6.81E-04	6.18E-03	4.01E-03	2.71E-03	4.37E-04	2.56E-03	8.09E-04	3.37E-03	1.69E-05	2.09E-05	3.5446E-02
551450.38	4173199.92	3593.84712	5770.12618	966.89823	6442.40761	979.81011	6274.71973	3624.03877	3421.24278	552.34828	5970.70512	2803.14923	7599.45397	0.62537	0.63211	5.25E-03	5.03E-03	8.42E-04	4.10E-03	7.86E-04	5.03E-03	3.43E-03	2.87E-03	4.63E-04	3.18E-03	1.03E-03	2.80E-03	8.75E-06	1.07E-05	3.4830E-02
551647.8	4173300.56	4904.86646	4908.3868	892.76387	4108.50831	776.27044	8224.59973	4990.00562	2921.14037	519.66423	4028.90831	1902.48769	9800.48711	4.5673	4.86787	7.16E-03	4.28E-03	7.78E-04	2.62E-03	6.23E-04	6.60E-03	4.73E-03	2.45E-03	4.36E-04	2.14E-03	7.00E-04	3.61E-03	6.39E-05	8.25E-05	3.6263E-02
551486.84	4173233.89	3759.98565	5684.70536	950.57166	5923.31924	945.83169	6691.79982	3795.39273	3420.90865	539.86877	5595.25824	2612.74534	8057.52155	0.72486	0.73358	5.49E-03	4.95E-03	8.28E-04	3.77E-03	7.59E-04	5.37E-03	3.60E-03	2.87E-03	4.53E-04	2.98E-03	9.61E-04	2.96E-03	1.01E-05	1.24E-05	3.5014E-02
551589.26	4173293.82	4310.98202	5246.60744	900.82909	4621.85378	824.23353	7910.97021	4374.29092	3159.94956	520.16262	4577.74694	2097.34675	9385.4392	1.51709	1.55214	6.29E-03	4.57E-03	7.85E-04	2.94E-03	6.61E-04	6.35E-03	4.15E-03	2.65E-03	4.36E-04	2.44E-03	7.72E-04	3.45E-03	2.12E-05	2.63E-05	3.5541E-02
551360.77	4173007.96	3342.26851	5745.63188	1034.24393	8536.9976	1178.42444	4169.20696	3353.68047	3369.48952	586.98452	7228.74986	4131.97407	5231.85984	0.51109	0.51881	4.88E-03	5.00E-03	9.01E-04	5.44E-03	9.45E-04	3.34E-03	3.18E-03	2.83E-03	4.93E-04	3.85E-03	1.52E-03	1.92E-03	7.15E-06	8.79E-06	3.4317E-02
551468.25	4173219.43	3660.30782	5686.65223	954.47738	6142.35066	957.4986	6456.70867	3692.44945	3427.13536	546.57937	5754.29838	2688.45237	7814.88321	0.66018	0.66744	5.34E-03	4.95E-03	8.31E-04	3.91E-03	7.68E-04	5.18E-03	3.50E-03	2.88E-03	4.59E-04	3.06E-03	9.89E-04	2.88E-03	9.24E-06	1.13E-05	3.4768E-02
552131.21	4173000.54	8427.11118	4534.42088	1054.79842	4323.97229	841.56887	4604.2919	8546.07687	2639.7412	624.43172	4219.92509	2043.58731	5919.83162	0.22212	0.22046	1.23E-02	3.95E-03	9.19E-04	2.75E-03	6.75E-04	3.69E-03	8.10E-03	2.21E-03	5.24E-04	2.25E-03	7.52E-04	2.18E-03	3.11E-06	3.74E-06	4.0313E-02
551505.3	4172604.93	3713.25205	3483.1064	1710.11394	10029.27911	2733.86575	2143.6567	3687.06803	2027.9874	931.77172	6949.61101	7558.51333	2808.91938	0.36366	0.36868	5.42E-03	3.03E-03	1.49E-03	6.39E-03	2.19E-03	1.72E-03	3.49E-03	1.70E-03	7.82E-04	3.70E-03	2.78E-03	1.03E-03	5.09E-06	6.25E-06	3.3745E-02
551353.06	4172899.3	3137.87821	4909.21217	1180.77624	10084.3101	1387.98295	3221.08298	3134.85916	2812.42121	663.69783	7941.7447	5221.87563	4079.94101	0.51521	0.52566	4.58E-03	4.28E-03	1.03E-03	6.42E-03	1.11E-03	2.58E-03	2.97E-03	2.36E-03	5.57E-04	4.23E-03	1.92E-03	1.50E-03	7.21E-06	8.91E-06	3.3557E-02
551431.84	4173177.5	3500.35197	5712.77938	970.82451	6708.96665	1003.52238	6037.54522	3529.01058	3372.91499	553.25136	6124.12038	2937.86138	7323.65645	0.59008	0.59644	5.11E-03	4.98E-03	8.46E-04	4.27E-03	8.05E-04	4.84E-03	3.34E-03	2.83E-03	4.64E-04	3.26E-03	1.08E-03	2.69E-03	8.26E-06	1.01E-05	3.4544E-02
551697.23	4172629.13	6466.76993	2623.0454	2472.9901	6413.35075	3928.57859	1728.78598	6387.83524	1564.49269	1297.05416	4711.58026	7830.15288	2338.22967	0.27406	0.27991	9.44E-03	2.28E-03	2.15E-03	4.08E-03	3.15E-03	1.39E-03	6.05E-03	1.31E-03	1.09E-03	2.51E-03	2.88E-03	8.60E-04	3.83E-06	4.74E-06	3.7213E-02
551393.6	4172731.4	2997.37494	4124.37311	1274.94589	10982.33405	1836.60897	2575.09072	2987.86887	2356.3955	702.98314	7557.24338	6829.59899	3305.11546	0.49451	0.50763	4.38E-03	3.59E-03	1.11E-03	6.99E-03	1.47E-03	2.07E-03	2.83E-03	1.98E-03	5.90E-04	4.02E-03	2.51E-03	1.22E-03	6.92E-06	8.60E-06	3.2776E-02
551357.52	4172998.95	3309.98645	5645.34746	1039.5366	8593.07998	1181.86434	4031.68962	3319.75363	3300.10506	590.08594	7260.25286	4174.46648	5065.89347	0.50584	0.51368	4.83E-03	4.92E-03	9.05E-04	5.47E-03	9.48E-04	3.23E-03	3.15E-03	2.77E-03	4.95E-04	3.86E-03	1.54E-03	1.86E-03	7.08E-06	8.70E-06	3.3999E-02
551635.08	4173302.41	4702.84968	4936.90364	889.79951	4175.08914	780.5162	8099.40276	4781.28828	2949.86169	516.91067	4110.43302	1927.17199	9635.71342	3.24512	3.41044	6.86E-03	4.30E-03	7.75E-04	2.66E-03	6.26E-04	6.50E-03	4.53E-03	2.48E-03	4.34E-04	2.19E-03	7.09E-04	3.55E-03	4.54E-05	5.78E-05	3.5708E-02
551544.36	4173275.89	4008.47852	5385.45829	899.84908	5101.55527	867.82231	7340.42977	4058.10418	3249.36026	517.3694	4968.38278	2290.96146	8747.10777	0.99766	1.01233	5.85E-03	4.69E-03	7.84E-04	3.25E-03	6.96E-04	5.89E-03	3.85E-03	2.73E-03	4.34E-04	2.64E-03	8.43E-04	3.22E-03	1.40E-05	1.72E-05	3.4903E-02
551360.74	4172827.84	2999.02031	4394.94168	1221.71867	10675.2484	1594.2081	2871.07507	2991.30382	2515.05079	680.06079	7688.45079	6131.06745	3645.39868	0.51386	0.52611	4.38E-03	3.83E-03	1.06E-03	6.80E-03	1.28E-03	2.30E-03	2.84E-03	2.11E-03	5.71E-04	4.09E-03	2.26E-03	1.34E-03	7.19E-06	8.92E-06	3.2871E-02
551406.84	4173136.96	3385.33769	5574.0897	973.25256	7093.03234	1052.99717	5628.07931	3412.55259	3297.56535	551.88423	6281.63182	3223.53099	6848.51055	0.55368	0.55929	4.94E-03	4.85E-03	8.48E-04	4.52E-03	8.45E-04	4.52E-03	3.23E-03	2.77E-03	4.63E-04	3.34E-03	1.19E-03	2.52E-03	7.75E-06	9.48E-06	3.4052E-02
551354.17	4172853.67	3024.98897	4514.88726	1203.43256	10482.62985	1517.10383	2956.31044	3018.69198	2584.31447	671.58116	7759.85857	5819.32681	3749.14778	0.51215	0.52353	4.42E-03	3.93E-03	1.05E-03	6.67E-03	1.22E-03	2.37E-03	2.86E-03	2.17E-03	5.63E-04	4.13E-03	2.14E-03	1.38E-03	7.17E-06	8.87E-06	3.2920E-02
551666	4172614.15	5936.33589	2742.62142	2494.747	6366.98694	4086.82395	1801.63128	5866.65803	1642.64629	1315.74492	4959.30233	7618.47719	2429.22378	0.24335	0.24669	8.67E-03	2.39E-03	2.17E-03	4.05E-03	3.28E-03	1.45E-03	5.56E-03	1.38E-03	1.10E-03	2.64E-03	2.80E-03	8.94E-04	3.41E-06	4.18E-06	3.6392E-02
551350.66	4172950.79	3213.52791	5268.25699	1106.72409	9247.51745	1255.42934	3552.8124	3216.04669	3039.78309	626.86302	7646.79846	4549.69906	4485.87021	0.50397	0.51313	4.69E-03	4.59E-03	9.64E-04	5.89E-03	1.01E-03	2.85E-03	3.05E-03	2.55E-03	5.26E-04	4.07E-03	1.67E-03	1.65E-03	7.05E-06	8.70E-06	3.3524E-02
551389.31	4172739.76	2973.8321	4131.1397	1261.86507	10861.4845	1806.67216	2594.12502	2964.48112	2360.39822	696.15585	7504.69976	6722.26709	3324.66611	0.49345	0.5065	4.34E-03	3.60E-03	1.10E-03	6.92E-03	1.45E-03	2.08E-03	2.81E-03	1.98E-03	5.84E-04	3.99E-03	2.47E-03	1.22E-03	6.90E-06	8.58E-06	3.2566E-02
551434.88	4172656.79	3205.28206	3755.10892	1394.314	10853.29448	2055.95776	2307.82031	3191.72781	2157.94596	768.86479	7305.68789	7176.59358	2988.17312	0.44502	0.45511	4.68E-03	3.27E-03	1.21E-03	6.91E-03	1.65E-03	1.85E-03	3.03E-03	1.81E-03	6.45E-04	3.89E-03	2.64E-03	1.10E-03	6.23E-06	7.71E-06	3.2699E-02
551350.25	4172920.56	3150.956	5016.78046	1144.75895	9654.80598	1318.77889	3320.31812	3150.01524	2880.01959	645.80054	7782.91028	4877.92748	4201.95176	0.50668	0.51597	4.60E-03	4.37E-03	9.97E-04	6.15E-03	1.06E-03	2.66E-03	2.99E-03	2.42E-03	5.42E-04	4.14E-03	1.79E-03	1.55E-03	7.09E-06	8.74E-06	3.3279E-02
551557.43	4172587.3	4230.82826	3232.79624	1981.93374	8699.81573	3298.52499	2014.31521	4195.11173	1903.34915	1073.42762	6376.21744	7467.944	2666.2419	0.29872	0.30142	6.18E-03	2.82E-03	1.73E-03	5.54E-03	2.65E-03	1.62E-03	3.98E-03	1.60E-03	9.01E-04	3.39E-03	2.75E-03	9.81E-04	4.18E-06	5.11E-06	3.4125E-02
551410.21	4173146.49	3386.04901	5544.20384	968.8258	6962.81417	1035.53736	5651.92317	3413.26588	3278.67808	550.44755	6248.43832	3133.67258	6871.23427	0.55405	0.55976	4.94E-03	4.83E-03	8.44E-04	4.43E-03	8.31E-04	4.53E-03	3.24E-03	2.75E-03	4.62E-04	3.33E-03	1.15E-03	2.53E-03	7.75E-06	9.49E-06	3.3886E-02
551354.29	4172989.99	3270.1638	5525.18843	1043.08621	8624.77358	1183.85058	3894.12853	3278.39396	3220.03869	592.04666	7266.87003	4211.6734	4899.00129	0.49948	0.50733	4.77E-03	4.81E-03	9.09E-04	5.49E-03	9.50E-04	3.12E-03	3.11E-03	2.70E-03	4.97E-04	3.87E-03	1.55E-03	1.80E-03	6.99E-06	8.60E-06	3.3601E-02
551434.93	4173186.08	3469.30455	5607.40385	956.11068	6526.97333	985.16039	5953.55207	3497.66439	3313.64924	545.16978	5973.46626	2865.48341	7222.00594	0.58568	0.59192	5.06E-03	4.88E-03	8.33E-04	4.16E-03	7.90E-04	4.78E-03	3.32E-03	2.78E-03	4.57E-04	3.18E-03	1.05E-03	2.66E-03	8.20E-06	1.00E-05	3.3966E-02
551493.06	4172607.86	3573.18872	3472.53602	1627.19714	10000.62224	2560.38157	2141.31151	3549.34672	2017.15094	888.6321	6887.29011	7358.51439	2798.40478	0.36857	0.37412	5.22E-03	3.02E-03	1.42E-03	6.37E-03	2.05E-03	1.72E-03	3.36E-03	1.69E-03	7.46E-04	3.67E-03	2.71E-03	1.03E-03	5.16E-06	6.34E-06	3.3014E-02
551409.81	4172696.48	3037.73814	3928.56356	1293.36761	10864.86204	1880.76062	2428.62086	3027.84511	2249.95985	712.89986	7394.29487	6888.29362	3132.84123	0.46711	0.47888	4.43E-03	3.42E-03	1.13E-03	6.92E-03	1.51E-03	1.95E-03	2.87E-03	1.89E-03	5.98E-04	3.94E-03	2.53E-03	1.15E-03	6.54E-06	8.11E-06	3.2351E-02
551422.04	4172676.84	3104.94241	3829.70136	1329.78462	10829.74919	1941.05453	2360.61916	3093.86734	2197.51853	733.17861	7325.71899	6985.47894	3051.5482	0.45371	0.46463	4.53E-03	3.34E-03	1.16E-03	6.90E-03	1.56E-03	1.89E-03	2.93E-03	1.84E-03	6.15E-04	3.90E-03	2.57E-03	1.12E-03	6.35E-06	7.87E-06	3.2371E-02
551593.47	4172582.73	4696.18233	3039.52047	2176.59833	7730.21776	3686.18236	1928.16825	4650.62651	1804.92954	1167.79981	5874.73667	7455.80043	2565.58654	0.26645	0.26871	6.85E-03	2.65E-03	1.90E-03	4.92E-03	2.96E-03	1.55E-03	4.41E-03	1.51E-03	9.80E-04	3.13E-03	2.74E-03	9.44E-04	3.73E-06	4.55E-06	3.4549E-02
551622.37	4173304.26	4503.50833	4931.98669	882.17951	4228.68198	782.48182	7874.62279	4575.79894	2956.41855	511.47193	4173.52324	1947.69316	9360.10935	2.4148	2.51666	6.57E-03	4.30E-03	7.68E-04	2.69E-03	6.28E-04	6.32E-03	4.34E-03	2.48E-03	4.29E-04	2.22E-03	7.17E-04	3.44E-03	3.38E-05	4.26E-05	3.4981E-02
551385.01	4172748.11	2946.02149	4121.67304	1245.66637	10692.09897	1769.85536	2606.16152	2936.86909	2355.75744	687.72047	7421.15923	6584.88496	3335.18124	0.48951	0.50235	4.30E-03	3.59E-03	1.08E-03	6.81E-03	1.42E-03	2.09E-03	2.78E-03	1.98E-03	5.77E-04	3.95E-03	2.42E-03	1.23E-03	6.85E-06	8.51E-06	3.2247E-02
551413.3	4173155.08	3380.03962	5501.34057	960.643	6835.95041	1018.52345	5705.31993	3407.18848	3275.23892	546.13	6151.02391	3055.60075	6865.85172	0.55215	0.55829	4.93E-03	4.79E-03	8.37E-04	4.35E-03	8.17E-04	4.58E-03	3.23E-03	2.75E-03	4.58E-04	3.27E-03	1.12E-03	2.53E-03	7.73E-06	9.46E-06	3.3686E-02
551361.41	4172818.78	2957.72937	4296.77522	1210.24886	10502.34178	1594.32675	2810.59339	2949.83713	2459.79107	673.12198	7525.74971	6099.86769	3569.91188	0.50297	0.5151	4.32E-03	3.74E-03	1.05E-03	6.69E-03	1.28E-03	2.25E-03	2.80E-03	2.06E-03	5.65E-04	4.01E-03	2.24E-03	1.31E-03	7.04E-06	8.73E-06	3.2339E-02
551727.64	4172644.43	6576.07834	2445.64004	2196.52868	6800.33367	3418.37982	1612.78837	6499.02625	1448.77037	1159.06257	4502.52822	7797.49111	2179.81562	0.31557	0.32373	9.60E-03	2.13E-03	1.91E-03	4.33E-03	2.74E-03	1.29E-03	6.16E-03	1.22E-03	9.73E-04	2.40E-03	2.87E-03	8.02E-04	4.42E-06	5.49E-06	3.6434E-02
551545.83	4172588.11	4052.25764	3247.0608	1886.74671	8840.67131	3106.88454	2019.84016	4019.78139	1907.2447	1023.9275	6410.62788	7327.9036	2668.2077	0.30514	0.308	5.91E-03	2.83E-03	1.64E-03	5.63E-03	2.49E-03	1.62E-03	3.81E-03	1.60E-03	8.59E-04	3.41E-03	2.70E-03	9.82E-04	4.27E-06	5.22E-06	3.3498E-02
551350	4172888.53	3052.4397	4688.83581	1161.18711	9893.59243	1382.50594	3082.98365	3048.79927	2686.35399	651.46324	7693.09081	5205.21697	3906.5266	0.49771	0.50783	4.46E-03	4.08E-03	1.01E-03	6.30E-03	1.11E-03	2.47E-03	2.89E-03	2.25E-03	5.47E-04	4.09E-03	1.92E-03	1.44E-03	6.96E-06	8.61E-06	3.2586E-02
551576.57	4173294.05	4122.53972	5137.98128	882.35396	4652.84481	821.85756	7468.6826	4180.52014	3098.24538	508.52667	4584.22484	2114.84309	8873.14586	1.27779	1.30192	6.02E-03	4.48E-03	7.69E-04	2.96E-03	6.59E-04	5.99E-03	3.96E-03	2.60E-03	4.27E-04	2.44E-03	7.78E-04	3.26E-03	1.79E-05	2.21E-05	3.4387E-02
551351.07	4172981.02	3225.0659	5391.30903	1045.52828	8638.62781	1185.13524	3758.89299	3231.83739	3133.57523	593.31233	7254.47069	4203.40481	4733.67384	0.49229	0.50063	4.71E-03	4.70E-03	9.11E-04	5.50E-03	9.51E-04	3.02E-03	3.06E-03	2.63E-03	4.98E-04	3.86E-03	1.55E-03	1.74E-03	6.89E-06	8.48E-06	3.3136E-02
551455.25	4173213.39	3532.5753	5509.9013	938.05902	6133.40352	948.54099	6088.10992	3562.40013	3302.97524	536.38395	5696.46218	2689.52121	7379.80037	0.61522	0.62166	5.16E-03	4.80E-03	8.17E-04	3.91E-03	7.61E-04	4.88E-03	3.38E-03	2.77E-03	4.50E-04	3.03E-03	9.90E-04	2.72E-03	8.61E-06	1.05E-05	3.3677E-02
551554	4173284.97	3985.98492	5207.27605	881.80749	4887.67685	843.25634	7215.74031	4037.50907	3141.20893	507.18721	4773.64941	2209.65196	8591.89562	1.04531	1.0621	5.82E-03	4.54E-03	7.68E-04	3.11E-03	6.77E-04	5.79E-03	3.83E-03	2.64E-03	4.26E-04	2.54E-03	8.13E-04	3.16E-03	1.46E-05	1.80E-05	3.4135E-02
551380.71	4172756.47	2923.06092	4112.38426	1231.76433	10549.45768	1735.83901	2618.39823	2914.07165	2351.40241	680.58119	7349.92019	6465.05512	3346.18661	0.48649	0.49914	4.27E-03	3.58E-03	1.07E-03	6.72E-03	1.39E-03	2.10E-03	2.76E-03	1.97E-03	5.71E-04	3.91E-03	2.38E-03	1.23E-03	6.81E-06	8.46E-06	3.1975E-02
551416.39	4173163.66	3368.3412	5445.04554	951.15352	6699.22746	1001.40111	5678.18015	3395.35912	3237.36212	541.03397	6043.89218	2980.15953	6903.6366	0.55179	0.55784	4.92E-03	4.74E-03	8.28E-04	4.27E-03	8.03E-04	4.56E-03	3.22E-03	2.72E-03	4.54E-04	3.22E-03	1.10E-03	2.54E-03	7.72E-06	9.45E-06	3.3371E-02
551347.43	4172941.83	3141.86679	5072.47262	1096.997	9131.42031	1247.76902	3409.27622	3143.3737	2923.38193	620.72844	7505.41022	4533.41454	4307.82847	0.49133	0.49958	4.59E-03	4.42E-03	9.55E-04	5.81E-03	1.00E-03	2.74E-03	2.98E-03	2.45E-03	5.21E-04	3.99E-03	1.67E-03	1.58E-03	6.87E-06	8.47E-06	3.2726E-02
551715.34	4173290.52	5920.28423	4360.48993	829.39601	3608.26265	720.10182	7403.99671	6051.19859	2527.73565	485.76218	3537.50822	1713.9551	8964.84254	5.77216	5.25235	8.64E-03	3.80E-03	7.22E-04	2.30E-03	5.78E-04	5.94E-03	5.74E-03	2.12E-03	4.08E-04	1.88E-03	6.31E-04	3.30E-03	8.08E-05	8.90E-05	3.6223E-02
551438.02	4173194.67	3445.48853	5509.70025	941.83639	6354.26952	966.06251	5874.79392	3473.61553	3259.03193	537.36411	5830.33558	2790.90777	7127.31781	0.58223	0.58832	5.03E-03	4.80E-03	8.20E-04	4.05E-03	7.75E-04	4.71E-03	3.29E-03	2.73E-03	4.51E-04	3.10E-03	1.03E-03	2.62E-03	8.15E-06	9.97E-06	3.3431E-02
551374.07	4173073.97	3274.87475	5525.9493	952.02715	7469.3681	1087.01603	4781.17935	3296.11553	3280.16072	538.93596	6382.34871	3585.93767	5917.67695	0.50177	0.50795	4.78E-03	4.81E-03	8.29E-04	4.76E-03	8.72E-04	3.84E-03	3.12E-03	2.75E-03	4.52E-04	3.40E-03	1.32E-03	2.18E-03	7.02E-06	8.61E-06	3.3124E-02
551347.02	4172911.6	3079.50667	4828.57561	1132.53249	9524.16659	1315.98637	3195.27101	3077.83586	2770.57795	637.92083	7608.394	4873.31725	4045.54886	0.49388	0.50352	4.50E-03	4.21E-03	9.86E-04	6.06E-03	1.06E-03	2.56E-03	2.92E-03	2.32E-03	5.35E-04	4.05E-03	1.79E-03	1.49E-03	6.91E-06	8.53E-06	3.2495E-02
551352.44	4172843.11	2955.36204	4347.17378	1182.0131	10240.54138	1510.99789	2855.64238	2948.76787	2489.16083	658.98514	7505.98522	5762.91953	3622.81972	0.49644	0.50761	4.31E-03	3.79E-03	1.03E-03	6.52E-03	1.21E-03	2.29E-03	2.79E-03	2.09E-03	5.53E-04	4.00E-03	2.12E-03	1.33E-03	6.95E-06	8.60E-06	3.2054E-02
551764.2	4172655.69	6041.0297	2257.65968	1835.25385	7867.1054	3320.81903	1464.51491	5978.66526	1323.7702	977.80798	4648.66222	8391.07803	1969.11652	0.36582	0.37464	8.82E-03	1.97E-03	1.60E-03	5.01E-03	2.66E-03	1.17E-03	5.67E-03	1.11E-03	8.20E-04	2.47E-03	3.09E-03	7.24E-04	5.12E-06	6.35E-06	3.5127E-02
551524.25	4173269.13	3826.68327	5282.88596	885.89914	5216.72424	873.21335	6850.36104	3869.92383	3186.69317	508.72884	5009.50319	2344.61237	8193.78888	0.85284	0.8638	5.59E-03	4.60E-03	7.72E-04	3.32E-03	7.01E-04	5.50E-03	3.67E-03	2.67E-03	4.27E-04	2.67E-03	8.63E-04	3.01E-03	1.19E-05	1.46E-05	3.3816E-02
551370.85	4173065.02	3270.61544	5540.77325	954.15012	7545.3142	1094.5016	4668.50102	3290.64419	3289.12718	540.30035	6429.72892	3631.37574	5792.2987	0.49831	0.50512	4.77E-03	4.83E-03	8.31E-04	4.80E-03	8.78E-04	3.75E-03	3.12E-03	2.76E-03	4.53E-04	3.42E-03	1.34E-03	2.13E-03	6.97E-06	8.56E-06	3.3096E-02
552091.09	4173065.79	7941.13463	4482.52808	839.53667	3715.28541	659.29151	5233.45091	8114.88168	2587.22108	499.14774	3700.76028	1631.72894	6635.32671	0.24915	0.24679	1.16E-02	3.90E-03	7.31E-04	2.37E-03	5.29E-04	4.20E-03	7.69E-03	2.17E-03	4.19E-04	1.97E-03	6.00E-04	2.44E-03	3.49E-06	4.18E-06	3.8620E-02
551367.62	4173056.06	3266.18684	5549.73783	957.69441	7625.86957	1101.81434	4553.0501	3284.87965	3292.46032	542.545	6486.03536	3677.95501	5662.23967	0.49545	0.50235	4.77E-03	4.83E-03	8.34E-04	4.86E-03	8.84E-04	3.65E-03	3.11E-03	2.76E-03	4.55E-04	3.45E-03	1.35E-03	2.08E-03	6.93E-06	8.51E-06	3.3063E-02
551472.7	4173229.89	3582.74766	5437.55839	918.67087	5865.96774	933.49017	6189.48315	3614.62333	3267.13393	526.24272	5476.73228	2608.13853	7471.63651	0.66463	0.67098	5.23E-03	4.74E-03	8.00E-04	3.74E-03	7.49E-04	4.97E-03	3.43E-03	2.74E-03	4.42E-04	2.92E-03	9.60E-04	2.75E-03	9.30E-06	1.14E-05	3.3469E-02
551364.4	4173047.11	3255.67359	5539.06905	960.64548	7694.11905	1102.92358	4429.98061	3272.95003	3282.63075	544.39928	6533.92372	3720.60752	5520.9347	0.49145	0.49833	4.75E-03	4.82E-03	8.37E-04	4.90E-03	8.85E-04	3.55E-03	3.10E-03	2.75E-03	4.57E-04	3.48E-03	1.37E-03	2.03E-03	6.88E-06	8.44E-06	3.2958E-02
551376.42	4172764.83	2899.2418	4094.00903	1216.55882	10390.39959	1698.7497	2626.06069	2890.4464	2342.09689	672.76413	7268.16788	6332.99121	3351.57451	0.48215	0.49454	4.23E-03	3.57E-03	1.06E-03	6.62E-03	1.36E-03	2.11E-03	2.74E-03	1.97E-03	5.64E-04	3.87E-03	2.33E-03	1.23E-03	6.75E-06	8.38E-06	3.1659E-02
551347.84	4172972.06	3176.10807	5248.22132	1047.12651	8637.70039	1186.19419	3626.9966	3181.4756	3043.48253	593.99875	7225.63918	4221.10629	4571.62903	0.48452	0.49298	4.64E-03	4.57E-03	9.12E-04	5.50E-03	9.52E-04	2.91E-03	3.02E-03	2.55E-03	4.98E-04	3.85E-03	1.55E-03	1.68E-03	6.78E-06	8.35E-06	3.2644E-02
551419.48	4173172.25	3352.51239	5378.67847	940.58507	6554.301	984.14906	5636.27343	3379.36291	3196.00936	535.33275	5929.35716	2906.837	6850.00046	0.55024	0.55606	4.89E-03	4.68E-03	8.19E-04	4.17E-03	7.90E-04	4.52E-03	3.20E-03	2.68E-03	4.49E-04	3.16E-03	1.07E-03	2.52E-03	7.70E-06	9.42E-06	3.2979E-02
551361.18	4173038.16	3239.30254	5508.2665	963.08652	7750.4181	1105.54694	4301.46447	3255.12262	3259.26527	546.01061	6573.35488	3759.64907	5371.12015	0.48649	0.49358	4.73E-03	4.80E-03	8.39E-04	4.94E-03	8.87E-04	3.45E-03	3.09E-03	2.73E-03	4.58E-04	3.50E-03	1.38E-03	1.98E-03	6.81E-06	8.36E-06	3.2789E-02
551382.76	4173098.39	3249.64435	5390.08065	939.75888	7180.61126	1059.77741	5007.17611	3273.48133	3196.22722	531.65993	6187.70416	3418.5452	6153.75666	0.50555	0.5111	4.74E-03	4.69E-03	8.19E-04	4.57E-03	8.50E-04	4.02E-03	3.10E-03	2.68E-03	4.46E-04	3.29E-03	1.26E-03	2.26E-03	7.07E-06	8.66E-06	3.2758E-02
551622.67	4172584.25	5026.16072	2841.78877	2256.02908	6878.23508	3800.59359	1837.03515	4973.18777	1697.07012	1201.6277	5347.49759	7250.10588	2455.39417	0.24259	0.24472	7.34E-03	2.48E-03	1.96E-03	4.38E-03	3.05E-03	1.47E-03	4.71E-03	1.42E-03	1.01E-03	2.85E-03	2.67E-03	9.03E-04	3.39E-06	4.15E-06	3.4250E-02
551425.13	4172663.24	3082.365	3690.86648	1320.59382	10442.04401	1927.43886	2282.01992	3070.76083	2120.32739	728.41588	7077.38163	6795.85791	2951.64259	0.43186	0.4418	4.50E-03	3.21E-03	1.15E-03	6.65E-03	1.55E-03	1.83E-03	2.91E-03	1.78E-03	6.11E-04	3.77E-03	2.50E-03	1.09E-03	6.04E-06	7.49E-06	3.1558E-02
551357.95	4173029.21	3226.04667	5475.7921	968.69473	7826.76601	1110.04362	4179.97041	3240.28981	3232.43588	549.37582	6632.79906	3802.86256	5228.63597	0.48347	0.4902	4.71E-03	4.77E-03	8.44E-04	4.98E-03	8.91E-04	3.35E-03	3.07E-03	2.71E-03	4.61E-04	3.53E-03	1.40E-03	1.92E-03	6.76E-06	8.31E-06	3.2663E-02
551344.21	4172932.86	3086.84112	4914.92764	1095.3792	9104.92043	1253.31941	3292.07574	3087.30426	2828.92652	618.93289	7419.93576	4564.74384	4162.51086	0.48257	0.49157	4.51E-03	4.28E-03	9.54E-04	5.80E-03	1.01E-03	2.64E-03	2.93E-03	2.37E-03	5.19E-04	3.95E-03	1.68E-03	1.53E-03	6.75E-06	8.33E-06	3.2179E-02
551412.41	4172683.2	3002.86377	3778.54652	1273.86077	10466.61457	1849.1735	2341.82711	2992.97604	2166.87475	702.43788	7130.07944	6674.01677	3023.85017	0.44286	0.45358	4.38E-03	3.29E-03	1.11E-03	6.66E-03	1.48E-03	1.88E-03	2.84E-03	1.82E-03	5.89E-04	3.80E-03	2.46E-03	1.11E-03	6.20E-06	7.69E-06	3.1432E-02
551372.12	4172773.18	2880.76889	4079.37009	1203.75076	10266.01382	1665.19606	2634.45735	2872.1517	2334.79962	666.27463	7206.95553	6220.24863	3358.33233	0.47914	0.49133	4.20E-03	3.55E-03	1.05E-03	6.54E-03	1.34E-03	2.11E-03	2.72E-03	1.96E-03	5.59E-04	3.84E-03	2.29E-03	1.24E-03	6.70E-06	8.33E-06	3.1408E-02
551664.92	4173307.03	4934.72686	4560.62695	855.28173	3843.12562	741.11973	7589.75287	5023.53608	2698.28034	498.66504	3731.76642	1802.18413	9091.51795	7.45162	8.23843	7.20E-03	3.97E-03	7.45E-04	2.45E-03	5.95E-04	6.09E-03	4.76E-03	2.26E-03	4.18E-04	1.99E-03	6.63E-04	3.35E-03	1.04E-04	1.40E-04	3.4733E-02
551362.83	4172802.99	2890.91211	4143.6158	1190.20642	10202.4095	1592.67866	2713.3048	2882.84976	2373.49289	660.96148	7260.10019	6025.18507	3448.90321	0.48415	0.496	4.22E-03	3.61E-03	1.04E-03	6.50E-03	1.28E-03	2.18E-03	2.73E-03	1.99E-03	5.55E-04	3.86E-03	2.22E-03	1.27E-03	6.77E-06	8.41E-06	3.1460E-02
551652	4173308.91	4749.17947	4629.69775	858.97612	3922.02576	748.18757	7616.45235	4831.22797	2751.5398	499.96583	3829.86041	1831.07508	9101.69475	4.68764	5.01878	6.93E-03	4.03E-03	7.48E-04	2.50E-03	6.00E-04	6.11E-03	4.58E-03	2.31E-03	4.19E-04	2.04E-03	6.74E-04	3.35E-03	6.56E-05	8.50E-05	3.4440E-02
551388.68	4173115.13	3245.25182	5323.36705	938.02314	7054.4802	1041.29331	5135.67745	3270.14304	3150.82255	530.81124	6103.37279	3289.41312	6285.11625	0.51035	0.51661	4.74E-03	4.64E-03	8.17E-04	4.49E-03	8.35E-04	4.12E-03	3.10E-03	2.64E-03	4.45E-04	3.25E-03	1.21E-03	2.31E-03	7.14E-06	8.75E-06	3.2614E-02
551677.84	4173305.16	5153.43482	4490.47842	848.1155	3758.19762	732.51696	7521.20759	5250.703	2640.26478	495.37327	3633.65726	1768.1807	9040.81285	14.6212	12.81838	7.52E-03	3.91E-03	7.39E-04	2.39E-03	5.88E-04	6.03E-03	4.98E-03	2.22E-03	4.16E-04	1.93E-03	6.51E-04	3.33E-03	2.05E-04	2.17E-04	3.5127E-02
551346.58	4172867.53	2957.41575	4422.95507	1151.26175	9851.1523	1419.6929	2913.99623	2952.47478	2533.73002	643.65371	7445.18828	5365.35251	3694.19837	0.48534	0.4955	4.32E-03	3.85E-03	1.00E-03	6.27E-03	1.14E-03	2.34E-03	2.80E-03	2.13E-03	5.40E-04	3.96E-03	1.97E-03	1.36E-03	6.79E-06	8.40E-06	3.1697E-02
551533.6	4173277.94	3827.84482	5158.33149	871.90884	5030.54272	852.67745	6821.58064	3873.14617	3110.63856	500.83781	4853.87919	2271.20926	8149.47773	0.88931	0.90116	5.59E-03	4.49E-03	7.59E-04	3.20E-03	6.84E-04	5.47E-03	3.67E-03	2.61E-03	4.20E-04	2.58E-03	8.36E-04	3.00E-03	1.24E-05	1.53E-05	3.3346E-02
551354.73	4173020.25	3207.00996	5423.49099	973.93572	7893.16841	1113.80056	4056.16225	3219.67818	3192.9457	552.51446	6682.75785	3843.25917	5081.81356	0.47978	0.48664	4.68E-03	4.72E-03	8.48E-04	5.03E-03	8.94E-04	3.25E-03	3.05E-03	2.68E-03	4.64E-04	3.56E-03	1.41E-03	1.87E-03	6.71E-06	8.25E-06	3.2477E-02
551662.73	4172604.86	5655.85206	2663.04416	2365.99989	6143.04018	3855.49822	1754.13632	5591.09435	1594.19076	1250.52075	4804.51218	7194.52031	2362.08014	0.23126	0.2341	8.26E-03	2.32E-03	2.06E-03	3.91E-03	3.09E-03	1.41E-03	5.30E-03	1.34E-03	1.05E-03	2.56E-03	2.65E-03	8.69E-04	3.24E-06	3.97E-06	3.4815E-02
551441.11	4173203.26	3414.55465	5356.03797	926.20046	6171.45457	947.40775	5780.46496	3442.41992	3198.25965	528.74834	5678.20744	2720.43042	7015.33026	0.57732	0.58325	4.98E-03	4.66E-03	8.07E-04	3.93E-03	7.60E-04	4.64E-03	3.26E-03	2.68E-03	4.44E-04	3.02E-03	1.00E-03	2.58E-03	8.08E-06	9.88E-06	3.2795E-02
551482.44	4173241.93	3586.5276	5310.15862	898.09357	5641.25225	910.47359	6191.29215	3619.74916	3196.73261	514.8469	5284.54322	2522.9015	7464.14269	0.68325	0.69087	5.24E-03	4.63E-03	7.82E-04	3.59E-03	7.30E-04	4.97E-03	3.43E-03	2.68E-03	4.32E-04	2.81E-03	9.28E-04	2.75E-03	9.56E-06	1.17E-05	3.2986E-02
551364.9	4172793.36	2874.48825	4099.20463	1189.00484	10155.66962	1607.86444	2677.58783	2866.25621	2348.00975	659.60198	7193.91117	6052.43498	3405.86772	0.47951	0.49139	4.20E-03	3.57E-03	1.04E-03	6.47E-03	1.29E-03	2.15E-03	2.72E-03	1.97E-03	5.53E-04	3.83E-03	2.23E-03	1.25E-03	6.71E-06	8.33E-06	3.1271E-02
551563.64	4173294.05	3962.71042	5032.88307	864.67421	4677.38055	818.67469	7072.7151	4015.93946	3034.67449	497.6374	4582.24036	2127.67891	8419.33881	1.10125	1.11927	5.78E-03	4.38E-03	7.53E-04	2.98E-03	6.57E-04	5.67E-03	3.81E-03	2.55E-03	4.18E-04	2.44E-03	7.83E-04	3.10E-03	1.54E-05	1.90E-05	3.3354E-02
551367.82	4172781.54	2867.90802	4071.09484	1193.47332	10177.74604	1635.45476	2644.51671	2859.45341	2331.09518	661.19184	7169.82545	6127.04221	3367.50806	0.47762	0.48964	4.19E-03	3.55E-03	1.04E-03	6.48E-03	1.31E-03	2.12E-03	2.71E-03	1.96E-03	5.55E-04	3.82E-03	2.25E-03	1.24E-03	6.68E-06	8.30E-06	3.1231E-02
551344.62	4172963.09	3124.88682	5100.60863	1047.87226	8626.34243	1187.57006	3499.64993	3128.97128	2952.23446	594.04448	7182.3305	4238.148	4414.7282	0.47736	0.48542	4.56E-03	4.44E-03	9.13E-04	5.49E-03	9.53E-04	2.81E-03	2.97E-03	2.48E-03	4.98E-04	3.82E-03	1.56E-03	1.62E-03	6.68E-06	8.23E-06	3.2132E-02
551639.08	4173310.79	4562.44288	4670.77347	858.04782	3990.35178	753.19989	7546.97984	4638.2629	2786.94318	498.49967	3914.61331	1856.30918	9002.55047	3.28155	3.45246	6.66E-03	4.07E-03	7.47E-04	2.54E-03	6.04E-04	6.05E-03	4.40E-03	2.34E-03	4.18E-04	2.08E-03	6.83E-04	3.31E-03	4.59E-05	5.85E-05	3.4011E-02
551459.06	4173222.95	3484.12498	5342.83703	917.05504	5907.34661	927.54491	5955.93225	3513.72785	3217.50627	524.74781	5502.27352	2615.17373	7145.58914	0.60897	0.61532	5.09E-03	4.65E-03	7.99E-04	3.76E-03	7.44E-04	4.78E-03	3.33E-03	2.70E-03	4.40E-04	2.93E-03	9.62E-04	2.63E-03	8.52E-06	1.04E-05	3.2831E-02
551422.57	4173180.83	3331.82294	5342.40877	928.85953	6400.10959	967.02709	5579.76817	3358.45244	3150.69852	528.97981	5806.8323	2836.46948	6779.83888	0.54761	0.55331	4.86E-03	4.65E-03	8.09E-04	4.08E-03	7.76E-04	4.48E-03	3.18E-03	2.64E-03	4.44E-04	3.09E-03	1.04E-03	2.49E-03	7.66E-06	9.38E-06	3.2570E-02
551685.11	4172617.87	5999.33089	2561.90749	2348.15199	5957.04124	3713.07035	1697.87828	5928.99076	1530.33594	1236.3909	4547.27314	7154.9625	2293.06438	0.23984	0.24396	8.76E-03	2.23E-03	2.05E-03	3.79E-03	2.98E-03	1.36E-03	5.62E-03	1.28E-03	1.04E-03	2.42E-03	2.63E-03	8.44E-04	3.36E-06	4.13E-06	3.5013E-02
551728.06	4173288.67	6002.40513	4190.18108	812.7545	3495.41735	704.31561	7045.817	6140.57607	2423.772	476.25042	3421.8858	1672.28942	8549.03128	3.73694	3.46695	8.76E-03	3.65E-03	7.08E-04	2.23E-03	5.65E-04	5.65E-03	5.82E-03	2.03E-03	4.00E-04	1.82E-03	6.15E-04	3.15E-03	5.23E-05	5.87E-05	3.5509E-02
551351.5	4173011.3	3181.12958	5350.06457	978.27116	7944.25155	1116.3911	3930.01875	3192.33092	3140.64938	555.13675	6717.44125	3879.97136	4930.78749	0.4752	0.48211	4.64E-03	4.66E-03	8.52E-04	5.06E-03	8.96E-04	3.15E-03	3.03E-03	2.64E-03	4.66E-04	3.58E-03	1.43E-03	1.81E-03	6.65E-06	8.17E-06	3.2221E-02
551394.6	4173131.87	3235.41657	5250.1053	933.31953	6840.66533	1020.85121	5211.43471	3260.80457	3103.97168	528.64119	5997.73328	3155.65289	6357.24941	0.51539	0.52054	4.72E-03	4.57E-03	8.13E-04	4.36E-03	8.19E-04	4.18E-03	3.09E-03	2.60E-03	4.44E-04	3.19E-03	1.16E-03	2.34E-03	7.21E-06	8.82E-06	3.2311E-02
551343.79	4172902.63	3001.13576	4631.78758	1114.48262	9334.65929	1305.91599	3068.32748	2998.90183	2657.27385	626.75582	7394.03093	4836.79113	3886.38192	0.4776	0.4869	4.38E-03	4.03E-03	9.71E-04	5.94E-03	1.05E-03	2.46E-03	2.84E-03	2.23E-03	5.26E-04	3.94E-03	1.78E-03	1.43E-03	6.68E-06	8.25E-06	3.1597E-02
551586.08	4173303	4069.13845	4911.46909	860.33105	4432.78181	794.7067	7205.36813	4127.98684	2960.20115	496.15343	4365.71407	2031.36252	8565.79187	1.35243	1.38304	5.94E-03	4.28E-03	7.49E-04	2.82E-03	6.38E-04	5.78E-03	3.91E-03	2.48E-03	4.16E-04	2.32E-03	7.47E-04	3.15E-03	1.89E-05	2.34E-05	3.3285E-02
551491.92	4173250.86	3608.7497	5233.2075	885.11097	5486.59853	894.09409	6253.82029	3643.68375	3154.38518	507.62855	5155.76126	2464.11455	7526.5009	0.7071	0.71423	5.27E-03	4.56E-03	7.71E-04	3.49E-03	7.17E-04	5.02E-03	3.45E-03	2.65E-03	4.26E-04	2.74E-03	9.07E-04	2.77E-03	9.89E-06	1.21E-05	3.2793E-02
551744.18	4172645.41	6234.88059	2304.36393	1960.09165	6958.56651	3142.74351	1516.58952	6166.25345	1359.46689	1040.46781	4384.37728	7615.30943	2044.53556	0.32646	0.33484	9.10E-03	2.01E-03	1.71E-03	4.43E-03	2.52E-03	1.22E-03	5.84E-03	1.14E-03	8.73E-04	2.33E-03	2.80E-03	7.52E-04	4.57E-06	5.67E-06	3.4740E-02
551391.55	4172715.31	2879.55901	3863.01379	1211.20835	10194.46714	1741.68452	2424.56641	2870.89615	2210.16674	667.90955	7053.18748	6349.54226	3115.6341	0.4504	0.46172	4.20E-03	3.36E-03	1.05E-03	6.49E-03	1.40E-03	1.95E-03	2.72E-03	1.85E-03	5.60E-04	3.75E-03	2.34E-03	1.15E-03	6.30E-06	7.82E-06	3.0843E-02
551348.25	4173002.29	3149.43064	5258.75916	981.98388	7982.32155	1118.25515	3802.97621	3159.12197	3077.75561	557.33903	6738.07585	3914.27718	4777.74976	0.46944	0.47685	4.60E-03	4.58E-03	8.55E-04	5.08E-03	8.97E-04	3.05E-03	2.99E-03	2.58E-03	4.68E-04	3.59E-03	1.44E-03	1.76E-03	6.57E-06	8.08E-06	3.1907E-02
551626.17	4173312.67	4370.60008	4675.73107	852.20284	4045.96073	755.86575	7373.28125	4440.55095	2799.6516	494.11012	3980.53132	1877.80417	8784.8423	2.41348	2.5217	6.38E-03	4.07E-03	7.42E-04	2.58E-03	6.06E-04	5.92E-03	4.21E-03	2.35E-03	4.15E-04	2.12E-03	6.91E-04	3.23E-03	3.38E-05	4.27E-05	3.3383E-02
551542.96	4173286.75	3815.66915	5016.32352	856.74987	4840.4788	831.15724	6745.46374	3862.8731	3024.42717	492.27231	4688.80769	2197.13836	8051.18938	0.92744	0.94018	5.57E-03	4.37E-03	7.46E-04	3.08E-03	6.67E-04	5.41E-03	3.66E-03	2.54E-03	4.13E-04	2.50E-03	8.08E-04	2.96E-03	1.30E-05	1.59E-05	3.2753E-02
551340.98	4172923.9	3016.98446	4733.71827	1083.62471	8979.05135	1247.87938	3165.22301	3016.65644	2721.52465	611.48672	7260.63622	4551.12228	4005.37478	0.47181	0.48012	4.40E-03	4.12E-03	9.44E-04	5.72E-03	1.00E-03	2.54E-03	2.86E-03	2.28E-03	5.13E-04	3.86E-03	1.67E-03	1.47E-03	6.60E-06	8.14E-06	3.1412E-02
551341.39	4172954.13	3070.19129	4946.97193	1046.5557	8594.52365	1188.07574	3375.00481	3073.10016	2858.83625	592.80142	7116.65124	4251.25185	4260.73192	0.46852	0.47698	4.48E-03	4.31E-03	9.12E-04	5.47E-03	9.53E-04	2.71E-03	2.91E-03	2.40E-03	4.97E-04	3.79E-03	1.56E-03	1.57E-03	6.56E-06	8.08E-06	3.1578E-02
551344.87	4172857.03	2894.22333	4265.51456	1134.38437	9683.08866	1419.43911	2818.0312	2888.86776	2444.27263	633.4661	7235.48024	5347.4684	3573.58525	0.47258	0.48259	4.22E-03	3.72E-03	9.88E-04	6.17E-03	1.14E-03	2.26E-03	2.74E-03	2.05E-03	5.32E-04	3.85E-03	1.97E-03	1.31E-03	6.61E-06	8.18E-06	3.0962E-02
551425.66	4173189.42	3308.19705	5256.47645	916.19378	6240.3579	949.89887	5512.00553	3334.57196	3102.71273	522.08925	5678.62649	2767.98596	6697.49111	0.54428	0.54983	4.83E-03	4.58E-03	7.98E-04	3.97E-03	7.62E-04	4.42E-03	3.16E-03	2.60E-03	4.38E-04	3.02E-03	1.02E-03	2.46E-03	7.62E-06	9.32E-06	3.2087E-02
551400.52	4173148.61	3222.70463	5175.52567	925.54351	6619.02864	996.48166	5236.39433	3248.15588	3058.48966	524.52741	5868.61376	3019.05735	6374.55144	0.51664	0.52213	4.70E-03	4.51E-03	8.06E-04	4.21E-03	7.99E-04	4.20E-03	3.08E-03	2.57E-03	4.40E-04	3.12E-03	1.11E-03	2.35E-03	7.23E-06	8.85E-06	3.1914E-02
551428.44	4172649.49	3059.02489	3555.55247	1312.32006	10039.98511	1917.17524	2206.2002	3046.71688	2044.82182	724.16448	6825.40876	6600.24117	2854.90972	0.41033	0.4193	4.47E-03	3.10E-03	1.14E-03	6.39E-03	1.54E-03	1.77E-03	2.89E-03	1.72E-03	6.08E-04	3.63E-03	2.43E-03	1.05E-03	5.74E-06	7.11E-06	3.0742E-02
551384.28	4172728.44	2842.81162	3879.3893	1192.49049	10042.12861	1703.21328	2454.46999	2834.34891	2219.11413	657.93733	6989.88877	6213.31841	3146.88337	0.45064	0.462	4.15E-03	3.38E-03	1.04E-03	6.39E-03	1.37E-03	1.97E-03	2.69E-03	1.86E-03	5.52E-04	3.72E-03	2.29E-03	1.16E-03	6.31E-06	7.83E-06	3.0576E-02
551612.28	4172576.95	4757.49448	2813.52161	2134.2187	6847.23188	3573.02532	1816.26195	4709.54499	1677.05867	1140.24909	5303.49175	6945.07764	2422.38958	0.23825	0.24018	6.94E-03	2.45E-03	1.86E-03	4.36E-03	2.87E-03	1.46E-03	4.46E-03	1.41E-03	9.57E-04	2.82E-03	2.56E-03	8.91E-04	3.33E-06	4.07E-06	3.3042E-02
551676.03	4172610.16	5763.00143	2561.61918	2307.79648	5873.56957	3675.72871	1698.08412	5696.66638	1531.52332	1217.814	4552.88405	6964.19437	2290.43643	0.22844	0.23175	8.41E-03	2.23E-03	2.01E-03	3.74E-03	2.95E-03	1.36E-03	5.40E-03	1.29E-03	1.02E-03	2.42E-03	2.56E-03	8.43E-04	3.20E-06	3.93E-06	3.4246E-02
551404.04	4173158.41	3219.77082	5141.02851	917.81205	6495.19387	978.81266	5288.70255	3245.136	3058.22884	521.50557	5815.28697	2937.18713	6374.30107	0.51428	0.51951	4.70E-03	4.48E-03	7.99E-04	4.14E-03	7.85E-04	4.24E-03	3.08E-03	2.57E-03	4.38E-04	3.10E-03	1.08E-03	2.35E-03	7.20E-06	8.80E-06	3.1758E-02
551345.03	4172993.32	3106.20233	5140.72862	982.07652	7978.89813	1116.5222	3671.25205	3114.51314	3000.36592	557.39538	6721.58835	3903.63744	4617.48893	0.46252	0.47	4.53E-03	4.48E-03	8.55E-04	5.08E-03	8.96E-04	2.95E-03	2.95E-03	2.52E-03	4.68E-04	3.58E-03	1.44E-03	1.70E-03	6.47E-06	7.96E-06	3.1453E-02
551602.26	4172574.89	4603.12416	2845.64728	2077.70484	7005.37334	3470.54714	1829.18585	4558.37146	1693.13051	1113.09007	5393.76003	6882.39279	2435.42723	0.24159	0.24348	6.72E-03	2.48E-03	1.81E-03	4.46E-03	2.78E-03	1.47E-03	4.32E-03	1.42E-03	9.34E-04	2.87E-03	2.53E-03	8.96E-04	3.38E-06	4.13E-06	3.2701E-02
551711.13	4172625.92	6144.347	2411.70347	2180.90175	6011.04158	3362.85411	1601.59785	6072.84601	1433.62247	1149.01942	4305.42652	7033.67048	2163.50746	0.2638	0.26972	8.97E-03	2.10E-03	1.90E-03	3.83E-03	2.70E-03	1.28E-03	5.76E-03	1.20E-03	9.64E-04	2.29E-03	2.59E-03	7.96E-04	3.69E-06	4.57E-06	3.4386E-02
551402.78	4172689.56	2898.56238	3710.32066	1217.97839	10034.84884	1757.73271	2315.99358	2889.67626	2126.81383	671.76457	6894.80066	6331.17654	2986.41648	0.42878	0.43911	4.23E-03	3.23E-03	1.06E-03	6.39E-03	1.41E-03	1.86E-03	2.74E-03	1.78E-03	5.64E-04	3.67E-03	2.33E-03	1.10E-03	6.00E-06	7.44E-06	3.0380E-02
551573.27	4173303.13	3929.93694	4848.14238	846.55554	4468.87517	793.59425	6893.05284	3984.45002	2921.68003	487.53343	4387.09108	2046.28245	8206.96982	1.161	1.1813	5.74E-03	4.22E-03	7.37E-04	2.85E-03	6.37E-04	5.53E-03	3.78E-03	2.45E-03	4.09E-04	2.34E-03	7.53E-04	3.02E-03	1.62E-05	2.00E-05	3.2490E-02
551415.37	4172669.68	2963.79554	3621.53973	1252.49195	10011.20317	1812.64586	2253.85678	2953.81213	2079.89203	691.03033	6838.72349	6424.2352	2912.16357	0.41731	0.42694	4.33E-03	3.15E-03	1.09E-03	6.37E-03	1.45E-03	1.81E-03	2.80E-03	1.75E-03	5.80E-04	3.64E-03	2.36E-03	1.07E-03	5.84E-06	7.23E-06	3.0421E-02
551379.95	4172736.84	2816.22451	3872.85282	1177.8482	9894.83973	1671.78999	2466.55783	2807.92897	2215.91867	650.24046	6916.6454	6096.11451	3157.73615	0.44775	0.45897	4.11E-03	3.37E-03	1.03E-03	6.30E-03	1.34E-03	1.98E-03	2.66E-03	1.86E-03	5.46E-04	3.68E-03	2.24E-03	1.16E-03	6.27E-06	7.78E-06	3.0297E-02
551446.13	4173217.1	3360.44808	5166.07925	899.8002	5877.86359	917.58992	5619.48318	3387.94961	3095.88265	514.15894	5430.0459	2610.97704	6824.36264	0.56898	0.57439	4.91E-03	4.50E-03	7.84E-04	3.74E-03	7.36E-04	4.51E-03	3.21E-03	2.60E-03	4.31E-04	2.89E-03	9.61E-04	2.51E-03	7.96E-06	9.73E-06	3.1795E-02
551407.13	4173167	3212.0177	5098.44535	909.7311	6378.05396	963.08203	5266.72487	3237.24089	3027.51989	517.18943	5724.40546	2867.37354	6412.60566	0.51418	0.51936	4.69E-03	4.44E-03	7.92E-04	4.06E-03	7.73E-04	4.23E-03	3.07E-03	2.54E-03	4.34E-04	3.05E-03	1.05E-03	2.36E-03	7.19E-06	8.80E-06	3.1501E-02
551428.75	4173198.01	3286.33123	5171.32188	903.31485	6083.92379	932.45611	5441.85824	3312.47835	3055.1876	515.0445	5550.84992	2699.59511	6613.20112	0.54095	0.54637	4.80E-03	4.50E-03	7.87E-04	3.87E-03	7.48E-04	4.37E-03	3.14E-03	2.56E-03	4.32E-04	2.95E-03	9.93E-04	2.43E-03	7.57E-06	9.26E-06	3.1609E-02
551552.31	4173295.57	3808.2475	4885.52292	843.50808	4653.5497	809.71514	6665.69515	3857.28933	2944.12523	484.93143	4530.30288	2121.62252	7952.28506	0.9715	0.98546	5.56E-03	4.26E-03	7.35E-04	2.96E-03	6.50E-04	5.35E-03	3.66E-03	2.47E-03	4.07E-04	2.41E-03	7.81E-04	2.93E-03	1.36E-05	1.67E-05	3.2190E-02
551595.58	4173311.95	4050.63049	4724.88193	841.70139	4225.81908	768.72299	7001.20844	4110.44305	2841.46509	486.00043	4168.50191	1947.41102	8334.96383	1.45462	1.49095	5.91E-03	4.12E-03	7.33E-04	2.69E-03	6.17E-04	5.62E-03	3.90E-03	2.38E-03	4.08E-04	2.22E-03	7.17E-04	3.07E-03	2.04E-05	2.53E-05	3.2421E-02
551341.8	4172984.36	3071.07836	5034.50862	986.97205	8015.3342	1120.20566	3554.3648	3077.99792	2930.58016	560.04302	6732.96314	3929.7058	4475.06289	0.45719	0.46427	4.48E-03	4.38E-03	8.60E-04	5.10E-03	8.99E-04	2.85E-03	2.92E-03	2.46E-03	4.70E-04	3.58E-03	1.45E-03	1.65E-03	6.40E-06	7.87E-06	3.1118E-02
551340.67	4172891.68	2913.53377	4414.41547	1092.74417	9124.01639	1293.91943	2929.89016	2910.72166	2532.65369	613.43007	7144.49798	4791.60545	3712.63176	0.45917	0.4681	4.25E-03	3.84E-03	9.52E-04	5.81E-03	1.04E-03	2.35E-03	2.76E-03	2.13E-03	5.15E-04	3.80E-03	1.76E-03	1.37E-03	6.42E-06	7.93E-06	3.0592E-02
551463.74	4173233.96	3415.87028	5123.12889	883.49072	5647.88838	903.76902	5721.73149	3445.26506	3074.50155	505.76364	5234.648	2534.69687	6921.05302	0.61512	0.62072	4.99E-03	4.46E-03	7.69E-04	3.60E-03	7.25E-04	4.59E-03	3.27E-03	2.58E-03	4.24E-04	2.79E-03	9.33E-04	2.55E-03	8.61E-06	1.05E-05	3.1683E-02
551338.16	4172945.16	3003.09439	4769.6916	1037.13726	8485.88253	1180.16555	3241.77273	3005.06996	2752.96293	586.91879	6988.1208	4232.77768	4095.74874	0.45702	0.4652	4.38E-03	4.15E-03	9.03E-04	5.40E-03	9.47E-04	2.60E-03	2.85E-03	2.31E-03	4.92E-04	3.72E-03	1.56E-03	1.51E-03	6.39E-06	7.88E-06	3.0841E-02
551343.15	4172846.54	2835.12686	4122.96898	1118.15356	9509.61658	1419.16815	2731.15745	2829.41633	2362.97298	623.77443	7034.32217	5324.83615	3464.52998	0.46072	0.47061	4.14E-03	3.59E-03	9.74E-04	6.06E-03	1.14E-03	2.19E-03	2.68E-03	1.98E-03	5.23E-04	3.74E-03	1.96E-03	1.27E-03	6.45E-06	7.97E-06	3.0268E-02
551520.35	4173277.65	3643.26914	4939.26535	845.03274	4989.66142	840.6692	6320.69133	3684.00936	2977.775	484.93552	4750.21728	2266.962	7571.16677	0.78807	0.79794	5.32E-03	4.30E-03	7.36E-04	3.18E-03	6.74E-04	5.07E-03	3.49E-03	2.50E-03	4.07E-04	2.53E-03	8.34E-04	2.79E-03	1.10E-05	1.35E-05	3.1848E-02
551337.75	4172914.93	2945.22042	4553.46502	1069.61262	8829.28376	1240.26646	3043.23862	2944.23074	2616.52181	602.7328	7086.14737	4526.54414	3852.94032	0.45861	0.46721	4.30E-03	3.97E-03	9.32E-04	5.62E-03	9.95E-04	2.44E-03	2.79E-03	2.20E-03	5.06E-04	3.77E-03	1.67E-03	1.42E-03	6.42E-06	7.92E-06	3.0616E-02
551637.08	4172582.56	5038.07591	2668.80233	2183.80745	6259.20807	3608.39601	1747.15631	4984.24246	1595.70145	1161.44526	4909.54657	6794.52118	2340.01873	0.22378	0.22576	7.35E-03	2.32E-03	1.90E-03	3.99E-03	2.89E-03	1.40E-03	4.72E-03	1.34E-03	9.75E-04	2.61E-03	2.50E-03	8.61E-04	3.13E-06	3.83E-06	3.2881E-02
551375.63	4172745.25	2790.20764	3859.06674	1163.06233	9740.10667	1638.8591	2475.52933	2782.07519	2208.92668	642.53055	6835.82906	5975.27728	3164.68729	0.4441	0.45513	4.07E-03	3.36E-03	1.01E-03	6.20E-03	1.31E-03	1.99E-03	2.64E-03	1.85E-03	5.39E-04	3.64E-03	2.20E-03	1.16E-03	6.21E-06	7.71E-06	2.9995E-02
551720.56	4173298.73	5656.75153	4070.88512	791.70391	3429.49843	690.41532	6731.07834	5780.91316	2360.21274	463.3959	3352.57476	1642.78043	8170.92473	5.22637	4.7595	8.26E-03	3.55E-03	6.90E-04	2.18E-03	5.54E-04	5.40E-03	5.48E-03	1.98E-03	3.89E-04	1.78E-03	6.04E-04	3.01E-03	7.31E-05	8.07E-05	3.4027E-02
551410.22	4173175.58	3193.74045	5033.48016	899.83425	6241.89674	947.72133	5223.41821	3218.758	2988.67593	511.84377	5619.12402	2802.40505	6357.7216	0.5121	0.51729	4.66E-03	4.38E-03	7.84E-04	3.97E-03	7.60E-04	4.19E-03	3.05E-03	2.51E-03	4.29E-04	2.99E-03	1.03E-03	2.34E-03	7.17E-06	8.77E-06	3.1120E-02
551656.32	4173317.25	4600.7151	4370.47187	826.4612	3746.10165	721.29546	7063.98236	4679.82121	2593.89906	481.024	3642.63127	1762.75504	8465.05099	4.83061	5.1904	6.72E-03	3.81E-03	7.20E-04	2.39E-03	5.79E-04	5.67E-03	4.44E-03	2.18E-03	4.04E-04	1.94E-03	6.49E-04	3.11E-03	6.76E-05	8.80E-05	3.2746E-02
551669.43	4173315.34	4781.00811	4300.54647	821.43166	3667.80615	713.82976	7016.51422	4866.74293	2540.23341	478.89319	3546.8326	1733.16978	8430.38956	7.91444	8.81363	6.98E-03	3.75E-03	7.15E-04	2.34E-03	5.73E-04	5.63E-03	4.61E-03	2.13E-03	4.02E-04	1.89E-03	6.38E-04	3.10E-03	1.11E-04	1.49E-04	3.3011E-02
551371.31	4172753.65	2769.91091	3847.76245	1151.06182	9618.95593	1609.72384	2485.47011	2761.90136	2203.37727	636.37545	6772.31446	5875.84708	3173.21317	0.44175	0.45264	4.04E-03	3.35E-03	1.00E-03	6.12E-03	1.29E-03	1.99E-03	2.62E-03	1.85E-03	5.34E-04	3.60E-03	2.16E-03	1.17E-03	6.18E-06	7.67E-06	2.9756E-02
551373.48	4173101.68	3096.41889	5026.68564	894.61883	6773.93705	1012.85508	4674.31318	3118.90175	2978.97582	506.00901	5814.22689	3255.15997	5747.65526	0.47203	0.47784	4.52E-03	4.38E-03	7.79E-04	4.31E-03	8.13E-04	3.75E-03	2.96E-03	2.50E-03	4.25E-04	3.09E-03	1.20E-03	2.11E-03	6.60E-06	8.10E-06	3.0855E-02
551338.58	4172975.39	3025.08115	4905.89706	987.74272	8007.62434	1120.15983	3432.59659	3030.70921	2849.38009	560.2996	6704.6558	3941.03137	4325.66735	0.45039	0.45779	4.42E-03	4.27E-03	8.60E-04	5.10E-03	8.99E-04	2.75E-03	2.87E-03	2.39E-03	4.70E-04	3.57E-03	1.45E-03	1.59E-03	6.30E-06	7.76E-06	3.0658E-02
551682.53	4173313.44	4990.32763	4229.82108	813.00522	3584.17385	704.91773	6932.58655	5084.28269	2482.71405	474.78426	3452.12055	1698.82347	8359.98968	16.26291	13.79184	7.28E-03	3.68E-03	7.08E-04	2.28E-03	5.66E-04	5.56E-03	4.82E-03	2.08E-03	3.98E-04	1.84E-03	6.25E-04	3.08E-03	2.28E-04	2.34E-04	3.3386E-02
551643.22	4173319.15	4424.52812	4419.25018	827.29096	3815.36034	726.92651	7034.42239	4497.7186	2633.55286	480.64706	3728.61493	1788.6615	8412.76087	3.32004	3.49929	6.46E-03	3.85E-03	7.21E-04	2.43E-03	5.83E-04	5.64E-03	4.26E-03	2.21E-03	4.03E-04	1.98E-03	6.58E-04	3.10E-03	4.65E-05	5.93E-05	3.2404E-02
551431.84	4173206.59	3256.61073	5033.89662	888.95107	5915.85984	915.48123	5356.39898	3282.46592	3001.40883	507.15548	5413.2743	2635.41599	6511.68189	0.53615	0.5414	4.75E-03	4.38E-03	7.74E-04	3.77E-03	7.34E-04	4.30E-03	3.11E-03	2.52E-03	4.26E-04	2.88E-03	9.70E-04	2.40E-03	7.50E-06	9.17E-06	3.1029E-02
551366.99	4172762.06	2758.47756	3846.0774	1143.52023	9556.84474	1587.2277	2499.2575	2750.52629	2203.08367	632.67745	6742.36869	5811.3024	3187.13578	0.44194	0.45279	4.03E-03	3.35E-03	9.96E-04	6.09E-03	1.27E-03	2.01E-03	2.61E-03	1.85E-03	5.31E-04	3.59E-03	2.14E-03	1.17E-03	6.18E-06	7.67E-06	2.9636E-02
551379.4	4173118.42	3092.79029	4969.36814	893.7656	6669.36319	996.54333	4785.69101	3116.20235	2939.59302	505.61879	5745.97777	3140.73864	5861.50078	0.47675	0.48212	4.51E-03	4.33E-03	7.78E-04	4.25E-03	8.00E-04	3.84E-03	2.95E-03	2.47E-03	4.24E-04	3.06E-03	1.16E-03	2.16E-03	6.67E-06	8.17E-06	3.0737E-02
551760.72	4172646.39	5753.64123	2164.87838	1738.16004	7072.06576	2963.43912	1418.28477	5695.49502	1271.44643	927.4096	4292.03421	7459.77319	1906.36708	0.33026	0.33842	8.40E-03	1.89E-03	1.51E-03	4.50E-03	2.38E-03	1.14E-03	5.40E-03	1.07E-03	7.78E-04	2.28E-03	2.74E-03	7.01E-04	4.62E-06	5.73E-06	3.2800E-02
551529.83	4173286.57	3640.52487	4824.12707	831.76613	4815.74839	821.37453	6285.44971	3683.23107	2907.69661	477.417	4607.55954	2197.13671	7520.45905	0.81994	0.82941	5.31E-03	4.20E-03	7.24E-04	3.07E-03	6.59E-04	5.04E-03	3.49E-03	2.44E-03	4.01E-04	2.45E-03	8.08E-04	2.77E-03	1.15E-05	1.41E-05	3.1393E-02

551449.86	4173226.47	3317.50957	5022.51686	881.19425	5677.43011	898.50265	5507.57465	3344.8038	3023.56607	503.85941	5259.67047	2542.92262	6615.35056	0.56435	0.56854	4.84E-03	4.37E-03	7.67E-04	3.62E-03	7.21E-04	4.42E-03	3.17E-03	2.54E-03	4.23E-04	2.80E-03	9.36E-04	2.43E-03	7.90E-06	9.63E-06	3.1056E-02
551478.15	4173250.08	3425.68181	4971.75622	857.50152	5380.05309	874.87326	5748.47492	3456.9973	2993.88098	491.42461	4996.78617	2435.90383	6938.2529	0.63811	0.64498	5.00E-03	4.33E-03	7.47E-04	3.43E-03	7.02E-04	4.61E-03	3.28E-03	2.51E-03	4.12E-04	2.66E-03	8.96E-04	2.55E-03	8.93E-06	1.09E-05	3.1147E-02
551405.61	4172676.13	2867.3231	3573.00607	1200.62411	9682.27738	1728.87014	2235.45658	2858.42589	2050.81671	662.48783	6658.29519	6144.45006	2885.31792	0.40749	0.41693	4.19E-03	3.11E-03	1.05E-03	6.17E-03	1.39E-03	1.79E-03	2.71E-03	1.72E-03	5.56E-04	3.54E-03	2.26E-03	1.06E-03	5.70E-06	7.07E-06	2.9554E-02
551334.94	4172936.2	2941.79967	4609.22822	1029.65919	8401.0201	1176.76287	3121.783	2942.88459	2656.41913	582.04026	6871.57566	4227.88427	3947.73639	0.44691	0.45491	4.29E-03	4.01E-03	8.97E-04	5.35E-03	9.44E-04	2.50E-03	2.79E-03	2.23E-03	4.88E-04	3.66E-03	1.56E-03	1.45E-03	6.25E-06	7.71E-06	3.0189E-02
551362.67	4172770.46	2746.81456	3839.37614	1135.00548	9487.52576	1562.46559	2509.4611	2738.97657	2199.94074	628.47619	6709.36413	5737.95009	3196.81568	0.44135	0.45211	4.01E-03	3.34E-03	9.89E-04	6.04E-03	1.25E-03	2.01E-03	2.60E-03	1.85E-03	5.27E-04	3.57E-03	2.11E-03	1.18E-03	6.18E-06	7.66E-06	2.9492E-02
551413.31	4173184.17	3174.52469	4965.5774	889.25992	6102.9488	932.13028	5171.71469	3199.3207	2949.0024	506.11424	5510.16196	2738.17561	6293.82911	0.50954	0.51461	4.63E-03	4.32E-03	7.75E-04	3.89E-03	7.48E-04	4.15E-03	3.03E-03	2.47E-03	4.25E-04	2.93E-03	1.01E-03	2.32E-03	7.13E-06	8.72E-06	3.0720E-02
551337.26	4172870.81	2823.1568	4166.63386	1082.50741	9074.03796	1324.92511	2769.51667	2819.09949	2389.80388	605.63191	6917.8848	4918.33433	3511.2514	0.44666	0.45557	4.12E-03	3.63E-03	9.43E-04	5.78E-03	1.06E-03	2.22E-03	2.67E-03	2.01E-03	5.08E-04	3.68E-03	1.81E-03	1.29E-03	6.25E-06	7.72E-06	2.9738E-02
551418.56	4172656.01	2931.40511	3477.59384	1236.81041	9591.07829	1786.42004	2173.39209	2921.06794	1999.83742	682.75762	6571.58706	6203.01196	2809.45371	0.3948	0.40348	4.28E-03	3.03E-03	1.08E-03	6.11E-03	1.43E-03	1.74E-03	2.77E-03	1.68E-03	5.73E-04	3.50E-03	2.28E-03	1.03E-03	5.52E-06	6.84E-06	2.9515E-02
551582.91	4173312.2	3883.81464	4648.83509	826.73288	4262.55931	768.02158	6670.76526	3939.09443	2800.01146	476.45138	4186.83444	1966.18972	7947.26395	1.22659	1.24979	5.67E-03	4.05E-03	7.20E-04	2.71E-03	6.16E-04	5.35E-03	3.73E-03	2.35E-03	4.00E-04	2.23E-03	7.23E-04	2.92E-03	1.72E-05	2.12E-05	3.1517E-02
551561.67	4173304.38	3769.60104	4713.12809	825.90042	4460.56752	786.70117	6502.68318	3819.88047	2840.37768	474.9973	4350.00078	2047.57469	7755.78988	1.01388	1.02874	5.50E-03	4.11E-03	7.19E-04	2.84E-03	6.31E-04	5.22E-03	3.62E-03	2.38E-03	3.99E-04	2.32E-03	7.53E-04	2.85E-03	1.42E-05	1.74E-05	3.1371E-02
551385.31	4173135.16	3086.66081	4911.83769	890.96262	6485.25496	978.6624	4853.31424	3110.48752	2901.94317	504.45473	5663.53324	3020.13907	5926.89287	0.48177	0.4864	4.51E-03	4.28E-03	7.76E-04	4.13E-03	7.85E-04	3.89E-03	2.95E-03	2.43E-03	4.23E-04	3.01E-03	1.11E-03	2.18E-03	6.74E-06	8.24E-06	3.0496E-02
551630.12	4173321.06	4240.88605	4433.50149	823.15776	3872.6544	730.27351	6905.97379	4308.46564	2651.84968	477.29213	3797.00063	1810.99629	8247.09149	2.41271	2.52364	6.19E-03	3.86E-03	7.17E-04	2.47E-03	5.86E-04	5.54E-03	4.08E-03	2.23E-03	4.00E-04	2.02E-03	6.66E-04	3.03E-03	3.38E-05	4.28E-05	3.1868E-02
551335.35	4172966.43	2977.57907	4773.64505	988.01322	7993.29303	1120.56585	3315.18697	2982.02054	2767.2898	560.13421	6665.02788	3952.74066	4181.24667	0.44318	0.45086	4.35E-03	4.16E-03	8.61E-04	5.09E-03	8.99E-04	2.66E-03	2.83E-03	2.32E-03	4.70E-04	3.55E-03	1.45E-03	1.54E-03	6.20E-06	7.64E-06	3.0185E-02
551353.09	4172801.52	2748.32908	3876.39883	1117.19951	9369.32951	1487.77108	2569.35898	2741.10622	2223.16726	620.68792	6718.70207	5521.36403	3264.37743	0.44284	0.45318	4.01E-03	3.38E-03	9.73E-04	5.97E-03	1.19E-03	2.06E-03	2.60E-03	1.87E-03	5.21E-04	3.58E-03	2.03E-03	1.20E-03	6.20E-06	7.68E-06	2.9389E-02
551334.53	4172905.97	2870.63514	4371.82477	1052.32166	8651.39125	1228.84161	2923.45638	2869.10431	2511.63275	592.11637	6890.60807	4485.37827	3702.83511	0.4434	0.45169	4.19E-03	3.81E-03	9.17E-04	5.51E-03	9.86E-04	2.35E-03	2.72E-03	2.11E-03	4.97E-04	3.67E-03	1.65E-03	1.36E-03	6.20E-06	7.65E-06	2.9772E-02
551733.47	4173296.85	5709.00162	3906.49889	774.81666	3320.69196	674.73853	6396.26514	5839.02774	2261.24957	453.71399	3241.32893	1602.02532	7778.48731	3.41271	3.16285	8.33E-03	3.40E-03	6.75E-04	2.11E-03	5.41E-04	5.13E-03	5.53E-03	1.90E-03	3.81E-04	1.73E-03	5.89E-04	2.86E-03	4.78E-05	5.36E-05	3.3288E-02
551693.03	4172613.45	5754.90755	2402.55449	2150.5943	5556.69146	3316.75699	1604.10587	5689.63483	1432.34964	1134.90122	4214.87415	6524.25993	2165.25635	0.22655	0.23053	8.40E-03	2.09E-03	1.87E-03	3.54E-03	2.66E-03	1.29E-03	5.39E-03	1.20E-03	9.52E-04	2.24E-03	2.40E-03	7.97E-04	3.17E-06	3.91E-06	3.2846E-02
551539.31	4173295.5	3633.7219	4707.43443	819.11259	4727.61125	801.56939	6227.17742	3678.26973	2836.68359	470.29818	4464.05702	2125.93715	7444.90182	0.8537	0.86472	5.30E-03	4.10E-03	7.13E-04	3.01E-03	6.43E-04	5.00E-03	3.49E-03	2.38E-03	3.95E-04	2.38E-03	7.82E-04	2.74E-03	1.19E-05	1.47E-05	3.0952E-02
551355.17	4172791.83	2728.89465	3829.79224	1113.63678	9295.7263	1497.21914	2534.75935	2721.54523	2196.27499	618.10908	6640.48119	5525.65473	3222.41661	0.4371	0.4474	3.98E-03	3.34E-03	9.70E-04	5.92E-03	1.20E-03	2.03E-03	2.58E-03	1.84E-03	5.19E-04	3.53E-03	2.03E-03	1.19E-03	6.12E-06	7.58E-06	2.9151E-02
551720.95	4172625.84	5958.90447	2297.89019	2015.56967	5872.08707	3070.83605	1530.59103	5891.985	1362.84438	1065.68832	4111.5748	6670.30479	2065.47393	0.26259	0.26871	8.70E-03	2.00E-03	1.76E-03	3.74E-03	2.46E-03	1.23E-03	5.58E-03	1.14E-03	8.94E-04	2.19E-03	2.45E-03	7.60E-04	3.67E-06	4.55E-06	3.2919E-02
551358.34	4172778.87	2719.85803	3801.02849	1116.74482	9298.76103	1521.63462	2502.86809	2712.30665	2179.15351	618.99013	6608.10137	5586.27725	3185.17558	0.43439	0.44478	3.97E-03	3.31E-03	9.73E-04	5.92E-03	1.22E-03	2.01E-03	2.57E-03	1.83E-03	5.19E-04	3.52E-03	2.06E-03	1.17E-03	6.08E-06	7.54E-06	2.9080E-02
551391.23	4173151.9	3078.00083	4853.51839	884.96573	6293.54668	956.81946	4876.70273	3101.84492	2865.65963	501.45308	5590.51542	2895.95804	5944.58897	0.48308	0.48746	4.49E-03	4.23E-03	7.71E-04	4.01E-03	7.68E-04	3.91E-03	2.94E-03	2.40E-03	4.21E-04	2.98E-03	1.07E-03	2.19E-03	6.76E-06	8.26E-06	3.0187E-02
551416.4	4173192.75	3152.23388	4890.60491	877.81577	5958.29394	916.55766	5110.12559	3176.77359	2906.88387	499.92142	5395.68806	2675.8433	6219.0648	0.50629	0.51123	4.60E-03	4.26E-03	7.65E-04	3.79E-03	7.35E-04	4.10E-03	3.01E-03	2.44E-03	4.19E-04	2.87E-03	9.85E-04	2.29E-03	7.08E-06	8.66E-06	3.0284E-02
551331.71	4172927.23	2886.22648	4463.27432	1024.49739	8342.57453	1178.62837	3014.98594	2886.47287	2569.68633	578.33198	6769.01831	4241.36582	3815.02744	0.43908	0.44653	4.21E-03	3.89E-03	8.92E-04	5.31E-03	9.46E-04	2.42E-03	2.74E-03	2.16E-03	4.85E-04	3.60E-03	1.56E-03	1.40E-03	6.14E-06	7.57E-06	2.9627E-02
551617.02	4173322.96	4086.53159	4439.8996	816.59813	3921.4543	732.05876	6745.02133	4149.45998	2660.64499	472.67273	3857.24019	1828.27476	8051.23448	1.85084	1.91341	5.96E-03	3.87E-03	7.11E-04	2.50E-03	5.87E-04	5.41E-03	3.93E-03	2.23E-03	3.97E-04	2.05E-03	6.73E-04	2.96E-03	2.59E-05	3.24E-05	3.1347E-02
551332.12	4172957.46	2928.08569	4637.14901	986.8704	7966.45642	1120.73506	3200.83219	2931.40299	2683.86949	559.06527	6608.76399	3962.97527	4040.2482	0.43524	0.44277	4.27E-03	4.04E-03	8.60E-04	5.07E-03	8.99E-04	2.57E-03	2.78E-03	2.25E-03	4.69E-04	3.52E-03	1.46E-03	1.49E-03	6.09E-06	7.50E-06	2.9687E-02
551335.56	4172860.37	2769.08314	4031.34292	1069.63388	8954.80391	1328.75193	2685.43173	2764.59021	2312.39712	597.69292	6750.17219	4920.91342	3405.5863	0.43673	0.44554	4.04E-03	3.51E-03	9.32E-04	5.70E-03	1.07E-03	2.15E-03	2.62E-03	1.94E-03	5.01E-04	3.59E-03	1.81E-03	1.25E-03	6.11E-06	7.55E-06	2.9139E-02
551383.87	4172709.15	2737.9689	3632.60672	1135.84332	9360.00943	1621.31117	2305.1998	2730.27959	2080.65216	626.70715	6540.91946	5802.9473	2960.62074	0.41105	0.42088	4.00E-03	3.16E-03	9.89E-04	5.96E-03	1.30E-03	1.85E-03	2.59E-03	1.75E-03	5.26E-04	3.48E-03	2.14E-03	1.09E-03	5.75E-06	7.13E-06	2.8838E-02
551394.77	4173161.75	3069.67266	4812.37503	877.44138	6174.51769	941.07871	4914.54562	3093.40026	2861.09606	498.31605	5502.91058	2823.72626	5931.56278	0.47998	0.48469	4.48E-03	4.19E-03	7.64E-04	3.93E-03	7.55E-04	3.94E-03	2.93E-03	2.40E-03	4.18E-04	2.93E-03	1.04E-03	2.18E-03	6.72E-06	8.21E-06	2.9982E-02
551656.2	4172586.28	5139.0615	2507.29219	2125.64769	5717.55165	3422.54761	1661.19841	5083.17325	1499.31797	1128.09567	4497.91119	6420.88494	2231.2913	0.21005	0.21215	7.50E-03	2.18E-03	1.85E-03	3.64E-03	2.75E-03	1.33E-03	4.82E-03	1.26E-03	9.47E-04	2.39E-03	2.36E-03	8.21E-04	2.94E-06	3.60E-06	3.1862E-02
551627.72	4172572.6	4733.50487	2610.56508	2046.65767	6119.523	3359.69644	1710.96112	4685.13268	1559.00052	1091.73739	4799.71795	6405.34506	2286.47231	0.21524	0.21693	6.91E-03	2.27E-03	1.78E-03	3.90E-03	2.70E-03	1.37E-03	4.44E-03	1.31E-03	9.16E-04	2.55E-03	2.36E-03	8.41E-04	3.01E-06	3.68E-06	3.1354E-02
551378.8	4172717.99	2715.21981	3644.45347	1125.16756	9278.47605	1600.39626	2324.66999	2707.61483	2087.12401	620.96601	6507.57858	5731.08525	2981.06259	0.41191	0.42179	3.96E-03	3.17E-03	9.80E-04	5.91E-03	1.28E-03	1.87E-03	2.57E-03	1.75E-03	5.21E-04	3.46E-03	2.11E-03	1.10E-03	5.76E-06	7.15E-06	2.8695E-02
551571.02	4173313.19	3737.47687	4552.83437	809.82032	4361.47958	763.92355	6345.03249	3788.79721	2742.70279	466.02537	4177.13878	1973.16672	7569.40985	1.06189	1.07839	5.46E-03	3.97E-03	7.05E-04	2.78E-03	6.13E-04	5.09E-03	3.59E-03	2.30E-03	3.91E-04	2.22E-03	7.26E-04	2.79E-03	1.49E-05	1.83E-05	3.0658E-02
551341.04	4172827.78	2719.63866	3863.98017	1080.1722	9050.61528	1396.91788	2576.6604	2713.58041	2216.32946	601.79847	6618.27535	5180.61914	3270.1139	0.43293	0.44236	3.97E-03	3.37E-03	9.41E-04	5.76E-03	1.12E-03	2.07E-03	2.57E-03	1.86E-03	5.05E-04	3.52E-03	1.91E-03	1.20E-03	6.06E-06	7.50E-06	2.8809E-02
551437.01	4173220.82	3198.2119	4848.0615	863.38539	5631.31972	887.69524	5200.31301	3223.63794	2905.49312	493.04708	5176.85661	2533.96509	6262.12044	0.52735	0.53251	4.67E-03	4.22E-03	7.52E-04	3.59E-03	7.12E-04	4.17E-03	3.06E-03	2.44E-03	4.14E-04	2.76E-03	9.32E-04	2.30E-03	7.38E-06	9.02E-06	3.0028E-02
551740.78	4172636.11	5859.78388	2195.34817	1831.76542	6205.81474	2832.42831	1457.66631	5797.5336	1295.97355	974.38177	4052.52495	6726.99147	1963.95001	0.28826	0.29554	8.55E-03	1.91E-03	1.60E-03	3.95E-03	2.27E-03	1.17E-03	5.49E-03	1.09E-03	8.18E-04	2.16E-03	2.48E-03	7.23E-04	4.03E-06	5.01E-06	3.2218E-02
551408.68	4172662.54	2834.65604	3433.46179	1183.37899	9299.23009	1699.13043	2155.82652	2825.61667	1973.4447	653.29097	6408.49491	5940.06813	2784.27919	0.38607	0.39464	4.14E-03	2.99E-03	1.03E-03	5.92E-03	1.36E-03	1.73E-03	2.68E-03	1.66E-03	5.48E-04	3.41E-03	2.19E-03	1.02E-03	5.40E-06	6.69E-06	2.8688E-02
551548.79	4173304.43	3626.54615	4593.21271	807.35232	4556.39168	781.45232	6155.92151	3672.77861	2766.8166	463.79081	4321.40857	2053.89391	7356.84143	0.89151	0.90271	5.29E-03	4.00E-03	7.03E-04	2.90E-03	6.27E-04	4.94E-03	3.48E-03	2.32E-03	3.89E-04	2.30E-03	7.56E-04	2.71E-03	1.25E-05	1.53E-05	3.0447E-02
551419.49	4173201.34	3129.07213	4812.43262	865.75362	5812.10519	900.83044	5042.96931	3153.34574	2863.5736	493.32944	5278.36794	2614.32215	6138.49033	0.50273	0.50746	4.57E-03	4.19E-03	7.54E-04	3.70E-03	7.23E-04	4.05E-03	2.99E-03	2.40E-03	4.14E-04	2.81E-03	9.62E-04	2.26E-03	7.03E-06	8.60E-06	2.9833E-02
551454.78	4173238.04	3256.04311	4825.59873	849.29485	5433.32709	874.62993	5296.89479	3283.19206	2893.37096	485.89803	4998.18424	2462.99555	6418.93805	0.56882	0.57378	4.75E-03	4.20E-03	7.40E-04	3.46E-03	7.02E-04	4.25E-03	3.11E-03	2.43E-03	4.08E-04	2.66E-03	9.06E-04	2.36E-03	7.96E-06	9.72E-06	3.0000E-02
551397.86	4173170.33	3058.01633	4766.89904	869.74656	6062.45045	927.14925	4888.10038	3081.57392	2831.06577	494.21219	5418.31748	2762.44095	5902.23372	0.47897	0.48377	4.46E-03	4.15E-03	7.58E-04	3.86E-03	7.44E-04	3.92E-03	2.92E-03	2.38E-03	4.15E-04	2.88E-03	1.02E-03	2.17E-03	6.70E-06	8.20E-06	2.9697E-02
551374.52	4172726.31	2691.11049	3641.52537	1112.59085	9157.76045	1574.70039	2337.07166	2683.63826	2085.80338	614.29265	6447.67438	5636.06378	2992.66306	0.4101	0.4199	3.93E-03	3.17E-03	9.69E-04	5.83E-03	1.26E-03	1.88E-03	2.54E-03	1.75E-03	5.15E-04	3.43E-03	2.07E-03	1.10E-03	5.74E-06	7.12E-06	2.8467E-02
551331.34	4172894.83	2791.84159	4178.55885	1034.49603	8486.76997	1221.20444	2796.91555	2789.70359	2400.23389	581.02363	6682.14672	4457.63652	3544.13682	0.4278	0.43581	4.08E-03	3.64E-03	9.01E-04	5.40E-03	9.80E-04	2.24E-03	2.64E-03	2.01E-03	4.88E-04	3.56E-03	1.64E-03	1.30E-03	5.99E-06	7.39E-06	2.8903E-02
551592.55	4173321.28	3836.39452	4449.16675	806.38955	4061.54149	742.4119	6432.70581	3892.05512	2677.09653	465.11103	3988.87998	1887.12867	7672.36305	1.2988	1.32504	5.60E-03	3.88E-03	7.02E-04	2.59E-03	5.96E-04	5.16E-03	3.69E-03	2.25E-03	3.90E-04	2.12E-03	6.94E-04	2.82E-03	1.82E-05	2.25E-05	3.0526E-02
551328.49	4172918.27	2824.03419	4308.61634	1014.3372	8235.15217	1175.05624	2906.7272	2823.60231	2479.10651	571.76735	6632.14142	4232.491	3679.87688	0.4285	0.43625	4.12E-03	3.75E-03	8.83E-04	5.24E-03	9.43E-04	2.33E-03	2.68E-03	2.08E-03	4.80E-04	3.53E-03	1.56E-03	1.35E-03	6.00E-06	7.39E-06	2.8968E-02
551328.9	4172948.5	2871.74013	4489.329	981.2252	7898.31115	1116.91714	3084.48166	2874.12139	2594.62102	555.3489	6516.20435	3957.75433	3896.5635	0.4262	0.43355	4.19E-03	3.91E-03	8.55E-04	5.03E-03	8.96E-04	2.47E-03	2.72E-03	2.18E-03	4.66E-04	3.47E-03	1.46E-03	1.43E-03	5.96E-06	7.35E-06	2.9095E-02
551333.86	4172849.93	2714.85414	3901.80193	1055.34032	8808.07681	1329.31944	2605.67611	2709.99451	2238.23472	589.12298	6574.48595	4907.06247	3305.47113	0.42633	0.43505	3.96E-03	3.40E-03	9.19E-04	5.61E-03	1.07E-03	2.09E-03	2.57E-03	1.88E-03	4.94E-04	3.50E-03	1.81E-03	1.22E-03	5.97E-06	7.37E-06	2.8521E-02
551651.63	4173326.89	4347.87666	4171.67036	797.48819	3629.48757	700.06605	6575.4674	4420.32274	2479.43835	463.59681	3528.18566	1715.94882	7889.18459	3.77048	4.00475	6.35E-03	3.63E-03	6.95E-04	2.31E-03	5.62E-04	5.28E-03	4.19E-03	2.08E-03	3.89E-04	1.88E-03	6.31E-04	2.90E-03	5.28E-05	6.79E-05	3.1014E-02
551341.74	4172818.5	2685.58154	3785.23923	1071.74975	8929.44966	1398.11438	2528.67382	2679.31298	2171.89864	596.63918	6495.78396	5162.8923	3209.83984	0.42495	0.43432	3.92E-03	3.30E-03	9.33E-04	5.69E-03	1.12E-03	2.03E-03	2.54E-03	1.82E-03	5.01E-04	3.46E-03	1.90E-03	1.18E-03	5.95E-06	7.36E-06	2.8400E-02
551664.34	4173325.04	4501.9692	4109.4091	793.78242	3559.73771	693.61232	6545.70888	4579.853	2432.85151	462.16718	3441.028	1689.89304	7870.42728	5.66204	6.15601	6.57E-03	3.58E-03	6.91E-04	2.27E-03	5.56E-04	5.25E-03	4.34E-03	2.04E-03	3.88E-04	1.83E-03	6.22E-04	2.90E-03	7.92E-05	1.04E-04	3.1219E-02
551400.95	4173178.92	3046.66055	4720.91581	861.54728	5949.20416	912.82539	4855.06733	3070.03046	2801.08318	489.80293	5330.99668	2700.9652	5917.66152	0.47781	0.4824	4.45E-03	4.11E-03	7.50E-04	3.79E-03	7.32E-04	3.90E-03	2.91E-03	2.35E-03	4.11E-04	2.84E-03	9.94E-04	2.18E-03	6.69E-06	8.17E-06	2.9419E-02
551370.24	4172734.63	2667.68246	3632.22801	1100.06433	9030.92043	1547.87521	2346.77768	2660.33073	2081.15366	607.7203	6380.93564	5538.78925	3000.87244	0.40769	0.41738	3.89E-03	3.16E-03	9.58E-04	5.75E-03	1.24E-03	1.88E-03	2.52E-03	1.75E-03	5.10E-04	3.40E-03	2.04E-03	1.10E-03	5.70E-06	7.07E-06	2.8219E-02
551677.06	4173323.19	4661.62923	4033.63236	786.58045	3483.24159	685.55219	6461.36206	4745.65907	2376.982	458.64157	3348.38676	1660.43631	7790.18959	9.84762	11.17722	6.80E-03	3.51E-03	6.85E-04	2.22E-03	5.50E-04	5.18E-03	4.50E-03	1.99E-03	3.85E-04	1.78E-03	6.11E-04	2.87E-03	1.38E-04	1.89E-04	3.1418E-02
551464.26	4173249.18	3258.30101	4729.73197	832.04562	5264.14198	855.27624	5303.0361	3286.47889	2843.72848	476.42397	4843.5272	2400.71016	6418.25944	0.58044	0.58631	4.76E-03	4.12E-03	7.25E-04	3.35E-03	6.86E-04	4.25E-03	3.11E-03	2.39E-03	4.00E-04	2.58E-03	8.83E-04	2.36E-03	8.12E-06	9.94E-06	2.9634E-02
551638.91	4173328.74	4181.56475	4203.53233	796.69285	3689.29497	704.57859	6518.55502	4248.73456	2508.09097	462.29601	3600.99544	1739.19393	7806.62093	2.70928	2.83919	6.10E-03	3.66E-03	6.94E-04	2.35E-03	5.65E-04	5.23E-03	4.03E-03	2.10E-03	3.88E-04	1.92E-03	6.40E-04	2.87E-03	3.79E-05	4.81E-05	3.0637E-02
551725.8	4173306.93	5398.36419	3805.08962	756.03319	3262.88711	662.37812	6137.70114	5515.78298	2206.96607	443.38512	3180.7651	1575.73782	7467.5044	4.72441	4.30421	7.88E-03	3.31E-03	6.58E-04	2.08E-03	5.31E-04	4.92E-03	5.23E-03	1.85E-03	3.72E-04	1.69E-03	5.80E-04	2.75E-03	6.61E-05	7.29E-05	3.1997E-02
551365.96	4172742.95	2651.06473	3627.63528	1091.07887	8943.29603	1525.89876	2358.71039	2643.77713	2079.18028	603.12188	6335.05486	5467.61769	3012.24858	0.40692	0.41656	3.87E-03	3.16E-03	9.50E-04	5.69E-03	1.22E-03	1.89E-03	2.51E-03	1.74E-03	5.06E-04	3.37E-03	2.01E-03	1.11E-03	5.69E-06	7.06E-06	2.8052E-02
551473.96	4173258.32	3282.26478	4677.07096	820.92853	5141.2227	842.29196	5366.71657	3311.95147	2816.02621	470.31786	4740.17058	2351.3266	6485.14681	0.59848	0.60379	4.79E-03	4.07E-03	7.15E-04	3.27E-03	6.76E-04	4.31E-03	3.14E-03	2.36E-03	3.95E-04	2.52E-03	8.65E-04	2.39E-03	8.37E-06	1.02E-05	2.9524E-02
551422.58	4173209.93	3099.33262	4720.44994	852.49936	5657.05604	885.32594	4963.99418	3123.29596	2815.47802	486.06716	5153.1475	2555.78953	5989.21112	0.49842	0.5029	4.52E-03	4.11E-03	7.43E-04	3.60E-03	7.10E-04	3.98E-03	2.96E-03	2.36E-03	4.08E-04	2.74E-03	9.40E-04	2.20E-03	6.97E-06	8.52E-06	2.9306E-02
551361.69	4172751.27	2644.74153	3634.92739	1087.40674	8921.00125	1511.96654	2375.88514	2637.43702	2083.76787	601.45898	6326.65283	5436.84298	3030.78422	0.40907	0.41877	3.86E-03	3.17E-03	9.47E-04	5.68E-03	1.21E-03	1.91E-03	2.50E-03	1.75E-03	5.05E-04	3.37E-03	2.00E-03	1.12E-03	5.72E-06	7.10E-06	2.8022E-02
551526.12	4173295.26	3467.07834	4521.52479	794.34884	4687.71189	791.91609	5812.59352	3507.41873	2724.25247	455.64571	4377.87355	2125.55738	6964.107	0.75734	0.76641	5.06E-03	3.94E-03	6.92E-04	2.98E-03	6.35E-04	4.66E-03	3.32E-03	2.29E-03	3.82E-04	2.33E-03	7.82E-04	2.56E-03	1.06E-05	1.30E-05	2.9665E-02
551440.66	4173229.99	3159.51719	4723.47831	846.83124	5453.57694	870.37769	5053.24246	3184.74679	2821.42698	481.61067	5026.72415	2471.96876	6135.39603	0.52815	0.53275	4.61E-03	4.11E-03	7.38E-04	3.47E-03	6.98E-04	4.05E-03	3.02E-03	2.37E-03	4.04E-04	2.68E-03	9.10E-04	2.26E-03	7.39E-06	9.03E-06	2.9337E-02
551558.27	4173313.36	3602.27105	4456.29149	793.26107	4378.64346	760.2993	6037.54135	3649.75331	2683.81637	455.93281	4165.43851	1982.33935	7214.30479	0.92914	0.94279	5.26E-03	3.88E-03	6.91E-04	2.79E-03	6.10E-04	4.84E-03	3.46E-03	2.25E-03	3.83E-04	2.22E-03	7.29E-04	2.65E-03	1.30E-05	1.60E-05	2.9796E-02
551342.43	4172809.22	2653.07689	3712.51125	1063.17605	8805.74583	1398.81973	2483.49655	2646.64431	2130.7794	591.37461	6377.26272	5138.65663	3153.24365	0.41707	0.42636	3.87E-03	3.23E-03	9.26E-04	5.61E-03	1.12E-03	1.99E-03	2.51E-03	1.79E-03	4.96E-04	3.39E-03	1.89E-03	1.16E-03	5.84E-06	7.22E-06	2.8005E-02
551404.04	4173187.5	3030.08529	4663.71078	852.22445	5826.20408	898.57351	4809.72482	3053.23366	2767.17125	484.76539	5235.63653	2641.98727	5861.71541	0.47555	0.4801	4.42E-03	4.06E-03	7.42E-04	3.71E-03	7.21E-04	3.86E-03	2.89E-03	2.32E-03	4.07E-04	2.79E-03	9.72E-04	2.16E-03	6.65E-06	8.14E-06	2.9069E-02
551626.2	4173330.59	4031.98678	4222.28508	792.85915	3740.97081	707.51393	6414.59372	4094.64232	2525.7717	459.29042	3664.99366	1758.33843	7674.35342	2.03144	2.11044	5.89E-03	3.68E-03	6.91E-04	2.38E-03	5.68E-04	5.15E-03	3.88E-03	2.12E-03	3.85E-04	1.95E-03	6.47E-04	2.82E-03	2.84E-05	3.58E-05	3.0221E-02
551580.37	4173322	3701.04745	4387.40573	793.03386	4171.73546	740.88192	6167.97103	3752.99869	2641.30904	456.71819	4002.8456	1899.47689	7362.91518	1.11403	1.13248	5.40E-03	3.82E-03	6.91E-04	2.66E-03	5.94E-04	4.95E-03	3.56E-03	2.22E-03	3.83E-04	2.13E-03	6.99E-04	2.71E-03	1.56E-05	1.92E-05	2.9843E-02
551325.67	4172939.53	2814.66838	4344.77683	974.34117	7820.92069	1113.37278	2973.51016	2816.20972	2507.29195	550.90657	6412.57839	3951.10826	3759.91269	0.41747	0.42427	4.11E-03	3.78E-03	8.49E-04	4.98E-03	8.93E-04	2.39E-03	2.67E-03	2.10E-03	4.62E-04	3.41E-03	1.45E-03	1.38E-03	5.84E-06	7.19E-06	2.8499E-02
551357.41	4172759.58	2626.68963	3616.65202	1076.18902	8811.76163	1484.70696	2379.92698	2619.51074	2074.16288	595.71198	6266.606	5346.4566	3032.56407	0.40648	0.41603	3.83E-03	3.15E-03	9.37E-04	5.61E-03	1.19E-03	1.91E-03	2.48E-03	1.74E-03	5.00E-04	3.34E-03	1.97E-03	1.12E-03	5.69E-06	7.05E-06	2.7787E-02
551398.8	4172669.06	2739.36655	3381.5318	1132.69042	8973.91586	1618.02159	2135.18114	2731.39082	1942.6129	625.40284	6226.76089	5669.32324	2754.74733	0.37595	0.3843	4.00E-03	2.95E-03	9.87E-04	5.71E-03	1.30E-03	1.71E-03	2.59E-03	1.63E-03	5.25E-04	3.31E-03	2.09E-03	1.01E-03	5.26E-06	6.51E-06	2.7825E-02
551327.95	4172874.06	2704.41996	3944.98497	1023.33614	8423.71694	1245.43427	2642.81762	2701.11754	2265.08069	572.84583	6469.40116	4552.25722	3350.80414	0.4149	0.42284	3.95E-03	3.44E-03	8.91E-04	5.36E-03	9.99E-04	2.12E-03	2.56E-03	1.90E-03	4.81E-04	3.44E-03	1.67E-03	1.23E-03	5.81E-06	7.17E-06	2.8064E-02
551493.36	4173276.59	3332.77719	4566.55643	800.85446	4881.13945	815.12087	5487.80371	3365.92752	2749.81194	459.08298	4546.77466	2239.56106	6611.13134	0.63953	0.64626	4.86E-03	3.98E-03	6.98E-04	3.11E-03	6.54E-04	4.40E-03	3.19E-03	2.31E-03	3.85E-04	2.42E-03	8.24E-04	2.43E-03	8.95E-06	1.10E-05	2.9284E-02
551325.26	4172909.3	2753.36485	4141.50436	997.98375	8069.5555	1163.24296	2794.02129	2752.41267	2382.28995	561.77348	6454.41388	4190.58395	3538.75852	0.41444	0.42191	4.02E-03	3.61E-03	8.69E-04	5.14E-03	9.33E-04	2.24E-03	2.61E-03	2.00E-03	4.71E-04	3.44E-03	1.54E-03	1.30E-03	5.80E-06	7.15E-06	2.8180E-02
551332.16	4172839.5	2656.61241	3770.02869	1037.8829	8611.00692	1322.67908	2525.91353	2651.47574	2163.40743	578.92682	6378.98094	4859.01348	3204.90145	0.414	0.42256	3.88E-03	3.28E-03	9.04E-04	5.48E-03	1.06E-03	2.03E-03	2.51E-03	1.82E-03	4.86E-04	3.40E-03	1.79E-03	1.18E-03	5.79E-06	7.16E-06	2.7825E-02
551652.93	4172576.99	4901.59274	2431.66421	2014.42	5514.86915	3222.49007	1616.00793	4849.67003	1453.25569	1071.13332	4347.76515	6069.04357	2167.97403	0.20064	0.20246	7.15E-03	2.12E-03	1.75E-03	3.51E-03	2.59E-03	1.30E-03	4.60E-03	1.22E-03	8.99E-04	2.31E-03	2.23E-03	7.98E-04	2.81E-06	3.43E-06	3.0486E-02
551382.34	4172696.12	2655.60987	3452.953	1091.46329	8840.86782	1552.85974	2199.90937	2648.49613	1979.72417	602.47008	6201.2359	5484.62399	2828.16975	0.38294	0.39171	3.88E-03	3.01E-03	9.51E-04	5.63E-03	1.25E-03	1.76E-03	2.51E-03	1.66E-03	5.06E-04	3.30E-03	2.02E-03	1.04E-03	5.36E-06	6.64E-06	2.7523E-02
551407.13	4173196.09	3009.54644	4597.81768	841.89078	5695.66871	884.33957	4754.21636	3032.44036	2730.21438	479.16217	5133.63471	2584.88739	5794.36655	0.47252	0.47697	4.39E-03	4.00E-03	7.33E-04	3.63E-03	7.09E-04	3.81E-03	2.87E-03	2.29E-03	4.02E-04	2.73E-03	9.51E-04	2.13E-03	6.61E-06	8.08E-06	2.8678E-02
551535.71	4173304.3	3459.35789	4417.97708	782.92814	4530.60702	773.32396	5756.87562	3501.40673	2661.47777	449.21899	4248.75716	2057.66401	6892.46611	0.78687	0.79617	5.05E-03	3.85E-03	6.82E-04	2.88E-03	6.20E-04	4.62E-03	3.32E-03	2.23E-03	3.77E-04	2.26E-03	7.57E-04	2.54E-03	1.10E-05	1.35E-05	2.9211E-02
551503.06	4173285.73	3333.43668	4469.14893	787.2109	4788.65816	798.88495	5487.0663	3368.41218	2691.17028	451.25538	4423.31047	2180.63537	6599.55049	0.65989	0.6669	4.87E-03	3.89E-03	6.86E-04	3.05E-03	6.41E-04	4.40E-03	3.19E-03	2.26E-03	3.79E-04	2.35E-03	8.02E-04	2.43E-03	9.23E-06	1.13E-05	2.8971E-02
551639.79	4172569.24	4695.42858	2461.30062	1967.07353	5633.31378	3171.49904	1629.73396	4647.16853	1470.43454	1048.56024	4442.42627	6005.74667	2181.24721	0.2006	0.20219	6.85E-03	2.14E-03	1.71E-03	3.59E-03	2.54E-03	1.31E-03	4.40E-03	1.23E-03	8.80E-04	2.36E-03	2.21E-03	8.03E-04	2.81E-06	3.43E-06	3.0051E-02
551414.06	4172635.86	2802.18547	3222.00696	1173.803	8753.08706	1688.26443	2031.78025	2791.98153	1854.95394	648.40795	6047.37952	5692.78543	2626.44791	0.35679	0.36417	4.09E-03	2.81E-03	1.02E-03	5.57E-03	1.35E-03	1.63E-03	2.65E-03	1.56E-03	5.44E-04	3.22E-03	2.09E-03	9.66E-04	4.99E-06	6.17E-06	2.7515E-02
551322.45	4172930.57	2760.02633	4207.83761	968.13138	7750.5054	1112.10636	2871.43284	2760.79884	2425.94161	546.72281	6311.64613	3951.64694	3633.10399	0.40962	0.41628	4.03E-03	3.66E-03	8.43E-04	4.94E-03	8.92E-04	2.30E-03	2.62E-03	2.04E-03	4.59E-04	3.36E-03	1.45E-03	1.34E-03	5.73E-06	7.05E-06	2.7942E-02
551353.13	4172767.9	2596.24207	3572.13041	1057.16595	8611.6083	1444.28224	2369.83977	2589.33733	2049.90407	585.73334	6153.12093	5195.7034	3016.42214	0.39899	0.40817	3.79E-03	3.11E-03	9.21E-04	5.48E-03	1.16E-03	1.90E-03	2.45E-03	1.72E-03	4.91E-04	3.28E-03	1.91E-03	1.11E-03	5.58E-06	6.92E-06	2.7340E-02
551697.94	4172606.28	5467.76607	2266.74999	1976.98406	5207.4721	2997.05277	1522.51649	5407.90369	1349.38303	1045.97276	3944.65305	5972.22277	2053.09363	0.21287	0.21654	7.98E-03	1.97E-03	1.72E-03	3.32E-03	2.40E-03	1.22E-03	5.13E-03	1.13E-03	8.78E-04	2.10E-03	2.20E-03	7.55E-04	2.98E-06	3.67E-06	3.0814E-02
551567.75	4173322.28	3566.09698	4305.36031	777.70697	4198.32961	738.50744	5886.06131	3614.40409	2592.56361	447.231	4002.25119	1911.41312	7034.4777	0.96902	0.9828	5.21E-03	3.75E-03	6.77E-04	2.67E-03	5.92E-04	4.72E-03	3.43E-03	2.18E-03	3.75E-04	2.13E-03	7.03E-04	2.59E-03	1.36E-05	1.67E-05	2.9049E-02
551326.25	4172863.68	2645.66955	3804.60328	1006.94111	8268.56289	1241.26945	2554.9224	2642.0001	2184.32292	563.04292	6286.24329	4521.61854	3240.64932	0.40284	0.41058	3.86E-03	3.31E-03	8.77E-04	5.26E-03	9.96E-04	2.05E-03	2.50E-03	1.83E-03	4.72E-04	3.35E-03	1.66E-03	1.19E-03	5.64E-06	6.96E-06	2.7387E-02
551410.22	4173204.68	2987.0715	4527.12329	830.86255	5561.7873	870.01718	4692.55923	3009.69328	2691.62523	473.16341	5027.71263	2528.89402	5720.36843	0.46915	0.47335	4.36E-03	3.94E-03	7.24E-04	3.54E-03	6.98E-04	3.76E-03	2.85E-03	2.26E-03	3.97E-04	2.68E-03	9.30E-04	2.10E-03	6.56E-06	8.02E-06	2.8265E-02
551427.89	4173224.54	3041.78519	4547.48177	828.43314	5390.94475	858.96824	4773.19255	3065.29948	2709.7512	471.49931	4933.52715	2459.58904	5803.52809	0.49518	0.49937	4.44E-03	3.96E-03	7.22E-04	3.43E-03	6.89E-04	3.83E-03	2.91E-03	2.27E-03	3.96E-04	2.63E-03	9.05E-04	2.14E-03	6.93E-06	8.46E-06	2.8330E-02
551798.68	4173274.84	5814.54795	3518.29376	706.65833	2953.28666	611.13485	5673.52072	5966.25657	2023.05089	414.09722	2853.44698	1442.79484	6903.285	1.11071	1.07428	8.49E-03	3.06E-03	6.15E-04	1.88E-03	4.90E-04	4.55E-03	5.65E-03	1.70E-03	3.47E-04	1.52E-03	5.31E-04	2.54E-03	1.55E-05	1.82E-05	3.1413E-02
551717.62	4172616.54	5581.408	2189.46038	1875.82234	5337.11393	2804.29117	1469.57104	5521.2006	1298.73158	994.44304	3846.56314	5979.17815	1981.37923	0.23275	0.23776	8.15E-03	1.91E-03	1.63E-03	3.40E-03	2.25E-03	1.18E-03	5.23E-03	1.09E-03	8.34E-04	2.05E-03	2.20E-03	7.29E-04	3.26E-06	4.03E-06	3.0656E-02
551445.82	4173242.11	3101.78225	4542.3296	815.93094	5222.68752	844.86195	4907.89318	3126.88679	2722.18158	466.55757	4766.25674	2393.37179	5957.26541	0.52691	0.53192	4.53E-03	3.96E-03	7.11E-04	3.33E-03	6.78E-04	3.94E-03	2.96E-03	2.28E-03	3.91E-04	2.54E-03	8.81E-04	2.19E-03	7.37E-06	9.01E-06	2.8400E-02
551545.31	4173313.33	3454.05702	4321.14354	772.8454	4374.0861	754.53221	5696.5089	3497.65049	2602.24944	443.65445	4122.50793	1988.93587	6818.16767	0.81909	0.82884	5.04E-03	3.76E-03	6.73E-04	2.79E-03	6.05E-04	4.57E-03	3.32E-03	2.18E-03	3.72E-04	2.19E-03	7.32E-04	2.51E-03	1.15E-05	1.40E-05	2.8770E-02
551376.19	4172702.98	2607.13348	3422.87781	1067.30105	8624.75465	1512.84155	2194.76832	2600.30563	1962.36439	589.23355	6082.64505	5325.60547	2817.45829	0.37696	0.38555	3.81E-03	2.98E-03	9.30E-04	5.49E-03	1.21E-03	1.76E-03	2.46E-03	1.65E-03	4.94E-04	3.24E-03	1.96E-03	1.04E-03	5.27E-06	6.53E-06	2.7034E-02
551401.22	4172655.9	2709.85517	3260.15387	1117.93149	8657.49198	1593.18968	2064.43516	2701.71901	1875.06358	617.50255	6015.87396	5502.98406	2665.03068	0.3585	0.36618	3.96E-03	2.84E-03	9.74E-04	5.51E-03	1.28E-03	1.66E-03	2.56E-03	1.57E-03	5.18E-04	3.20E-03	2.02E-03	9.81E-04	5.02E-06	6.21E-06	2.7086E-02
551348.86	4172776.22	2575.52078	3542.19134	1043.05261	8475.48712	1412.07021	2364.73908	2568.82461	2033.54149	578.44415	6079.24616	5082.82819	3007.32146	0.39441	0.40335	3.76E-03	3.09E-03	9.08E-04	5.40E-03	1.13E-03	1.90E-03	2.43E-03	1.71E-03	4.85E-04	3.24E-03	1.87E-03	1.11E-03	5.52E-06	6.84E-06	2.7031E-02
551589.73	4173330.81	3651.55236	4207.00051	774.22606	3981.8051	717.37152	5953.88073	3703.61153	2531.13262	446.20533	3822.91018	1827.21773	7114.33232	1.16662	1.18999	5.33E-03	3.66E-03	6.74E-04	2.54E-03	5.76E-04	4.78E-03	3.51E-03	2.12E-03	3.74E-04	2.03E-03	6.72E-04	2.62E-03	1.63E-05	2.02E-05	2.8926E-02
551790.59	4173280.38	5754.15682	3528.82828	708.51767	2965.82458	613.9967	5617.7028	5901.84962	2026.76081	415.19613	2864.0048	1450.02455	6859.58856	1.21407	1.17099	8.40E-03	3.07E-03	6.17E-04	1.89E-03	4.93E-04	4.51E-03	5.59E-03	1.70E-03	3.48E-04	1.52E-03	5.34E-04	2.52E-03	1.70E-05	1.98E-05	3.1239E-02
551655.87	4173335.24	4217.09583	3950.63445	768.41136	3473.75718	675.80365	6133.81786	4286.96886	2345.0893	446.67403	3363.51318	1654.09354	7377.85086	3.82467	4.06821	6.16E-03	3.44E-03	6.69E-04	2.21E-03	5.42E-04	4.92E-03	4.06E-03	1.97E-03	3.75E-04	1.79E-03	6.09E-04	2.71E-03	5.35E-05	6.89E-05	2.9582E-02
551600.76	4173334.29	3718.58703	4163.39799	773.16998	3808.88496	707.27155	6000.59653	3772.76831	2500.68916	446.25649	3735.45002	1786.40656	7174.7462	1.31493	1.34222	5.43E-03	3.63E-03	6.73E-04	2.43E-03	5.67E-04	4.81E-03	3.58E-03	2.10E-03	3.74E-04	1.99E-03	6.57E-04	2.64E-03	1.84E-05	2.27E-05	2.8909E-02
551331.19	4172827.85	2590.96981	3626.83023	1016.42754	8351.69955	1308.39516	2440.77313	2585.64022	2082.53073	566.53071	6150.17918	4771.92221	3097.32554	0.39846	0.40676	3.78E-03	3.16E-03	8.85E-04	5.32E-03	1.05E-03	1.96E-03	2.45E-03	1.75E-03	4.75E-04	3.27E-03	1.76E-03	1.14E-03	5.58E-06	6.89E-06	2.7007E-02
551668.76	4173333.36	4359.7619	3883.24989	763.33021	3403.98626	668.90685	6080.52513	4434.8147	2296.14182	444.36645	3276.25559	1627.76407	7330.22477	5.88175	6.42001	6.36E-03	3.38E-03	6.65E-04	2.17E-03	5.37E-04	4.88E-03	4.20E-03	1.93E-03	3.73E-04	1.74E-03	5.99E-04	2.70E-03	8.23E-05	1.09E-04	2.9727E-02
551642.99	4173337.11	4064.58164	3992.51117	769.40078	3534.78988	680.93075	6113.67923	4129.51651	2378.89656	446.48933	3438.85111	1677.66145	7339.44974	2.71326	2.84376	5.93E-03	3.48E-03	6.70E-04	2.25E-03	5.46E-04	4.90E-03	3.91E-03	2.00E-03	3.75E-04	1.83E-03	6.17E-04	2.70E-03	3.80E-05	4.82E-05	2.9301E-02
551322	4172897.97	2670.26174	3946.62693	976.99091	7874.39102	1148.40492	2664.68547	2668.78039	2269.83331	549.01222	6235.33976	4131.67823	3376.65852	0.39737	0.40452	3.90E-03	3.44E-03	8.51E-04	5.01E-03	9.21E-04	2.14E-03	2.53E-03	1.90E-03	4.61E-04	3.32E-03	1.52E-03	1.24E-03	5.56E-06	6.85E-06	2.7248E-02
551454.83	4173252.47	3109.69284	4474.24642	802.10455	5087.0668	829.41469	4926.39614	3135.58905	2688.24353	459.01636	4642.35299	2341.0768	5973.22089	0.537	0.54207	4.54E-03	3.90E-03	6.99E-04	3.24E-03	6.65E-04	3.95E-03	2.97E-03	2.26E-03	3.85E-04	2.47E-03	8.61E-04	2.20E-03	7.51E-06	9.19E-06	2.8151E-02
551369.48	4172715.01	2575.92524	3429.04403	1052.6081	8501.84027	1485.12595	2215.59442	2569.21899	1965.85724	581.29658	6025.0404	5225.63466	2838.31861	0.3768	0.3854	3.76E-03	2.99E-03	9.17E-04	5.41E-03	1.19E-03	1.78E-03	2.44E-03	1.65E-03	4.88E-04	3.21E-03	1.92E-03	1.04E-03	5.27E-06	6.53E-06	2.6804E-02
551346.28	4173083.98	2837.16774	4491.02393	820.06021	6226.86025	945.17343	3943.36201	2855.37195	2662.27566	464.01597	5270.84799	3060.16698	4883.04152	0.41069	0.41507	4.14E-03	3.91E-03	7.14E-04	3.96E-03	7.58E-04	3.16E-03	2.71E-03	2.23E-03	3.89E-04	2.81E-03	1.13E-03	1.80E-03	5.75E-06	7.03E-06	2.7724E-02
551681.64	4173331.49	4515.24807	3810.05221	755.27927	3328.91966	660.62202	5990.88979	4596.39737	2241.99285	440.30964	3187.70203	1597.89203	7243.09522	10.64538	12.17056	6.59E-03	3.32E-03	6.58E-04	2.12E-03	5.30E-04	4.81E-03	4.36E-03	1.88E-03	3.69E-04	1.70E-03	5.88E-04	2.66E-03	1.49E-04	2.06E-04	2.9935E-02
551343.05	4173075.03	2831.02086	4496.53863	820.1129	6262.8648	946.51986	3860.55813	2848.30789	2666.54354	464.1896	5290.29009	3088.4114	4790.75448	0.40693	0.4116	4.13E-03	3.92E-03	7.14E-04	3.99E-03	7.59E-04	3.10E-03	2.70E-03	2.24E-03	3.89E-04	2.82E-03	1.14E-03	1.76E-03	5.69E-06	6.97E-06	2.7662E-02
551319.22	4172921.6	2696.20656	4057.14449	955.8641	7620.49563	1103.23648	2764.54432	2696.36873	2337.73942	539.09698	6170.03163	3921.8897	3499.69244	0.39746	0.40437	3.94E-03	3.53E-03	8.33E-04	4.85E-03	8.85E-04	2.22E-03	2.56E-03	1.96E-03	4.52E-04	3.28E-03	1.44E-03	1.29E-03	5.56E-06	6.85E-06	2.7254E-02
551339.83	4173066.08	2829.46957	4507.94644	822.91034	6315.16522	949.85729	3780.72278	2845.74271	2672.49269	465.92202	5329.57734	3120.28234	4701.642	0.40318	0.40833	4.13E-03	3.93E-03	7.17E-04	4.02E-03	7.62E-04	3.03E-03	2.70E-03	2.24E-03	3.91E-04	2.84E-03	1.15E-03	1.73E-03	5.64E-06	6.92E-06	2.7647E-02
551630.1	4173338.98	3919.75852	4017.2308	766.97152	3587.74232	684.42563	6039.27421	3980.32333	2400.44894	444.31895	3504.4069	1697.66788	7240.8478	2.01171	2.0905	5.72E-03	3.50E-03	6.68E-04	2.28E-03	5.49E-04	4.85E-03	3.77E-03	2.01E-03	3.73E-04	1.87E-03	6.25E-04	2.66E-03	2.81E-05	3.54E-05	2.8944E-02
551336.6	4173057.12	2820.20855	4500.10845	824.17182	6350.25168	951.22288	3690.28027	2835.35922	2666.39	466.81745	5355.15221	3147.13012	4598.22366	0.40013	0.40535	4.12E-03	3.92E-03	7.18E-04	4.04E-03	7.63E-04	2.96E-03	2.69E-03	2.24E-03	3.92E-04	2.85E-03	1.16E-03	1.69E-03	5.60E-06	6.87E-06	2.7550E-02
551354.91	4173108.24	2822.15067	4404.94199	813.77643	6055.96856	927.59552	4100.24605	2842.20532	2607.71816	460.15407	5162.41881	2957.73262	5047.16313	0.41465	0.41949	4.12E-03	3.84E-03	7.09E-04	3.86E-03	7.44E-04	3.29E-03	2.69E-03	2.19E-03	3.86E-04	2.75E-03	1.09E-03	1.86E-03	5.80E-06	7.11E-06	2.7529E-02
551413.31	4173213.26	2959.68389	4446.03512	818.8603	5421.5463	855.80497	4622.26449	2981.99581	2649.59442	466.60352	4915.72801	2475.11103	5584.04726	0.46502	0.46928	4.32E-03	3.87E-03	7.13E-04	3.45E-03	6.87E-04	3.71E-03	2.83E-03	2.22E-03	3.92E-04	2.62E-03	9.11E-04	2.05E-03	6.51E-06	7.95E-06	2.7790E-02
551464.29	4173261.39	3121.25193	4410.46713	789.34668	4974.36751	817.05344	4964.05551	3148.43187	2655.45598	451.97579	4532.35109	2299.16618	6009.34265	0.55118	0.55568	4.56E-03	3.84E-03	6.88E-04	3.17E-03	6.56E-04	3.98E-03	2.98E-03	2.23E-03	3.79E-04	2.41E-03	8.46E-04	2.21E-03	7.71E-06	9.42E-06	2.7968E-02
551365.18	4172723.37	2554.92137	3424.81536	1042.11073	8400.34372	1463.66464	2226.6641	2548.29852	1963.93327	575.73334	5972.24259	5148.26321	2848.48486	0.37552	0.38407	3.73E-03	2.98E-03	9.08E-04	5.35E-03	1.17E-03	1.79E-03	2.42E-03	1.65E-03	4.83E-04	3.18E-03	1.89E-03	1.05E-03	5.25E-06	6.51E-06	2.6609E-02
551360.82	4173124.98	2825.44766	4373.66544	815.86412	5990.81084	915.71965	4192.35494	2846.21922	2584.08225	461.35005	5131.36442	2866.60137	5143.239	0.41966	0.42409	4.12E-03	3.81E-03	7.11E-04	3.81E-03	7.35E-04	3.36E-03	2.70E-03	2.17E-03	3.87E-04	2.73E-03	1.05E-03	1.89E-03	5.87E-06	7.19E-06	2.7501E-02
551324.56	4172853.3	2592.86701	3680.80749	992.86546	8125.55159	1239.98127	2478.47921	2588.83558	2113.68161	554.64793	6121.89856	4502.97761	3144.27712	0.39269	0.40031	3.78E-03	3.21E-03	8.65E-04	5.17E-03	9.95E-04	1.99E-03	2.45E-03	1.77E-03	4.65E-04	3.26E-03	1.66E-03	1.16E-03	5.49E-06	6.78E-06	2.6790E-02
551331.86	4172818.83	2561.95106	3559.83859	1009.85331	8257.53292	1310.725	2400.1009	2556.39683	2044.63832	562.45365	6050.11413	4762.18514	3046.09046	0.39213	0.4004	3.74E-03	3.10E-03	8.80E-04	5.26E-03	1.05E-03	1.93E-03	2.42E-03	1.72E-03	4.72E-04	3.22E-03	1.75E-03	1.12E-03	5.49E-06	6.79E-06	2.6671E-02
551333.38	4173048.17	2808.86021	4483.54992	826.06886	6384.95447	952.38687	3598.03917	2822.86587	2653.72162	468.06	5382.82609	3173.11007	4491.4495	0.39739	0.4023	4.10E-03	3.91E-03	7.19E-04	4.07E-03	7.64E-04	2.89E-03	2.68E-03	2.23E-03	3.93E-04	2.87E-03	1.17E-03	1.65E-03	5.56E-06	6.82E-06	2.7433E-02
551360.88	4172731.73	2542.75321	3428.92489	1036.51151	8350.19053	1449.19869	2241.9863	2536.12286	1966.80964	572.90448	5947.77583	5105.89495	2864.31893	0.3765	0.38508	3.71E-03	2.99E-03	9.03E-04	5.32E-03	1.16E-03	1.80E-03	2.40E-03	1.65E-03	4.81E-04	3.17E-03	1.88E-03	1.05E-03	5.27E-06	6.53E-06	2.6524E-02
551431.46	4173233.52	3009.75058	4444.31464	809.83473	5236.69146	842.78237	4687.59252	3033.08964	2653.45146	462.44596	4758.15404	2402.15058	5699.82949	0.49614	0.50004	4.39E-03	3.87E-03	7.05E-04	3.33E-03	6.76E-04	3.76E-03	2.87E-03	2.23E-03	3.88E-04	2.53E-03	8.84E-04	2.10E-03	6.94E-06	8.47E-06	2.7759E-02
551356.58	4172740.1	2535.39957	3435.5666	1033.14038	8325.75582	1437.30192	2258.29454	2528.74377	1971.0183	571.33127	5937.10934	5079.40711	2881.77607	0.37847	0.38711	3.70E-03	2.99E-03	9.00E-04	5.30E-03	1.15E-03	1.81E-03	2.40E-03	1.65E-03	4.79E-04	3.16E-03	1.87E-03	1.06E-03	5.30E-06	6.56E-06	2.6490E-02
551483.21	4173279.21	3180.39172	4338.10002	773.08607	4788.88305	794.57298	5101.5679	3210.80186	2611.65514	442.94932	4380.22236	2199.54209	6158.52142	0.58681	0.59183	4.64E-03	3.78E-03	6.73E-04	3.05E-03	6.37E-04	4.09E-03	3.04E-03	2.19E-03	3.72E-04	2.33E-03	8.09E-04	2.27E-03	8.21E-06	1.00E-05	2.7905E-02
551577.22	4173331.21	3532.35371	4157.10358	762.35738	4020.06486	716.65456	5731.02849	3581.1897	2501.76575	438.73873	3841.20876	1840.79601	6853.54538	1.01176	1.02678	5.16E-03	3.62E-03	6.64E-04	2.56E-03	5.75E-04	4.60E-03	3.39E-03	2.10E-03	3.68E-04	2.04E-03	6.77E-04	2.52E-03	1.42E-05	1.74E-05	2.8310E-02
551554.9	4173322.37	3428.01829	4196.56494	759.75515	4208.02178	734.47324	5585.4029	3472.70857	2527.20404	436.34616	3978.73052	1920.62819	6684.29246	0.8504	0.86162	5.00E-03	3.66E-03	6.62E-04	2.68E-03	5.89E-04	4.48E-03	3.29E-03	2.12E-03	3.66E-04	2.12E-03	7.07E-04	2.46E-03	1.19E-05	1.46E-05	2.8159E-02
551330.15	4173039.22	2795.83883	4458.59272	828.75738	6421.73644	953.75994	3505.46372	2808.6537	2634.68477	469.76773	5413.78624	3198.91343	4383.23858	0.39381	0.39919	4.08E-03	3.88E-03	7.22E-04	4.09E-03	7.65E-04	2.81E-03	2.66E-03	2.21E-03	3.94E-04	2.88E-03	1.18E-03	1.61E-03	5.51E-06	6.76E-06	2.7303E-02
551366.74	4173141.72	2820.02293	4329.33356	814.46029	5848.39725	901.44375	4240.86186	2841.10139	2554.6732	460.81181	5072.56906	2769.69768	5189.78287	0.42348	0.42753	4.12E-03	3.77E-03	7.09E-04	3.72E-03	7.23E-04	3.40E-03	2.69E-03	2.14E-03	3.87E-04	2.70E-03	1.02E-03	1.91E-03	5.93E-06	7.24E-06	2.7311E-02
551352.28	4172748.46	2520.08957	3423.02304	1024.38335	8241.9479	1415.73499	2264.62701	2513.50299	1964.55091	566.86903	5889.96349	5011.53138	2886.60156	0.37718	0.38575	3.68E-03	2.98E-03	8.92E-04	5.25E-03	1.14E-03	1.82E-03	2.38E-03	1.65E-03	4.76E-04	3.14E-03	1.84E-03	1.06E-03	5.28E-06	6.54E-06	2.6312E-02
551332.54	4172809.81	2536.02462	3501.29749	1004.08408	8171.65016	1313.89603	2363.65094	2530.28468	2011.40031	558.79439	5959.95236	4754.12146	3000.36125	0.38641	0.39466	3.70E-03	3.05E-03	8.75E-04	5.20E-03	1.05E-03	1.90E-03	2.40E-03	1.69E-03	4.69E-04	3.17E-03	1.75E-03	1.10E-03	5.41E-06	6.69E-06	2.6372E-02
551326.93	4173030.27	2778.70114	4420.71583	831.30747	6452.64781	954.70822	3411.05755	2790.34003	2606.9907	471.38031	5439.76443	3222.94199	4271.74873	0.39022	0.39567	4.06E-03	3.85E-03	7.24E-04	4.11E-03	7.66E-04	2.74E-03	2.64E-03	2.19E-03	3.96E-04	2.90E-03	1.19E-03	1.57E-03	5.46E-06	6.70E-06	2.7134E-02
551318.63	4172877.31	2593.3028	3741.29129	969.10917	7842.71374	1173.45109	2525.0588	2590.67364	2150.26869	542.77317	6063.53396	4228.30504	3201.71391	0.38672	0.39383	3.79E-03	3.26E-03	8.44E-04	4.99E-03	9.41E-04	2.03E-03	2.46E-03	1.80E-03	4.55E-04	3.23E-03	1.56E-03	1.18E-03	5.41E-06	6.67E-06	2.6537E-02
551391.56	4172662.28	2619.56488	3207.7961	1070.52301	8349.90291	1518.02149	2042.94924	2612.39922	1844.17217	591.41278	5841.22245	5251.90584	2634.6457	0.34869	0.35613	3.82E-03	2.79E-03	9.32E-04	5.32E-03	1.22E-03	1.64E-03	2.48E-03	1.55E-03	4.96E-04	3.11E-03	1.93E-03	9.69E-04	4.88E-06	6.03E-06	2.6265E-02
551672.04	4172580.71	4928.90593	2269.53644	1911.38479	5052.8017	2964.55391	1524.25444	4876.80061	1354.40319	1015.0059	3967.1597	5647.94178	2049.15561	0.19001	0.19207	7.19E-03	1.98E-03	1.66E-03	3.22E-03	2.38E-03	1.22E-03	4.62E-03	1.14E-03	8.52E-04	2.11E-03	2.08E-03	7.54E-04	2.66E-06	3.25E-06	2.9215E-02
551323.7	4173021.31	2759.64992	4373.9563	834.60472	6485.20418	956.20042	3317.86519	2770.10162	2573.34454	473.40337	5466.14731	3246.69249	4160.86052	0.3866	0.3921	4.03E-03	3.81E-03	7.27E-04	4.13E-03	7.67E-04	2.66E-03	2.63E-03	2.16E-03	3.97E-04	2.91E-03	1.19E-03	1.53E-03	5.41E-06	6.64E-06	2.6952E-02
551648.9	4172566.87	4618.54499	2334.50694	1877.33751	5234.40073	2969.99607	1559.43403	4571.44937	1394.40973	1000.8751	4143.51851	5622.33935	2089.20413	0.18802	0.18952	6.74E-03	2.03E-03	1.64E-03	3.33E-03	2.38E-03	1.25E-03	4.33E-03	1.17E-03	8.40E-04	2.21E-03	2.07E-03	7.69E-04	2.63E-06	3.21E-06	2.8768E-02
551492.67	4173288.12	3169.82815	4230.70158	757.39285	4651.25304	779.49303	5084.73894	3201.68115	2548.32447	433.97137	4253.46601	2147.2679	6126.71983	0.60145	0.60716	4.63E-03	3.68E-03	6.60E-04	2.96E-03	6.25E-04	4.08E-03	3.03E-03	2.14E-03	3.64E-04	2.26E-03	7.90E-04	2.25E-03	8.42E-06	1.03E-05	2.7502E-02
551532.17	4173313.14	3300.30435	4158.67486	749.72915	4345.43791	746.78615	5344.82596	3340.09999	2504.51865	429.91241	4050.58836	1990.99674	6407.75655	0.72786	0.73562	4.82E-03	3.62E-03	6.53E-04	2.77E-03	5.99E-04	4.29E-03	3.17E-03	2.10E-03	3.61E-04	2.16E-03	7.33E-04	2.36E-03	1.02E-05	1.25E-05	2.7643E-02
551315.99	4172912.64	2630.06334	3904.60731	940.88248	7474.77279	1091.40827	2659.22635	2629.7268	2249.08292	529.94333	6011.53117	3880.16865	3367.94034	0.38454	0.39122	3.84E-03	3.40E-03	8.19E-04	4.76E-03	8.76E-04	2.13E-03	2.49E-03	1.89E-03	4.45E-04	3.20E-03	1.43E-03	1.24E-03	5.38E-06	6.63E-06	2.6531E-02
551322.87	4172842.92	2542.16999	3565.71626	979.00979	7974.45689	1237.4269	2407.96751	2537.82531	2048.21385	546.4554	5961.9476	4476.52798	3055.20682	0.38297	0.3905	3.71E-03	3.11E-03	8.53E-04	5.08E-03	9.93E-04	1.93E-03	2.41E-03	1.72E-03	4.59E-04	3.17E-03	1.65E-03	1.12E-03	5.36E-06	6.62E-06	2.6210E-02
551372.66	4173158.46	2801.43973	4262.95706	807.76052	5683.17382	883.87803	4238.85139	2822.46111	2514.57069	457.47047	4974.5897	2672.62067	5178.27546	0.42427	0.42795	4.09E-03	3.71E-03	7.04E-04	3.62E-03	7.09E-04	3.40E-03	2.68E-03	2.11E-03	3.84E-04	2.65E-03	9.83E-04	1.91E-03	5.94E-06	7.25E-06	2.6953E-02
551333.62	4172798.58	2508.13986	3440.49177	998.0621	8077.98665	1318.99914	2323.96263	2502.21388	1976.56185	554.87169	5862.74928	4747.5526	2951.00839	0.38002	0.38823	3.66E-03	3.00E-03	8.69E-04	5.14E-03	1.06E-03	1.86E-03	2.37E-03	1.66E-03	4.66E-04	3.12E-03	1.75E-03	1.09E-03	5.32E-06	6.58E-06	2.6054E-02
551407.55	4172628.59	2683.03647	3062.52443	1110.52494	8162.91013	1584.77189	1947.36966	2673.74643	1764.35021	613.81361	5684.63414	5284.0824	2516.13982	0.33208	0.33872	3.92E-03	2.67E-03	9.67E-04	5.20E-03	1.27E-03	1.56E-03	2.53E-03	1.48E-03	5.15E-04	3.03E-03	1.94E-03	9.26E-04	4.65E-06	5.74E-06	2.6018E-02
551374.67	4172689.94	2533.24347	3263.46488	1028.36773	8182.63348	1452.72038	2099.36028	2526.91506	1872.75673	567.96927	5789.81021	5056.70445	2697.56597	0.35314	0.36089	3.70E-03	2.84E-03	8.96E-04	5.21E-03	1.17E-03	1.68E-03	2.39E-03	1.57E-03	4.77E-04	3.08E-03	1.86E-03	9.93E-04	4.94E-06	6.12E-06	2.5885E-02
551320.45	4173012.29	2733.39275	4309.0018	836.39771	6499.8555	956.16916	3220.74354	2742.65762	2529.07651	474.48259	5475.90888	3240.21353	4043.89788	0.38196	0.38749	3.99E-03	3.75E-03	7.28E-04	4.14E-03	7.67E-04	2.58E-03	2.60E-03	2.12E-03	3.98E-04	2.91E-03	1.19E-03	1.49E-03	5.34E-06	6.57E-06	2.6687E-02
551564.5	4173331.41	3407.13237	4078.42533	747.56784	4043.73414	714.33911	5477.78482	3452.66455	2454.8597	429.63689	3838.09325	1852.13972	6557.59104	0.88486	0.89593	4.97E-03	3.55E-03	6.51E-04	2.57E-03	5.73E-04	4.39E-03	3.27E-03	2.06E-03	3.60E-04	2.04E-03	6.81E-04	2.41E-03	1.24E-05	1.52E-05	2.7577E-02
551604.33	4173342.73	3608.92095	3969.49432	749.37902	3721.91301	685.30057	5679.02603	3661.28223	2383.47836	432.48982	3578.66206	1727.87564	6800.42834	1.28093	1.30928	5.27E-03	3.46E-03	6.53E-04	2.37E-03	5.50E-04	4.56E-03	3.47E-03	2.00E-03	3.63E-04	1.90E-03	6.36E-04	2.50E-03	1.79E-05	2.22E-05	2.7769E-02
551347.98	4172756.83	2485.88521	3372.88023	1004.1882	8028.37754	1375.02101	2251.44343	2479.56119	1937.17127	556.1885	5764.26625	4857.72666	2866.42481	0.36912	0.37732	3.63E-03	2.94E-03	8.75E-04	5.11E-03	1.10E-03	1.81E-03	2.35E-03	1.63E-03	4.67E-04	3.07E-03	1.79E-03	1.05E-03	5.16E-06	6.39E-06	2.5826E-02
551734	4172617.51	5342.86268	2059.83374	1687.62449	5313.35842	2524.52864	1383.12857	5288.27582	1217.70772	898.91697	3672.362	5714.76399	1861.30604	0.2394	0.24492	7.80E-03	1.79E-03	1.47E-03	3.38E-03	2.03E-03	1.11E-03	5.01E-03	1.02E-03	7.54E-04	1.95E-03	2.10E-03	6.85E-04	3.35E-06	4.15E-06	2.9119E-02
551376.24	4173168.42	2791.36007	4226.23624	802.95019	5583.07065	871.43277	4225.81933	2812.22823	2493.05821	455.04348	4911.52567	2614.0739	5159.10502	0.42307	0.42716	4.07E-03	3.68E-03	6.99E-04	3.56E-03	6.99E-04	3.39E-03	2.67E-03	2.09E-03	3.82E-04	2.61E-03	9.62E-04	1.90E-03	5.92E-06	7.24E-06	2.6726E-02
551502.13	4173297.03	3167.43519	4144.1588	745.46856	4524.48527	764.89461	5074.2439	3200.95309	2495.92687	427.09547	4147.15007	2090.38337	6105.14756	0.61902	0.62436	4.62E-03	3.61E-03	6.49E-04	2.88E-03	6.14E-04	4.07E-03	3.03E-03	2.09E-03	3.58E-04	2.21E-03	7.69E-04	2.25E-03	8.66E-06	1.06E-05	2.7176E-02
551714.28	4172607.25	5301.90153	2116.07279	1785.56601	5000.08342	2647.79154	1427.49087	5246.22668	1255.54656	947.99975	3678.4681	5548.1717	1923.07345	0.21319	0.21738	7.74E-03	1.84E-03	1.56E-03	3.18E-03	2.12E-03	1.15E-03	4.97E-03	1.05E-03	7.95E-04	1.96E-03	2.04E-03	7.08E-04	2.98E-06	3.68E-06	2.9125E-02
551418.77	4173228.26	2905.89468	4289.81177	796.4555	5174.06498	830.77032	4447.16592	2927.75141	2553.78575	453.20442	4676.70303	2383.63312	5415.07487	0.46383	0.46753	4.24E-03	3.74E-03	6.94E-04	3.29E-03	6.67E-04	3.57E-03	2.77E-03	2.14E-03	3.80E-04	2.49E-03	8.77E-04	1.99E-03	6.49E-06	7.92E-06	2.6872E-02
551335.72	4172788.79	2485.11357	3391.79031	991.8671	7977.15776	1320.93938	2292.17455	2479.11248	1948.81722	550.97513	5774.70503	4726.6171	2911.59178	0.37339	0.38149	3.63E-03	2.95E-03	8.64E-04	5.08E-03	1.06E-03	1.84E-03	2.35E-03	1.64E-03	4.62E-04	3.07E-03	1.74E-03	1.07E-03	5.22E-06	6.46E-06	2.5767E-02
551660.21	4173343.57	4092.18687	3744.15459	740.4474	3326.55191	652.57926	5728.94665	4159.67422	2219.70819	430.3791	3208.34311	1594.91959	6907.77067	3.87928	4.13047	5.97E-03	3.26E-03	6.45E-04	2.12E-03	5.24E-04	4.60E-03	3.94E-03	1.86E-03	3.61E-04	1.71E-03	5.87E-04	2.54E-03	5.43E-05	7.00E-05	2.8244E-02
551437.01	4173246.54	2957.48215	4279.40625	783.97771	5015.98267	815.79115	4558.25563	2980.72298	2563.37636	448.04097	4544.0454	2322.31477	5541.41664	0.48983	0.49431	4.32E-03	3.73E-03	6.83E-04	3.19E-03	6.55E-04	3.66E-03	2.83E-03	2.15E-03	3.76E-04	2.42E-03	8.54E-04	2.04E-03	6.85E-06	8.38E-06	2.6912E-02
551586.7	4173340.14	3493.16842	4000.57537	745.74534	3842.21381	694.48291	5554.6885	3542.14476	2405.57822	429.52307	3677.13844	1771.20871	6649.48246	1.05607	1.0724	5.10E-03	3.48E-03	6.50E-04	2.45E-03	5.57E-04	4.46E-03	3.36E-03	2.02E-03	3.60E-04	1.96E-03	6.52E-04	2.45E-03	1.48E-05	1.82E-05	2.7517E-02
551647.17	4173345.46	3951.75847	3793.7761	742.96502	3388.42631	658.2265	5737.76892	4014.60341	2257.4364	431.18055	3285.2801	1618.80078	6904.44826	2.71281	2.84356	5.77E-03	3.30E-03	6.47E-04	2.16E-03	5.28E-04	4.60E-03	3.80E-03	1.89E-03	3.62E-04	1.75E-03	5.96E-04	2.54E-03	3.80E-05	4.82E-05	2.8040E-02
551317.23	4173003.32	2703.19662	4233.14818	837.63697	6505.1815	955.56249	3124.30275	2711.33393	2478.68968	475.18956	5475.986	3247.64727	3926.97755	0.37685	0.38247	3.95E-03	3.69E-03	7.30E-04	4.14E-03	7.67E-04	2.51E-03	2.57E-03	2.08E-03	3.99E-04	2.91E-03	1.19E-03	1.44E-03	5.27E-06	6.48E-06	2.6392E-02
551673.25	4173341.67	4227.69994	3675.52531	734.2673	3257.43334	645.34578	5662.0103	4300.22013	2170.34511	427.38962	3122.89257	1568.23907	6843.36848	6.11904	6.70172	6.17E-03	3.20E-03	6.40E-04	2.07E-03	5.18E-04	4.54E-03	4.08E-03	1.82E-03	3.59E-04	1.66E-03	5.77E-04	2.52E-03	8.56E-05	1.14E-04	2.8358E-02
551316.94	4172866.98	2532.72469	3601.55862	951.05911	7672.24579	1164.42401	2436.79049	2529.77086	2069.7877	532.11152	5878.27012	4180.00126	3091.05724	0.37377	0.38064	3.70E-03	3.14E-03	8.28E-04	4.89E-03	9.34E-04	1.96E-03	2.40E-03	1.74E-03	4.46E-04	3.13E-03	1.54E-03	1.14E-03	5.23E-06	6.45E-06	2.5833E-02
551511.59	4173305.94	3187.22157	4100.29161	739.80859	4416.14692	751.17787	5096.40058	3222.52969	2467.51966	423.9053	4072.46813	2033.71193	6127.01011	0.64067	0.64679	4.65E-03	3.57E-03	6.44E-04	2.81E-03	6.03E-04	4.09E-03	3.05E-03	2.07E-03	3.56E-04	2.17E-03	7.48E-04	2.25E-03	8.96E-06	1.10E-05	2.7042E-02
551379.33	4173177	2780.84581	4190.91702	796.8543	5492.29617	860.13625	4204.96453	2801.53886	2472.88876	452.33002	4870.55713	2563.92887	5131.81782	0.42166	0.42542	4.06E-03	3.65E-03	6.94E-04	3.50E-03	6.90E-04	3.37E-03	2.66E-03	2.07E-03	3.80E-04	2.59E-03	9.43E-04	1.89E-03	5.90E-06	7.21E-06	2.6511E-02
551634.13	4173347.36	3815.07116	3825.84974	742.07927	3442.46881	662.23806	5693.0983	3873.73171	2283.23782	429.94032	3352.72595	1639.32355	6840.72152	1.99232	2.07017	5.57E-03	3.33E-03	6.46E-04	2.19E-03	5.31E-04	4.57E-03	3.67E-03	1.92E-03	3.61E-04	1.78E-03	6.03E-04	2.52E-03	2.79E-05	3.51E-05	2.7754E-02
551343.68	4172765.19	2467.65263	3347.52384	992.56146	7918.06172	1348.03161	2248.53458	2461.47786	1923.32429	550.19689	5702.01498	4768.02665	2860.13688	0.36587	0.37391	3.60E-03	2.92E-03	8.64E-04	5.04E-03	1.08E-03	1.80E-03	2.33E-03	1.61E-03	4.62E-04	3.04E-03	1.75E-03	1.05E-03	5.12E-06	6.34E-06	2.5571E-02
551541.87	4173322.27	3274.59539	4045.72569	737.32445	4191.70822	728.22607	5249.61597	3315.57702	2437.258	422.91416	3919.70132	1924.84701	6290.59717	0.75217	0.7598	4.78E-03	3.52E-03	6.42E-04	2.67E-03	5.84E-04	4.21E-03	3.14E-03	2.04E-03	3.55E-04	2.09E-03	7.08E-04	2.31E-03	1.05E-05	1.29E-05	2.7086E-02
551368.51	4172696.82	2489.77768	3237.63589	1007.37533	7999.52104	1418.80485	2095.55532	2483.67888	1857.80027	556.43519	5687.70266	4923.657	2688.84372	0.34843	0.35603	3.63E-03	2.82E-03	8.77E-04	5.09E-03	1.14E-03	1.68E-03	2.35E-03	1.56E-03	4.67E-04	3.03E-03	1.81E-03	9.89E-04	4.88E-06	6.03E-06	2.5464E-02
551686.3	4173339.77	4373.32885	3601.91652	725.24238	3183.54523	636.8128	5563.87228	4451.70273	2116.72626	422.72933	3036.99653	1538.25327	6744.57194	11.59345	13.35081	6.38E-03	3.14E-03	6.32E-04	2.03E-03	5.11E-04	4.46E-03	4.22E-03	1.78E-03	3.55E-04	1.62E-03	5.66E-04	2.48E-03	1.62E-04	2.26E-04	2.8557E-02
551450.51	4173260.59	2970.79752	4197.55761	766.01542	4854.60759	797.78171	4596.2762	2995.31112	2524.52319	438.28019	4385.98137	2262.402	5577.60098	0.50474	0.50857	4.34E-03	3.66E-03	6.67E-04	3.09E-03	6.40E-04	3.69E-03	2.84E-03	2.12E-03	3.68E-04	2.33E-03	8.32E-04	2.05E-03	7.06E-06	8.62E-06	2.6638E-02
551314	4172994.36	2675.36184	4158.23925	840.78253	6525.47794	957.44722	3034.17295	2682.39352	2429.09012	476.91543	5483.70287	3261.54843	3817.56447	0.37299	0.37844	3.91E-03	3.62E-03	7.32E-04	4.16E-03	7.68E-04	2.43E-03	2.54E-03	2.04E-03	4.00E-04	2.92E-03	1.20E-03	1.40E-03	5.22E-06	6.41E-06	2.6132E-02
551337.01	4173087.32	2709.52922	4207.86304	781.72604	5875.76641	903.61387	3709.61426	2726.85669	2493.56108	442.25858	4960.69767	2908.77287	4594.46915	0.38507	0.38966	3.96E-03	3.66E-03	6.81E-04	3.74E-03	7.25E-04	2.98E-03	2.58E-03	2.09E-03	3.71E-04	2.64E-03	1.07E-03	1.69E-03	5.39E-06	6.60E-06	2.6204E-02
551382.42	4173185.59	2770.34262	4154.97572	790.26158	5399.42749	848.40202	4213.8053	2790.8409	2467.28684	448.82749	4801.71692	2513.46766	5098.86632	0.41852	0.42186	4.04E-03	3.62E-03	6.88E-04	3.44E-03	6.81E-04	3.38E-03	2.65E-03	2.07E-03	3.77E-04	2.56E-03	9.25E-04	1.88E-03	5.86E-06	7.15E-06	2.6312E-02
551469.63	4173278.6	3033.66438	4147.55542	750.94684	4683.19591	778.56172	4740.63587	3060.98898	2496.26488	430.04596	4251.80641	2174.39533	5737.3449	0.53531	0.54006	4.43E-03	3.61E-03	6.54E-04	2.98E-03	6.25E-04	3.80E-03	2.90E-03	2.09E-03	3.61E-04	2.26E-03	8.00E-04	2.11E-03	7.49E-06	9.15E-06	2.6652E-02
551397.67	4172635.12	2604.61466	3033.18122	1067.63105	7978.20453	1514.87483	1934.94823	2596.53627	1746.66379	590.09541	5577.39671	5102.33565	2498.4807	0.32684	0.33346	3.80E-03	2.64E-03	9.30E-04	5.08E-03	1.22E-03	1.55E-03	2.46E-03	1.47E-03	4.95E-04	2.97E-03	1.88E-03	9.19E-04	4.57E-06	5.65E-06	2.5419E-02
551333.79	4173078.36	2704.09841	4213.42554	781.66668	5905.35191	903.83895	3635.89974	2720.58951	2497.8844	442.36705	4976.85041	2933.71416	4512.45513	0.3806	0.38524	3.95E-03	3.67E-03	6.81E-04	3.76E-03	7.25E-04	2.92E-03	2.58E-03	2.10E-03	3.71E-04	2.65E-03	1.08E-03	1.66E-03	5.33E-06	6.53E-06	2.6146E-02
551312.67	4172901.12	2553.30931	3727.05373	922.46685	7308.82275	1079.29831	2538.35581	2552.41363	2146.13282	518.65437	5819.43576	3828.69353	3216.65001	0.36916	0.37555	3.73E-03	3.25E-03	8.03E-04	4.65E-03	8.66E-04	2.04E-03	2.42E-03	1.80E-03	4.35E-04	3.10E-03	1.41E-03	1.18E-03	5.17E-06	6.36E-06	2.5689E-02
551330.56	4173069.41	2702.37984	4223.40585	783.95391	5948.45593	906.36919	3563.83817	2717.93353	2503.24547	443.80456	5009.72377	2961.15016	4432.09635	0.3785	0.38281	3.94E-03	3.68E-03	6.83E-04	3.79E-03	7.27E-04	2.86E-03	2.58E-03	2.10E-03	3.72E-04	2.67E-03	1.09E-03	1.63E-03	5.30E-06	6.49E-06	2.6127E-02
551351.54	4173128.26	2708.0692	4121.98434	781.53633	5691.62681	879.18068	3940.23434	2727.68735	2433.83646	441.86513	4866.38866	2740.57481	4837.98806	0.39531	0.3996	3.95E-03	3.59E-03	6.81E-04	3.62E-03	7.05E-04	3.16E-03	2.59E-03	2.04E-03	3.71E-04	2.59E-03	1.01E-03	1.78E-03	5.53E-06	6.77E-06	2.6104E-02
551345.62	4173111.52	2697.16123	4133.91124	776.91455	5733.84522	888.53357	3849.53767	2716.15532	2446.30576	439.24037	4872.42791	2822.46102	4740.91009	0.38975	0.39371	3.94E-03	3.60E-03	6.77E-04	3.65E-03	7.13E-04	3.09E-03	2.57E-03	2.05E-03	3.69E-04	2.59E-03	1.04E-03	1.74E-03	5.45E-06	6.67E-06	2.6050E-02
551327.34	4173060.46	2696.11093	4221.20621	785.81408	5983.70094	907.92104	3485.13595	2710.62881	2500.67357	445.02224	5037.58196	2985.95638	4342.56858	0.37598	0.38038	3.94E-03	3.68E-03	6.84E-04	3.81E-03	7.28E-04	2.80E-03	2.57E-03	2.10E-03	3.73E-04	2.68E-03	1.10E-03	1.60E-03	5.26E-06	6.45E-06	2.6061E-02
551422.27	4173237.04	2869.69503	4187.1082	778.59079	5029.71374	814.54535	4359.5026	2891.336	2498.81703	444.31425	4538.68091	2333.32328	5308.18657	0.46205	0.46621	4.19E-03	3.65E-03	6.78E-04	3.20E-03	6.54E-04	3.50E-03	2.74E-03	2.10E-03	3.73E-04	2.42E-03	8.59E-04	1.95E-03	6.47E-06	7.90E-06	2.6319E-02
551321.35	4172827.73	2466.81377	3401.80702	955.89778	7705.28088	1225.04938	2309.53537	2462.15301	1955.36172	533.02244	5711.95977	4395.01965	2930.66021	0.36672	0.37402	3.60E-03	2.96E-03	8.33E-04	4.91E-03	9.83E-04	1.85E-03	2.33E-03	1.64E-03	4.47E-04	3.04E-03	1.62E-03	1.08E-03	5.13E-06	6.34E-06	2.5307E-02

551574.09	4173340.44	3374.58985	3943.92965	733.36668	3876.10855	693.58846	5339.20793	3420.51818	2372.6961	421.77841	3688.53605	1784.61638	6395.62698	0.91895	0.93069	4.93E-03	3.44E-03	6.39E-04	2.47E-03	5.56E-04	4.28E-03	3.24E-03	1.99E-03	3.54E-04	1.96E-03	6.57E-04	2.35E-03	1.29E-05	1.58E-05	2.6896E-02
551360.15	4172712.05	2452.66537	3239.72243	990.16754	7851.52404	1387.20742	2118.02411	2446.67683	1859.16131	547.12683	5613.45487	4808.67466	2710.71965	0.34787	0.35548	3.58E-03	2.82E-03	8.62E-04	5.00E-03	1.11E-03	1.70E-03	2.32E-03	1.56E-03	4.59E-04	2.99E-03	1.77E-03	9.97E-04	4.87E-06	6.02E-06	2.5179E-02
551324.11	4173051.51	2685.19474	4206.17334	787.24756	6010.94134	908.5335	3401.07675	2698.65781	2489.49114	445.98935	5060.06945	3008.03063	4245.39158	0.37292	0.37739	3.92E-03	3.66E-03	6.86E-04	3.83E-03	7.29E-04	2.73E-03	2.56E-03	2.09E-03	3.74E-04	2.69E-03	1.11E-03	1.56E-03	5.22E-06	6.40E-06	2.5948E-02
551315.26	4172856.65	2485.70663	3491.36548	939.43868	7559.18161	1165.28304	2367.53644	2482.37893	2006.74704	525.09513	5740.43828	4172.72964	3003.69037	0.36534	0.37212	3.63E-03	3.04E-03	8.18E-04	4.81E-03	9.35E-04	1.90E-03	2.35E-03	1.68E-03	4.41E-04	3.06E-03	1.54E-03	1.11E-03	5.11E-06	6.31E-06	2.5320E-02
551310.78	4172985.39	2642.17695	4071.60526	842.19982	6528.22585	957.99139	2942.78357	2648.13737	2373.42407	477.60605	5473.12279	3270.47694	3706.06477	0.36818	0.37389	3.86E-03	3.55E-03	7.34E-04	4.16E-03	7.69E-04	2.36E-03	2.51E-03	1.99E-03	4.01E-04	2.91E-03	1.20E-03	1.36E-03	5.15E-06	6.34E-06	2.5817E-02
551355.83	4172720.45	2440.75679	3245.05652	985.08769	7807.60434	1375.41278	2133.0059	2434.75554	1862.53338	544.49567	5591.82595	4772.38412	2726.3229	0.34901	0.35666	3.56E-03	2.83E-03	8.58E-04	4.97E-03	1.10E-03	1.71E-03	2.31E-03	1.56E-03	4.57E-04	2.98E-03	1.76E-03	1.00E-03	4.88E-06	6.04E-06	2.5107E-02
551385.51	4173194.17	2759.31221	4117.03573	783.13242	5304.07049	836.41407	4179.57632	2779.57473	2443.3721	444.99135	4729.64696	2463.24606	5060.42992	0.41605	0.41961	4.03E-03	3.59E-03	6.82E-04	3.38E-03	6.71E-04	3.35E-03	2.63E-03	2.05E-03	3.73E-04	2.52E-03	9.06E-04	1.86E-03	5.82E-06	7.11E-06	2.6054E-02
551479.19	4173287.61	3035.87787	4067.43684	737.68481	4565.39196	765.66303	4754.3102	3064.65415	2449.28651	422.50726	4146.23136	2126.6734	5743.67102	0.54878	0.55364	4.43E-03	3.54E-03	6.43E-04	2.91E-03	6.14E-04	3.81E-03	2.90E-03	2.06E-03	3.55E-04	2.21E-03	7.82E-04	2.11E-03	7.68E-06	9.38E-06	2.6386E-02
551357.46	4173145	2701.09556	4079.15817	780.06691	5563.80411	866.193	3979.02917	2720.96927	2405.69891	441.24698	4812.45141	2653.8694	4874.30288	0.3987	0.40218	3.94E-03	3.55E-03	6.79E-04	3.54E-03	6.95E-04	3.19E-03	2.58E-03	2.02E-03	3.70E-04	2.56E-03	9.76E-04	1.79E-03	5.58E-06	6.82E-06	2.5916E-02
551351.51	4172728.86	2431.96712	3249.87919	981.47275	7777.59551	1364.80029	2147.83249	2425.93542	1865.79159	542.72061	5577.07735	4745.16082	2741.85193	0.3506	0.3583	3.55E-03	2.83E-03	8.55E-04	4.95E-03	1.09E-03	1.72E-03	2.30E-03	1.57E-03	4.55E-04	2.97E-03	1.75E-03	1.01E-03	4.91E-06	6.07E-06	2.5060E-02
551668.78	4172571.41	4688.72394	2195.98789	1808.73636	4842.23514	2786.56271	1480.55473	4640.57661	1310.07397	962.56224	3819.54173	5313.61029	1988.21812	0.17979	0.18152	6.84E-03	1.91E-03	1.58E-03	3.08E-03	2.24E-03	1.19E-03	4.40E-03	1.10E-03	8.08E-04	2.03E-03	1.96E-03	7.32E-04	2.52E-06	3.08E-06	2.7869E-02
551320.89	4173042.56	2675.70788	4189.2976	790.52496	6049.74954	910.42472	3319.91525	2688.06341	2475.73549	448.02717	5094.20486	3032.17617	4150.98231	0.37035	0.37488	3.91E-03	3.65E-03	6.89E-04	3.85E-03	7.30E-04	2.66E-03	2.55E-03	2.08E-03	3.76E-04	2.71E-03	1.12E-03	1.53E-03	5.18E-06	6.35E-06	2.5856E-02
551322.06	4172818.27	2447.6757	3354.54487	954.33793	7670.95279	1234.26297	2279.86952	2442.72721	1928.39877	531.72278	5653.12796	4418.3277	2893.31875	0.36365	0.37102	3.57E-03	2.92E-03	8.31E-04	4.88E-03	9.90E-04	1.83E-03	2.32E-03	1.62E-03	4.46E-04	3.01E-03	1.63E-03	1.06E-03	5.09E-06	6.29E-06	2.5119E-02
551608.04	4173351.15	3536.75488	3814.87014	729.30649	3521.14962	664.93062	5429.82566	3587.8757	2286.67916	421.08275	3442.9421	1670.56911	6514.74446	1.26329	1.28773	5.16E-03	3.32E-03	6.35E-04	2.24E-03	5.33E-04	4.36E-03	3.40E-03	1.92E-03	3.53E-04	1.83E-03	6.15E-04	2.40E-03	1.77E-05	2.18E-05	2.6808E-02
551317.66	4173033.6	2657.89296	4152.46837	791.98795	6069.12692	910.3348	3231.72597	2669.18063	2449.55227	449.00668	5111.20373	3051.40442	4046.85028	0.36665	0.37122	3.88E-03	3.62E-03	6.90E-04	3.86E-03	7.30E-04	2.59E-03	2.53E-03	2.06E-03	3.77E-04	2.72E-03	1.12E-03	1.49E-03	5.13E-06	6.29E-06	2.5679E-02
551347.19	4172737.26	2415.16777	3235.9144	972.65655	7690.35862	1344.70982	2153.00458	2409.18664	1858.56493	538.16061	5526.29968	4679.56162	2745.18939	0.34913	0.35676	3.53E-03	2.82E-03	8.47E-04	4.90E-03	1.08E-03	1.73E-03	2.28E-03	1.56E-03	4.52E-04	2.94E-03	1.72E-03	1.01E-03	4.89E-06	6.05E-06	2.4873E-02
551309.31	4172880.55	2489.26255	3553.76002	919.38787	7322.16214	1108.13698	2415.65161	2487.22437	2044.39015	515.17282	5695.55245	3940.86204	3063.19484	0.3616	0.368	3.63E-03	3.10E-03	8.01E-04	4.66E-03	8.89E-04	1.94E-03	2.36E-03	1.72E-03	4.32E-04	3.03E-03	1.45E-03	1.13E-03	5.06E-06	6.24E-06	2.5144E-02
551551.57	4173331.41	3231.86873	3913.89045	722.91043	4030.67453	708.70567	5116.2047	3273.58241	2359.39617	414.7424	3776.38538	1857.6477	6128.94129	0.77505	0.78343	4.72E-03	3.41E-03	6.30E-04	2.57E-03	5.69E-04	4.10E-03	3.10E-03	1.98E-03	3.48E-04	2.01E-03	6.83E-04	2.26E-03	1.08E-05	1.33E-05	2.6399E-02
551307.55	4172976.43	2607.65168	3980.89934	843.27798	6527.22221	958.96187	2853.80229	2612.61395	2316.13603	478.01927	5453.96694	3280.30366	3597.21262	0.36303	0.36802	3.81E-03	3.47E-03	7.34E-04	4.16E-03	7.69E-04	2.29E-03	2.48E-03	1.94E-03	4.01E-04	2.90E-03	1.21E-03	1.32E-03	5.08E-06	6.24E-06	2.5489E-02
551322.77	4172808.8	2424.1755	3301.79362	949.74338	7600.47341	1238.34074	2247.0326	2419.02155	1898.2807	528.72787	5574.84837	4416.6192	2852.06536	0.35878	0.36615	3.54E-03	2.88E-03	8.27E-04	4.84E-03	9.94E-04	1.80E-03	2.29E-03	1.59E-03	4.44E-04	2.97E-03	1.63E-03	1.05E-03	5.02E-06	6.20E-06	2.4859E-02
551658.01	4172564.49	4521.54807	2208.6355	1777.94007	4860.58778	2755.36155	1487.98641	4476.15294	1318.37644	948.25351	3856.21709	5235.23904	1995.05954	0.17635	0.17778	6.60E-03	1.92E-03	1.55E-03	3.09E-03	2.21E-03	1.19E-03	4.24E-03	1.11E-03	7.96E-04	2.05E-03	1.93E-03	7.34E-04	2.47E-06	3.01E-06	2.7434E-02
551388.6	4173202.76	2742.65737	4067.79203	774.88182	5199.52312	824.45307	4135.22677	2762.67172	2415.6138	440.53263	4649.65208	2415.01072	5007.09957	0.41362	0.41707	4.00E-03	3.54E-03	6.75E-04	3.31E-03	6.61E-04	3.32E-03	2.62E-03	2.03E-03	3.70E-04	2.47E-03	8.89E-04	1.84E-03	5.79E-06	7.07E-06	2.5745E-02
551488.76	4173296.61	3030.46033	3977.97279	724.3157	4443.36358	752.14297	4746.87916	3060.7745	2395.86363	414.82083	4038.66386	2072.45806	5724.85197	0.56246	0.56752	4.42E-03	3.46E-03	6.31E-04	2.83E-03	6.03E-04	3.81E-03	2.90E-03	2.01E-03	3.48E-04	2.15E-03	7.63E-04	2.11E-03	7.87E-06	9.62E-06	2.6055E-02
551373.18	4172676.87	2460.28497	3107.45954	990.18054	7749.95229	1392.20639	2006.94522	2454.42607	1785.18692	547.16725	5502.16944	4792.50653	2580.93793	0.33038	0.33733	3.59E-03	2.71E-03	8.62E-04	4.93E-03	1.12E-03	1.61E-03	2.33E-03	1.50E-03	4.59E-04	2.93E-03	1.76E-03	9.50E-04	4.62E-06	5.72E-06	2.4757E-02
551314.44	4173024.65	2639.86675	4110.54847	794.70443	6094.8485	911.33712	3146.44037	2650.0519	2419.64375	450.70136	5133.0814	3053.63489	3945.3756	0.36315	0.3678	3.85E-03	3.58E-03	6.92E-04	3.88E-03	7.31E-04	2.52E-03	2.51E-03	2.03E-03	3.78E-04	2.73E-03	1.12E-03	1.45E-03	5.08E-06	6.23E-06	2.5501E-02
551363.37	4173161.74	2672.26748	3997.8235	771.72558	5402.76236	848.61001	3959.09109	2692.06605	2357.64026	436.80506	4706.187	2569.76784	4840.91864	0.3974	0.40142	3.90E-03	3.48E-03	6.72E-04	3.44E-03	6.81E-04	3.18E-03	2.55E-03	1.98E-03	3.67E-04	2.50E-03	9.45E-04	1.78E-03	5.56E-06	6.80E-06	2.5492E-02
551323.88	4172797.11	2406.5848	3261.76214	949.22856	7572.79284	1250.76815	2219.24807	2401.16429	1875.14122	527.85827	5522.10707	4446.95603	2817.63412	0.35581	0.36325	3.51E-03	2.84E-03	8.27E-04	4.82E-03	1.00E-03	1.78E-03	2.28E-03	1.57E-03	4.43E-04	2.94E-03	1.64E-03	1.04E-03	4.98E-06	6.16E-06	2.4702E-02
551955.01	4173205.79	4827.05793	3359.40559	572.31029	2534.5756	494.00964	5640.76166	4967.89098	1918.08606	335.17038	2515.62501	1188.40654	6867.45414	0.39872	0.39186	7.05E-03	2.93E-03	4.98E-04	1.61E-03	3.96E-04	4.53E-03	4.71E-03	1.61E-03	2.81E-04	1.34E-03	4.37E-04	2.53E-03	5.58E-06	6.64E-06	2.7920E-02
551387.79	4172641.64	2517.26665	2985.9753	1021.01363	7714.53377	1440.36411	1914.46259	2510.28732	1718.93634	564.39838	5424.11063	4876.7172	2470.08699	0.31823	0.32467	3.67E-03	2.60E-03	8.89E-04	4.91E-03	1.16E-03	1.54E-03	2.38E-03	1.44E-03	4.74E-04	2.89E-03	1.79E-03	9.09E-04	4.45E-06	5.50E-06	2.4663E-02
551651.45	4173353.8	3841.98006	3605.76876	717.36317	3249.47296	636.34761	5387.20342	3902.76374	2142.82959	416.3174	3139.37891	1562.3872	6497.4863	2.70508	2.83332	5.61E-03	3.14E-03	6.25E-04	2.07E-03	5.11E-04	4.32E-03	3.70E-03	1.80E-03	3.49E-04	1.67E-03	5.75E-04	2.39E-03	3.79E-05	4.80E-05	2.6844E-02
551313.57	4172846.32	2433.23248	3374.70567	924.1046	7397.79288	1159.0291	2295.90464	2429.62111	1940.36517	516.13595	5577.29954	4132.17056	2913.11466	0.35496	0.3616	3.55E-03	2.94E-03	8.05E-04	4.71E-03	9.30E-04	1.84E-03	2.30E-03	1.63E-03	4.33E-04	2.97E-03	1.52E-03	1.07E-03	4.97E-06	6.13E-06	2.4714E-02
551304.32	4172967.46	2571.05321	3886.2348	843.43496	6517.84941	959.87994	2766.61077	2575.10249	2257.26565	477.83664	5423.23228	3289.51868	3490.31218	0.35747	0.36266	3.75E-03	3.38E-03	7.35E-04	4.15E-03	7.70E-04	2.22E-03	2.44E-03	1.89E-03	4.01E-04	2.89E-03	1.21E-03	1.28E-03	5.00E-06	6.15E-06	2.5140E-02
551664.64	4173351.88	3973.09165	3551.48383	713.53445	3187.42321	630.30184	5357.76711	4038.35068	2102.77257	414.71918	3062.29926	1538.26592	6475.70623	3.92974	4.18403	5.80E-03	3.09E-03	6.21E-04	2.03E-03	5.06E-04	4.30E-03	3.83E-03	1.76E-03	3.48E-04	1.63E-03	5.66E-04	2.38E-03	5.50E-05	7.09E-05	2.6992E-02
551561.27	4173340.55	3241.57557	3848.73075	716.74643	3891.58633	690.78789	5079.51063	3284.35685	2317.02681	411.60655	3672.08073	1795.32837	6089.16871	0.80732	0.81751	4.73E-03	3.35E-03	6.24E-04	2.48E-03	5.54E-04	4.08E-03	3.11E-03	1.94E-03	3.45E-04	1.95E-03	6.61E-04	2.24E-03	1.13E-05	1.39E-05	2.6098E-02
551638.27	4173355.72	3714.8314	3645.30834	717.95013	3304.5546	640.89312	5369.9759	3771.64288	2172.72603	416.01512	3208.7494	1583.39918	6466.40606	1.96946	2.04756	5.42E-03	3.17E-03	6.25E-04	2.10E-03	5.14E-04	4.31E-03	3.57E-03	1.82E-03	3.49E-04	1.71E-03	5.83E-04	2.38E-03	2.76E-05	3.47E-05	2.6628E-02
551498.32	4173305.62	3034.62616	3911.00912	714.85018	4333.43563	738.8779	4748.14279	3066.56375	2354.58527	409.36762	3951.63533	2018.10283	5718.95106	0.57849	0.58361	4.43E-03	3.41E-03	6.23E-04	2.76E-03	5.93E-04	3.81E-03	2.91E-03	1.98E-03	3.43E-04	2.10E-03	7.43E-04	2.10E-03	8.09E-06	9.89E-06	2.5814E-02
551399.76	4172622.17	2564.6168	2914.26491	1048.50023	7623.75824	1484.71516	1868.08879	2556.28168	1679.83329	579.83918	5349.38298	4906.7541	2412.4958	0.30995	0.31597	3.74E-03	2.54E-03	9.13E-04	4.85E-03	1.19E-03	1.50E-03	2.42E-03	1.41E-03	4.87E-04	2.85E-03	1.81E-03	8.88E-04	4.34E-06	5.35E-06	2.4608E-02
551342.86	4172745.67	2386.03346	3195.94892	956.14402	7519.60592	1311.58154	2144.31688	2380.24776	1836.72816	529.44117	5423.67307	4558.17994	2730.91473	0.34327	0.35066	3.48E-03	2.78E-03	8.33E-04	4.79E-03	1.05E-03	1.72E-03	2.26E-03	1.54E-03	4.44E-04	2.89E-03	1.68E-03	1.00E-03	4.80E-06	5.94E-06	2.4481E-02
551311.19	4173015.62	2611.46342	4045.51692	794.51698	6091.13033	909.30171	3053.53409	2620.56238	2376.32312	450.66112	5129.65389	3056.70311	3833.22506	0.35809	0.36277	3.81E-03	3.52E-03	6.92E-04	3.88E-03	7.30E-04	2.45E-03	2.48E-03	1.99E-03	3.78E-04	2.73E-03	1.12E-03	1.41E-03	5.01E-06	6.15E-06	2.5218E-02
551583.68	4173349.48	3335.45332	3799.38129	717.72058	3707.78239	672.40212	5178.8031	3381.41051	2284.20109	413.08948	3534.46772	1718.01229	6209.43003	0.95281	0.96712	4.87E-03	3.31E-03	6.25E-04	2.36E-03	5.39E-04	4.15E-03	3.20E-03	1.92E-03	3.47E-04	1.88E-03	6.32E-04	2.28E-03	1.33E-05	1.64E-05	2.6154E-02
551428.05	4173250.63	2822.07999	4038.32432	754.09089	4822.69642	788.46581	4244.06971	2843.58759	2417.8856	430.71416	4337.54714	2254.97525	5166.85016	0.45654	0.45983	4.12E-03	3.52E-03	6.57E-04	3.07E-03	6.33E-04	3.40E-03	2.70E-03	2.03E-03	3.61E-04	2.31E-03	8.30E-04	1.90E-03	6.39E-06	7.79E-06	2.5541E-02
551325.99	4172787.28	2386.8404	3220.34512	944.56034	7493.52019	1253.88086	2192.41181	2381.3234	1851.51004	524.84224	5449.3693	4435.15335	2784.29272	0.35041	0.35777	3.48E-03	2.80E-03	8.23E-04	4.77E-03	1.01E-03	1.76E-03	2.26E-03	1.55E-03	4.40E-04	2.90E-03	1.63E-03	1.02E-03	4.90E-06	6.06E-06	2.4467E-02
551366.97	4173171.75	2655.90562	3952.34515	766.29084	5304.65953	837.61605	3936.11379	2675.53461	2331.47296	433.96815	4639.84782	2518.80779	4809.28925	0.39671	0.40063	3.88E-03	3.44E-03	6.67E-04	3.38E-03	6.72E-04	3.16E-03	2.54E-03	1.96E-03	3.64E-04	2.47E-03	9.27E-04	1.77E-03	5.55E-06	6.79E-06	2.5229E-02
551391.69	4173211.35	2720.21543	4007.3058	765.53552	5086.51079	812.53285	4047.5506	2739.93121	2371.79664	435.44225	4562.18768	2368.77703	4939.14469	0.41336	0.41615	3.97E-03	3.49E-03	6.67E-04	3.24E-03	6.52E-04	3.25E-03	2.60E-03	1.99E-03	3.65E-04	2.43E-03	8.72E-04	1.82E-03	5.78E-06	7.05E-06	2.5348E-02
551367.01	4172683.76	2418.89382	3088.53113	970.40217	7594.19607	1361.40673	2005.31659	2413.27484	1773.89373	536.24877	5416.91799	4675.71948	2575.4586	0.32678	0.33364	3.53E-03	2.69E-03	8.45E-04	4.84E-03	1.09E-03	1.61E-03	2.29E-03	1.49E-03	4.50E-04	2.88E-03	1.72E-03	9.48E-04	4.57E-06	5.65E-06	2.4390E-02
551677.83	4173349.97	4097.63768	3479.88521	706.19348	3118.66997	622.69716	5276.45936	4167.69749	2052.3341	410.99438	2977.79602	1511.36923	6392.95294	6.3722	7.002	5.98E-03	3.03E-03	6.15E-04	1.99E-03	5.00E-04	4.23E-03	3.95E-03	1.72E-03	3.45E-04	1.59E-03	5.56E-04	2.35E-03	8.92E-05	1.19E-04	2.7064E-02
551595	4173353.05	3378.93363	3752.70555	715.95457	3611.54326	663.01752	5197.91139	3426.3522	2254.40289	412.56178	3452.89241	1681.49562	6234.79758	1.0498	1.06524	4.93E-03	3.27E-03	6.24E-04	2.30E-03	5.32E-04	4.17E-03	3.25E-03	1.89E-03	3.46E-04	1.84E-03	6.19E-04	2.29E-03	1.47E-05	1.81E-05	2.6094E-02
551436.62	4173259.69	2833.04981	4000.00976	744.28796	4734.39819	778.46352	4270.68893	2855.28065	2401.41219	425.4612	4249.43139	2220.48396	5194.18781	0.46482	0.46815	4.14E-03	3.48E-03	6.48E-04	3.01E-03	6.25E-04	3.43E-03	2.71E-03	2.01E-03	3.57E-04	2.26E-03	8.17E-04	1.91E-03	6.50E-06	7.93E-06	2.5415E-02
551307.96	4173006.66	2586.02353	3982.13153	796.52193	6103.39603	909.57404	2967.58586	2594.06196	2333.74117	451.80554	5136.75803	3065.28669	3729.31266	0.35415	0.35871	3.77E-03	3.47E-03	6.94E-04	3.89E-03	7.30E-04	2.38E-03	2.46E-03	1.96E-03	3.79E-04	2.73E-03	1.13E-03	1.37E-03	4.96E-06	6.08E-06	2.4975E-02
551507.88	4173314.63	3042.16827	3855.5431	707.65839	4227.12813	725.37269	4746.47322	3075.67065	2320.01509	405.25694	3873.24103	1964.20674	5711.86256	0.59647	0.60172	4.44E-03	3.36E-03	6.16E-04	2.69E-03	5.82E-04	3.81E-03	2.92E-03	1.95E-03	3.40E-04	2.06E-03	7.23E-04	2.10E-03	8.35E-06	1.02E-05	2.5603E-02
551691.01	4173348.05	4247.48525	3415.36075	696.84666	3047.44179	614.1863	5187.51832	4323.55408	2003.56121	406.12715	2899.16652	1480.82169	6305.73106	12.69787	14.71007	6.20E-03	2.97E-03	6.07E-04	1.94E-03	4.93E-04	4.16E-03	4.10E-03	1.68E-03	3.41E-04	1.54E-03	5.45E-04	2.32E-03	1.78E-04	2.49E-04	2.7331E-02
551307.63	4172870.26	2432.02558	3424.17865	902.516	7167.07315	1099.0667	2332.41382	2429.66706	1969.62948	505.19652	5527.806	3895.37751	2958.81283	0.34959	0.35577	3.55E-03	2.98E-03	7.86E-04	4.56E-03	8.82E-04	1.87E-03	2.30E-03	1.65E-03	4.24E-04	2.94E-03	1.43E-03	1.09E-03	4.89E-06	6.03E-06	2.4489E-02
551338.54	4172754.07	2369.07285	3173.33805	946.15584	7424.66211	1288.53507	2142.75988	2363.38588	1824.46434	524.28576	5367.95767	4483.70463	2726.30166	0.34082	0.34808	3.46E-03	2.76E-03	8.24E-04	4.73E-03	1.03E-03	1.72E-03	2.24E-03	1.53E-03	4.40E-04	2.86E-03	1.65E-03	1.00E-03	4.77E-06	5.90E-06	2.4258E-02
551688.08	4172578.4	4759.04146	2083.53994	1728.55995	4599.34502	2595.55742	1413.11658	4710.46878	1240.25737	919.01063	3579.74973	5070.1397	1900.1364	0.17836	0.18057	6.95E-03	1.81E-03	1.51E-03	2.93E-03	2.08E-03	1.13E-03	4.46E-03	1.04E-03	7.71E-04	1.91E-03	1.87E-03	6.99E-04	2.50E-06	3.06E-06	2.7163E-02
551301.1	4172958.5	2531.20433	3787.54393	841.83238	6492.70003	959.87661	2680.40968	2534.42064	2196.41881	476.54258	5376.32133	3294.9	3384.52281	0.35178	0.3569	3.69E-03	3.30E-03	7.33E-04	4.13E-03	7.70E-04	2.15E-03	2.40E-03	1.84E-03	4.00E-04	2.86E-03	1.21E-03	1.25E-03	4.92E-06	6.05E-06	2.4757E-02
551370.06	4173180.34	2646.17627	3921.82052	761.91668	5223.10458	828.4336	3915.99972	2665.61769	2314.0578	431.74272	4586.81582	2473.30816	4783.274	0.39655	0.39969	3.86E-03	3.42E-03	6.64E-04	3.33E-03	6.65E-04	3.14E-03	2.53E-03	1.94E-03	3.62E-04	2.44E-03	9.10E-04	1.76E-03	5.55E-06	6.77E-06	2.5028E-02
551539.98	4173332.68	3123.78545	3806.34842	705.82612	4006.04618	701.38713	4875.99872	3162.70964	2292.58887	404.62712	3728.57234	1852.10838	5850.50979	0.69835	0.70462	4.56E-03	3.32E-03	6.15E-04	2.55E-03	5.63E-04	3.91E-03	3.00E-03	1.92E-03	3.40E-04	1.98E-03	6.81E-04	2.15E-03	9.77E-06	1.19E-05	2.5616E-02
551327.74	4173090.65	2592.3605	3954.45343	746.70675	5557.70321	863.31716	3497.82737	2608.85896	2342.46919	422.38595	4682.11012	2769.39608	4333.1247	0.36216	0.36638	3.78E-03	3.44E-03	6.50E-04	3.54E-03	6.93E-04	2.81E-03	2.47E-03	1.97E-03	3.54E-04	2.49E-03	1.02E-03	1.59E-03	5.07E-06	6.21E-06	2.4826E-02
551304.74	4172997.69	2561.21917	3916.81884	799.65807	6124.0444	911.50121	2885.72493	2568.21985	2290.22386	453.5304	5146.49075	3078.1198	3630.09867	0.35051	0.3551	3.74E-03	3.41E-03	6.96E-04	3.90E-03	7.31E-04	2.32E-03	2.43E-03	1.92E-03	3.81E-04	2.74E-03	1.13E-03	1.34E-03	4.90E-06	6.02E-06	2.4747E-02
551465.59	4173286.98	2901.34078	3898.47394	717.5806	4464.85172	750.59072	4434.2108	2927.37727	2347.26648	410.82172	4028.49849	2101.68278	5370.2051	0.50243	0.50663	4.23E-03	3.40E-03	6.25E-04	2.84E-03	6.02E-04	3.56E-03	2.77E-03	1.97E-03	3.45E-04	2.14E-03	7.73E-04	1.98E-03	7.03E-06	8.59E-06	2.5256E-02
551324.52	4173081.7	2590.27131	3965.00122	747.54245	5589.50274	865.16268	3435.23639	2606.00527	2349.44479	423.00061	4702.90093	2792.98088	4264.10869	0.35834	0.36259	3.78E-03	3.45E-03	6.51E-04	3.56E-03	6.94E-04	2.76E-03	2.47E-03	1.97E-03	3.55E-04	2.50E-03	1.03E-03	1.57E-03	5.01E-06	6.14E-06	2.4802E-02
551336.34	4173114.81	2589.27068	3904.29776	745.30029	5454.99531	852.92277	3631.75286	2607.25934	2308.69431	421.31009	4626.80677	2696.04633	4475.50547	0.36784	0.37189	3.78E-03	3.40E-03	6.49E-04	3.47E-03	6.84E-04	2.91E-03	2.47E-03	1.94E-03	3.54E-04	2.46E-03	9.92E-04	1.65E-03	5.15E-06	6.30E-06	2.4775E-02
551394.78	4173219.93	2698.51196	3946.82217	755.882	4974.45164	800.38617	3991.10664	2717.96078	2339.18515	430.33613	4447.56934	2322.35746	4870.99914	0.41158	0.41452	3.94E-03	3.44E-03	6.58E-04	3.17E-03	6.42E-04	3.20E-03	2.58E-03	1.96E-03	3.61E-04	2.37E-03	8.54E-04	1.79E-03	5.76E-06	7.02E-06	2.4973E-02
551339.29	4173123.18	2590.2774	3891.10606	746.28664	5421.63539	848.44868	3669.71501	2608.62181	2298.81523	421.82476	4616.62003	2660.83716	4515.2915	0.36981	0.37379	3.78E-03	3.39E-03	6.50E-04	3.45E-03	6.81E-04	2.94E-03	2.47E-03	1.93E-03	3.54E-04	2.46E-03	9.79E-04	1.66E-03	5.17E-06	6.33E-06	2.4761E-02
551373.15	4173188.92	2641.78561	3900.70534	757.84041	5145.83645	818.33659	3899.05895	2661.01713	2301.98915	429.74665	4538.59416	2425.91736	4762.47347	0.39527	0.39876	3.86E-03	3.40E-03	6.60E-04	3.28E-03	6.57E-04	3.13E-03	2.52E-03	1.93E-03	3.61E-04	2.42E-03	8.93E-04	1.75E-03	5.53E-06	6.76E-06	2.4862E-02
551321.3	4173072.75	2586.96825	3971.03908	748.91098	5621.30985	866.69401	3368.41681	2601.8309	2352.85402	423.90503	4726.69952	2815.82151	4189.40359	0.35616	0.36048	3.78E-03	3.46E-03	6.52E-04	3.58E-03	6.95E-04	2.70E-03	2.47E-03	1.97E-03	3.56E-04	2.52E-03	1.04E-03	1.54E-03	4.98E-06	6.11E-06	2.4764E-02
551611.89	4173359.55	3454.43962	3655.85922	708.58585	3387.77168	644.90419	5172.3609	3504.11312	2188.75546	409.19618	3307.52534	1615.98875	6217.07444	1.23666	1.25926	5.04E-03	3.18E-03	6.17E-04	2.16E-03	5.17E-04	4.15E-03	3.32E-03	1.84E-03	3.43E-04	1.76E-03	5.95E-04	2.29E-03	1.73E-05	2.13E-05	2.5850E-02
551517.44	4173323.63	3044.54334	3797.01793	700.64788	4116.00942	711.14811	4726.98077	3079.55627	2284.02842	401.31272	3790.97325	1909.44321	5684.95369	0.61467	0.62044	4.44E-03	3.31E-03	6.10E-04	2.62E-03	5.71E-04	3.79E-03	2.92E-03	1.92E-03	3.37E-04	2.02E-03	7.03E-04	2.09E-03	8.60E-06	1.05E-05	2.5348E-02
551390.07	4172628.57	2493.07989	2887.40176	1010.20744	7460.0137	1423.24474	1856.41024	2485.8188	1663.68447	558.64122	5253.39953	4747.39165	2396.02018	0.30522	0.3112	3.64E-03	2.51E-03	8.80E-04	4.75E-03	1.14E-03	1.49E-03	2.36E-03	1.40E-03	4.69E-04	2.80E-03	1.75E-03	8.82E-04	4.27E-06	5.27E-06	2.4070E-02
551570.97	4173349.68	3222.57578	3741.68581	705.40769	3738.32243	671.4885	4978.83484	3265.77642	2250.69307	405.4269	3541.81047	1730.79777	5972.95606	0.8371	0.84614	4.70E-03	3.26E-03	6.14E-04	2.38E-03	5.39E-04	3.99E-03	3.10E-03	1.89E-03	3.40E-04	1.89E-03	6.37E-04	2.20E-03	1.17E-05	1.43E-05	2.5560E-02
551318.07	4173063.8	2583.84558	3974.39278	751.48816	5658.61489	868.66627	3300.28351	2597.76098	2353.62141	425.52286	4758.09592	2839.03662	4112.43519	0.35419	0.35821	3.77E-03	3.46E-03	6.55E-04	3.60E-03	6.97E-04	2.65E-03	2.46E-03	1.97E-03	3.57E-04	2.53E-03	1.04E-03	1.51E-03	4.96E-06	6.07E-06	2.4731E-02
551360.83	4172690.65	2376.12749	3060.49294	949.96171	7415.63548	1328.93322	1999.80315	2370.7188	1757.76837	525.00651	5314.98191	4548.88908	2564.7424	0.32201	0.32873	3.47E-03	2.67E-03	8.27E-04	4.72E-03	1.07E-03	1.60E-03	2.25E-03	1.47E-03	4.41E-04	2.83E-03	1.67E-03	9.44E-04	4.51E-06	5.57E-06	2.3973E-02
551345.21	4173139.92	2592.19886	3867.30689	748.20959	5354.10707	838.62155	3726.54251	2610.90532	2280.87213	423.0216	4593.44506	2583.8279	4573.76349	0.37387	0.37775	3.78E-03	3.37E-03	6.52E-04	3.41E-03	6.73E-04	2.99E-03	2.47E-03	1.91E-03	3.55E-04	2.44E-03	9.51E-04	1.68E-03	5.23E-06	6.40E-06	2.4709E-02
551377.91	4172648.17	2429.85388	2931.31714	975.85665	7421.22345	1369.53654	1890.97387	2423.78824	1686.93183	539.55017	5253.33495	4642.4669	2437.37494	0.30856	0.31476	3.55E-03	2.55E-03	8.50E-04	4.73E-03	1.10E-03	1.52E-03	2.30E-03	1.42E-03	4.53E-04	2.80E-03	1.71E-03	8.97E-04	4.32E-06	5.33E-06	2.3867E-02
551301.51	4172988.73	2530.94964	3839.60977	800.99861	6127.14602	911.96382	2801.98851	2536.9526	2240.40685	454.19089	5138.17718	3085.74487	3528.05587	0.34578	0.35097	3.69E-03	3.34E-03	6.98E-04	3.90E-03	7.32E-04	2.25E-03	2.40E-03	1.88E-03	3.81E-04	2.73E-03	1.14E-03	1.30E-03	4.84E-06	5.95E-06	2.4462E-02
551305.95	4172859.97	2387.77455	3321.5437	891.6895	7066.07153	1099.6282	2266.82055	2385.05122	1910.75117	498.64168	5403.24723	3888.31275	2876.08326	0.34181	0.3479	3.49E-03	2.89E-03	7.77E-04	4.50E-03	8.82E-04	1.82E-03	2.26E-03	1.60E-03	4.18E-04	2.88E-03	1.43E-03	1.06E-03	4.78E-06	5.90E-06	2.4013E-02
551314.85	4173054.85	2567.17543	3949.46175	750.20242	5661.13295	866.78471	3216.69375	2580.13892	2337.58806	424.94539	4759.05413	2853.8752	4015.09898	0.35023	0.35468	3.75E-03	3.44E-03	6.53E-04	3.60E-03	6.95E-04	2.58E-03	2.45E-03	1.96E-03	3.57E-04	2.53E-03	1.05E-03	1.48E-03	4.90E-06	6.01E-06	2.4556E-02
551346.11	4172718.26	2337.78283	3084.96642	934.87819	7298.95227	1298.21397	2049.09721	2332.2996	1772.1054	516.97864	5260.58543	4452.00058	2616.74706	0.3267	0.33363	3.41E-03	2.69E-03	8.14E-04	4.65E-03	1.04E-03	1.64E-03	2.21E-03	1.49E-03	4.34E-04	2.80E-03	1.64E-03	9.63E-04	4.57E-06	5.65E-06	2.3789E-02
551297.87	4172949.53	2485.38806	3681.06011	836.75189	6436.19158	956.70956	2592.78299	2487.87299	2131.55037	473.28855	5303.69335	3288.0509	3276.94664	0.3453	0.35035	3.63E-03	3.21E-03	7.29E-04	4.10E-03	7.68E-04	2.08E-03	2.36E-03	1.79E-03	3.97E-04	2.82E-03	1.21E-03	1.21E-03	4.83E-06	5.94E-06	2.4302E-02
551350.39	4172709.93	2343.38684	3074.79291	936.42157	7306.91628	1303.78319	2032.55198	2337.97438	1766.06938	517.68529	5263.04721	4462.80406	2598.71846	0.32425	0.33108	3.42E-03	2.68E-03	8.16E-04	4.65E-03	1.05E-03	1.63E-03	2.22E-03	1.48E-03	4.34E-04	2.80E-03	1.64E-03	9.56E-04	4.54E-06	5.61E-06	2.3785E-02
551354.68	4172701.6	2350.2195	3061.28121	938.36099	7317.44545	1308.85835	2014.53421	2344.87994	1758.29106	518.67517	5264.78226	4474.9555	2578.92688	0.32172	0.32846	3.43E-03	2.67E-03	8.17E-04	4.66E-03	1.05E-03	1.62E-03	2.22E-03	1.48E-03	4.35E-04	2.80E-03	1.65E-03	9.49E-04	4.50E-06	5.57E-06	2.3780E-02
551475.25	4173296.07	2899.09735	3817.35328	704.23104	4352.12077	738.45994	4438.5329	2926.41657	2299.41767	403.1734	3926.90226	2050.39805	5365.77717	0.5139	0.51818	4.23E-03	3.32E-03	6.13E-04	2.77E-03	5.92E-04	3.56E-03	2.77E-03	1.93E-03	3.38E-04	2.09E-03	7.54E-04	1.97E-03	7.19E-06	8.78E-06	2.4971E-02
551376.24	4173197.51	2630.54824	3865.99909	750.74275	5058.44436	807.56078	3868.27225	2649.53972	2282.7711	426.59426	4475.6109	2380.38938	4724.81017	0.39323	0.39613	3.84E-03	3.37E-03	6.54E-04	3.22E-03	6.48E-04	3.10E-03	2.51E-03	1.92E-03	3.58E-04	2.38E-03	8.76E-04	1.74E-03	5.50E-06	6.71E-06	2.4626E-02
551311.62	4173045.89	2557.30059	3933.11931	752.66335	5690.32262	867.83181	3141.67981	2569.23697	2324.74644	426.51513	4785.85893	2873.9612	3927.91439	0.34759	0.35211	3.73E-03	3.43E-03	6.56E-04	3.62E-03	6.96E-04	2.52E-03	2.44E-03	1.95E-03	3.58E-04	2.55E-03	1.06E-03	1.45E-03	4.86E-06	5.97E-06	2.4458E-02
551549.44	4173341.59	3104.84781	3718.70222	696.403	3871.02339	684.27798	4797.84884	3144.5851	2239.74995	399.4051	3618.27782	1792.63789	5757.01922	0.71954	0.72633	4.53E-03	3.24E-03	6.07E-04	2.46E-03	5.49E-04	3.85E-03	2.98E-03	1.88E-03	3.35E-04	1.93E-03	6.60E-04	2.12E-03	1.01E-05	1.23E-05	2.5161E-02
551311.5	4172827.8	2352.92239	3199.58981	901.02256	7136.24494	1150.10292	2189.36721	2348.86621	1840.77442	502.62866	5322.60186	4063.80032	2778.26333	0.3391	0.34558	3.43E-03	2.79E-03	7.85E-04	4.54E-03	9.23E-04	1.76E-03	2.23E-03	1.54E-03	4.22E-04	2.83E-03	1.50E-03	1.02E-03	4.74E-06	5.86E-06	2.3783E-02
551707.63	4172588.66	4835.96186	1996.77387	1640.97848	4518.07181	2412.44176	1357.60729	4787.40744	1185.27129	873.34544	3422.90509	4922.69487	1826.06655	0.18506	0.18804	7.06E-03	1.74E-03	1.43E-03	2.88E-03	1.94E-03	1.09E-03	4.54E-03	9.95E-04	7.33E-04	1.82E-03	1.81E-03	6.72E-04	2.59E-06	3.19E-06	2.6704E-02
551351.13	4173156.66	2570.06164	3801.47735	742.66814	5219.63122	824.1075	3725.70832	2588.81896	2240.99369	420.02674	4513.4133	2508.26658	4563.43571	0.37438	0.37765	3.75E-03	3.31E-03	6.47E-04	3.32E-03	6.61E-04	2.99E-03	2.45E-03	1.88E-03	3.52E-04	2.40E-03	9.23E-04	1.68E-03	5.24E-06	6.40E-06	2.4385E-02
551299.99	4172883.77	2390.33767	3378.04946	872.9504	6846.97452	1047.52452	2312.38162	2388.83325	1945.02625	489.3818	5356.0291	3679.93715	2932.4582	0.33868	0.34446	3.49E-03	2.94E-03	7.60E-04	4.36E-03	8.40E-04	1.86E-03	2.26E-03	1.63E-03	4.11E-04	2.85E-03	1.35E-03	1.08E-03	4.74E-06	5.84E-06	2.3848E-02
551308.4	4173036.94	2540.18284	3899.58725	753.59759	5703.0866	867.21125	3060.90229	2551.14089	2301.22308	427.18358	4798.46928	2875.73592	3832.57605	0.344	0.34856	3.71E-03	3.40E-03	6.56E-04	3.63E-03	6.96E-04	2.46E-03	2.42E-03	1.93E-03	3.58E-04	2.55E-03	1.06E-03	1.41E-03	4.81E-06	5.91E-06	2.4284E-02
551341.83	4172726.58	2317.19326	3065.37724	924.3551	7192.43221	1276.83689	2050.70616	2311.78787	1761.66827	511.4343	5196.75383	4376.87046	2615.58409	0.32423	0.33106	3.38E-03	2.67E-03	8.05E-04	4.58E-03	1.02E-03	1.65E-03	2.19E-03	1.48E-03	4.29E-04	2.77E-03	1.61E-03	9.62E-04	4.54E-06	5.61E-06	2.3554E-02
551379.33	4173206.1	2620.34206	3831.98406	743.91883	4970.54818	796.38295	3836.14437	2639.10416	2264.05889	422.70762	4428.92135	2334.45519	4686.19365	0.39055	0.39438	3.82E-03	3.34E-03	6.48E-04	3.16E-03	6.39E-04	3.08E-03	2.50E-03	1.90E-03	3.55E-04	2.36E-03	8.59E-04	1.72E-03	5.46E-06	6.68E-06	2.4400E-02
551298.28	4172979.76	2496.72452	3753.6709	800.70943	6115.20705	911.19837	2717.52956	2501.80702	2186.15971	453.86758	5113.18655	3088.97472	3424.76688	0.34058	0.34542	3.64E-03	3.27E-03	6.97E-04	3.89E-03	7.31E-04	2.18E-03	2.37E-03	1.83E-03	3.81E-04	2.72E-03	1.14E-03	1.26E-03	4.77E-06	5.85E-06	2.4131E-02
551598.7	4173361.47	3303.11953	3606.21182	696.9836	3477.91371	643.76093	4972.93647	3349.23581	2164.2264	401.72057	3323.694	1627.85276	5974.21623	1.02507	1.03902	4.82E-03	3.14E-03	6.07E-04	2.21E-03	5.16E-04	3.99E-03	3.17E-03	1.82E-03	3.37E-04	1.77E-03	5.99E-04	2.20E-03	1.43E-05	1.76E-05	2.5216E-02
551646.87	4173363.43	3656.46205	3461.0574	694.2488	3155.90708	618.86419	5070.19639	3712.71911	2058.50714	402.51571	3049.59309	1523.09571	6121.48022	2.14883	2.23647	5.34E-03	3.01E-03	6.05E-04	2.01E-03	4.97E-04	4.07E-03	3.52E-03	1.73E-03	3.38E-04	1.62E-03	5.60E-04	2.25E-03	3.01E-05	3.79E-05	2.5618E-02
551484.9	4173305.17	2897.41561	3742.12203	692.72614	4244.09429	726.08208	4436.86292	2926.27859	2253.77717	396.52489	3835.04661	1998.71399	5355.16076	0.52651	0.53086	4.23E-03	3.26E-03	6.03E-04	2.70E-03	5.83E-04	3.56E-03	2.77E-03	1.89E-03	3.33E-04	2.04E-03	7.35E-04	1.97E-03	7.37E-06	9.00E-06	2.4697E-02
551312.18	4172818.59	2331.80522	3150.16253	897.56474	7082.0139	1154.83178	2159.16937	2327.50227	1812.43692	500.35337	5255.60226	4069.31389	2740.19845	0.33518	0.34168	3.40E-03	2.74E-03	7.82E-04	4.51E-03	9.27E-04	1.73E-03	2.21E-03	1.52E-03	4.20E-04	2.80E-03	1.50E-03	1.01E-03	4.69E-06	5.79E-06	2.3557E-02
551659.73	4173361.56	3768.3411	3410.73325	691.25737	3099.79293	613.53848	5048.51712	3828.33639	2022.60331	401.31999	2978.13301	1501.61415	6105.90336	2.98095	3.12873	5.50E-03	2.97E-03	6.02E-04	1.97E-03	4.92E-04	4.05E-03	3.63E-03	1.70E-03	3.37E-04	1.59E-03	5.52E-04	2.25E-03	4.17E-05	5.30E-05	2.5731E-02
551634	4173365.3	3549.70152	3499.38149	694.53229	3205.9361	622.89331	5054.55427	3602.67278	2085.73175	402.10963	3114.22177	1541.59783	6095.18219	1.63135	1.67693	5.18E-03	3.05E-03	6.05E-04	2.04E-03	5.00E-04	4.06E-03	3.41E-03	1.75E-03	3.37E-04	1.66E-03	5.67E-04	2.24E-03	2.28E-05	2.84E-05	2.5451E-02
551365.52	4172670.68	2356.84912	2954.28098	938.6973	7243.31806	1311.94204	1923.45456	2351.59484	1698.31476	518.96932	5178.5905	4463.81888	2472.5015	0.30819	0.31444	3.44E-03	2.57E-03	8.18E-04	4.61E-03	1.05E-03	1.54E-03	2.23E-03	1.42E-03	4.35E-04	2.76E-03	1.64E-03	9.10E-04	4.31E-06	5.33E-06	2.3446E-02
551305.17	4173027.99	2523.63682	3862.73222	756.02053	5724.56408	867.92406	2983.21657	2533.56406	2275.06608	428.70577	4818.2248	2886.97755	3740.14337	0.34073	0.34532	3.68E-03	3.36E-03	6.58E-04	3.65E-03	6.96E-04	2.39E-03	2.40E-03	1.91E-03	3.60E-04	2.56E-03	1.06E-03	1.38E-03	4.77E-06	5.85E-06	2.4125E-02
551294.65	4172940.57	2442.00777	3580.46466	832.64588	6388.01676	955.6604	2511.80332	2443.81764	2071.30786	470.48038	5235.79565	3288.12581	3176.71532	0.33925	0.34459	3.56E-03	3.12E-03	7.25E-04	4.07E-03	7.67E-04	2.02E-03	2.32E-03	1.74E-03	3.95E-04	2.79E-03	1.21E-03	1.17E-03	4.75E-06	5.84E-06	2.3883E-02
551380.39	4172634.97	2419.65322	2853.5287	972.19513	7262.79401	1363.81121	1841.76547	2413.29595	1643.46612	537.63776	5138.19535	4574.66062	2375.50893	0.29922	0.30509	3.53E-03	2.49E-03	8.47E-04	4.62E-03	1.09E-03	1.48E-03	2.29E-03	1.38E-03	4.51E-04	2.73E-03	1.68E-03	8.74E-04	4.19E-06	5.17E-06	2.3479E-02
551494.56	4173314.26	2917.63871	3709.19324	687.69565	4159.86406	714.60641	4466.57899	2948.0882	2231.74221	393.65746	3778.64203	1950.71072	5385.86887	0.54309	0.547	4.26E-03	3.23E-03	5.99E-04	2.65E-03	5.73E-04	3.58E-03	2.79E-03	1.87E-03	3.30E-04	2.01E-03	7.18E-04	1.98E-03	7.60E-06	9.27E-06	2.4618E-02
551672.59	4173359.69	3888.01687	3352.89388	685.70028	3038.6441	607.00554	4995.52063	3952.30408	1980.82434	398.64052	2903.37462	1477.25965	6055.53659	4.45229	4.77234	5.68E-03	2.92E-03	5.97E-04	1.93E-03	4.87E-04	4.01E-03	3.75E-03	1.66E-03	3.34E-04	1.55E-03	5.44E-04	2.23E-03	6.23E-05	8.09E-05	2.5825E-02
551354.61	4173166.5	2550.70695	3752.58076	737.42411	5130.36098	814.04127	3704.68109	2569.35324	2212.56051	417.19285	4451.16522	2464.19791	4533.41122	0.37334	0.37651	3.72E-03	3.27E-03	6.42E-04	3.27E-03	6.53E-04	2.97E-03	2.44E-03	1.86E-03	3.50E-04	2.37E-03	9.07E-04	1.67E-03	5.22E-06	6.38E-06	2.4123E-02
551580.67	4173358.82	3189.11593	3613.87629	691.35345	3580.47992	651.41741	4842.14232	3232.32697	2172.20829	397.65707	3400.25449	1666.98338	5814.5691	0.86357	0.87274	4.66E-03	3.15E-03	6.02E-04	2.28E-03	5.23E-04	3.88E-03	3.06E-03	1.82E-03	3.34E-04	1.81E-03	6.13E-04	2.14E-03	1.21E-05	1.48E-05	2.4901E-02
551400.53	4173235.69	2652.55196	3821.1078	735.17835	4763.58292	776.25947	3876.41343	2671.53981	2271.84517	418.72351	4260.81974	2239.16825	4732.24612	0.40827	0.41174	3.87E-03	3.33E-03	6.40E-04	3.03E-03	6.23E-04	3.11E-03	2.53E-03	1.91E-03	3.51E-04	2.27E-03	8.24E-04	1.74E-03	5.71E-06	6.98E-06	2.4241E-02
551304.27	4172849.69	2337.3503	3210.53451	876.87346	6915.95719	1093.00334	2197.85434	2334.34766	1847.44513	489.99497	5251.0358	3847.92487	2788.8803	0.33199	0.33794	3.41E-03	2.80E-03	7.64E-04	4.40E-03	8.77E-04	1.76E-03	2.21E-03	1.55E-03	4.11E-04	2.79E-03	1.42E-03	1.03E-03	4.65E-06	5.73E-06	2.3437E-02
551295.06	4172970.8	2464.16694	3671.00311	801.45356	6112.12842	912.61991	2638.52855	2468.37953	2134.32143	454.06185	5090.51581	3098.86034	3328.14084	0.33582	0.34088	3.60E-03	3.20E-03	6.98E-04	3.89E-03	7.32E-04	2.12E-03	2.34E-03	1.79E-03	3.81E-04	2.71E-03	1.14E-03	1.22E-03	4.70E-06	5.78E-06	2.3829E-02
551746.97	4172609.18	4789.55099	1871.64418	1444.3401	4913.2376	2158.50182	1262.68923	4744.99708	1103.52627	773.61624	3349.58994	5055.34972	1694.34469	0.22266	0.22773	6.99E-03	1.63E-03	1.26E-03	3.13E-03	1.73E-03	1.01E-03	4.50E-03	9.26E-04	6.49E-04	1.78E-03	1.86E-03	6.23E-04	3.12E-06	3.86E-06	2.6098E-02
551558.9	4173350.5	3089.4777	3633.54171	687.39405	3735.79947	666.98485	4722.32102	3129.77505	2187.46697	394.49721	3508.02254	1733.87899	5668.77861	0.7412	0.74932	4.51E-03	3.16E-03	5.99E-04	2.38E-03	5.35E-04	3.79E-03	2.97E-03	1.84E-03	3.31E-04	1.87E-03	6.38E-04	2.09E-03	1.04E-05	1.27E-05	2.4722E-02
551312.87	4172809.38	2309.87677	3102.14332	893.23274	7016.0002	1157.63188	2129.89288	2305.37486	1785.02932	497.57487	5184.80091	4066.03678	2703.21831	0.33075	0.33724	3.37E-03	2.70E-03	7.78E-04	4.47E-03	9.29E-04	1.71E-03	2.19E-03	1.50E-03	4.17E-04	2.76E-03	1.50E-03	9.95E-04	4.63E-06	5.71E-06	2.3317E-02
551685.45	4173357.82	4003.34651	3283.68923	677.2504	2972.50861	599.19003	4905.82291	4072.27028	1932.22226	394.21078	2824.68303	1450.4781	5961.90558	7.64129	8.53488	5.84E-03	2.86E-03	5.90E-04	1.89E-03	4.81E-04	3.94E-03	3.86E-03	1.62E-03	3.31E-04	1.50E-03	5.34E-04	2.19E-03	1.07E-04	1.45E-04	2.5897E-02
551301.92	4173018.96	2499.60894	3808.61512	756.59695	5727.25547	866.69511	2900.40173	2508.52122	2238.64341	429.09048	4821.30485	2891.03065	3640.43932	0.33641	0.34108	3.65E-03	3.32E-03	6.59E-04	3.65E-03	6.95E-04	2.33E-03	2.38E-03	1.88E-03	3.60E-04	2.57E-03	1.06E-03	1.34E-03	4.71E-06	5.78E-06	2.3890E-02
551382.42	4173214.68	2601.13003	3781.15299	735.67577	4870.72846	785.36861	3787.92522	2619.61728	2236.60115	418.59801	4330.18963	2291.49281	4627.67218	0.38913	0.39246	3.80E-03	3.29E-03	6.41E-04	3.10E-03	6.30E-04	3.04E-03	2.48E-03	1.88E-03	3.51E-04	2.30E-03	8.43E-04	1.70E-03	5.44E-06	6.65E-06	2.4075E-02
551504.21	4173323.36	2927.96599	3665.14381	681.90944	4065.24097	702.04061	4470.08062	2960.00424	2203.87543	390.36255	3712.15538	1900.40146	5386.03803	0.55914	0.56312	4.27E-03	3.19E-03	5.94E-04	2.59E-03	5.63E-04	3.59E-03	2.81E-03	1.85E-03	3.28E-04	1.98E-03	6.99E-04	1.98E-03	7.82E-06	9.54E-06	2.4454E-02
551316.02	4172786.87	2291.50641	3056.68727	898.38171	7029.55539	1187.32383	2096.2764	2286.48	1758.57839	499.38494	5138.71327	4152.61817	2661.68197	0.32856	0.33524	3.34E-03	2.66E-03	7.82E-04	4.48E-03	9.53E-04	1.68E-03	2.17E-03	1.48E-03	4.19E-04	2.74E-03	1.53E-03	9.79E-04	4.60E-06	5.68E-06	2.3214E-02
551357.7	4173175.09	2538.68785	3719.89315	733.65043	5056.19946	805.60689	3686.80068	2557.17823	2193.67511	415.24803	4403.27639	2424.28963	4509.06352	0.37299	0.37606	3.71E-03	3.24E-03	6.39E-04	3.22E-03	6.46E-04	2.96E-03	2.42E-03	1.84E-03	3.48E-04	2.34E-03	8.92E-04	1.66E-03	5.22E-06	6.37E-06	2.3927E-02
551314.14	4172795.64	2293.64372	3064.71283	894.42594	7005.00759	1172.99393	2104.03178	2288.81708	1763.37597	497.60092	5141.48019	4108.81306	2670.94895	0.32852	0.33511	3.35E-03	2.67E-03	7.79E-04	4.46E-03	9.41E-04	1.69E-03	2.17E-03	1.48E-03	4.18E-04	2.74E-03	1.51E-03	9.83E-04	4.60E-06	5.68E-06	2.3194E-02
551298.31	4172873.53	2344.83554	3273.47814	861.58275	6750.85653	1045.65098	2242.91178	2342.9671	1884.4097	482.46192	5234.50043	3666.49494	2845.35096	0.33022	0.33588	3.42E-03	2.85E-03	7.50E-04	4.30E-03	8.39E-04	1.80E-03	2.22E-03	1.58E-03	4.05E-04	2.79E-03	1.35E-03	1.05E-03	4.62E-06	5.69E-06	2.3360E-02
551337.54	4172734.91	2284.92218	3021.48263	906.79308	7010.14081	1243.36428	2039.43061	2279.71792	1737.6699	502.08994	5085.34148	4252.4665	2598.04652	0.31786	0.32443	3.34E-03	2.63E-03	7.90E-04	4.46E-03	9.98E-04	1.64E-03	2.16E-03	1.46E-03	4.21E-04	2.71E-03	1.56E-03	9.56E-04	4.45E-06	5.50E-06	2.3131E-02
551698.32	4173355.95	4142.12505	3223.92509	667.15803	2904.73341	590.72466	4815.9376	4216.86614	1886.92317	388.81375	2753.35576	1420.08169	5872.29975	8.8191	13.39336	6.05E-03	2.81E-03	5.81E-04	1.85E-03	4.74E-04	3.86E-03	4.00E-03	1.58E-03	3.26E-04	1.47E-03	5.22E-04	2.16E-03	1.23E-04	2.27E-04	2.6028E-02
551333.26	4172743.24	2275.11944	3011.33376	901.50975	6964.41179	1229.38478	2043.75603	2269.92573	1732.27369	499.44796	5057.63665	4213.50521	2601.12685	0.31775	0.3243	3.32E-03	2.62E-03	7.85E-04	4.43E-03	9.86E-04	1.64E-03	2.15E-03	1.45E-03	4.19E-04	2.69E-03	1.55E-03	9.57E-04	4.45E-06	5.50E-06	2.3023E-02
551455.56	4173289.72	2777.33895	3715.27633	694.37977	4323.52332	731.07128	4149.40614	2801.15967	2236.78603	397.38551	3880.74406	2055.54206	5034.28107	0.46662	0.46973	4.05E-03	3.24E-03	6.05E-04	2.75E-03	5.87E-04	3.33E-03	2.65E-03	1.88E-03	3.33E-04	2.07E-03	7.56E-04	1.85E-03	6.53E-06	7.96E-06	2.4117E-02
551360.79	4173183.67	2532.29477	3697.87143	730.52954	4985.98158	797.5851	3671.53048	2550.6018	2180.95136	413.73199	4361.67873	2382.38962	4489.42936	0.37277	0.37627	3.70E-03	3.22E-03	6.36E-04	3.17E-03	6.40E-04	2.95E-03	2.42E-03	1.83E-03	3.47E-04	2.32E-03	8.77E-04	1.65E-03	5.22E-06	6.38E-06	2.3770E-02
551685.07	4172569.12	4508.28532	2005.039	1627.20696	4356.60719	2422.0862	1366.90347	4463.82066	1193.24043	867.12414	3417.5994	4722.19049	1836.25668	0.16628	0.16808	6.58E-03	1.75E-03	1.42E-03	2.77E-03	1.94E-03	1.10E-03	4.23E-03	1.00E-03	7.28E-04	1.82E-03	1.74E-03	6.76E-04	2.33E-06	2.85E-06	2.5755E-02
551298.69	4173009.99	2475.27309	3750.53111	757.94253	5733.90924	866.36562	2820.75455	2483.20128	2199.75962	429.87311	4825.12126	2896.43171	3544.14882	0.33276	0.33727	3.61E-03	3.27E-03	6.60E-04	3.65E-03	6.95E-04	2.26E-03	2.35E-03	1.85E-03	3.61E-04	2.57E-03	1.07E-03	1.30E-03	4.66E-06	5.72E-06	2.3657E-02
551766.78	4172619.45	4551.80599	1802.32835	1326.68304	5261.69247	2097.51776	1205.70019	4512.70008	1058.28836	713.18093	3375.16326	5254.79213	1614.23457	0.24321	0.24902	6.64E-03	1.57E-03	1.16E-03	3.35E-03	1.68E-03	9.67E-04	4.28E-03	8.88E-04	5.98E-04	1.80E-03	1.93E-03	5.94E-04	3.40E-06	4.22E-06	2.5465E-02
551359.34	4172677.58	2311.30357	2925.72258	916.62022	7062.19701	1277.58026	1916.70332	2306.33175	1681.75563	506.80238	5075.47762	4332.50482	2460.47624	0.30317	0.30927	3.37E-03	2.55E-03	7.98E-04	4.50E-03	1.02E-03	1.54E-03	2.19E-03	1.41E-03	4.25E-04	2.70E-03	1.59E-03	9.05E-04	4.24E-06	5.24E-06	2.3013E-02
551291.83	4172961.83	2428.18362	3583.89911	800.55147	6094.21721	913.15799	2559.85334	2431.60807	2080.18524	453.21653	5052.65753	3105.21368	3231.91515	0.3309	0.33526	3.54E-03	3.12E-03	6.97E-04	3.88E-03	7.33E-04	2.05E-03	2.30E-03	1.75E-03	3.80E-04	2.69E-03	1.14E-03	1.19E-03	4.63E-06	5.68E-06	2.3492E-02
551291.42	4172931.6	2392.77804	3471.75319	824.73028	6305.81631	950.31113	2428.48643	2394.03541	2007.03594	465.48234	5143.36386	3271.87943	3073.13924	0.33079	0.336	3.49E-03	3.02E-03	7.18E-04	4.02E-03	7.62E-04	1.95E-03	2.27E-03	1.68E-03	3.91E-04	2.74E-03	1.20E-03	1.13E-03	4.63E-06	5.69E-06	2.3387E-02
551608.28	4173369.04	3295.07787	3487.47321	683.40898	3334.79943	625.61644	4839.96946	3341.43602	2088.37571	394.31597	3193.43532	1571.07697	5825.50846	1.07993	1.09726	4.81E-03	3.04E-03	5.95E-04	2.12E-03	5.02E-04	3.88E-03	3.17E-03	1.75E-03	3.31E-04	1.70E-03	5.78E-04	2.14E-03	1.51E-05	1.86E-05	2.4656E-02
551751.51	4173330.29	4648.76558	3035.38432	640.67515	2757.32967	575.44878	4557.23751	4748.57122	1763.20855	374.19864	2563.37859	1367.27012	5579.92799	2.51468	2.31116	6.79E-03	2.64E-03	5.58E-04	1.76E-03	4.62E-04	3.66E-03	4.50E-03	1.48E-03	3.14E-04	1.36E-03	5.03E-04	2.05E-03	3.52E-05	3.92E-05	2.6150E-02
551315.25	4173085.04	2484.17811	3739.27901	715.81598	5299.36951	829.00346	3251.04169	2499.20165	2214.56665	405.00021	4452.64687	2662.16873	4036.23898	0.33815	0.34205	3.63E-03	3.26E-03	6.23E-04	3.37E-03	6.65E-04	2.61E-03	2.37E-03	1.86E-03	3.40E-04	2.37E-03	9.79E-04	1.49E-03	4.73E-06	5.80E-06	2.3566E-02
551318.48	4173093.99	2481.85135	3721.84354	713.68385	5261.8713	826.5088	3302.32196	2497.57896	2203.93386	403.67476	4424.08126	2638.97572	4091.81208	0.34128	0.34478	3.62E-03	3.24E-03	6.22E-04	3.35E-03	6.63E-04	2.65E-03	2.37E-03	1.85E-03	3.39E-04	2.35E-03	9.71E-04	1.51E-03	4.78E-06	5.84E-06	2.3546E-02
551385.51	4173223.27	2577.66176	3721.743	726.89995	4765.68222	773.91854	3731.3727	2595.86818	2204.84724	413.25285	4240.2951	2249.48463	4559.07507	0.38876	0.39151	3.76E-03	3.24E-03	6.33E-04	3.03E-03	6.21E-04	2.99E-03	2.46E-03	1.85E-03	3.47E-04	2.26E-03	8.28E-04	1.68E-03	5.44E-06	6.63E-06	2.3718E-02
551363.88	4173192.26	2524.45945	3672.8841	726.41814	4912.03578	789.04519	3650.143	2542.55772	2166.82626	411.65381	4313.71458	2340.39418	4462.92765	0.37244	0.37523	3.68E-03	3.20E-03	6.33E-04	3.13E-03	6.33E-04	2.93E-03	2.41E-03	1.82E-03	3.45E-04	2.30E-03	8.61E-04	1.64E-03	5.21E-06	6.36E-06	2.3590E-02
551302.59	4172839.4	2292.93818	3113.89741	864.31948	6782.68353	1088.68071	2138.00355	2289.66427	1792.30615	482.66489	5116.9247	3815.34595	2713.14394	0.3238	0.32967	3.35E-03	2.71E-03	7.53E-04	4.32E-03	8.73E-04	1.72E-03	2.17E-03	1.50E-03	4.05E-04	2.72E-03	1.40E-03	9.98E-04	4.53E-06	5.59E-06	2.2934E-02
551295.47	4173001.03	2449.30543	3686.71605	759.28207	5739.08621	866.30888	2742.61101	2456.28826	2157.65563	430.59882	4824.32019	2901.90853	3449.33042	0.32893	0.33368	3.58E-03	3.21E-03	6.61E-04	3.65E-03	6.95E-04	2.20E-03	2.33E-03	1.81E-03	3.61E-04	2.57E-03	1.07E-03	1.27E-03	4.60E-06	5.65E-06	2.3412E-02
551312.03	4173076.09	2475.97751	3735.48704	715.13269	5311.94947	828.61824	3184.79479	2490.20787	2212.79443	404.74164	4459.56299	2678.78767	3961.31058	0.33562	0.33923	3.61E-03	3.25E-03	6.23E-04	3.38E-03	6.65E-04	2.56E-03	2.36E-03	1.86E-03	3.40E-04	2.37E-03	9.86E-04	1.46E-03	4.70E-06	5.75E-06	2.3476E-02
551513.87	4173332.45	2905.90141	3576.84878	670.91759	3945.69728	694.25563	4407.16764	2939.12164	2151.62712	384.04562	3611.99638	1845.51445	5305.39608	0.57196	0.57669	4.24E-03	3.12E-03	5.84E-04	2.51E-03	5.57E-04	3.54E-03	2.79E-03	1.81E-03	3.22E-04	1.92E-03	6.79E-04	1.95E-03	8.00E-06	9.77E-06	2.4031E-02
551324.69	4172759.9	2255.37176	2984.64819	889.2813	6864.875	1197.1812	2044.45382	2250.28139	1717.74884	493.30544	5000.90779	4122.715	2598.14826	0.31646	0.3229	3.29E-03	2.60E-03	7.75E-04	4.37E-03	9.60E-04	1.64E-03	2.13E-03	1.44E-03	4.14E-04	2.66E-03	1.52E-03	9.56E-04	4.43E-06	5.47E-06	2.2771E-02
551704.31	4172579.36	4620.982	1939.76609	1571.85901	4314.24279	2301.39458	1323.77958	4575.65447	1151.51856	837.66814	3305.06358	4652.18626	1779.19472	0.17355	0.17607	6.75E-03	1.69E-03	1.37E-03	2.75E-03	1.85E-03	1.06E-03	4.34E-03	9.66E-04	7.03E-04	1.76E-03	1.71E-03	6.55E-04	2.43E-06	2.98E-06	2.5596E-02
551465.01	4173298.62	2772.39506	3636.40728	680.77481	4217.04599	720.12396	4151.14404	2797.56653	2190.93593	389.59662	3781.80012	2007.66688	5027.10248	0.47551	0.47924	4.05E-03	3.17E-03	5.93E-04	2.69E-03	5.78E-04	3.33E-03	2.65E-03	1.84E-03	3.27E-04	2.01E-03	7.39E-04	1.85E-03	6.65E-06	8.12E-06	2.3833E-02
551318.14	4172777	2255.75737	2990.22257	884.26128	6848.77988	1174.37294	2056.89281	2250.80885	1721.15702	491.22402	5008.23186	4071.90813	2611.85646	0.3184	0.32481	3.29E-03	2.60E-03	7.70E-04	4.36E-03	9.42E-04	1.65E-03	2.13E-03	1.44E-03	4.12E-04	2.67E-03	1.50E-03	9.61E-04	4.46E-06	5.50E-06	2.2745E-02
551568.36	4173359.41	3062.58	3530.74819	676.15599	3594.61871	648.95597	4619.91061	3103.03934	2124.74818	388.30416	3386.41526	1674.74832	5549.18913	0.76139	0.76969	4.47E-03	3.08E-03	5.89E-04	2.29E-03	5.21E-04	3.71E-03	2.94E-03	1.78E-03	3.26E-04	1.80E-03	6.16E-04	2.04E-03	1.07E-05	1.30E-05	2.4184E-02
551370.7	4172641.37	2338.10371	2801.96897	930.62493	6994.43678	1299.18885	1819.27383	2332.57053	1613.28083	514.75495	4980.286	4362.24101	2344.294	0.29038	0.29603	3.41E-03	2.44E-03	8.11E-04	4.45E-03	1.04E-03	1.46E-03	2.21E-03	1.35E-03	4.32E-04	2.65E-03	1.61E-03	8.63E-04	4.06E-06	5.02E-06	2.2743E-02
551308.8	4173067.14	2465.56402	3725.38706	714.64053	5321.52336	827.70869	3114.65925	2478.93893	2206.49629	404.6094	4466.57419	2694.25409	3881.03346	0.33254	0.33658	3.60E-03	3.24E-03	6.22E-04	3.39E-03	6.64E-04	2.50E-03	2.35E-03	1.85E-03	3.39E-04	2.38E-03	9.91E-04	1.43E-03	4.65E-06	5.70E-06	2.3365E-02
551405.96	4173248.99	2612.31147	3707.58281	715.65795	4590.37394	754.10741	3781.69524	2631.06353	2211.58768	407.99094	4095.49886	2172.5758	4616.7844	0.40298	0.40629	3.81E-03	3.23E-03	6.23E-04	2.92E-03	6.05E-04	3.03E-03	2.49E-03	1.86E-03	3.42E-04	2.18E-03	7.99E-04	1.70E-03	5.64E-06	6.88E-06	2.3610E-02
551546.13	4173350.65	2981.5459	3541.18282	671.57372	3734.38789	663.00405	4507.64798	3019.26568	2131.49816	384.99458	3478.7312	1737.63709	5416.74575	0.66505	0.67102	4.35E-03	3.08E-03	5.85E-04	2.38E-03	5.32E-04	3.62E-03	2.86E-03	1.79E-03	3.23E-04	1.85E-03	6.39E-04	1.99E-03	9.31E-06	1.14E-05	2.4025E-02
551327.05	4173118.09	2458.45123	3638.63803	706.19867	5130.81922	815.54779	3396.17381	2475.55175	2152.82072	399.1271	4329.83203	2564.42992	4185.93055	0.34387	0.34757	3.59E-03	3.17E-03	6.15E-04	3.27E-03	6.54E-04	2.72E-03	2.35E-03	1.81E-03	3.35E-04	2.30E-03	9.44E-04	1.54E-03	4.81E-06	5.89E-06	2.3305E-02
551296.64	4172863.28	2297.45696	3167.59691	848.54293	6630.28234	1041.11648	2174.67227	2295.27273	1823.62524	474.71202	5101.41385	3639.45999	2759.33068	0.3212	0.32672	3.35E-03	2.76E-03	7.39E-04	4.22E-03	8.35E-04	1.74E-03	2.18E-03	1.53E-03	3.98E-04	2.72E-03	1.34E-03	1.02E-03	4.49E-06	5.54E-06	2.2837E-02
551353.15	4172684.48	2271.2714	2899.02142	897.89516	6900.42551	1248.38155	1911.25824	2266.48097	1666.42502	496.48373	4981.54956	4219.47154	2450.05587	0.29893	0.30493	3.32E-03	2.52E-03	7.82E-04	4.39E-03	1.00E-03	1.53E-03	2.15E-03	1.40E-03	4.17E-04	2.65E-03	1.55E-03	9.01E-04	4.18E-06	5.17E-06	2.2629E-02
551320.41	4172768.23	2245.27799	2969.92363	882.17749	6809.73907	1179.20959	2041.27031	2240.2911	1709.54399	489.72077	4971.70407	4070.15803	2592.79519	0.31528	0.32164	3.28E-03	2.59E-03	7.68E-04	4.34E-03	9.46E-04	1.64E-03	2.12E-03	1.43E-03	4.11E-04	2.65E-03	1.50E-03	9.54E-04	4.41E-06	5.45E-06	2.2629E-02
551332.97	4173134.83	2458.33389	3612.42813	708.24469	5074.34181	807.23986	3454.42226	2475.92582	2133.77233	400.19357	4313.83467	2515.84372	4245.78712	0.34761	0.35121	3.59E-03	3.15E-03	6.17E-04	3.23E-03	6.48E-04	2.77E-03	2.35E-03	1.79E-03	3.36E-04	2.30E-03	9.26E-04	1.56E-03	4.86E-06	5.95E-06	2.3269E-02
551292.24	4172992.06	2425.26641	3623.87499	762.11113	5756.48523	868.43548	2669.14253	2431.28306	2116.45022	432.10208	4828.55339	2914.01706	3360.13112	0.32524	0.3296	3.54E-03	3.16E-03	6.64E-04	3.67E-03	6.97E-04	2.14E-03	2.30E-03	1.78E-03	3.63E-04	2.57E-03	1.07E-03	1.24E-03	4.55E-06	5.59E-06	2.3195E-02
551366.97	4173200.84	2513.88082	3642.23648	721.14028	4833.19618	779.41275	3621.49026	2531.73751	2149.91251	408.9215	4257.91048	2298.95334	4427.92021	0.37141	0.37414	3.67E-03	3.17E-03	6.28E-04	3.08E-03	6.25E-04	2.91E-03	2.40E-03	1.80E-03	3.43E-04	2.27E-03	8.46E-04	1.63E-03	5.20E-06	6.34E-06	2.3378E-02
551288.61	4172952.87	2385.56589	3487.56926	796.00137	6042.82856	909.99963	2479.04705	2388.3006	2021.49542	450.31222	4988.28962	3097.96141	3132.6229	0.32507	0.32965	3.48E-03	3.04E-03	6.93E-04	3.85E-03	7.30E-04	1.99E-03	2.26E-03	1.70E-03	3.78E-04	2.66E-03	1.14E-03	1.15E-03	4.55E-06	5.59E-06	2.3075E-02
551341.06	4172706.98	2247.14458	2927.67961	890.09469	6847.92934	1233.05593	1953.88696	2242.2039	1682.84052	492.27238	4962.13825	4174.42282	2496.17223	0.30425	0.31046	3.28E-03	2.55E-03	7.75E-04	4.36E-03	9.89E-04	1.57E-03	2.13E-03	1.41E-03	4.13E-04	2.64E-03	1.54E-03	9.18E-04	4.26E-06	5.26E-06	2.2578E-02
551335.93	4173143.2	2458.38095	3600.92083	709.34644	5041.32432	802.53939	3474.63584	2476.09315	2125.22296	400.82435	4305.0029	2482.43542	4266.07365	0.34916	0.35269	3.59E-03	3.14E-03	6.18E-04	3.21E-03	6.44E-04	2.79E-03	2.35E-03	1.78E-03	3.36E-04	2.29E-03	9.13E-04	1.57E-03	4.89E-06	5.98E-06	2.3236E-02
551763.57	4173325.59	4673.16137	2964.05506	628.27552	2705.18096	567.45645	4435.84846	4776.15339	1721.34923	366.93083	2508.31053	1346.66932	5432.95286	1.85972	1.73618	6.82E-03	2.58E-03	5.47E-04	1.72E-03	4.55E-04	3.56E-03	4.53E-03	1.44E-03	3.08E-04	1.34E-03	4.95E-04	2.00E-03	2.60E-05	2.94E-05	2.5851E-02
551638.09	4173373.67	3464.12516	3344.69388	672.84664	3082.81377	603.50418	4788.82887	3515.59389	1990.72035	389.63131	2987.15022	1490.45245	5786.81844	1.5908	1.63257	5.06E-03	2.91E-03	5.86E-04	1.96E-03	4.84E-04	3.84E-03	3.33E-03	1.67E-03	3.27E-04	1.59E-03	5.48E-04	2.13E-03	2.23E-05	2.77E-05	2.4492E-02
551651.09	4173371.78	3565.41815	3302.17973	671.42328	3032.24522	599.07294	4786.99764	3620.07236	1961.03045	389.31461	2921.88829	1471.49605	5792.46613	2.10937	2.18742	5.20E-03	2.88E-03	5.85E-04	1.93E-03	4.81E-04	3.84E-03	3.43E-03	1.65E-03	3.27E-04	1.56E-03	5.41E-04	2.13E-03	2.95E-05	3.71E-05	2.4615E-02
551383.43	4172621.39	2378.07301	2730.80622	950.48807	6912.17098	1327.57588	1772.39275	2371.66678	1574.77005	525.99955	4908.44122	4377.22485	2286.46094	0.28215	0.28745	3.47E-03	2.38E-03	8.28E-04	4.40E-03	1.07E-03	1.42E-03	2.25E-03	1.32E-03	4.41E-04	2.61E-03	1.61E-03	8.41E-04	3.95E-06	4.87E-06	2.2650E-02
551664.08	4173369.89	3684.58412	3257.64331	667.94445	2977.39355	593.62576	4765.39121	3743.214	1927.55223	387.86127	2855.02507	1449.27684	5778.55779	2.94852	3.08196	5.38E-03	2.84E-03	5.82E-04	1.90E-03	4.76E-04	3.82E-03	3.55E-03	1.62E-03	3.25E-04	1.52E-03	5.33E-04	2.13E-03	4.13E-05	5.22E-05	2.4756E-02
551305.58	4173058.18	2450.13514	3703.79931	713.25059	5320.31336	825.4548	3038.9763	2462.6387	2192.49232	403.98201	4466.16391	2707.04373	3793.18193	0.32884	0.33293	3.58E-03	3.23E-03	6.21E-04	3.39E-03	6.62E-04	2.44E-03	2.33E-03	1.84E-03	3.39E-04	2.38E-03	9.96E-04	1.40E-03	4.60E-06	5.64E-06	2.3203E-02
551474.46	4173307.51	2773.37433	3570.84189	669.94243	4121.80799	704.94932	4157.6944	2799.82121	2151.076	383.34787	3699.93116	1961.68947	5026.92219	0.4856	0.48889	4.05E-03	3.11E-03	5.84E-04	2.62E-03	5.66E-04	3.34E-03	2.65E-03	1.80E-03	3.22E-04	1.97E-03	7.22E-04	1.85E-03	6.79E-06	8.28E-06	2.3604E-02
551288.19	4172922.64	2341.01941	3360.16071	814.37599	6209.04576	942.44448	2345.56425	2341.80861	1941.52121	459.0657	5036.37058	3246.0131	2969.77602	0.32167	0.32674	3.42E-03	2.93E-03	7.09E-04	3.95E-03	7.56E-04	1.88E-03	2.22E-03	1.63E-03	3.85E-04	2.68E-03	1.19E-03	1.09E-03	4.50E-06	5.54E-06	2.2856E-02
551523.52	4173341.55	2897.83106	3515.57717	663.81728	3836.9497	673.12772	4364.98713	2932.21338	2114.69211	380.08345	3529.76436	1792.5453	5252.77865	0.5874	0.59188	4.23E-03	3.06E-03	5.78E-04	2.44E-03	5.40E-04	3.50E-03	2.78E-03	1.77E-03	3.19E-04	1.88E-03	6.60E-04	1.93E-03	8.22E-06	1.00E-05	2.3717E-02
551595.42	4173370.91	3153.50916	3435.23856	671.73958	3364.70083	624.21289	4652.79522	3196.67189	2061.78184	386.86774	3203.51512	1581.46181	5597.2726	0.91162	0.92306	4.60E-03	2.99E-03	5.85E-04	2.14E-03	5.01E-04	3.73E-03	3.03E-03	1.73E-03	3.25E-04	1.71E-03	5.82E-04	2.06E-03	1.28E-05	1.56E-05	2.4015E-02
551389.38	4173233.94	2551.5966	3651.31168	714.46841	4638.74721	758.22522	3665.43248	2569.49323	2167.19334	406.49325	4130.21825	2196.47525	4479.49758	0.38501	0.38823	3.72E-03	3.18E-03	6.22E-04	2.95E-03	6.08E-04	2.94E-03	2.44E-03	1.82E-03	3.41E-04	2.20E-03	8.08E-04	1.65E-03	5.39E-06	6.58E-06	2.3291E-02
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

551743.76	4173340.38	4453.21882	2976.0364	631.31217	2718.48239	566.72644	4422.57281	4545.32937	1730.38577	368.53864	2529.8403	1348.6091	5418.1049	3.33338	3.005	6.50E-03	2.59E-03	5.50E-04	1.73E-03	4.55E-04	3.55E-03	4.31E-03	1.45E-03	3.09E-04	1.35E-03	4.96E-04	1.99E-03	4.66E-05	5.09E-05	2.5379E-02
551483.91	4173316.41	2776.15723	3513.73999	661.20024	4032.27236	695.41587	4160.5002	2804.03422	2115.61225	378.2854	3628.18772	1915.90205	5023.72612	0.49398	0.49781	4.05E-03	3.06E-03	5.76E-04	2.57E-03	5.58E-04	3.34E-03	2.66E-03	1.78E-03	3.17E-04	1.93E-03	7.05E-04	1.85E-03	6.91E-06	8.44E-06	2.3402E-02
551493.36	4173325.31	2802.23262	3500.0509	659.03344	3966.94936	689.32209	4197.46798	2831.71172	2104.86076	377.07679	3591.63279	1873.18984	5065.07967	0.51304	0.51639	4.09E-03	3.05E-03	5.74E-04	2.53E-03	5.53E-04	3.37E-03	2.68E-03	1.77E-03	3.16E-04	1.91E-03	6.89E-04	1.86E-03	7.18E-06	8.75E-06	2.3406E-02
551690.08	4173366.11	3904.36107	3129.15757	652.16968	2851.60088	578.80815	4607.38929	3971.67233	1837.22284	379.61135	2705.47706	1397.74742	5614.79742	8.02417	9.0061	5.70E-03	2.73E-03	5.68E-04	1.82E-03	4.64E-04	3.70E-03	3.76E-03	1.54E-03	3.19E-04	1.44E-03	5.14E-04	2.07E-03	1.12E-04	1.53E-04	2.4879E-02
551299.13	4173040.28	2417.9516	3647.70945	713.22841	5328.33414	822.29158	2890.399	2428.62769	2154.04944	404.28681	4480.37038	2710.64375	3618.3506	0.32215	0.32594	3.53E-03	3.18E-03	6.21E-04	3.39E-03	6.60E-04	2.32E-03	2.30E-03	1.81E-03	3.39E-04	2.38E-03	9.97E-04	1.33E-03	4.51E-06	5.52E-06	2.2871E-02
551555.69	4173359.66	2960.38096	3456.64288	662.30197	3604.93219	646.31475	4428.38034	2998.47909	2080.18473	379.89383	3372.07857	1681.09428	5323.34202	0.68168	0.68687	4.32E-03	3.01E-03	5.77E-04	2.30E-03	5.19E-04	3.55E-03	2.84E-03	1.75E-03	3.19E-04	1.79E-03	6.19E-04	1.96E-03	9.54E-06	1.16E-05	2.3575E-02
551724.04	4173352.21	4250.81691	3019.94773	637.58991	2752.42002	569.09673	4470.42914	4333.18945	1759.68785	371.90782	2578.26047	1359.36014	5471.89622	8.92044	7.61388	6.20E-03	2.63E-03	5.55E-04	1.75E-03	4.57E-04	3.59E-03	4.11E-03	1.48E-03	3.12E-04	1.37E-03	5.00E-04	2.01E-03	1.25E-04	1.29E-04	2.5221E-02
551410.14	4173258.81	2579.58012	3615.47353	699.7014	4463.44324	737.7338	3709.83943	2598.22786	2162.13628	399.15818	3966.42306	2123.95531	4528.41096	0.39949	0.40207	3.77E-03	3.15E-03	6.09E-04	2.84E-03	5.92E-04	2.98E-03	2.46E-03	1.81E-03	3.35E-04	2.11E-03	7.81E-04	1.67E-03	5.59E-06	6.81E-06	2.3117E-02
551612.09	4173377.45	3230.12871	3355.43399	665.20888	3212.02295	607.50795	4633.86705	3275.37653	2006.09203	383.96828	3075.88447	1520.91652	5587.93185	1.05254	1.06551	4.71E-03	2.92E-03	5.79E-04	2.05E-03	4.87E-04	3.72E-03	3.10E-03	1.68E-03	3.22E-04	1.64E-03	5.60E-04	2.06E-03	1.47E-05	1.81E-05	2.3862E-02
551743.56	4172599.88	4590.53092	1813.63087	1387.99415	4571.33056	2041.52714	1230.30863	4548.64646	1069.93805	743.93796	3194.83682	4680.97104	1650.11882	0.20407	0.20847	6.70E-03	1.58E-03	1.21E-03	2.91E-03	1.64E-03	9.87E-04	4.31E-03	8.98E-04	6.24E-04	1.70E-03	1.72E-03	6.07E-04	2.86E-06	3.53E-06	2.4894E-02
551294.97	4172853.03	2249.98402	3063.86508	834.72239	6495.52547	1034.95982	2109.18767	2247.51981	1764.30556	466.64236	4962.88759	3602.70003	2676.58349	0.31217	0.31756	3.28E-03	2.67E-03	7.27E-04	4.14E-03	8.30E-04	1.69E-03	2.13E-03	1.48E-03	3.92E-04	2.64E-03	1.33E-03	9.85E-04	4.37E-06	5.38E-06	2.2302E-02
551302.38	4172818.06	2228.87901	2972.59485	848.95802	6591.74805	1088.41129	2051.79489	2225.08225	1711.51319	473.43408	4918.71649	3784.64921	2604.05778	0.31167	0.31749	3.25E-03	2.59E-03	7.39E-04	4.20E-03	8.73E-04	1.65E-03	2.11E-03	1.44E-03	3.97E-04	2.62E-03	1.39E-03	9.58E-04	4.36E-06	5.38E-06	2.2219E-02
551345.35	4173169.84	2424.74777	3507.85249	702.15949	4874.78094	781.12379	3457.12216	2442.34634	2069.07474	396.95942	4195.8864	2373.39579	4232.97308	0.34936	0.35251	3.54E-03	3.06E-03	6.12E-04	3.10E-03	6.27E-04	2.77E-03	2.31E-03	1.74E-03	3.33E-04	2.23E-03	8.73E-04	1.56E-03	4.89E-06	5.97E-06	2.2769E-02
551577.82	4173368.33	3026.11306	3413.65589	663.01885	3449.97284	630.37116	4493.8275	3066.39079	2053.51209	381.00573	3256.68399	1615.70924	5402.12746	0.77838	0.78662	4.42E-03	2.97E-03	5.77E-04	2.20E-03	5.06E-04	3.61E-03	2.91E-03	1.72E-03	3.20E-04	1.73E-03	5.94E-04	1.99E-03	1.09E-05	1.33E-05	2.3564E-02
551332.45	4172723.72	2204.43483	2884.15918	868.75169	6633.16944	1191.73309	1953.19743	2199.65595	1659.40192	480.95168	4830.68772	4027.31793	2489.21967	0.29895	0.30496	3.22E-03	2.51E-03	7.57E-04	4.22E-03	9.56E-04	1.57E-03	2.08E-03	1.39E-03	4.04E-04	2.57E-03	1.48E-03	9.16E-04	4.18E-06	5.17E-06	2.2092E-02
551285.79	4172974.13	2362.31623	3470.40449	761.87502	5737.0484	867.98592	2517.37467	2366.66724	2019.32415	431.63857	4782.80406	2921.73605	3174.83246	0.31586	0.32046	3.45E-03	3.02E-03	6.64E-04	3.65E-03	6.96E-04	2.02E-03	2.24E-03	1.69E-03	3.62E-04	2.55E-03	1.07E-03	1.17E-03	4.42E-06	5.43E-06	2.2602E-02
551361.01	4172647.76	2266.41302	2756.78777	895.78959	6755.88443	1246.39309	1800.56855	2261.45115	1586.61859	495.54214	4840.12718	4180.41724	2317.52093	0.28311	0.28859	3.31E-03	2.40E-03	7.80E-04	4.30E-03	1.00E-03	1.44E-03	2.14E-03	1.33E-03	4.16E-04	2.58E-03	1.54E-03	8.53E-04	3.96E-06	4.89E-06	2.2102E-02
551502.8	4173334.21	2806.99315	3457.02039	653.465	3880.11952	680.44864	4189.84188	2837.86441	2078.066	373.90786	3530.02158	1826.55562	5052.60614	0.52603	0.52986	4.10E-03	3.01E-03	5.69E-04	2.47E-03	5.46E-04	3.36E-03	2.69E-03	1.74E-03	3.14E-04	1.88E-03	6.72E-04	1.86E-03	7.36E-06	8.98E-06	2.3229E-02
551373.15	4173218.02	2479.70537	3555.79843	706.63275	4656.66911	758.09393	3537.42399	2497.03298	2103.27345	401.17709	4117.3627	2219.10316	4325.70339	0.36726	0.3704	3.62E-03	3.10E-03	6.15E-04	2.97E-03	6.08E-04	2.84E-03	2.37E-03	1.76E-03	3.37E-04	2.19E-03	8.16E-04	1.59E-03	5.14E-06	6.28E-06	2.2822E-02
551373.65	4172627.86	2308.74348	2698.88539	915.25269	6732.97576	1273.24757	1758.20508	2303.17162	1555.72036	506.50738	4802.38713	4221.00328	2266.75056	0.27667	0.28187	3.37E-03	2.35E-03	7.97E-04	4.29E-03	1.02E-03	1.41E-03	2.18E-03	1.31E-03	4.25E-04	2.56E-03	1.55E-03	8.34E-04	3.87E-06	4.78E-06	2.2102E-02
551441.95	4173289.08	2647.94479	3546.68266	674.30494	4204.88933	714.48045	3863.54986	2669.44163	2135.27158	385.68814	3754.31793	2020.74136	4697.47503	0.42988	0.43314	3.87E-03	3.09E-03	5.87E-04	2.68E-03	5.73E-04	3.10E-03	2.53E-03	1.79E-03	3.24E-04	2.00E-03	7.43E-04	1.73E-03	6.02E-06	7.34E-06	2.3021E-02
551295.91	4173031.33	2394.84248	3601.76346	712.0356	5316.83807	819.05959	2812.02104	2404.61337	2123.42763	403.72531	4475.35294	2707.93875	3524.44225	0.31829	0.32234	3.50E-03	3.14E-03	6.20E-04	3.39E-03	6.57E-04	2.26E-03	2.28E-03	1.78E-03	3.39E-04	2.38E-03	9.96E-04	1.30E-03	4.45E-06	5.46E-06	2.2636E-02
551351.67	4172671.41	2226.59881	2799.38787	876.13149	6672.35842	1216.06756	1845.58058	2222.03788	1609.8758	484.57953	4820.04442	4085.19501	2368.41621	0.28616	0.29176	3.25E-03	2.44E-03	7.63E-04	4.25E-03	9.76E-04	1.48E-03	2.11E-03	1.35E-03	4.07E-04	2.57E-03	1.50E-03	8.71E-04	4.00E-06	4.94E-06	2.1969E-02
551328.15	4172732.09	2190.92292	2868.76528	861.9067	6567.89827	1176.40119	1954.81274	2186.1686	1651.09443	477.41695	4789.76367	3979.29772	2488.76278	0.29792	0.30389	3.20E-03	2.50E-03	7.51E-04	4.18E-03	9.44E-04	1.57E-03	2.07E-03	1.39E-03	4.01E-04	2.55E-03	1.46E-03	9.16E-04	4.17E-06	5.15E-06	2.1938E-02
551348.44	4173178.42	2410.52724	3473.46858	698.4532	4806.24979	773.12206	3435.69027	2427.9682	2049.36489	394.97481	4149.91387	2337.88132	4204.45285	0.34869	0.35177	3.52E-03	3.03E-03	6.08E-04	3.06E-03	6.20E-04	2.76E-03	2.30E-03	1.72E-03	3.31E-04	2.21E-03	8.60E-04	1.55E-03	4.88E-06	5.96E-06	2.2568E-02
551282.15	4172934.94	2303.61788	3304.28708	787.45005	5947.26804	907.22313	2330.43211	2305.1414	1912.02737	444.52555	4859.70337	3094.38007	2948.5735	0.31252	0.31729	3.36E-03	2.88E-03	6.86E-04	3.79E-03	7.28E-04	1.87E-03	2.18E-03	1.60E-03	3.73E-04	2.59E-03	1.14E-03	1.08E-03	4.37E-06	5.38E-06	2.2293E-02
551394.65	4173247.36	2516.00647	3554.24868	697.29942	4479.51877	737.82845	3580.69919	2533.60865	2115.89066	397.10598	3982.56555	2132.71229	4376.5707	0.38024	0.3833	3.67E-03	3.10E-03	6.07E-04	2.85E-03	5.92E-04	2.87E-03	2.40E-03	1.78E-03	3.33E-04	2.12E-03	7.85E-04	1.61E-03	5.32E-06	6.50E-06	2.2729E-02
551451.49	4173298.06	2654.72251	3492.41562	663.17047	4117.19012	698.96251	3887.4072	2677.50431	2104.22902	379.39725	3674.25686	1979.35791	4718.72618	0.43853	0.44182	3.88E-03	3.04E-03	5.78E-04	2.62E-03	5.61E-04	3.12E-03	2.54E-03	1.77E-03	3.18E-04	1.96E-03	7.28E-04	1.74E-03	6.14E-06	7.49E-06	2.2851E-02
551292.65	4173022.29	2375.14689	3557.67906	713.10789	5323.53719	818.16026	2738.74457	2383.95059	2093.15693	404.40052	4483.48048	2711.05277	3436.53222	0.3151	0.31916	3.47E-03	3.10E-03	6.21E-04	3.39E-03	6.56E-04	2.20E-03	2.26E-03	1.76E-03	3.39E-04	2.39E-03	9.97E-04	1.26E-03	4.41E-06	5.41E-06	2.2443E-02
551282.56	4172965.17	2328.97798	3392.08529	761.09332	5720.83438	868.33536	2444.91097	2332.5838	1970.38823	430.92368	4749.66567	2926.57562	3086.48456	0.31112	0.31567	3.40E-03	2.95E-03	6.63E-04	3.64E-03	6.97E-04	1.96E-03	2.21E-03	1.65E-03	3.62E-04	2.53E-03	1.08E-03	1.14E-03	4.35E-06	5.35E-06	2.2294E-02
551351.53	4173187.01	2410.41732	3464.97399	697.56245	4748.58748	766.38127	3428.51742	2427.67017	2044.06005	394.73159	4125.87421	2298.98564	4195.32926	0.34978	0.35248	3.52E-03	3.02E-03	6.08E-04	3.02E-03	6.15E-04	2.75E-03	2.30E-03	1.72E-03	3.31E-04	2.20E-03	8.46E-04	1.54E-03	4.89E-06	5.97E-06	2.2477E-02
551284.64	4172910.4	2270.79747	3211.01046	797.39296	6062.20476	928.6158	2237.55737	2271.08321	1854.33767	448.77415	4878.12022	3190.53022	2834.9704	0.3084	0.31325	3.31E-03	2.80E-03	6.95E-04	3.86E-03	7.45E-04	1.80E-03	2.15E-03	1.56E-03	3.77E-04	2.60E-03	1.17E-03	1.04E-03	4.32E-06	5.31E-06	2.2114E-02
551303.1	4172808.44	2198.28044	2909.79411	840.08491	6475.15492	1083.43143	2014.99662	2194.34546	1675.97829	468.17831	4817.74718	3749.07753	2557.20264	0.30483	0.31055	3.21E-03	2.53E-03	7.32E-04	4.12E-03	8.69E-04	1.62E-03	2.08E-03	1.41E-03	3.93E-04	2.56E-03	1.38E-03	9.41E-04	4.27E-06	5.26E-06	2.1857E-02
551289.43	4173013.33	2361.6087	3521.03985	717.76255	5359.34329	821.34872	2674.47499	2369.47782	2066.95257	407.05675	4511.5105	2726.11376	3359.58228	0.3124	0.31648	3.45E-03	3.07E-03	6.25E-04	3.41E-03	6.59E-04	2.15E-03	2.25E-03	1.73E-03	3.42E-04	2.40E-03	1.00E-03	1.24E-03	4.37E-06	5.36E-06	2.2328E-02
551376.24	4173226.6	2459.41738	3505.5517	698.02191	4564.03783	746.43973	3488.34823	2476.46846	2076.50719	396.50844	4038.22815	2179.73023	4266.26321	0.36502	0.36748	3.59E-03	3.05E-03	6.08E-04	2.91E-03	5.99E-04	2.80E-03	2.35E-03	1.74E-03	3.33E-04	2.15E-03	8.02E-04	1.57E-03	5.11E-06	6.23E-06	2.2509E-02
551763.31	4172610.15	4370.73132	1740.50486	1270.432	4821.78136	1943.84649	1172.82628	4333.89242	1023.00535	683.58395	3180.04131	4783.17197	1569.67728	0.22123	0.22638	6.38E-03	1.52E-03	1.11E-03	3.07E-03	1.56E-03	9.41E-04	4.11E-03	8.58E-04	5.74E-04	1.69E-03	1.76E-03	5.78E-04	3.10E-06	3.84E-06	2.4150E-02
551655.39	4173380.11	3491.54696	3161.02862	649.90589	2916.16273	580.26366	4536.60607	3545.04248	1873.01873	376.93176	2805.03987	1421.56259	5503.23456	2.0659	2.12692	5.10E-03	2.75E-03	5.66E-04	1.86E-03	4.66E-04	3.64E-03	3.36E-03	1.57E-03	3.16E-04	1.49E-03	5.23E-04	2.02E-03	2.89E-05	3.60E-05	2.3731E-02
551293.3	4172842.79	2208.39511	2973.49997	823.08322	6376.19446	1031.08591	2052.45813	2205.64916	1712.59232	459.8461	4841.02625	3573.82496	2604.82858	0.30471	0.31002	3.22E-03	2.59E-03	7.17E-04	4.06E-03	8.27E-04	1.65E-03	2.09E-03	1.44E-03	3.86E-04	2.58E-03	1.31E-03	9.58E-04	4.26E-06	5.25E-06	2.1837E-02
551599.09	4173379.34	3084.40313	3306.06661	654.35932	3244.23887	606.54683	4459.59296	3126.37413	1982.35481	376.94152	3087.64821	1532.48414	5372.85168	0.88318	0.89288	4.50E-03	2.88E-03	5.70E-04	2.07E-03	4.87E-04	3.58E-03	2.96E-03	1.66E-03	3.16E-04	1.64E-03	5.64E-04	1.98E-03	1.24E-05	1.51E-05	2.3236E-02
551642.26	4173382.02	3379.90905	3196.90656	651.72761	2965.4744	584.80357	4536.98996	3429.92449	1900.25253	377.43433	2865.7822	1441.42881	5493.64548	1.54121	1.57801	4.93E-03	2.78E-03	5.68E-04	1.89E-03	4.69E-04	3.64E-03	3.25E-03	1.59E-03	3.17E-04	1.53E-03	5.30E-04	2.02E-03	2.16E-05	2.67E-05	2.3570E-02
551461.03	4173307.04	2664.73468	3443.93195	653.72746	4036.72626	689.86332	3913.26717	2688.7134	2074.64091	373.98808	3605.60065	1938.51938	4742.77441	0.44785	0.45137	3.89E-03	3.00E-03	5.69E-04	2.57E-03	5.53E-04	3.14E-03	2.55E-03	1.74E-03	3.14E-04	1.92E-03	7.13E-04	1.75E-03	6.27E-06	7.65E-06	2.2716E-02
551512.25	4173343.11	2786.40166	3381.24025	644.00329	3773.44024	668.99039	4131.67171	2818.30203	2033.26599	368.47659	3442.6011	1776.43301	4978.78249	0.53708	0.54054	4.07E-03	2.94E-03	5.61E-04	2.40E-03	5.37E-04	3.31E-03	2.67E-03	1.71E-03	3.09E-04	1.83E-03	6.54E-04	1.83E-03	7.52E-06	9.16E-06	2.2848E-02
551319.54	4172748.83	2168.8702	2838.43708	849.53307	6461.06005	1146.32454	1953.91632	2164.18009	1634.41297	471.11751	4723.76479	3891.46223	2483.71053	0.29629	0.30215	3.17E-03	2.47E-03	7.40E-04	4.11E-03	9.20E-04	1.57E-03	2.05E-03	1.37E-03	3.95E-04	2.51E-03	1.43E-03	9.14E-04	4.15E-06	5.12E-06	2.1666E-02
551668.51	4173378.2	3599.49522	3110.74847	645.15756	2860.92555	574.41806	4497.24764	3656.74465	1836.85307	374.67411	2737.23623	1399.22209	5467.18229	2.88781	3.00264	5.25E-03	2.71E-03	5.62E-04	1.82E-03	4.61E-04	3.61E-03	3.47E-03	1.54E-03	3.14E-04	1.46E-03	5.15E-04	2.01E-03	4.04E-05	5.09E-05	2.3812E-02
551302.76	4173079.42	2370.55975	3517.73184	683.09328	5023.01492	792.48616	3013.64472	2384.19959	2083.4619	386.56885	4210.80339	2550.52162	3748.72894	0.31623	0.31991	3.46E-03	3.06E-03	5.95E-04	3.20E-03	6.36E-04	2.42E-03	2.26E-03	1.75E-03	3.24E-04	2.24E-03	9.38E-04	1.38E-03	4.42E-06	5.42E-06	2.2272E-02
551736.9	4173350.34	4257.27543	2906.84395	620.25596	2673.38276	557.03146	4273.88359	4342.22393	1692.234	361.83051	2489.308	1327.88251	5237.97751	4.6195	4.06234	6.21E-03	2.53E-03	5.40E-04	1.70E-03	4.47E-04	3.43E-03	4.12E-03	1.42E-03	3.04E-04	1.32E-03	4.89E-04	1.93E-03	6.46E-05	6.88E-05	2.4578E-02
551305.99	4173088.38	2367.05733	3500.88529	679.94717	4984.76957	790.0309	3060.73955	2381.42751	2073.97243	384.66404	4177.21335	2529.70228	3800.05911	0.31761	0.32086	3.46E-03	3.05E-03	5.92E-04	3.17E-03	6.34E-04	2.46E-03	2.26E-03	1.74E-03	3.23E-04	2.22E-03	9.31E-04	1.40E-03	4.44E-06	5.44E-06	2.2242E-02
551565.25	4173368.66	2918.31463	3345.22569	649.6188	3466.3153	628.63789	4308.64416	2956.29358	2013.70007	372.78563	3248.41564	1623.55379	5181.37179	0.69536	0.69997	4.26E-03	2.91E-03	5.66E-04	2.21E-03	5.04E-04	3.46E-03	2.80E-03	1.69E-03	3.13E-04	1.73E-03	5.97E-04	1.91E-03	9.73E-06	1.19E-05	2.2966E-02
551756.95	4173338.46	4411.60742	2852.45802	611.1526	2633.08611	552.89478	4203.16671	4504.94093	1658.54629	356.67201	2437.88741	1314.1722	5153.40959	2.22776	2.04322	6.44E-03	2.48E-03	5.32E-04	1.68E-03	4.44E-04	3.37E-03	4.27E-03	1.39E-03	2.99E-04	1.30E-03	4.84E-04	1.90E-03	3.12E-05	3.46E-05	2.4652E-02
551354.62	4173195.59	2397.51528	3433.31876	693.13928	4676.85508	757.79163	3400.31461	2414.5456	2026.44801	392.41021	4075.76673	2262.21101	4160.24223	0.34882	0.35144	3.50E-03	2.99E-03	6.04E-04	2.98E-03	6.08E-04	2.73E-03	2.29E-03	1.70E-03	3.29E-04	2.17E-03	8.32E-04	1.53E-03	4.88E-06	5.96E-06	2.2269E-02
551345.47	4172678.32	2187.59509	2771.91781	858.02785	6516.70162	1188.15424	1839.32189	2183.20918	1594.17572	474.59626	4728.14243	3977.803	2357.0852	0.28201	0.2875	3.19E-03	2.41E-03	7.47E-04	4.15E-03	9.53E-04	1.48E-03	2.07E-03	1.34E-03	3.98E-04	2.52E-03	1.46E-03	8.67E-04	3.95E-06	4.87E-06	2.1594E-02
551363.86	4172634.32	2246.2089	2671.19594	885.09186	6567.91337	1228.21002	1746.72357	2241.23294	1538.89532	489.81733	4705.74286	4083.23054	2250.16397	0.27214	0.27726	3.28E-03	2.33E-03	7.71E-04	4.18E-03	9.85E-04	1.40E-03	2.12E-03	1.29E-03	4.11E-04	2.50E-03	1.50E-03	8.28E-04	3.81E-06	4.70E-06	2.1615E-02
551306.29	4172785.36	2168.71348	2846.35397	838.59402	6416.74356	1100.56094	1974.08296	2164.3554	1639.57821	466.42008	4731.05105	3784.02786	2505.68518	0.2993	0.30506	3.17E-03	2.48E-03	7.30E-04	4.09E-03	8.83E-04	1.58E-03	2.05E-03	1.38E-03	3.91E-04	2.52E-03	1.39E-03	9.22E-04	4.19E-06	5.17E-06	2.1588E-02
551286.2	4173004.36	2338.49988	3464.63922	718.95187	5364.30575	821.00626	2603.10639	2345.468	2029.46542	407.70594	4511.56567	2729.76002	3273.14245	0.30851	0.31279	3.41E-03	3.02E-03	6.26E-04	3.42E-03	6.59E-04	2.09E-03	2.22E-03	1.70E-03	3.42E-04	2.40E-03	1.00E-03	1.20E-03	4.32E-06	5.30E-06	2.2108E-02
551315.24	4172757.2	2157.9732	2821.5891	842.67994	6405.39566	1129.66875	1949.98354	2153.35491	1625.0509	467.62331	4691.36972	3842.46303	2477.2791	0.29507	0.30085	3.15E-03	2.46E-03	7.34E-04	4.08E-03	9.06E-04	1.56E-03	2.04E-03	1.36E-03	3.92E-04	2.50E-03	1.41E-03	9.11E-04	4.13E-06	5.10E-06	2.1519E-02
551701.81	4172570.12	4371.44783	1860.25561	1476.34925	4053.89661	2140.26148	1276.87471	4330.11422	1104.04437	788.46306	3138.85716	4305.65374	1714.71778	0.1603	0.16235	6.38E-03	1.62E-03	1.29E-03	2.58E-03	1.72E-03	1.02E-03	4.10E-03	9.26E-04	6.62E-04	1.67E-03	1.58E-03	6.31E-04	2.24E-06	2.75E-06	2.4193E-02
551309.21	4173097.33	2353.40446	3463.95098	674.20725	4924.4916	785.11444	3093.15483	2368.42205	2052.65755	381.29127	4123.90578	2503.47749	3832.40706	0.3176	0.32118	3.44E-03	3.02E-03	5.87E-04	3.14E-03	6.30E-04	2.48E-03	2.24E-03	1.72E-03	3.20E-04	2.20E-03	9.21E-04	1.41E-03	4.44E-06	5.44E-06	2.2110E-02
551720.56	4173360.82	4081.83898	2933.17345	623.18487	2692.72045	557.22489	4292.37101	4158.88357	1710.62492	363.2905	2523.14171	1332.61197	5257.21257	12.80412	10.63619	5.96E-03	2.55E-03	5.43E-04	1.71E-03	4.47E-04	3.44E-03	3.94E-03	1.44E-03	3.05E-04	1.34E-03	4.90E-04	1.93E-03	1.79E-04	1.80E-04	2.4470E-02
551299.54	4173070.47	2355.16604	3499.05878	680.4201	5012.63718	789.41509	2943.75242	2368.03801	2072.53745	385.20382	4200.86725	2560.63352	3668.1109	0.31281	0.31617	3.44E-03	3.05E-03	5.93E-04	3.19E-03	6.33E-04	2.36E-03	2.24E-03	1.74E-03	3.23E-04	2.24E-03	9.42E-04	1.35E-03	4.38E-06	5.36E-06	2.2109E-02
551279.34	4172956.2	2290.9478	3307.35892	757.94176	5681.99236	866.33372	2371.79297	2293.88517	1918.78489	428.83407	4698.43769	2922.97866	2996.51086	0.30649	0.311	3.34E-03	2.88E-03	6.60E-04	3.62E-03	6.95E-04	1.90E-03	2.17E-03	1.61E-03	3.60E-04	2.50E-03	1.08E-03	1.10E-03	4.29E-06	5.27E-06	2.1933E-02
551470.56	4173316.03	2666.46013	3385.05929	643.84186	3950.1768	680.21274	3920.02068	2691.79634	2038.45489	368.2761	3532.21146	1895.66847	4743.71323	0.45485	0.45771	3.89E-03	2.95E-03	5.61E-04	2.52E-03	5.46E-04	3.15E-03	2.55E-03	1.71E-03	3.09E-04	1.88E-03	6.97E-04	1.75E-03	6.36E-06	7.76E-06	2.2515E-02
551304.4	4172794.17	2166.81457	2846.41436	832.93776	6373.04335	1084.75946	1976.41537	2162.67713	1639.90183	463.66465	4718.7868	3732.27242	2508.25872	0.2982	0.30386	3.16E-03	2.48E-03	7.25E-04	4.06E-03	8.70E-04	1.59E-03	2.05E-03	1.38E-03	3.89E-04	2.51E-03	1.37E-03	9.23E-04	4.17E-06	5.15E-06	2.1513E-02
551681.64	4173376.3	3686.01848	3039.40778	637.12273	2799.2177	567.09472	4408.97257	3746.86958	1789.60999	370.39231	2660.17236	1375.0977	5370.63031	4.44266	4.73685	5.38E-03	2.65E-03	5.55E-04	1.78E-03	4.55E-04	3.54E-03	3.55E-03	1.50E-03	3.11E-04	1.42E-03	5.06E-04	1.98E-03	6.22E-05	8.03E-05	2.3761E-02
551357.71	4173204.18	2391.09197	3412.77485	689.48264	4608.89765	749.59981	3378.14292	2407.87629	2015.12572	390.60573	4032.94886	2223.63667	4133.4625	0.34806	0.35101	3.49E-03	2.97E-03	6.01E-04	2.93E-03	6.01E-04	2.71E-03	2.28E-03	1.69E-03	3.28E-04	2.15E-03	8.18E-04	1.52E-03	4.87E-06	5.95E-06	2.2107E-02
551278.93	4172925.97	2252.36136	3197.86382	776.54481	5846.02368	897.56104	2250.41329	2253.45242	1849.50566	437.86962	4754.5366	3062.11594	2848.89682	0.3035	0.30815	3.29E-03	2.79E-03	6.76E-04	3.72E-03	7.20E-04	1.81E-03	2.14E-03	1.55E-03	3.67E-04	2.53E-03	1.13E-03	1.05E-03	4.25E-06	5.22E-06	2.1767E-02
551282.98	4172995.4	2320.49928	3415.63224	723.28347	5395.32714	824.81481	2539.6766	2326.55179	1996.54005	410.07098	4528.12465	2746.25084	3196.51385	0.30557	0.30985	3.39E-03	2.97E-03	6.30E-04	3.44E-03	6.62E-04	2.04E-03	2.21E-03	1.68E-03	3.44E-04	2.41E-03	1.01E-03	1.18E-03	4.28E-06	5.25E-06	2.1957E-02
551296.31	4173061.52	2347.33542	3491.20241	681.37984	5028.0739	789.20566	2882.04971	2359.38284	2066.48552	385.90039	4216.76149	2575.01326	3597.38226	0.31035	0.31374	3.43E-03	3.04E-03	5.93E-04	3.20E-03	6.33E-04	2.31E-03	2.24E-03	1.73E-03	3.24E-04	2.24E-03	9.47E-04	1.32E-03	4.34E-06	5.32E-06	2.2027E-02
551521.7	4173352.01	2781.44926	3333.11709	638.45251	3678.15734	658.94563	4098.40427	2814.35832	2004.10813	365.42458	3373.4765	1728.13818	4937.74962	0.55029	0.55325	4.06E-03	2.90E-03	5.56E-04	2.34E-03	5.29E-04	3.29E-03	2.67E-03	1.68E-03	3.07E-04	1.80E-03	6.36E-04	1.82E-03	7.70E-06	9.38E-06	2.2599E-02
551616.01	4173385.84	3155.18038	3219.26902	646.49838	3092.8567	589.74327	4420.72536	3199.11422	1922.7884	373.2207	2958.5287	1473.0945	5339.79414	1.01549	1.02575	4.61E-03	2.80E-03	5.63E-04	1.97E-03	4.73E-04	3.55E-03	3.03E-03	1.61E-03	3.13E-04	1.57E-03	5.42E-04	1.96E-03	1.42E-05	1.74E-05	2.3033E-02
551380.19	4173237.45	2441.9766	3453.95027	687.77263	4453.56938	732.58108	3438.53996	2458.76579	2048.95806	391.02769	3947.4418	2128.26164	4206.78274	0.36218	0.36453	3.56E-03	3.01E-03	5.99E-04	2.84E-03	5.88E-04	2.76E-03	2.33E-03	1.72E-03	3.28E-04	2.10E-03	7.83E-04	1.55E-03	5.07E-06	6.18E-06	2.2175E-02
551281.17	4172889.17	2212.62332	3066.59126	793.1007	6055.17559	946.94655	2127.04761	2211.92648	1768.61139	444.89969	4776.32014	3257.52167	2697.53735	0.30066	0.30548	3.23E-03	2.67E-03	6.91E-04	3.86E-03	7.60E-04	1.71E-03	2.10E-03	1.48E-03	3.73E-04	2.54E-03	1.20E-03	9.93E-04	4.21E-06	5.18E-06	2.1610E-02
551340.35	4172687.25	2160.36235	2758.33539	845.36383	6403.43551	1167.54441	1843.01559	2156.08633	1586.70558	467.64847	4663.21888	3899.22538	2358.23603	0.2798	0.28523	3.15E-03	2.40E-03	7.36E-04	4.08E-03	9.37E-04	1.48E-03	2.04E-03	1.33E-03	3.92E-04	2.48E-03	1.43E-03	8.68E-04	3.92E-06	4.83E-06	2.1345E-02
551796.13	4173315.36	4534.73708	2745.02922	607.81914	2540.56242	539.14769	4054.3575	4638.24106	1595.78344	342.84719	2442.72598	1277.84588	4965.65567	1.12472	1.07364	6.62E-03	2.39E-03	5.29E-04	1.62E-03	4.33E-04	3.25E-03	4.40E-03	1.34E-03	2.88E-04	1.30E-03	4.70E-04	1.83E-03	1.57E-05	1.82E-05	2.4496E-02
551720.55	4172580.32	4423.44596	1805.99178	1410.49093	4096.36424	2028.84992	1237.59195	4382.44327	1069.03142	754.53259	3072.34875	4277.38104	1661.21512	0.17084	0.17367	6.46E-03	1.57E-03	1.23E-03	2.61E-03	1.63E-03	9.93E-04	4.15E-03	8.97E-04	6.33E-04	1.64E-03	1.57E-03	6.11E-04	2.39E-06	2.94E-06	2.3997E-02
551480.1	4173325.01	2666.72763	3329.40573	635.31634	3866.12038	671.09969	3917.60145	2693.40907	2003.94838	363.32161	3464.32948	1852.36385	4734.63157	0.46448	0.46779	3.89E-03	2.90E-03	5.53E-04	2.46E-03	5.38E-04	3.14E-03	2.55E-03	1.68E-03	3.05E-04	1.84E-03	6.82E-04	1.74E-03	6.50E-06	7.93E-06	2.2310E-02
551308.42	4172775.46	2144.0733	2800.656	829.93951	6305.59415	1095.74984	1946.44674	2139.72082	1613.71697	461.28756	4644.31342	3741.30535	2470.78939	0.29275	0.29836	3.13E-03	2.44E-03	7.23E-04	4.02E-03	8.79E-04	1.56E-03	2.03E-03	1.35E-03	3.87E-04	2.47E-03	1.38E-03	9.09E-04	4.10E-06	5.06E-06	2.1283E-02
551331.71	4172704.06	2142.54247	2767.0164	839.19677	6348.69467	1154.84773	1867.75635	2138.16222	1592.12564	464.37633	4634.48551	3860.13682	2384.08884	0.28227	0.2878	3.13E-03	2.41E-03	7.31E-04	4.04E-03	9.27E-04	1.50E-03	2.03E-03	1.34E-03	3.90E-04	2.47E-03	1.42E-03	8.77E-04	3.95E-06	4.88E-06	2.1261E-02
551552.49	4173368.83	2843.33682	3297.19475	639.19365	3482.33517	626.74079	4168.621	2879.44472	1983.21409	366.47214	3246.69096	1630.99254	5018.02777	0.62787	0.63261	4.15E-03	2.87E-03	5.57E-04	2.22E-03	5.03E-04	3.34E-03	2.73E-03	1.66E-03	3.07E-04	1.73E-03	6.00E-04	1.85E-03	8.79E-06	1.07E-05	2.2538E-02
551694.77	4173374.39	3785.29344	2972.02878	627.35672	2735.53621	559.0237	4313.13686	3850.41965	1743.0332	365.09508	2587.09653	1348.16934	5267.64304	8.36623	9.40756	5.53E-03	2.59E-03	5.46E-04	1.74E-03	4.49E-04	3.46E-03	3.65E-03	1.46E-03	3.06E-04	1.38E-03	4.96E-04	1.94E-03	1.17E-04	1.59E-04	2.3817E-02
551279.75	4172986.43	2296.74021	3355.73004	725.61929	5407.67988	826.95392	2473.4367	2301.94637	1957.72467	411.26451	4526.20722	2757.25926	3116.03985	0.30216	0.30607	3.35E-03	2.92E-03	6.32E-04	3.44E-03	6.63E-04	1.98E-03	2.18E-03	1.64E-03	3.45E-04	2.41E-03	1.01E-03	1.15E-03	4.23E-06	5.19E-06	2.1747E-02
551293.09	4173052.57	2329.34481	3462.78466	679.584	5017.5083	786.01476	2810.41222	2340.57749	2048.10727	385.05295	4211.7245	2567.07394	3513.13311	0.30648	0.31028	3.40E-03	3.02E-03	5.92E-04	3.19E-03	6.31E-04	2.25E-03	2.22E-03	1.72E-03	3.23E-04	2.24E-03	9.45E-04	1.29E-03	4.29E-06	5.26E-06	2.1837E-02
551769.09	4173333.75	4403.89001	2775.99237	598.08224	2581.50161	544.92076	4076.37999	4499.08934	1614.73495	348.97001	2380.05229	1294.53142	4997.95931	1.67151	1.55865	6.43E-03	2.42E-03	5.21E-04	1.64E-03	4.37E-04	3.27E-03	4.26E-03	1.35E-03	2.93E-04	1.27E-03	4.76E-04	1.84E-03	2.34E-05	2.64E-05	2.4262E-02
551310.93	4172765.57	2137.24368	2787.69138	829.94589	6289.90197	1103.86343	1935.31916	2132.81534	1606.09483	460.92979	4622.49424	3754.27457	2457.4536	0.29081	0.29642	3.12E-03	2.43E-03	7.23E-04	4.01E-03	8.86E-04	1.55E-03	2.02E-03	1.35E-03	3.87E-04	2.46E-03	1.38E-03	9.04E-04	4.07E-06	5.02E-06	2.1225E-02
551336.03	4172695.66	2142.37634	2750.78266	837.284	6327.43075	1153.45791	1849.43448	2138.14118	1582.78859	463.26817	4619.28117	3847.28694	2363.32094	0.27886	0.28426	3.13E-03	2.40E-03	7.29E-04	4.03E-03	9.25E-04	1.48E-03	2.03E-03	1.33E-03	3.89E-04	2.46E-03	1.42E-03	8.70E-04	3.90E-06	4.82E-06	2.1186E-02
551360.8	4173212.77	2375.4328	3375.47851	683.4051	4530.81364	739.93253	3340.66141	2391.95488	1995.00756	387.3774	3971.96064	2186.74089	4087.72319	0.34619	0.34915	3.47E-03	2.94E-03	5.95E-04	2.88E-03	5.94E-04	2.68E-03	2.27E-03	1.67E-03	3.25E-04	2.11E-03	8.05E-04	1.50E-03	4.84E-06	5.92E-06	2.1861E-02
551291.8	4172827.76	2156.52723	2862.6696	809.17488	6220.77425	1026.53887	1983.65725	2153.42494	1649.03575	451.69372	4686.6969	3537.15683	2517.81683	0.29525	0.3005	3.15E-03	2.49E-03	7.05E-04	3.96E-03	8.24E-04	1.59E-03	2.04E-03	1.38E-03	3.79E-04	2.49E-03	1.30E-03	9.26E-04	4.13E-06	5.09E-06	2.1257E-02
551401.32	4173263.22	2469.57534	3426.19686	674.30603	4263.47054	713.64181	3479.16191	2486.96253	2047.71162	384.44266	3795.27401	2059.19279	4251.90733	0.37467	0.37694	3.60E-03	2.98E-03	5.87E-04	2.71E-03	5.73E-04	2.79E-03	2.36E-03	1.72E-03	3.23E-04	2.02E-03	7.58E-04	1.56E-03	5.24E-06	6.39E-06	2.2006E-02
551408.99	4173270.22	2485.89228	3422.14824	670.14623	4216.84972	709.85923	3513.88739	2503.77051	2050.54418	382.39718	3752.63363	2044.28698	4290.9522	0.38135	0.38422	3.63E-03	2.98E-03	5.84E-04	2.69E-03	5.70E-04	2.82E-03	2.37E-03	1.72E-03	3.21E-04	2.00E-03	7.52E-04	1.58E-03	5.34E-06	6.51E-06	2.2021E-02
551276.11	4172947.24	2251.14489	3220.91847	753.64437	5632.5418	863.51235	2299.95354	2253.48477	1866.96135	426.00974	4638.64687	2916.01373	2907.69081	0.30034	0.30478	3.29E-03	2.81E-03	6.56E-04	3.59E-03	6.93E-04	1.85E-03	2.14E-03	1.57E-03	3.57E-04	2.47E-03	1.07E-03	1.07E-03	4.20E-06	5.16E-06	2.1553E-02
551531.15	4173360.91	2774.72011	3283.60808	632.88172	3578.87374	636.22429	4060.12668	2808.42569	1973.98407	362.39326	3300.5589	1679.43642	4891.86799	0.56217	0.5656	4.05E-03	2.86E-03	5.51E-04	2.28E-03	5.10E-04	3.26E-03	2.66E-03	1.66E-03	3.04E-04	1.76E-03	6.18E-04	1.80E-03	7.87E-06	9.58E-06	2.2322E-02
551418.61	4173279.28	2503.20717	3403.28717	662.61804	4148.27715	703.83978	3553.08358	2521.80188	2044.8996	378.4706	3688.96616	2015.74818	4333.80243	0.38929	0.39212	3.65E-03	2.96E-03	5.77E-04	2.64E-03	5.65E-04	2.85E-03	2.39E-03	1.72E-03	3.18E-04	1.96E-03	7.42E-04	1.59E-03	5.45E-06	6.64E-06	2.1987E-02
551489.64	4173333.99	2670.78692	3286.3943	629.25426	3788.71257	663.12523	3914.97298	2698.78009	1976.93772	359.8127	3407.64875	1809.18748	4727.06009	0.47566	0.47897	3.90E-03	2.86E-03	5.48E-04	2.41E-03	5.32E-04	3.14E-03	2.56E-03	1.66E-03	3.02E-04	1.81E-03	6.66E-04	1.74E-03	6.66E-06	8.12E-06	2.2146E-02
551586.09	4173381.23	2935.26477	3227.80537	639.35402	3259.75854	603.84444	4245.90316	2974.17518	1940.3278	367.5654	3077.38456	1538.24708	5112.56535	0.76163	0.76646	4.28E-03	2.81E-03	5.57E-04	2.08E-03	4.84E-04	3.41E-03	2.82E-03	1.63E-03	3.08E-04	1.64E-03	5.66E-04	1.88E-03	1.07E-05	1.30E-05	2.2483E-02
551729.08	4173360.44	4074.41631	2850.66856	610.5884	2634.64368	548.19241	4149.54298	4152.71651	1661.40809	355.95176	2458.07075	1309.25548	5087.38144	7.48843	6.33432	5.95E-03	2.48E-03	5.32E-04	1.68E-03	4.40E-04	3.33E-03	3.94E-03	1.39E-03	2.99E-04	1.31E-03	4.82E-04	1.87E-03	1.05E-04	1.07E-04	2.3911E-02
551289.87	4173043.62	2310.95605	3430.15025	678.56514	5009.7262	783.20774	2739.78131	2321.32696	2026.40126	384.59982	4210.55429	2565.96713	3429.3742	0.30323	0.30655	3.37E-03	2.99E-03	5.91E-04	3.19E-03	6.28E-04	2.20E-03	2.20E-03	1.70E-03	3.23E-04	2.24E-03	9.44E-04	1.26E-03	4.24E-06	5.19E-06	2.1648E-02
551749.77	4173348.47	4242.61526	2798.1655	602.25996	2594.6881	544.35277	4083.35215	4329.44547	1627.86962	351.29599	2405.43626	1295.36997	5010.10998	2.82508	2.54012	6.19E-03	2.44E-03	5.25E-04	1.65E-03	4.37E-04	3.28E-03	4.10E-03	1.37E-03	2.95E-04	1.28E-03	4.77E-04	1.84E-03	3.95E-05	4.30E-05	2.3966E-02
551740.16	4172590.59	4384.76557	1751.64702	1326.13382	4249.4862	1922.10738	1195.10157	4345.73387	1033.78821	711.49363	3039.92928	4321.59069	1602.09878	0.18648	0.19022	6.40E-03	1.53E-03	1.16E-03	2.71E-03	1.54E-03	9.59E-04	4.12E-03	8.67E-04	5.97E-04	1.62E-03	1.59E-03	5.89E-04	2.61E-06	3.22E-06	2.3674E-02
551354.07	4172640.78	2181.69511	2633.94921	854.5657	6368.35817	1182.78745	1731.45741	2177.20159	1516.73021	472.94831	4587.8837	3930.17378	2228.04227	0.2664	0.27139	3.18E-03	2.29E-03	7.44E-04	4.06E-03	9.49E-04	1.39E-03	2.06E-03	1.27E-03	3.97E-04	2.44E-03	1.45E-03	8.20E-04	3.73E-06	4.60E-06	2.1065E-02
551574.81	4173377.67	2881.24616	3236.53888	637.17809	3329.42304	610.88295	4192.48271	2918.93678	1947.90076	365.86115	3126.44794	1567.06988	5045.35134	0.70831	0.71271	4.21E-03	2.82E-03	5.55E-04	2.12E-03	4.90E-04	3.36E-03	2.77E-03	1.63E-03	3.07E-04	1.66E-03	5.77E-04	1.86E-03	9.91E-06	1.21E-05	2.2380E-02
551276.52	4172977.47	2269.61887	3290.41693	726.71062	5408.73282	828.47477	2406.99285	2274.04431	1916.05062	411.70239	4511.88262	2765.82939	3035.17356	0.29835	0.30225	3.31E-03	2.87E-03	6.33E-04	3.44E-03	6.65E-04	1.93E-03	2.16E-03	1.61E-03	3.45E-04	2.40E-03	1.02E-03	1.12E-03	4.17E-06	5.12E-06	2.1505E-02
551327.38	4172712.47	2121.56486	2744.97134	828.99771	6246.84081	1135.76731	1866.57024	2117.25401	1580.19956	458.94537	4570.89148	3791.95739	2379.69289	0.27976	0.28521	3.10E-03	2.39E-03	7.22E-04	3.98E-03	9.11E-04	1.50E-03	2.01E-03	1.33E-03	3.85E-04	2.43E-03	1.40E-03	8.76E-04	3.91E-06	4.83E-06	2.1026E-02
551292.5	4172818.38	2137.67517	2819.49597	806.24494	6173.82279	1029.83341	1957.50214	2134.33367	1624.40773	449.77534	4631.01964	3540.24415	2484.56341	0.29187	0.29714	3.12E-03	2.46E-03	7.02E-04	3.93E-03	8.26E-04	1.57E-03	2.02E-03	1.36E-03	3.77E-04	2.46E-03	1.30E-03	9.14E-04	4.08E-06	5.04E-06	2.1060E-02
551602.88	4173387.75	3018.51891	3182.56115	637.43091	3128.63288	589.4708	4275.78654	3059.34266	1906.37114	367.26878	2976.45748	1485.30709	5159.2315	0.85347	0.86125	4.41E-03	2.77E-03	5.55E-04	1.99E-03	4.73E-04	3.43E-03	2.90E-03	1.60E-03	3.08E-04	1.58E-03	5.46E-04	1.90E-03	1.19E-05	1.46E-05	2.2492E-02
551499.18	4173342.98	2681.88726	3260.05168	625.93715	3717.88263	656.17313	3918.8466	2711.2443	1959.85633	357.95655	3362.90164	1766.31315	4729.45883	0.4889	0.4918	3.91E-03	2.84E-03	5.45E-04	2.37E-03	5.26E-04	3.14E-03	2.57E-03	1.64E-03	3.00E-04	1.79E-03	6.50E-04	1.74E-03	6.84E-06	8.33E-06	2.2047E-02
551279.44	4172878.55	2169.63657	2972.05705	782.22669	5966.86985	943.50264	2061.81362	2168.59906	1713.62048	438.29688	4669.1637	3239.42719	2615.78977	0.29277	0.29747	3.17E-03	2.59E-03	6.81E-04	3.80E-03	7.57E-04	1.65E-03	2.06E-03	1.44E-03	3.68E-04	2.49E-03	1.19E-03	9.62E-04	4.10E-06	5.04E-06	2.1157E-02
551286.64	4173034.66	2295.81242	3399.58208	679.78303	5018.69558	782.52044	2674.07021	2305.30695	2004.99711	385.37386	4222.39398	2569.65304	3351.26547	0.30064	0.30398	3.35E-03	2.96E-03	5.92E-04	3.20E-03	6.28E-04	2.15E-03	2.18E-03	1.68E-03	3.23E-04	2.25E-03	9.45E-04	1.23E-03	4.21E-06	5.15E-06	2.1499E-02
551385.53	4173251.07	2413.23763	3373.96856	672.70291	4310.29999	714.17203	3368.05725	2429.74021	2006.7847	382.84935	3817.9202	2067.37091	4121.44876	0.35826	0.36047	3.52E-03	2.94E-03	5.86E-04	2.74E-03	5.73E-04	2.70E-03	2.30E-03	1.68E-03	3.21E-04	2.03E-03	7.61E-04	1.52E-03	5.01E-06	6.11E-06	2.1695E-02
551323.06	4172720.87	2110.35613	2734.46427	823.89101	6197.47456	1124.28466	1870.45093	2106.03428	1574.5929	456.31517	4539.34871	3757.00793	2382.19893	0.27949	0.28492	3.08E-03	2.38E-03	7.18E-04	3.95E-03	9.02E-04	1.50E-03	2.00E-03	1.32E-03	3.83E-04	2.42E-03	1.38E-03	8.76E-04	3.91E-06	4.83E-06	2.0912E-02
551312.44	4173106.28	2286.07775	3330.17725	650.38964	4724.33904	764.46966	3059.22181	2301.78242	1976.1846	367.68241	3940.77604	2442.7183	3780.40756	0.31178	0.31526	3.34E-03	2.90E-03	5.66E-04	3.01E-03	6.13E-04	2.45E-03	2.18E-03	1.66E-03	3.09E-04	2.10E-03	8.99E-04	1.39E-03	4.36E-06	5.34E-06	2.1425E-02
551363.89	4173221.35	2353.56514	3326.86787	675.63859	4446.35446	729.25542	3292.50503	2369.79574	1968.97603	383.15877	3898.25392	2150.76589	4029.01429	0.34392	0.34681	3.44E-03	2.90E-03	5.88E-04	2.83E-03	5.85E-04	2.64E-03	2.25E-03	1.65E-03	3.21E-04	2.07E-03	7.91E-04	1.48E-03	4.81E-06	5.88E-06	2.1558E-02
551650.74	4173389.75	3334.77638	3047.06536	630.65622	2838.78146	565.38372	4301.56564	3384.52817	1806.77748	365.4466	2732.1943	1388.03554	5222.39478	1.62475	1.65938	4.87E-03	2.65E-03	5.49E-04	1.81E-03	4.54E-04	3.45E-03	3.21E-03	1.52E-03	3.07E-04	1.45E-03	5.11E-04	1.92E-03	2.27E-05	2.81E-05	2.2751E-02
551447.48	4173306.47	2551.40519	3307.03158	636.4838	3937.32121	673.56548	3668.03174	2573.09498	1992.71498	364.02387	3499.92444	1910.44078	4455.45856	0.41149	0.41442	3.72E-03	2.88E-03	5.54E-04	2.51E-03	5.40E-04	2.94E-03	2.44E-03	1.67E-03	3.05E-04	1.86E-03	7.03E-04	1.64E-03	5.76E-06	7.02E-06	2.1783E-02
551663.58	4173387.88	3435.78469	3004.86648	627.02147	2788.93848	560.30437	4276.878	3488.92029	1776.03656	363.81736	2671.11353	1367.73258	5202.64411	2.17397	2.22468	5.02E-03	2.62E-03	5.46E-04	1.78E-03	4.50E-04	3.43E-03	3.31E-03	1.49E-03	3.05E-04	1.42E-03	5.03E-04	1.91E-03	3.04E-05	3.77E-05	2.2845E-02
551272.89	4172938.27	2211.71257	3136.12758	748.84658	5582.6797	861.16753	2230.97697	2213.51685	1816.47724	422.84796	4575.4675	2910.66113	2822.22179	0.29402	0.29838	3.23E-03	2.73E-03	6.52E-04	3.55E-03	6.91E-04	1.79E-03	2.10E-03	1.52E-03	3.55E-04	2.44E-03	1.07E-03	1.04E-03	4.11E-06	5.06E-06	2.1178E-02
551275.3	4172913.55	2188.04235	3063.50273	761.94306	5722.36431	886.50504	2150.48625	2188.61749	1770.67149	428.94181	4617.48295	3018.03819	2724.35525	0.29185	0.29631	3.19E-03	2.67E-03	6.64E-04	3.64E-03	7.11E-04	1.73E-03	2.07E-03	1.49E-03	3.60E-04	2.46E-03	1.11E-03	1.00E-03	4.08E-06	5.02E-06	2.1106E-02
551273.3	4172968.5	2240.44823	3222.35658	726.97201	5402.30332	829.87761	2341.70094	2244.15138	1873.30886	411.60585	4488.56408	2773.79608	2955.68047	0.29461	0.29824	3.27E-03	2.81E-03	6.33E-04	3.44E-03	6.66E-04	1.88E-03	2.13E-03	1.57E-03	3.45E-04	2.39E-03	1.02E-03	1.09E-03	4.12E-06	5.05E-06	2.1245E-02
551283.39	4173025.63	2278.69147	3361.95639	681.07059	5027.29985	781.9691	2607.91032	2287.28293	1978.97154	386.16654	4232.18805	2572.9001	3272.03937	0.29749	0.3012	3.33E-03	2.93E-03	5.93E-04	3.20E-03	6.27E-04	2.09E-03	2.17E-03	1.66E-03	3.24E-04	2.25E-03	9.47E-04	1.20E-03	4.16E-06	5.10E-06	2.1333E-02
551759.87	4172600.85	4218.95906	1690.90176	1227.90693	4481.80176	1836.50794	1146.0891	4183.86532	994.649	661.01846	3031.28949	4426.77015	1533.39694	0.20353	0.20809	6.16E-03	1.47E-03	1.07E-03	2.85E-03	1.47E-03	9.19E-04	3.97E-03	8.35E-04	5.55E-04	1.61E-03	1.63E-03	5.64E-04	2.85E-06	3.53E-06	2.3115E-02
551293.2	4172809	2113.64795	2769.43214	800.31033	6093.37221	1028.1695	1927.83733	2110.14287	1596.01104	446.17973	4555.87049	3521.69103	2446.75277	0.2869	0.29211	3.09E-03	2.41E-03	6.97E-04	3.88E-03	8.25E-04	1.55E-03	2.00E-03	1.34E-03	3.74E-04	2.42E-03	1.30E-03	9.00E-04	4.01E-06	4.95E-06	2.0789E-02
551508.71	4173351.96	2677.73372	3215.3249	620.46217	3632.65197	647.29321	3891.92268	2708.19808	1932.76933	354.86209	3301.51161	1721.00707	4695.03332	0.50002	0.50328	3.91E-03	2.80E-03	5.40E-04	2.31E-03	5.19E-04	3.12E-03	2.57E-03	1.62E-03	2.98E-04	1.76E-03	6.33E-04	1.73E-03	7.00E-06	8.53E-06	2.1824E-02
551676.42	4173386.02	3527.50936	2948.58736	620.67624	2733.99819	553.9597	4216.46368	3584.11189	1737.26914	360.53935	2603.76457	1345.45219	5139.90955	3.07647	3.18919	5.15E-03	2.57E-03	5.41E-04	1.74E-03	4.44E-04	3.38E-03	3.40E-03	1.46E-03	3.03E-04	1.39E-03	4.95E-04	1.89E-03	4.30E-05	5.40E-05	2.2852E-02
551625.05	4173393.49	3128.95036	3091.66694	629.98568	2921.19096	571.95996	4250.28077	3172.79978	1842.67652	363.99201	2832.7392	1421.48929	5145.13362	1.04803	1.05721	4.57E-03	2.69E-03	5.49E-04	1.86E-03	4.59E-04	3.41E-03	3.01E-03	1.55E-03	3.05E-04	1.51E-03	5.23E-04	1.89E-03	1.47E-05	1.79E-05	2.2353E-02
551314.42	4172737.68	2089.93818	2707.95458	813.4531	6104.62543	1099.36868	1871.78955	2085.62699	1560.02999	450.99816	4479.73595	3685.04661	2379.94422	0.27857	0.28394	3.05E-03	2.36E-03	7.08E-04	3.89E-03	8.82E-04	1.50E-03	1.98E-03	1.31E-03	3.78E-04	2.38E-03	1.36E-03	8.76E-04	3.90E-06	4.81E-06	2.0677E-02
551280.16	4173016.66	2265.24867	3327.52078	684.82251	5055.40822	784.27924	2547.7533	2272.97047	1954.54246	388.31278	4254.59098	2584.38491	3200.00479	0.29488	0.29847	3.31E-03	2.90E-03	5.96E-04	3.22E-03	6.29E-04	2.04E-03	2.15E-03	1.64E-03	3.26E-04	2.26E-03	9.51E-04	1.18E-03	4.13E-06	5.06E-06	2.1216E-02
551457.1	4173315.53	2555.97284	3253.85688	626.45593	3857.66093	664.29186	3683.3498	2578.903	1960.30291	358.24702	3429.97265	1871.48361	4466.96361	0.41954	0.42245	3.73E-03	2.83E-03	5.46E-04	2.46E-03	5.33E-04	2.96E-03	2.44E-03	1.64E-03	3.01E-04	1.83E-03	6.89E-04	1.64E-03	5.87E-06	7.16E-06	2.1615E-02
551562.15	4173377.92	2794.33767	3185.00267	626.02654	3348.02908	627.3623	4044.98771	2830.15358	1916.94531	359.04268	3125.08622	1575.40631	4870.42889	0.63819	0.64169	4.08E-03	2.77E-03	5.45E-04	2.13E-03	5.03E-04	3.25E-03	2.68E-03	1.61E-03	3.01E-04	1.66E-03	5.80E-04	1.79E-03	8.93E-06	1.09E-05	2.1925E-02
551366.98	4173229.94	2342.24595	3295.20617	669.30388	4369.30702	719.5459	3258.63467	2358.24383	1952.21824	379.83383	3838.5024	2112.60317	3988.61587	0.3423	0.3451	3.42E-03	2.87E-03	5.83E-04	2.78E-03	5.77E-04	2.61E-03	2.24E-03	1.64E-03	3.19E-04	2.04E-03	7.77E-04	1.47E-03	4.79E-06	5.85E-06	2.1336E-02
551277.7	4172887.93	2129.80964	2884.15713	772.21005	5882.62778	941.82477	2002.4621	2128.44325	1662.80201	432.25994	4567.5112	3225.9884	2541.11958	0.28584	0.29045	3.11E-03	2.51E-03	6.73E-04	3.75E-03	7.56E-04	1.61E-03	2.02E-03	1.40E-03	3.63E-04	2.43E-03	1.19E-03	9.35E-04	4.00E-06	4.92E-06	2.0739E-02
551276.93	4173007.7	2250.56108	3288.48009	688.93863	5085.3936	787.34428	2488.6528	2257.40654	1927.48385	390.60657	4275.07582	2598.10592	3128.92674	0.2922	0.29581	3.29E-03	2.86E-03	6.00E-04	3.24E-03	6.32E-04	2.00E-03	2.14E-03	1.62E-03	3.28E-04	2.28E-03	9.56E-04	1.15E-03	4.09E-06	5.01E-06	2.1092E-02
551518.25	4173360.94	2675.60634	3176.74794	616.02196	3546.93826	638.29339	3866.31531	2707.00787	1909.21435	352.4463	3241.9908	1675.54129	4663.62658	0.51356	0.5164	3.91E-03	2.77E-03	5.37E-04	2.26E-03	5.12E-04	3.10E-03	2.57E-03	1.60E-03	2.96E-04	1.73E-03	6.16E-04	1.72E-03	7.19E-06	8.75E-06	2.1619E-02
551742.08	4173358.55	4064.30005	2740.58502	593.24063	2558.14535	536.26695	3962.06096	4144.50986	1596.39525	345.83236	2371.98899	1278.58495	4862.57297	3.90264	3.40777	5.93E-03	2.39E-03	5.17E-04	1.63E-03	4.30E-04	3.18E-03	3.93E-03	1.34E-03	2.90E-04	1.26E-03	4.70E-04	1.79E-03	5.46E-05	5.77E-05	2.3266E-02
551326.64	4173146.48	2243.04058	3193.64989	643.74629	4559.82914	752.49062	3133.65064	2259.89367	1891.93341	363.40159	3831.51298	2340.00442	3842.13752	0.31513	0.31782	3.27E-03	2.78E-03	5.61E-04	2.90E-03	6.04E-04	2.51E-03	2.14E-03	1.59E-03	3.05E-04	2.04E-03	8.61E-04	1.41E-03	4.41E-06	5.39E-06	2.0996E-02
551310.1	4172746.09	2075.90935	2685.82398	805.45771	6034.18736	1081.88439	1865.4685	2071.67053	1547.69394	446.85007	4435.75504	3630.55717	2370.35359	0.27666	0.28194	3.03E-03	2.34E-03	7.02E-04	3.84E-03	8.68E-04	1.50E-03	1.96E-03	1.30E-03	3.75E-04	2.36E-03	1.34E-03	8.72E-04	3.87E-06	4.78E-06	2.0492E-02
551270.07	4172959.54	2203.75459	3143.30717	723.56547	5361.71971	827.16183	2272.87299	2206.85069	1825.1375	409.41628	4439.19177	2767.47204	2870.95127	0.28961	0.29374	3.22E-03	2.74E-03	6.30E-04	3.41E-03	6.64E-04	1.82E-03	2.09E-03	1.53E-03	3.44E-04	2.36E-03	1.02E-03	1.06E-03	4.05E-06	4.98E-06	2.0899E-02
551689.27	4173384.15	3604.61169	2879.22685	611.79667	2674.5339	546.48605	4123.30552	3664.58548	1691.52174	355.70882	2531.35161	1321.46932	5036.65475	4.94296	5.27681	5.26E-03	2.51E-03	5.33E-04	1.70E-03	4.38E-04	3.31E-03	3.47E-03	1.42E-03	2.98E-04	1.35E-03	4.86E-04	1.85E-03	6.92E-05	8.94E-05	2.2788E-02
551589.76	4173389.66	2883.87253	3123.98861	625.04882	3150.81022	587.68367	4099.69883	2921.88343	1875.58469	359.46593	2977.25395	1492.69108	4943.73114	0.73699	0.7423	4.21E-03	2.72E-03	5.44E-04	2.01E-03	4.71E-04	3.29E-03	2.77E-03	1.57E-03	3.02E-04	1.58E-03	5.49E-04	1.82E-03	1.03E-05	1.26E-05	2.1862E-02
551342.54	4172652.12	2113.07196	2600.62808	822.76138	6146.52195	1135.70523	1723.71248	2109.00103	1496.82253	455.32939	4460.51232	3763.85393	2213.68689	0.26102	0.26589	3.08E-03	2.27E-03	7.17E-04	3.91E-03	9.11E-04	1.38E-03	2.00E-03	1.26E-03	3.82E-04	2.37E-03	1.38E-03	8.14E-04	3.65E-06	4.51E-06	2.0492E-02
551320.72	4173129.74	2240.86976	3212.47024	638.37227	4575.76474	752.33356	3093.78344	2257.51919	1905.42817	360.53717	3821.81495	2370.34773	3802.81868	0.31187	0.31469	3.27E-03	2.80E-03	5.56E-04	2.91E-03	6.04E-04	2.48E-03	2.14E-03	1.60E-03	3.03E-04	2.03E-03	8.72E-04	1.40E-03	4.36E-06	5.33E-06	2.0980E-02
551612.2	4173395.36	3011.62104	3079.95974	624.63655	3003.51042	573.05376	4157.60816	3052.59549	1840.55527	360.27643	2863.29804	1434.82414	5026.98567	0.88152	0.88679	4.40E-03	2.68E-03	5.44E-04	1.91E-03	4.60E-04	3.34E-03	2.89E-03	1.54E-03	3.02E-04	1.52E-03	5.28E-04	1.85E-03	1.23E-05	1.50E-05	2.1999E-02
551317.77	4173121.37	2241.512	3226.46324	636.5659	4584.03729	751.64187	3067.93221	2257.91637	1914.85814	359.64034	3822.37951	2384.57118	3777.02309	0.31059	0.31324	3.27E-03	2.81E-03	5.54E-04	2.92E-03	6.03E-04	2.46E-03	2.14E-03	1.61E-03	3.02E-04	2.03E-03	8.77E-04	1.39E-03	4.35E-06	5.31E-06	2.0979E-02
551466.72	4173324.59	2555.76846	3197.01139	616.89513	3777.02927	655.12242	3685.67408	2579.97928	1925.15537	352.70631	3361.07823	1831.31802	4463.01825	0.42766	0.4301	3.73E-03	2.78E-03	5.37E-04	2.41E-03	5.26E-04	2.96E-03	2.45E-03	1.62E-03	2.96E-04	1.79E-03	6.74E-04	1.64E-03	5.98E-06	7.29E-06	2.1415E-02
551332.56	4173163.22	2245.09324	3179.67039	648.86648	4526.44648	748.64827	3152.47698	2261.8739	1882.2894	366.25678	3836.68829	2292.82138	3858.82164	0.31791	0.32051	3.28E-03	2.77E-03	5.65E-04	2.88E-03	6.01E-04	2.53E-03	2.14E-03	1.58E-03	3.07E-04	2.04E-03	8.44E-04	1.42E-03	4.45E-06	5.43E-06	2.0970E-02
551273.71	4172998.73	2233.0936	3242.9765	692.55194	5110.54568	790.42279	2429.3224	2239.08953	1896.94129	392.58449	4288.20174	2611.6988	3057.23589	0.28932	0.29326	3.26E-03	2.82E-03	6.03E-04	3.25E-03	6.34E-04	1.95E-03	2.12E-03	1.59E-03	3.29E-04	2.28E-03	9.61E-04	1.12E-03	4.05E-06	4.97E-06	2.0945E-02
551762.63	4173346.6	4192.62486	2687.9099	583.48622	2516.09992	531.26801	3891.66125	4280.0529	1563.88779	340.26045	2322.78884	1262.85135	4778.14936	1.94315	1.7794	6.12E-03	2.34E-03	5.08E-04	1.60E-03	4.26E-04	3.12E-03	4.06E-03	1.31E-03	2.85E-04	1.24E-03	4.65E-04	1.76E-03	2.72E-05	3.02E-05	2.3290E-02
551269.66	4172929.31	2167.14365	3044.11764	740.58065	5507.74507	854.7828	2159.48769	2168.50959	1762.17003	417.71242	4491.11486	2889.83576	2733.34041	0.28654	0.29079	3.16E-03	2.65E-03	6.45E-04	3.51E-03	6.86E-04	1.73E-03	2.06E-03	1.48E-03	3.50E-04	2.39E-03	1.06E-03	1.01E-03	4.01E-06	4.93E-06	2.0738E-02
551336.08	4173173.17	2245.34617	3172.26095	651.06091	4495.3041	744.22543	3153.11038	2261.95963	1877.05929	367.57394	3832.16017	2262.72151	3857.67047	0.31877	0.32179	3.28E-03	2.76E-03	5.67E-04	2.86E-03	5.97E-04	2.53E-03	2.14E-03	1.57E-03	3.08E-04	2.04E-03	8.33E-04	1.42E-03	4.46E-06	5.45E-06	2.0925E-02
551977.46	4173223.99	3910.90441	2758.6652	501.22957	2216.02776	440.01705	4474.21114	4012.71667	1599.42721	292.80301	2179.24966	1059.49096	5458.16957	0.35229	0.34593	5.71E-03	2.40E-03	4.37E-04	1.41E-03	3.53E-04	3.59E-03	3.80E-03	1.34E-03	2.46E-04	1.16E-03	3.90E-04	2.01E-03	4.93E-06	5.86E-06	2.2861E-02
551330.56	4172685.2	2077.45899	2640.96561	806.99056	6042.27449	1109.81236	1780.04269	2073.52169	1520.05635	446.55929	4423.4005	3672.85968	2275.62329	0.26492	0.26993	3.03E-03	2.30E-03	7.03E-04	3.85E-03	8.90E-04	1.43E-03	1.97E-03	1.28E-03	3.75E-04	2.35E-03	1.35E-03	8.37E-04	3.71E-06	4.57E-06	2.0368E-02
551476.34	4173333.65	2565.97225	3162.81818	611.42631	3711.95984	648.32974	3699.37374	2591.50501	1902.88556	349.52199	3314.14341	1792.29533	4474.80021	0.43768	0.44012	3.75E-03	2.75E-03	5.33E-04	2.36E-03	5.20E-04	2.97E-03	2.46E-03	1.60E-03	2.93E-04	1.76E-03	6.59E-04	1.65E-03	6.12E-06	7.46E-06	2.1314E-02
551271.85	4172892.42	2127.23767	2920.88844	754.79161	5685.84468	897.41354	2040.07692	2126.92964	1685.95699	423.60812	4506.30782	3055.71178	2587.25337	0.28279	0.28717	3.11E-03	2.54E-03	6.57E-04	3.62E-03	7.20E-04	1.64E-03	2.02E-03	1.41E-03	3.55E-04	2.40E-03	1.12E-03	9.52E-04	3.96E-06	4.87E-06	2.0553E-02
551270.48	4172989.77	2212.66181	3191.46122	695.49746	5128.57431	793.32101	2369.68734	2217.84559	1863.29567	394.1251	4292.09174	2624.65282	2984.90053	0.28649	0.28986	3.23E-03	2.78E-03	6.06E-04	3.27E-03	6.36E-04	1.90E-03	2.10E-03	1.56E-03	3.31E-04	2.28E-03	9.66E-04	1.10E-03	4.01E-06	4.91E-06	2.0772E-02
551294.66	4172792.7	2073.28456	2690.06468	789.30414	5950.19504	1024.10724	1880.70762	2069.58156	1550.94419	439.51593	4428.02034	3481.23773	2386.70644	0.27819	0.28328	3.03E-03	2.34E-03	6.87E-04	3.79E-03	8.22E-04	1.51E-03	1.96E-03	1.30E-03	3.69E-04	2.36E-03	1.28E-03	8.78E-04	3.89E-06	4.80E-06	2.0332E-02
551339.17	4173181.76	2239.22187	3155.18874	650.58134	4450.96037	738.43163	3140.78876	2255.65018	1866.91159	367.3766	3810.80569	2233.63821	3841.25929	0.31934	0.3218	3.27E-03	2.75E-03	5.67E-04	2.83E-03	5.92E-04	2.52E-03	2.14E-03	1.57E-03	3.08E-04	2.03E-03	8.22E-04	1.41E-03	4.47E-06	5.45E-06	2.0816E-02
551392.37	4173267.32	2373.73499	3263.8523	651.95614	4107.78744	691.718	3281.14574	2390.05246	1948.49955	371.48022	3648.79774	1996.96949	4014.89687	0.35293	0.35551	3.46E-03	2.84E-03	5.68E-04	2.62E-03	5.55E-04	2.63E-03	2.27E-03	1.63E-03	3.12E-04	1.94E-03	7.35E-04	1.48E-03	4.94E-06	6.02E-06	2.1055E-02
551702.11	4173382.28	3686.165	2812.1385	601.35731	2613.30381	538.36568	4022.89917	3749.96585	1646.28266	349.93705	2462.34946	1295.14397	4925.98667	10.14508	11.42872	5.38E-03	2.45E-03	5.24E-04	1.66E-03	4.32E-04	3.23E-03	3.55E-03	1.38E-03	2.94E-04	1.31E-03	4.77E-04	1.81E-03	1.42E-04	1.94E-04	2.2841E-02
551404.72	4173278.38	2396.64536	3255.76914	645.38542	4036.6095	686.40997	3330.65487	2413.68555	1952.0141	368.23566	3582.55949	1974.80925	4070.03183	0.36274	0.36482	3.50E-03	2.84E-03	5.62E-04	2.57E-03	5.51E-04	2.67E-03	2.29E-03	1.64E-03	3.09E-04	1.91E-03	7.27E-04	1.50E-03	5.08E-06	6.18E-06	2.1066E-02
551571.8	4173387.02	2784.77762	3111.70285	617.80482	3227.54893	593.37842	3980.40346	2820.64843	1870.58814	354.63688	3026.96322	1523.00171	4797.86798	0.64642	0.65056	4.06E-03	2.71E-03	5.38E-04	2.06E-03	4.76E-04	3.19E-03	2.67E-03	1.57E-03	2.98E-04	1.61E-03	5.60E-04	1.77E-03	9.05E-06	1.10E-05	2.1535E-02
551527.79	4173369.93	2671.09643	3135.40654	611.33606	3455.93425	628.39782	3835.15694	2703.21861	1883.87962	349.927	3177.32937	1629.38847	4626.56212	0.52356	0.52624	3.90E-03	2.73E-03	5.32E-04	2.20E-03	5.04E-04	3.08E-03	2.56E-03	1.58E-03	2.94E-04	1.69E-03	6.00E-04	1.70E-03	7.33E-06	8.92E-06	2.1389E-02
551485.96	4173342.71	2574.74626	3132.26149	607.10586	3646.67109	641.73985	3704.55216	2601.6322	1883.16735	347.02416	3270.05809	1752.27664	4477.62298	0.44789	0.45072	3.76E-03	2.73E-03	5.29E-04	2.32E-03	5.15E-04	2.97E-03	2.47E-03	1.58E-03	2.91E-04	1.74E-03	6.45E-04	1.65E-03	6.27E-06	7.64E-06	2.1208E-02
551414.42	4173287.52	2414.38632	3238.50323	638.06658	3972.99242	680.82685	3369.43041	2432.08313	1946.5602	364.40155	3523.52555	1944.61483	4112.85712	0.37007	0.37211	3.52E-03	2.82E-03	5.56E-04	2.53E-03	5.46E-04	2.70E-03	2.31E-03	1.63E-03	3.06E-04	1.88E-03	7.15E-04	1.51E-03	5.18E-06	6.31E-06	2.1040E-02
551326.27	4172693.54	2059.80133	2629.76435	799.07087	5966.38945	1096.04687	1783.97392	2055.90101	1514.11306	442.27996	4377.47049	3622.51089	2277.76677	0.26373	0.26871	3.01E-03	2.29E-03	6.96E-04	3.80E-03	8.79E-04	1.43E-03	1.95E-03	1.27E-03	3.71E-04	2.33E-03	1.33E-03	8.38E-04	3.69E-06	4.55E-06	2.0202E-02
551336.33	4172659.06	2078.4468	2581.42406	807.04993	6024.3601	1112.34316	1720.49203	2074.53291	1485.63495	446.61945	4389.19652	3677.2443	2206.66515	0.25814	0.26295	3.03E-03	2.25E-03	7.03E-04	3.84E-03	8.92E-04	1.38E-03	1.97E-03	1.25E-03	3.75E-04	2.34E-03	1.35E-03	8.12E-04	3.61E-06	4.46E-06	2.0191E-02
551357.01	4172627.28	2133.2573	2512.40445	827.99192	6043.60605	1138.08688	1660.26698	2129.07132	1448.95219	458.60428	4368.42623	3738.30461	2137.64951	0.24979	0.25425	3.11E-03	2.19E-03	7.21E-04	3.85E-03	9.13E-04	1.33E-03	2.02E-03	1.22E-03	3.85E-04	2.33E-03	1.38E-03	7.87E-04	3.50E-06	4.31E-06	2.0230E-02
551370.99	4173240.97	2307.54459	3218.93635	656.55265	4222.3202	704.59648	3185.68841	2323.18967	1911.79105	372.82568	3725.76667	2066.53102	3899.38315	0.3381	0.34077	3.37E-03	2.80E-03	5.72E-04	2.69E-03	5.65E-04	2.56E-03	2.20E-03	1.60E-03	3.13E-04	1.98E-03	7.60E-04	1.43E-03	4.73E-06	5.77E-06	2.0861E-02
551266.85	4172950.57	2166.2777	3064.02045	719.54086	5315.5514	824.22222	2205.84059	2168.81409	1777.49974	406.77346	4384.84188	2759.98115	2788.15044	0.28391	0.28798	3.16E-03	2.67E-03	6.27E-04	3.38E-03	6.61E-04	1.77E-03	2.06E-03	1.49E-03	3.41E-04	2.33E-03	1.02E-03	1.03E-03	3.97E-06	4.88E-06	2.0546E-02
551342.26	4173190.34	2233.17651	3138.79304	649.67128	4403.02136	731.95338	3124.52024	2249.38942	1857.32965	366.97044	3785.99133	2203.74842	3820.88919	0.31996	0.32306	3.26E-03	2.73E-03	5.66E-04	2.80E-03	5.87E-04	2.51E-03	2.13E-03	1.56E-03	3.08E-04	2.02E-03	8.11E-04	1.41E-03	4.48E-06	5.47E-06	2.0697E-02
551305.77	4172754.5	2052.07983	2646.69013	791.75754	5906.82837	1055.29783	1848.43865	2048.01923	1525.82656	439.59498	4356.88604	3538.903	2347.35254	0.27188	0.27697	3.00E-03	2.31E-03	6.90E-04	3.76E-03	8.47E-04	1.48E-03	1.94E-03	1.28E-03	3.69E-04	2.32E-03	1.30E-03	8.64E-04	3.80E-06	4.69E-06	2.0164E-02
551296.56	4172783.87	2059.50935	2662.78748	786.21578	5901.2437	1026.03305	1864.52266	2055.719	1535.38003	437.50864	4381.77837	3473.88899	2366.21857	0.2749	0.27993	3.01E-03	2.32E-03	6.85E-04	3.76E-03	8.23E-04	1.50E-03	1.95E-03	1.29E-03	3.67E-04	2.33E-03	1.28E-03	8.71E-04	3.85E-06	4.74E-06	2.0180E-02
551267.26	4172980.8	2189.1212	3134.69678	697.38821	5137.15808	795.77687	2309.73199	2193.55615	1826.90429	395.03203	4285.10384	2635.96318	2911.97006	0.28302	0.28691	3.20E-03	2.73E-03	6.07E-04	3.27E-03	6.38E-04	1.85E-03	2.08E-03	1.53E-03	3.31E-04	2.28E-03	9.70E-04	1.07E-03	3.96E-06	4.86E-06	2.0570E-02
551321.98	4172701.88	2047.66724	2622.72275	794.04717	5916.9329	1086.25369	1789.79656	2043.74699	1510.48993	439.6162	4346.70723	3589.91202	2282.58637	0.26359	0.26856	2.99E-03	2.28E-03	6.92E-04	3.77E-03	8.71E-04	1.44E-03	1.94E-03	1.27E-03	3.69E-04	2.31E-03	1.32E-03	8.40E-04	3.69E-06	4.55E-06	2.0096E-02
551281.95	4172827.81	2068.42484	2715.96393	768.93155	5832.24342	972.69116	1892.47292	2065.72288	1565.47731	429.3619	4414.34599	3314.69379	2402.34702	0.27678	0.28154	3.02E-03	2.37E-03	6.70E-04	3.71E-03	7.80E-04	1.52E-03	1.96E-03	1.31E-03	3.60E-04	2.35E-03	1.22E-03	8.84E-04	3.87E-06	4.77E-06	2.0160E-02
551599.36	4173397.22	2883.55066	3040.39552	615.30088	3034.03557	572.49392	4018.72914	2921.74345	1821.85629	354.23554	2875.69468	1445.25	4854.18848	0.75591	0.75876	4.21E-03	2.65E-03	5.36E-04	1.93E-03	4.59E-04	3.22E-03	2.77E-03	1.53E-03	2.97E-04	1.53E-03	5.32E-04	1.79E-03	1.06E-05	1.29E-05	2.1475E-02
551642.02	4173399.98	3158.06924	2947.6858	612.4688	2777.47029	552.21308	4080.88689	3203.53093	1750.34731	354.46575	2678.2936	1361.05106	4955.95453	1.21303	1.223	4.61E-03	2.57E-03	5.33E-04	1.77E-03	4.43E-04	3.27E-03	3.04E-03	1.47E-03	2.97E-04	1.43E-03	5.01E-04	1.82E-03	1.70E-05	2.07E-05	2.1786E-02
551774.6	4173341.91	4178.06795	2621.02649	571.45763	2468.55074	523.69092	3782.8153	4266.8259	1525.53896	333.17585	2271.58041	1244.03062	4644.47876	1.49395	1.39242	6.10E-03	2.28E-03	4.98E-04	1.57E-03	4.20E-04	3.03E-03	4.04E-03	1.28E-03	2.80E-04	1.21E-03	4.58E-04	1.71E-03	2.09E-05	2.36E-05	2.2930E-02
551654.98	4173398.1	3251.44965	2912.25551	610.32513	2732.46329	547.89173	4072.73261	3299.82343	1724.69244	353.67753	2622.19482	1342.89889	4954.2453	1.54209	1.56322	4.75E-03	2.54E-03	5.32E-04	1.74E-03	4.40E-04	3.27E-03	3.13E-03	1.45E-03	2.97E-04	1.40E-03	4.94E-04	1.82E-03	2.16E-05	2.65E-05	2.1893E-02
551718.55	4172571.11	4177.15852	1725.6643	1320.41049	3815.98948	1877.42731	1190.05526	4139.97909	1021.21767	707.79984	2901.77593	3928.07604	1596.1423	0.15644	0.15877	6.10E-03	1.50E-03	1.15E-03	2.43E-03	1.51E-03	9.55E-04	3.92E-03	8.57E-04	5.94E-04	1.54E-03	1.45E-03	5.87E-04	2.19E-06	2.69E-06	2.2598E-02
551298.69	4172773.93	2048.01109	2641.25569	784.3516	5865.40679	1030.61513	1850.67021	2044.13682	1522.99339	436.14501	4345.0919	3475.46255	2348.89901	0.27218	0.27718	2.99E-03	2.30E-03	6.83E-04	3.73E-03	8.27E-04	1.48E-03	1.94E-03	1.28E-03	3.66E-04	2.31E-03	1.28E-03	8.64E-04	3.81E-06	4.70E-06	2.0065E-02
551345.35	4173198.93	2228.87986	3125.59813	648.6612	4354.43965	725.06223	3107.38703	2244.84684	1849.76739	366.56661	3760.51857	2173.66845	3800.13159	0.32115	0.32421	3.25E-03	2.72E-03	5.65E-04	2.77E-03	5.82E-04	2.49E-03	2.13E-03	1.55E-03	3.08E-04	2.00E-03	8.00E-04	1.40E-03	4.49E-06	5.49E-06	2.0585E-02
551736.78	4172581.29	4187.50874	1691.46572	1266.03931	3967.10947	1812.75192	1160.52005	4151.19485	998.55082	679.97606	2896.92858	4003.20163	1554.93476	0.17098	0.17414	6.11E-03	1.47E-03	1.10E-03	2.53E-03	1.45E-03	9.31E-04	3.93E-03	8.38E-04	5.71E-04	1.54E-03	1.47E-03	5.72E-04	2.39E-06	2.95E-06	2.2535E-02
551290.27	4173073.81	2213.95664	3227.52341	634.41192	4614.42989	739.83784	2745.44199	2226.4595	1913.8879	359.19113	3859.64715	2393.44982	3420.05611	0.29056	0.29362	3.23E-03	2.81E-03	5.53E-04	2.94E-03	5.94E-04	2.20E-03	2.11E-03	1.61E-03	3.01E-04	2.05E-03	8.81E-04	1.26E-03	4.07E-06	4.98E-06	2.0550E-02
551734.15	4173368.66	3905.1267	2694.82904	585.00823	2523.92141	528.32721	3860.92958	3979.5142	1570.94946	340.85364	2346.11757	1261.4753	4740.62996	6.0677	5.05361	5.70E-03	2.35E-03	5.10E-04	1.61E-03	4.24E-04	3.10E-03	3.77E-03	1.32E-03	2.86E-04	1.25E-03	4.64E-04	1.74E-03	8.49E-05	8.56E-05	2.2689E-02
551667.95	4173396.21	3348.24162	2869.04975	605.89879	2682.9253	542.573	4039.95429	3399.92044	1693.44097	351.56892	2562.13417	1322.28316	4924.67664	2.05283	2.08182	4.89E-03	2.50E-03	5.28E-04	1.71E-03	4.35E-04	3.24E-03	3.22E-03	1.42E-03	2.95E-04	1.36E-03	4.87E-04	1.81E-03	2.87E-05	3.53E-05	2.1963E-02

551495.58	4173351.78	2570.83245	3088.16728	601.327	3569.68124	633.69637	3682.93182	2598.8634	1856.31143	343.70576	3213.67204	1709.91483	4448.58153	0.45726	0.46002	3.75E-03	2.69E-03	5.24E-04	2.27E-03	5.08E-04	2.95E-03	2.46E-03	1.56E-03	2.88E-04	1.71E-03	6.29E-04	1.64E-03	6.40E-06	7.80E-06	2.1002E-02
551629.05	4173401.87	3056.93375	2965.5894	611.72921	2816.11149	555.23525	4050.6441	3099.59206	1765.59396	353.49286	2724.88433	1377.11017	4911.96844	0.99962	1.00498	4.46E-03	2.58E-03	5.33E-04	1.79E-03	4.45E-04	3.25E-03	2.94E-03	1.48E-03	2.97E-04	1.45E-03	5.07E-04	1.81E-03	1.40E-05	1.70E-05	2.1577E-02
551283.82	4173055.91	2210.85211	3231.20982	640.83686	4672.51237	742.89869	2647.12722	2221.79122	1912.49533	363.08934	3920.74821	2415.45736	3308.29482	0.28774	0.29069	3.23E-03	2.81E-03	5.58E-04	2.98E-03	5.96E-04	2.12E-03	2.11E-03	1.60E-03	3.05E-04	2.09E-03	8.89E-04	1.22E-03	4.03E-06	4.93E-06	2.0512E-02
551755.08	4173356.66	4043.43383	2641.59723	575.97477	2483.09303	523.85823	3791.28871	4125.11369	1537.66803	335.73508	2294.72079	1246.54905	4658.12187	2.41642	2.16465	5.90E-03	2.30E-03	5.02E-04	1.58E-03	4.20E-04	3.04E-03	3.91E-03	1.29E-03	2.82E-04	1.22E-03	4.59E-04	1.71E-03	3.38E-05	3.67E-05	2.2694E-02
551725.69	4173374.32	3824.2668	2705.52153	586.10521	2531.38811	528.08613	3866.62625	3895.15292	1578.45966	341.36359	2360.73408	1263.05138	4746.22284	11.13553	8.82643	5.58E-03	2.36E-03	5.10E-04	1.61E-03	4.24E-04	3.10E-03	3.69E-03	1.32E-03	2.86E-04	1.26E-03	4.65E-04	1.75E-03	1.56E-04	1.50E-04	2.2662E-02
551270.13	4172881.85	2086.94084	2833.85117	744.8262	5606.57048	894.10164	1978.71879	2086.3056	1635.28249	417.52501	4410.06542	3038.94433	2510.35903	0.27552	0.27979	3.05E-03	2.47E-03	6.49E-04	3.57E-03	7.17E-04	1.59E-03	1.98E-03	1.37E-03	3.50E-04	2.35E-03	1.12E-03	9.24E-04	3.86E-06	4.74E-06	2.0136E-02
551293.5	4173082.76	2204.57733	3202.78515	628.62542	4561.99213	735.59845	2781.91215	2217.82156	1900.44012	355.7836	3809.7504	2373.55765	3458.92487	0.29156	0.29475	3.22E-03	2.79E-03	5.48E-04	2.90E-03	5.90E-04	2.23E-03	2.10E-03	1.59E-03	2.99E-04	2.03E-03	8.73E-04	1.27E-03	4.08E-06	4.99E-06	2.0460E-02
551443.53	4173314.93	2457.014	3140.43267	611.96256	3771.91004	649.91891	3471.88172	2477.77091	1892.13612	349.89922	3341.5593	1845.8434	4220.00827	0.38951	0.3921	3.59E-03	2.74E-03	5.33E-04	2.40E-03	5.21E-04	2.79E-03	2.35E-03	1.59E-03	2.94E-04	1.78E-03	6.79E-04	1.55E-03	5.45E-06	6.64E-06	2.0815E-02
551301.45	4172762.9	2035.75788	2619.95042	781.70419	5820.8161	1034.48743	1836.05675	2031.83911	1510.80869	434.33486	4305.32992	3471.0751	2330.7699	0.26891	0.27387	2.97E-03	2.28E-03	6.81E-04	3.71E-03	8.30E-04	1.47E-03	1.93E-03	1.27E-03	3.64E-04	2.29E-03	1.28E-03	8.58E-04	3.76E-06	4.64E-06	1.9936E-02
551296.72	4173091.71	2200.30498	3184.75111	625.77169	4531.78645	734.11032	2821.96187	2214.1919	1890.01211	354.01652	3779.46479	2360.01003	3501.95465	0.29255	0.29526	3.21E-03	2.77E-03	5.45E-04	2.89E-03	5.89E-04	2.26E-03	2.10E-03	1.59E-03	2.97E-04	2.01E-03	8.68E-04	1.29E-03	4.09E-06	5.00E-06	2.0428E-02
551537.32	4173378.91	2650.82523	3072.78694	603.94549	3353.11519	616.74027	3775.71311	2683.26084	1846.45275	345.82329	3095.78466	1581.59086	4555.42886	0.53082	0.53396	3.87E-03	2.68E-03	5.26E-04	2.14E-03	4.95E-04	3.03E-03	2.54E-03	1.55E-03	2.90E-04	1.65E-03	5.82E-04	1.68E-03	7.43E-06	9.05E-06	2.1036E-02
551559.49	4173387.61	2705.57402	3063.34188	607.34439	3241.23805	591.59962	3847.42692	2739.75377	1841.27551	348.26877	3023.2234	1528.99117	4640.16573	0.58772	0.58964	3.95E-03	2.67E-03	5.29E-04	2.06E-03	4.75E-04	3.09E-03	2.60E-03	1.54E-03	2.92E-04	1.61E-03	5.63E-04	1.71E-03	8.22E-06	9.99E-06	2.1103E-02
551264.03	4172971.84	2159.52471	3068.8141	696.49157	5121.61897	795.66143	2246.91178	2163.28702	1785.45397	394.31835	4256.95836	2638.65206	2835.49742	0.27891	0.28248	3.15E-03	2.67E-03	6.07E-04	3.26E-03	6.38E-04	1.80E-03	2.05E-03	1.50E-03	3.31E-04	2.27E-03	9.71E-04	1.04E-03	3.90E-06	4.79E-06	2.0302E-02
551282.63	4172818.65	2049.12806	2673.04538	765.28014	5779.26688	973.82752	1866.55711	2046.21565	1541.04088	427.0826	4357.7657	3310.28346	2369.32923	0.2732	0.27796	2.99E-03	2.33E-03	6.67E-04	3.68E-03	7.81E-04	1.50E-03	1.94E-03	1.29E-03	3.58E-04	2.32E-03	1.22E-03	8.72E-04	3.82E-06	4.71E-06	1.9953E-02
551287.05	4173064.86	2201.69108	3212.44931	632.85586	4604.96554	736.4972	2685.06924	2213.48561	1904.01014	358.44856	3858.52968	2391.14388	3350.17494	0.28795	0.29104	3.21E-03	2.80E-03	5.51E-04	2.93E-03	5.91E-04	2.15E-03	2.10E-03	1.60E-03	3.01E-04	2.05E-03	8.80E-04	1.23E-03	4.03E-06	4.93E-06	2.0412E-02
551265.97	4172916.7	2109.10096	2924.35549	728.54731	5407.95338	846.82902	2067.76677	2109.93875	1691.62211	410.25886	4375.10464	2857.8805	2619.22795	0.27648	0.28059	3.08E-03	2.55E-03	6.35E-04	3.44E-03	6.79E-04	1.66E-03	2.00E-03	1.42E-03	3.44E-04	2.33E-03	1.05E-03	9.64E-04	3.87E-06	4.75E-06	2.0158E-02
551280.6	4173046.95	2199.89464	3212.17904	641.86923	4680.92649	741.97856	2588.77098	2210.00571	1898.72886	363.77172	3933.84163	2417.95775	3239.77424	0.28499	0.28858	3.21E-03	2.80E-03	5.59E-04	2.98E-03	5.95E-04	2.08E-03	2.09E-03	1.59E-03	3.05E-04	2.09E-03	8.90E-04	1.19E-03	3.99E-06	4.89E-06	2.0398E-02
551680.91	4173394.32	3431.85693	2811.53876	598.82874	2628.57071	536.05441	3972.84717	3486.83541	1654.36259	347.83185	2495.98201	1299.99891	4853.02266	2.89989	2.96762	5.01E-03	2.45E-03	5.22E-04	1.67E-03	4.30E-04	3.19E-03	3.30E-03	1.39E-03	2.92E-04	1.33E-03	4.78E-04	1.79E-03	4.06E-05	5.03E-05	2.1939E-02
551330.11	4172665.99	2043.14775	2555.67865	791.04925	5889.22521	1088.19802	1714.34081	2039.37713	1470.97235	437.77638	4307.40208	3585.8044	2195.76773	0.25459	0.25931	2.98E-03	2.23E-03	6.89E-04	3.75E-03	8.73E-04	1.38E-03	1.93E-03	1.23E-03	3.67E-04	2.29E-03	1.32E-03	8.08E-04	3.56E-06	4.39E-06	1.9858E-02
551505.2	4173360.84	2574.48508	3060.34159	598.0638	3498.62377	626.5161	3671.19328	2603.58631	1838.99596	341.91226	3167.92297	1668.00016	4433.33316	0.46837	0.47067	3.76E-03	2.67E-03	5.21E-04	2.23E-03	5.03E-04	2.95E-03	2.47E-03	1.54E-03	2.87E-04	1.69E-03	6.14E-04	1.63E-03	6.55E-06	7.98E-06	2.0863E-02
551277.38	4173038	2194.36299	3199.25793	646.12989	4715.2968	744.53724	2537.17193	2203.63083	1887.7801	366.26252	3966.47509	2430.08704	3179.27766	0.28311	0.28672	3.20E-03	2.79E-03	5.63E-04	3.00E-03	5.97E-04	2.04E-03	2.09E-03	1.58E-03	3.07E-04	2.11E-03	8.94E-04	1.17E-03	3.96E-06	4.86E-06	2.0351E-02
551274.12	4173028.96	2189.91913	3184.99353	652.00044	4762.19672	749.05009	2487.55783	2198.29934	1875.52111	369.61851	4007.03022	2447.83607	3120.88214	0.28144	0.28508	3.20E-03	2.77E-03	5.68E-04	3.03E-03	6.01E-04	2.00E-03	2.08E-03	1.57E-03	3.10E-04	2.13E-03	9.01E-04	1.15E-03	3.94E-06	4.83E-06	2.0325E-02
551616.08	4173403.75	2948.28924	2963.20223	607.85441	2896.34781	556.83688	3980.57921	2988.22853	1768.7178	350.68318	2759.53227	1390.87265	4820.89425	0.84471	0.84762	4.30E-03	2.58E-03	5.29E-04	1.84E-03	4.47E-04	3.19E-03	2.83E-03	1.48E-03	2.94E-04	1.47E-03	5.12E-04	1.77E-03	1.18E-05	1.44E-05	2.1289E-02
551376.41	4173254.79	2288.94348	3161.37152	644.10651	4092.98738	688.49308	3133.0686	2304.32212	1881.83283	366.2192	3618.74243	2007.32827	3836.26061	0.33508	0.33762	3.34E-03	2.75E-03	5.61E-04	2.61E-03	5.52E-04	2.51E-03	2.18E-03	1.58E-03	3.07E-04	1.93E-03	7.39E-04	1.41E-03	4.69E-06	5.72E-06	2.0485E-02
551348.44	4173207.51	2210.72616	3087.6439	643.44761	4278.51816	715.75507	3068.90603	2226.42234	1828.93152	363.74975	3704.87944	2137.52374	3752.68433	0.31987	0.32194	3.23E-03	2.69E-03	5.60E-04	2.72E-03	5.74E-04	2.46E-03	2.11E-03	1.53E-03	3.05E-04	1.97E-03	7.86E-04	1.38E-03	4.48E-06	5.46E-06	2.0336E-02
551347.13	4172633.8	2079.72969	2487.89933	803.80306	5898.92652	1103.44695	1650.84997	2075.89829	1433.92921	445.1798	4283.28274	3625.28764	2123.40441	0.2462	0.2506	3.04E-03	2.17E-03	7.00E-04	3.76E-03	8.85E-04	1.32E-03	1.97E-03	1.20E-03	3.74E-04	2.28E-03	1.33E-03	7.81E-04	3.44E-06	4.25E-06	1.9815E-02
551263.62	4172941.61	2122.77673	2976.31569	711.85849	5241.06826	816.81582	2135.53996	2124.83779	1725.4696	402.07788	4308.29333	2736.81156	2700.93705	0.27664	0.28061	3.10E-03	2.59E-03	6.20E-04	3.34E-03	6.55E-04	1.71E-03	2.01E-03	1.45E-03	3.37E-04	2.29E-03	1.01E-03	9.94E-04	3.87E-06	4.76E-06	2.0118E-02
551299.95	4173100.67	2183.58232	3143.57837	619.20687	4469.96429	728.78756	2845.41649	2198.09065	1865.97956	350.18225	3723.27153	2335.4902	3523.61353	0.2928	0.29587	3.19E-03	2.74E-03	5.39E-04	2.85E-03	5.85E-04	2.28E-03	2.08E-03	1.57E-03	2.94E-04	1.98E-03	8.59E-04	1.30E-03	4.10E-06	5.01E-06	2.0268E-02
551270.89	4173020	2179.94909	3158.42495	656.47779	4796.24234	752.30843	2434.58509	2187.49699	1856.08491	372.16787	4034.51712	2461.58198	3057.70564	0.27944	0.28275	3.18E-03	2.75E-03	5.72E-04	3.05E-03	6.04E-04	1.95E-03	2.07E-03	1.56E-03	3.12E-04	2.15E-03	9.06E-04	1.13E-03	3.91E-06	4.79E-06	2.0245E-02
551309.12	4172726.89	2013.52672	2583.90055	778.28317	5766.64629	1052.121	1793.58531	2009.59398	1489.33255	431.43931	4248.83748	3485.11999	2281.00851	0.26192	0.26683	2.94E-03	2.25E-03	6.78E-04	3.67E-03	8.44E-04	1.44E-03	1.90E-03	1.25E-03	3.62E-04	2.26E-03	1.28E-03	8.39E-04	3.66E-06	4.52E-06	1.9730E-02
551756.43	4172591.55	4053.18651	1636.09336	1178.5504	4153.77872	1727.06747	1115.70818	4020.13488	962.98853	634.94321	2880.38796	4078.21558	1492.21492	0.18626	0.19022	5.92E-03	1.42E-03	1.03E-03	2.64E-03	1.39E-03	8.95E-04	3.81E-03	8.08E-04	5.33E-04	1.53E-03	1.50E-03	5.49E-04	2.61E-06	3.22E-06	2.2033E-02
551283.32	4172809.5	2031.39471	2634.87098	762.0871	5731.28159	975.29493	1843.59262	2028.29032	1519.30435	425.0298	4305.98719	3306.96605	2340.03515	0.26989	0.27464	2.97E-03	2.29E-03	6.64E-04	3.65E-03	7.82E-04	1.48E-03	1.92E-03	1.27E-03	3.57E-04	2.29E-03	1.22E-03	8.61E-04	3.78E-06	4.65E-06	1.9767E-02
551514.83	4173369.9	2583.35522	3041.7	596.18693	3427.43208	619.23058	3666.74681	2613.42093	1826.78592	340.99936	3125.41426	1626.03826	4428.39484	0.48119	0.48337	3.77E-03	2.65E-03	5.19E-04	2.18E-03	4.97E-04	2.94E-03	2.48E-03	1.53E-03	2.86E-04	1.66E-03	5.98E-04	1.63E-03	6.73E-06	8.19E-06	2.0762E-02
551453.23	4173324.06	2452.2145	3076.17104	600.37702	3687.52333	639.74618	3470.68787	2474.14534	1853.32154	343.20268	3263.84808	1807.88557	4211.41515	0.39547	0.39803	3.58E-03	2.68E-03	5.23E-04	2.35E-03	5.13E-04	2.78E-03	2.34E-03	1.56E-03	2.88E-04	1.74E-03	6.65E-04	1.55E-03	5.53E-06	6.74E-06	2.0580E-02
551586.51	4173399.09	2777.068	2999.03802	605.16622	3056.43144	571.04367	3881.36877	2813.03626	1799.28789	347.86712	2882.28454	1451.77122	4687.1441	0.66593	0.66927	4.05E-03	2.61E-03	5.27E-04	1.95E-03	4.58E-04	3.11E-03	2.67E-03	1.51E-03	2.92E-04	1.53E-03	5.34E-04	1.72E-03	9.32E-06	1.13E-05	2.0992E-02
551267.67	4173011.03	2168.12464	3126.40223	661.05899	4830.06918	756.0086	2381.79221	2174.83545	1833.50879	374.72982	4058.71189	2476.76358	2994.36974	0.27727	0.28038	3.16E-03	2.72E-03	5.76E-04	3.08E-03	6.07E-04	1.91E-03	2.06E-03	1.54E-03	3.14E-04	2.16E-03	9.11E-04	1.10E-03	3.88E-06	4.75E-06	2.0153E-02
551989.27	4173224.29	3761.26861	2677.8902	485.62459	2154.80865	427.14605	4255.03407	3858.99211	1546.00409	283.59372	2117.1503	1030.10006	5197.36068	0.33345	0.32751	5.49E-03	2.33E-03	4.23E-04	1.37E-03	3.43E-04	3.41E-03	3.66E-03	1.30E-03	2.38E-04	1.13E-03	3.79E-04	1.91E-03	4.67E-06	5.55E-06	2.1995E-02
551693.88	4173392.44	3503.59717	2744.37696	589.51047	2570.41423	528.50477	3880.10746	3561.8255	1610.143	342.71494	2426.55805	1275.88202	4749.64488	4.71007	4.91077	5.11E-03	2.39E-03	5.13E-04	1.64E-03	4.24E-04	3.11E-03	3.38E-03	1.35E-03	2.88E-04	1.29E-03	4.69E-04	1.75E-03	6.59E-05	8.32E-05	2.1864E-02
551260.8	4172962.87	2126.03712	2997.75396	693.78697	5088.77453	793.7814	2183.65068	2129.20219	1741.91871	392.5569	4214.80931	2635.05758	2757.77089	0.27501	0.27855	3.10E-03	2.61E-03	6.04E-04	3.24E-03	6.37E-04	1.75E-03	2.02E-03	1.46E-03	3.29E-04	2.24E-03	9.70E-04	1.01E-03	3.85E-06	4.72E-06	1.9993E-02
551304.83	4172735.23	2002.56603	2567.07322	772.45604	5715.80625	1038.9621	1790.17687	1998.65724	1479.93798	428.44155	4215.97686	3446.23737	2275.1501	0.26095	0.2658	2.92E-03	2.24E-03	6.73E-04	3.64E-03	8.34E-04	1.44E-03	1.89E-03	1.24E-03	3.59E-04	2.24E-03	1.27E-03	8.37E-04	3.65E-06	4.50E-06	1.9594E-02
551268.4	4172871.28	2049.93428	2753.0847	735.74277	5533.35397	892.8429	1922.92649	2048.98272	1588.46123	412.0024	4319.17705	3027.76138	2440.25033	0.26923	0.27342	2.99E-03	2.40E-03	6.41E-04	3.52E-03	7.16E-04	1.54E-03	1.94E-03	1.33E-03	3.46E-04	2.30E-03	1.11E-03	8.98E-04	3.77E-06	4.63E-06	1.9753E-02
551264.44	4173002.07	2152.76288	3086.70241	664.79906	4856.40539	759.32134	2327.73879	2158.66798	1806.66739	376.78732	4073.6657	2490.55084	2929.12501	0.27453	0.27817	3.14E-03	2.69E-03	5.79E-04	3.09E-03	6.09E-04	1.87E-03	2.05E-03	1.52E-03	3.16E-04	2.17E-03	9.16E-04	1.08E-03	3.84E-06	4.71E-06	2.0028E-02
552063.28	4173187.41	4028.05389	2728.26746	473.88895	2173.8017	408.36169	3908.2441	4136.93824	1566.78557	277.73427	2148.08477	1000.74299	4823.54307	0.25594	0.25222	5.88E-03	2.38E-03	4.13E-04	1.38E-03	3.28E-04	3.14E-03	3.92E-03	1.31E-03	2.33E-04	1.14E-03	3.68E-04	1.77E-03	3.58E-06	4.27E-06	2.2279E-02
551284	4172800.34	2014.13943	2599.46085	758.74107	5682.7249	976.52463	1822.26351	2010.87364	1499.12259	422.87063	4255.399	3301.74702	2312.82841	0.2666	0.27133	2.94E-03	2.26E-03	6.61E-04	3.62E-03	7.83E-04	1.46E-03	1.91E-03	1.26E-03	3.55E-04	2.27E-03	1.21E-03	8.51E-04	3.73E-06	4.60E-06	1.9586E-02
551351.53	4173216.1	2192.19841	3048.83102	637.6354	4199.49129	705.91134	3027.69987	2207.60983	1807.86518	360.62727	3645.38543	2100.68041	3702.34515	0.316	0.31868	3.20E-03	2.66E-03	5.55E-04	2.67E-03	5.66E-04	2.43E-03	2.09E-03	1.52E-03	3.03E-04	1.94E-03	7.73E-04	1.36E-03	4.42E-06	5.40E-06	2.0077E-02
551462.93	4173333.2	2454.21609	3027.80487	592.09394	3616.86313	631.6726	3475.49823	2477.3676	1822.88363	338.37533	3204.87	1770.74018	4211.40213	0.40303	0.40511	3.58E-03	2.64E-03	5.16E-04	2.30E-03	5.07E-04	2.79E-03	2.35E-03	1.53E-03	2.84E-04	1.71E-03	6.52E-04	1.55E-03	5.64E-06	6.86E-06	2.0414E-02
551472.63	4173342.34	2473.88491	3013.21002	589.54957	3569.68913	627.1116	3504.01313	2498.44375	1811.9584	336.8966	3177.46259	1735.48536	4242.27426	0.41296	0.41543	3.61E-03	2.62E-03	5.13E-04	2.27E-03	5.03E-04	2.81E-03	2.37E-03	1.52E-03	2.83E-04	1.69E-03	6.39E-04	1.56E-03	5.78E-06	7.04E-06	2.0411E-02
551334.88	4172645.94	2029.55035	2481.00126	782.79599	5778.69224	1074.75324	1656.16366	2025.92352	1428.75973	433.41137	4217.93978	3528.82231	2126.16555	0.24523	0.24965	2.96E-03	2.16E-03	6.82E-04	3.68E-03	8.62E-04	1.33E-03	1.92E-03	1.20E-03	3.64E-04	2.25E-03	1.30E-03	7.82E-04	3.43E-06	4.23E-06	1.9492E-02
551303.17	4173109.62	2151.6863	3074.65988	607.80195	4368.01686	718.48918	2847.10172	2166.71483	1825.67759	343.59447	3633.9786	2297.05947	3517.64666	0.29178	0.29502	3.14E-03	2.68E-03	5.29E-04	2.78E-03	5.76E-04	2.28E-03	2.05E-03	1.53E-03	2.88E-04	1.93E-03	8.45E-04	1.29E-03	4.08E-06	5.00E-06	1.9947E-02
551568.94	4173396.51	2684.55195	2984.26749	598.06627	3125.66526	576.14869	3770.59963	2718.57361	1792.59389	343.17904	2925.41886	1479.51514	4551.43042	0.59217	0.59498	3.92E-03	2.60E-03	5.21E-04	1.99E-03	4.62E-04	3.03E-03	2.58E-03	1.50E-03	2.88E-04	1.56E-03	5.44E-04	1.67E-03	8.29E-06	1.01E-05	2.0679E-02
551747.27	4173366.75	3883.40889	2590.02816	567.957	2450.30296	516.53623	3685.53616	3959.19922	1509.35175	330.88586	2264.07279	1231.52165	4529.43987	3.2092	2.78168	5.67E-03	2.26E-03	4.95E-04	1.56E-03	4.14E-04	2.96E-03	3.75E-03	1.27E-03	2.78E-04	1.21E-03	4.53E-04	1.67E-03	4.49E-05	4.71E-05	2.2064E-02
551603.12	4173405.64	2824.62292	2931.60832	599.85182	2929.47363	556.78806	3861.00249	2861.80867	1754.92469	345.41595	2775.90586	1402.00137	4670.46512	0.72539	0.72666	4.12E-03	2.55E-03	5.22E-04	1.87E-03	4.47E-04	3.10E-03	2.71E-03	1.47E-03	2.90E-04	1.48E-03	5.16E-04	1.72E-03	1.02E-05	1.23E-05	2.0817E-02
551261.22	4172993.1	2134.98599	3041.93441	668.12467	4877.97349	762.7077	2273.66789	2140.11655	1777.22139	378.54895	4081.5067	2504.6414	2863.61467	0.27213	0.27548	3.12E-03	2.65E-03	5.82E-04	3.11E-03	6.12E-04	1.82E-03	2.03E-03	1.49E-03	3.18E-04	2.17E-03	9.22E-04	1.05E-03	3.81E-06	4.67E-06	1.9883E-02
551262.53	4172895.66	2052.61715	2794.79595	722.26213	5377.03198	856.74469	1964.57073	2052.61029	1614.41332	405.4816	4277.25556	2891.8157	2491.32124	0.26818	0.27222	3.00E-03	2.43E-03	6.29E-04	3.42E-03	6.87E-04	1.58E-03	1.95E-03	1.35E-03	3.40E-04	2.28E-03	1.06E-03	9.17E-04	3.75E-06	4.61E-06	1.9653E-02
551524.45	4173378.96	2571.8894	2995.51644	590.68036	3338.38211	609.43228	3626.60901	2602.49761	1799.00652	337.97996	3059.6947	1581.41738	4380.0744	0.48841	0.49063	3.75E-03	2.61E-03	5.14E-04	2.13E-03	4.89E-04	2.91E-03	2.47E-03	1.51E-03	2.84E-04	1.63E-03	5.82E-04	1.61E-03	6.83E-06	8.31E-06	2.0499E-02
551395.25	4173281.64	2302.02603	3105.53203	625.04475	3896.84384	666.64199	3141.10848	2317.95858	1860.20563	356.39068	3450.79949	1919.12648	3843.05939	0.3415	0.34383	3.36E-03	2.70E-03	5.44E-04	2.48E-03	5.35E-04	2.52E-03	2.20E-03	1.56E-03	2.99E-04	1.84E-03	7.06E-04	1.41E-03	4.78E-06	5.83E-06	2.0170E-02
551414.29	4173299.57	2339.19471	3079.32078	611.97304	3785.7527	648.5344	3218.82961	2356.47289	1852.53301	349.56202	3348.47276	1866.19101	3929.84744	0.35459	0.35647	3.41E-03	2.68E-03	5.33E-04	2.41E-03	5.20E-04	2.58E-03	2.23E-03	1.55E-03	2.93E-04	1.78E-03	6.87E-04	1.45E-03	4.96E-06	6.04E-06	2.0150E-02
551706.84	4173390.55	3562.30148	2671.37342	578.41829	2509.57897	520.11095	3769.82028	3623.68685	1563.05683	336.46872	2356.43159	1250.32279	4624.06506	9.76219	6.2883	5.20E-03	2.33E-03	5.04E-04	1.60E-03	4.17E-04	3.02E-03	3.43E-03	1.31E-03	2.82E-04	1.25E-03	4.60E-04	1.70E-03	1.37E-04	1.07E-04	2.1757E-02
551260.39	4172932.64	2076.71709	2885.13731	702.0924	5154.8384	807.42284	2064.5625	2078.3852	1671.68718	396.19461	4219.37586	2703.23064	2612.69172	0.26867	0.27253	3.03E-03	2.51E-03	6.12E-04	3.28E-03	6.48E-04	1.66E-03	1.97E-03	1.40E-03	3.32E-04	2.25E-03	9.95E-04	9.61E-04	3.76E-06	4.62E-06	1.9657E-02
551768.07	4173354.76	3982.78834	2537.59743	557.76251	2407.82599	511.09136	3614.35235	4064.51736	1477.4883	325.00624	2216.33462	1215.01462	4443.11932	1.6892	1.5452	5.81E-03	2.21E-03	4.86E-04	1.53E-03	4.10E-04	2.90E-03	3.85E-03	1.24E-03	2.73E-04	1.18E-03	4.47E-04	1.63E-03	2.36E-05	2.62E-05	2.2029E-02
551646.22	4173408.33	3083.80139	2823.40563	593.69171	2676.46684	535.67908	3878.00266	3128.06304	1674.51695	343.61433	2574.13921	1317.88174	4718.28686	1.14547	1.14936	4.50E-03	2.46E-03	5.17E-04	1.70E-03	4.30E-04	3.11E-03	2.96E-03	1.41E-03	2.88E-04	1.37E-03	4.85E-04	1.74E-03	1.60E-05	1.95E-05	2.1007E-02
551404.77	4173290.61	2311.46692	3080.66206	616.90333	3828.47703	653.96016	3165.27593	2327.94137	1851.18545	352.09917	3385.15233	1890.53701	3868.07459	0.3468	0.34928	3.37E-03	2.68E-03	5.37E-04	2.44E-03	5.25E-04	2.54E-03	2.21E-03	1.55E-03	2.95E-04	1.80E-03	6.96E-04	1.42E-03	4.85E-06	5.92E-06	2.0083E-02
551316.93	4172690.6	1984.84934	2518.38945	764.84317	5648.33528	1045.15642	1721.98251	1981.24486	1450.79679	423.45946	4161.67591	3425.82617	2197.16082	0.25023	0.25483	2.90E-03	2.19E-03	6.66E-04	3.60E-03	8.39E-04	1.38E-03	1.88E-03	1.22E-03	3.55E-04	2.22E-03	1.26E-03	8.08E-04	3.50E-06	4.32E-06	1.9316E-02
551659.3	4173406.43	3172.92681	2785.93494	590.68122	2631.39969	531.10014	3860.13929	3220.05002	1647.67685	342.308	2518.27764	1299.42485	4704.91417	1.44708	1.45448	4.63E-03	2.43E-03	5.14E-04	1.68E-03	4.26E-04	3.10E-03	3.05E-03	1.38E-03	2.87E-04	1.34E-03	4.78E-04	1.73E-03	2.02E-05	2.46E-05	2.1087E-02
551257.99	4172984.14	2113.28444	2990.337	670.03651	4887.28415	765.18178	2218.24665	2117.69888	1744.13699	379.48072	4076.48664	2515.6889	2796.18866	0.26897	0.27258	3.08E-03	2.60E-03	5.84E-04	3.11E-03	6.14E-04	1.78E-03	2.01E-03	1.46E-03	3.18E-04	2.17E-03	9.26E-04	1.03E-03	3.76E-06	4.62E-06	1.9700E-02
551328.66	4172652.88	2002.66697	2471.01203	771.44083	5696.46281	1058.61264	1657.21612	1999.11804	1422.77005	427.06951	4170.50778	3470.0185	2124.8444	0.24396	0.24837	2.92E-03	2.15E-03	6.72E-04	3.63E-03	8.49E-04	1.33E-03	1.89E-03	1.19E-03	3.58E-04	2.22E-03	1.28E-03	7.82E-04	3.41E-06	4.21E-06	1.9286E-02
551482.33	4173351.47	2467.97203	2964.77854	582.71071	3496.52357	619.17506	3484.21432	2493.65827	1782.2962	332.90806	3120.4901	1695.85175	4214.40015	0.42065	0.42264	3.60E-03	2.58E-03	5.08E-04	2.23E-03	4.97E-04	2.80E-03	2.36E-03	1.50E-03	2.79E-04	1.66E-03	6.24E-04	1.55E-03	5.89E-06	7.16E-06	2.0198E-02
551633.14	4173410.23	2987.07165	2845.09433	593.9332	2715.74342	539.03341	3860.91136	3028.58669	1692.04894	343.26885	2621.63593	1334.36261	4689.89748	0.94785	0.94927	4.36E-03	2.48E-03	5.17E-04	1.73E-03	4.32E-04	3.10E-03	2.87E-03	1.42E-03	2.88E-04	1.40E-03	4.91E-04	1.73E-03	1.33E-05	1.61E-05	2.0834E-02
551354.62	4173224.69	2173.30795	3008.91364	631.17943	4117.71518	695.53066	2984.58436	2188.42502	1786.44159	357.16052	3582.07747	2063.38358	3649.88932	0.31432	0.31642	3.17E-03	2.62E-03	5.50E-04	2.62E-03	5.58E-04	2.39E-03	2.07E-03	1.50E-03	3.00E-04	1.91E-03	7.59E-04	1.34E-03	4.40E-06	5.36E-06	1.9808E-02
551308.48	4173124.65	2125.89073	3007.62984	600.97509	4289.76093	712.62487	2870.16202	2141.51407	1785.31274	339.50762	3567.62545	2259.89118	3534.13882	0.29236	0.29517	3.10E-03	2.62E-03	5.23E-04	2.73E-03	5.72E-04	2.30E-03	2.03E-03	1.50E-03	2.85E-04	1.90E-03	8.31E-04	1.30E-03	4.09E-06	5.00E-06	1.9704E-02
551300.54	4172743.57	1977.61373	2526.46926	758.75928	5587.74404	1013.1713	1772.63705	1973.86952	1457.25081	421.15261	4134.51394	3357.05565	2251.4022	0.25615	0.26083	2.89E-03	2.20E-03	6.61E-04	3.56E-03	8.13E-04	1.42E-03	1.87E-03	1.22E-03	3.53E-04	2.20E-03	1.24E-03	8.28E-04	3.58E-06	4.42E-06	1.9260E-02
551383.41	4173271.42	2258.19468	3071.64681	625.60596	3923.47117	668.26329	3062.4539	2273.40285	1834.84258	356.1865	3469.7083	1937.04342	3749.86674	0.3313	0.33315	3.30E-03	2.68E-03	5.45E-04	2.50E-03	5.36E-04	2.46E-03	2.15E-03	1.54E-03	2.99E-04	1.85E-03	7.13E-04	1.38E-03	4.64E-06	5.65E-06	1.9950E-02
551284.93	4172791.23	1988.7822	2551.44213	750.53485	5583.95915	970.63472	1794.2131	1985.45684	1471.8736	418.0433	4173.7899	3264.41583	2277.02209	0.26095	0.26557	2.90E-03	2.22E-03	6.54E-04	3.56E-03	7.79E-04	1.44E-03	1.88E-03	1.23E-03	3.51E-04	2.22E-03	1.20E-03	8.38E-04	3.65E-06	4.50E-06	1.9289E-02
551266.68	4172860.72	2014.24299	2675.67017	726.5581	5454.55079	891.33581	1870.69193	2012.98919	1543.71417	406.54137	4227.70909	3013.37472	2374.46772	0.26329	0.26742	2.94E-03	2.33E-03	6.33E-04	3.47E-03	7.15E-04	1.50E-03	1.91E-03	1.30E-03	3.41E-04	2.25E-03	1.11E-03	8.74E-04	3.68E-06	4.53E-06	1.9378E-02
551423.81	4173308.54	2346.94199	3040.58337	602.13172	3715.19661	639.63888	3242.26756	2365.15016	1831.88623	344.12219	3281.24869	1835.43262	3952.67385	0.35811	0.35999	3.43E-03	2.65E-03	5.24E-04	2.37E-03	5.13E-04	2.60E-03	2.24E-03	1.54E-03	2.89E-04	1.75E-03	6.75E-04	1.45E-03	5.01E-06	6.10E-06	2.0033E-02
551257.58	4172953.91	2083.54815	2914.03544	686.4791	5013.51147	785.81441	2114.94544	2086.24817	1691.83849	388.15327	4143.89459	2610.34463	2672.67776	0.2683	0.27204	3.04E-03	2.54E-03	5.98E-04	3.19E-03	6.30E-04	1.70E-03	1.98E-03	1.42E-03	3.26E-04	2.21E-03	9.60E-04	9.83E-04	3.75E-06	4.61E-06	1.9577E-02
551672.38	4173404.53	3258.89029	2738.4661	585.31098	2581.7859	525.42714	3815.37736	3309.09217	1614.56243	339.58557	2457.69919	1278.79105	4659.82279	1.89814	1.90205	4.76E-03	2.39E-03	5.10E-04	1.64E-03	4.22E-04	3.06E-03	3.14E-03	1.35E-03	2.85E-04	1.31E-03	4.71E-04	1.71E-03	2.66E-05	3.22E-05	2.1106E-02
551620.06	4173412.14	2883.23037	2848.29136	591.17702	2792.89837	541.03323	3806.70236	2922.08596	1698.46112	341.11278	2658.37393	1348.53759	4617.58459	0.8041	0.80457	4.21E-03	2.48E-03	5.15E-04	1.78E-03	4.34E-04	3.05E-03	2.77E-03	1.43E-03	2.86E-04	1.41E-03	4.96E-04	1.70E-03	1.13E-05	1.36E-05	2.0587E-02
551590.15	4173407.52	2722.64453	2898.90707	590.9986	2955.29755	555.93815	3741.75039	2757.67252	1737.65112	339.80132	2787.4191	1409.58344	4524.41965	0.64083	0.64125	3.97E-03	2.52E-03	5.15E-04	1.88E-03	4.46E-04	3.00E-03	2.61E-03	1.46E-03	2.85E-04	1.48E-03	5.19E-04	1.66E-03	8.97E-06	1.09E-05	2.0387E-02
551254.76	4172975.17	2088.92092	2934.89763	670.91144	4887.63248	767.16895	2162.71685	2092.68197	1709.0514	379.76104	4061.55336	2525.21173	2728.52559	0.26581	0.26913	3.05E-03	2.56E-03	5.84E-04	3.11E-03	6.15E-04	1.74E-03	1.98E-03	1.43E-03	3.19E-04	2.16E-03	9.29E-04	1.00E-03	3.72E-06	4.56E-06	1.9492E-02
551492.03	4173360.61	2466.12903	2929.0966	578.08538	3429.183	612.20971	3466.89409	2492.89698	1760.44701	330.25628	3073.39983	1656.20568	4191.14384	0.42866	0.43093	3.60E-03	2.55E-03	5.03E-04	2.18E-03	4.91E-04	2.78E-03	2.36E-03	1.48E-03	2.77E-04	1.64E-03	6.09E-04	1.54E-03	6.00E-06	7.30E-06	2.0028E-02
551260.82	4172885.14	2015.08378	2715.2735	713.14155	5306.66809	853.59531	1907.12072	2014.76954	1567.9642	399.89038	4191.23223	2876.46957	2419.42732	0.26152	0.26547	2.94E-03	2.36E-03	6.21E-04	3.38E-03	6.85E-04	1.53E-03	1.91E-03	1.32E-03	3.36E-04	2.23E-03	1.06E-03	8.90E-04	3.66E-06	4.50E-06	1.9270E-02
551534.07	4173388.03	2543.17723	2927.34549	582.31071	3237.33352	597.92479	3557.08244	2573.94928	1758.86129	333.27285	2976.72263	1535.00127	4296.15358	0.49431	0.49577	3.71E-03	2.55E-03	5.07E-04	2.06E-03	4.80E-04	2.85E-03	2.44E-03	1.48E-03	2.80E-04	1.58E-03	5.65E-04	1.58E-03	6.92E-06	8.40E-06	2.0104E-02
551296.25	4172751.91	1961.27372	2499.45862	749.29741	5505.61172	993.97974	1760.48202	1957.6453	1442.08347	416.18408	4083.33915	3295.07429	2235.00661	0.25337	0.25793	2.86E-03	2.18E-03	6.53E-04	3.51E-03	7.97E-04	1.41E-03	1.86E-03	1.21E-03	3.49E-04	2.17E-03	1.21E-03	8.22E-04	3.55E-06	4.37E-06	1.9039E-02
551780.12	4173350.07	3963.33665	2478.43419	546.46166	2362.69941	503.56696	3519.31057	4046.00562	1443.37007	318.37098	2170.32194	1196.26775	4326.4543	1.32794	1.23835	5.79E-03	2.16E-03	4.76E-04	1.50E-03	4.04E-04	2.82E-03	3.83E-03	1.21E-03	2.67E-04	1.16E-03	4.40E-04	1.59E-03	1.86E-05	2.10E-05	2.1691E-02
551314.4	4173141.39	2097.98484	2936.99355	595.56725	4210.74544	706.76734	2878.00141	2113.94874	1742.62409	336.21917	3507.81783	2217.18815	3532.3673	0.2927	0.29539	3.06E-03	2.56E-03	5.19E-04	2.68E-03	5.67E-04	2.31E-03	2.00E-03	1.46E-03	2.82E-04	1.87E-03	8.16E-04	1.30E-03	4.10E-06	5.01E-06	1.9436E-02
551288.97	4172772.4	1962.79551	2502.57275	744.84361	5494.01094	974.62672	1765.34928	1959.31045	1443.97169	414.33073	4090.13017	3252.12068	2240.4035	0.25493	0.25946	2.87E-03	2.18E-03	6.49E-04	3.50E-03	7.82E-04	1.42E-03	1.86E-03	1.21E-03	3.48E-04	2.18E-03	1.20E-03	8.24E-04	3.57E-06	4.40E-06	1.9012E-02
551322.43	4172659.82	1970.01417	2447.41055	756.93647	5575.46253	1037.04787	1651.77766	1966.58455	1409.34066	419.03799	4096.45452	3388.96191	2115.0081	0.2409	0.24523	2.88E-03	2.13E-03	6.59E-04	3.55E-03	8.32E-04	1.33E-03	1.86E-03	1.18E-03	3.52E-04	2.18E-03	1.25E-03	7.78E-04	3.37E-06	4.16E-06	1.8985E-02
551357.71	4173233.27	2154.03646	2967.63238	624.03529	4033.56801	684.65814	2940.23242	2168.86549	1764.48467	353.33195	3515.03843	2025.80586	3596.05746	0.31191	0.31443	3.14E-03	2.58E-03	5.44E-04	2.57E-03	5.49E-04	2.36E-03	2.06E-03	1.48E-03	2.96E-04	1.87E-03	7.45E-04	1.32E-03	4.36E-06	5.33E-06	1.9531E-02
551760.4	4173364.84	3859.49096	2501.80237	559.20784	2379.03584	504.37417	3535.03406	3936.45339	1456.66704	321.34569	2194.23533	1199.89393	4349.27608	2.03268	1.81704	5.63E-03	2.18E-03	4.87E-04	1.51E-03	4.05E-04	2.84E-03	3.73E-03	1.22E-03	2.70E-04	1.17E-03	4.41E-04	1.60E-03	2.84E-05	3.08E-05	2.1547E-02
551256.63	4172919.84	2029.47785	2786.0416	694.89774	5097.59749	806.00599	1984.81816	2030.57493	1612.88803	391.43781	4136.40892	2695.50263	2513.83369	0.26109	0.26486	2.96E-03	2.43E-03	6.05E-04	3.25E-03	6.47E-04	1.59E-03	1.92E-03	1.35E-03	3.28E-04	2.20E-03	9.92E-04	9.25E-04	3.65E-06	4.49E-06	1.9212E-02
551291.97	4172760.25	1954.71368	2488.75662	744.6028	5474.65795	982.12098	1755.44082	1951.14785	1435.97767	413.83421	4066.431	3262.93928	2228.15176	0.25289	0.25741	2.85E-03	2.17E-03	6.49E-04	3.49E-03	7.88E-04	1.41E-03	1.85E-03	1.20E-03	3.47E-04	2.16E-03	1.20E-03	8.20E-04	3.54E-06	4.36E-06	1.8946E-02
551268.11	4173041.34	2110.73154	3034.58907	619.57966	4476.82272	714.27108	2421.0721	2119.72312	1790.96059	351.1591	3763.7463	2316.4678	3033.76675	0.26869	0.27167	3.08E-03	2.64E-03	5.40E-04	2.85E-03	5.73E-04	1.94E-03	2.01E-03	1.50E-03	2.95E-04	2.00E-03	8.52E-04	1.12E-03	3.76E-06	4.60E-06	1.9416E-02
551271.33	4173050.29	2111.81361	3038.95552	614.04318	4432.61719	710.20004	2464.42686	2121.60288	1796.57285	347.95909	3723.22471	2300.59752	3084.06775	0.27007	0.27301	3.08E-03	2.65E-03	5.35E-04	2.82E-03	5.70E-04	1.98E-03	2.01E-03	1.51E-03	2.92E-04	1.98E-03	8.46E-04	1.13E-03	3.78E-06	4.63E-06	1.9415E-02
551501.73	4173369.75	2466.20519	2901.10813	574.76308	3362.83063	605.48199	3450.47094	2493.94511	1743.36396	328.42198	3030.25928	1616.18447	4170.26278	0.43768	0.43947	3.60E-03	2.53E-03	5.01E-04	2.14E-03	4.86E-04	2.77E-03	2.36E-03	1.46E-03	2.76E-04	1.61E-03	5.95E-04	1.53E-03	6.12E-06	7.45E-06	1.9880E-02
551264.85	4173032.3	2107.35583	3023.34875	625.23232	4521.37453	718.67942	2376.06475	2115.49594	1780.91981	354.38547	3802.50421	2333.23848	2980.92023	0.26685	0.2702	3.08E-03	2.63E-03	5.45E-04	2.88E-03	5.77E-04	1.91E-03	2.01E-03	1.49E-03	2.97E-04	2.02E-03	8.58E-04	1.10E-03	3.73E-06	4.58E-06	1.9400E-02
551274.56	4173059.24	2111.41163	3037.96436	608.97109	4391.38527	706.7424	2507.09037	2121.98895	1798.56134	345.01172	3683.57544	2286.23182	3132.9848	0.27109	0.27436	3.08E-03	2.65E-03	5.30E-04	2.80E-03	5.67E-04	2.01E-03	2.01E-03	1.51E-03	2.89E-04	1.96E-03	8.41E-04	1.15E-03	3.79E-06	4.65E-06	1.9406E-02
551735.28	4172572.1	3965.17384	1618.83732	1190.09313	3694.70912	1684.16328	1117.09652	3932.07063	955.45496	640.2541	2740.03621	3682.25431	1495.68171	0.15688	0.15955	5.79E-03	1.41E-03	1.04E-03	2.35E-03	1.35E-03	8.96E-04	3.73E-03	8.02E-04	5.37E-04	1.46E-03	1.35E-03	5.50E-04	2.20E-06	2.70E-06	2.1269E-02
551254.35	4172944.94	2045.61489	2837.90848	680.83924	4958.96479	780.94148	2051.90426	2047.84929	1646.47445	384.61724	4082.9707	2595.9408	2594.63732	0.2622	0.26587	2.99E-03	2.47E-03	5.93E-04	3.16E-03	6.27E-04	1.65E-03	1.94E-03	1.38E-03	3.23E-04	2.17E-03	9.55E-04	9.55E-04	3.67E-06	4.51E-06	1.9217E-02
551277.78	4173068.2	2109.3489	3031.22908	604.28185	4352.54313	703.73126	2548.24713	2120.70062	1796.5345	342.23184	3644.93602	2272.82903	3179.44312	0.27243	0.27567	3.08E-03	2.64E-03	5.26E-04	2.77E-03	5.65E-04	2.04E-03	2.01E-03	1.51E-03	2.87E-04	1.94E-03	8.36E-04	1.17E-03	3.81E-06	4.67E-06	1.9385E-02
551281.01	4173077.15	2106.30785	3020.2146	600.28809	4317.9783	701.38656	2588.09556	2118.37807	1791.39723	339.84541	3609.46435	2260.71458	3223.68413	0.27382	0.27676	3.07E-03	2.63E-03	5.23E-04	2.75E-03	5.63E-04	2.08E-03	2.01E-03	1.50E-03	2.85E-04	1.92E-03	8.32E-04	1.19E-03	3.83E-06	4.69E-06	1.9360E-02
551261.63	4173023.33	2099.83319	3002.56774	630.07071	4558.15497	722.45621	2328.8759	2107.19323	1765.23512	357.13361	3832.50658	2348.03148	2924.83237	0.26526	0.26832	3.07E-03	2.62E-03	5.49E-04	2.90E-03	5.80E-04	1.87E-03	2.00E-03	1.48E-03	3.00E-04	2.04E-03	8.64E-04	1.08E-03	3.71E-06	4.55E-06	1.9346E-02
551304.01	4172715.72	1943.27925	2471.41364	746.02926	5465.44584	1008.55993	1721.37888	1939.69957	1425.12727	413.51594	4042.08778	3304.97649	2189.83282	0.24706	0.25156	2.84E-03	2.15E-03	6.50E-04	3.48E-03	8.09E-04	1.38E-03	1.84E-03	1.20E-03	3.47E-04	2.15E-03	1.22E-03	8.06E-04	3.46E-06	4.26E-06	1.8871E-02
551511.43	4173378.88	2482.55614	2897.55317	574.90577	3304.89315	599.85123	3460.5361	2511.22257	1739.88583	328.68247	3002.13285	1577.25551	4183.44406	0.44898	0.45065	3.62E-03	2.52E-03	5.01E-04	2.10E-03	4.81E-04	2.78E-03	2.38E-03	1.46E-03	2.76E-04	1.60E-03	5.80E-04	1.54E-03	6.28E-06	7.64E-06	1.9857E-02
551264.95	4172850.15	1977.45504	2597.8131	716.2332	5358.07555	887.28064	1819.44809	1975.93363	1498.76147	400.52883	4128.27913	2987.42044	2309.8494	0.25696	0.26102	2.89E-03	2.26E-03	6.24E-04	3.41E-03	7.12E-04	1.46E-03	1.87E-03	1.26E-03	3.36E-04	2.20E-03	1.10E-03	8.50E-04	3.60E-06	4.42E-06	1.8977E-02
551753.01	4172582.25	3901.51366	1586.88237	1134.93809	3881.83751	1637.81299	1088.02395	3870.28528	934.45401	611.83751	2752.33721	3790.82557	1454.66244	0.17163	0.17506	5.69E-03	1.38E-03	9.89E-04	2.47E-03	1.31E-03	8.73E-04	3.67E-03	7.84E-04	5.13E-04	1.46E-03	1.39E-03	5.35E-04	2.40E-06	2.97E-06	2.1090E-02
551606.98	4173414.04	2769.99752	2828.58215	584.93002	2829.22789	541.6468	3712.20065	2806.27274	1691.31876	336.90479	2680.68312	1360.33957	4497.30826	0.69481	0.69457	4.04E-03	2.46E-03	5.09E-04	1.80E-03	4.35E-04	2.98E-03	2.66E-03	1.42E-03	2.83E-04	1.43E-03	5.01E-04	1.65E-03	9.72E-06	1.18E-05	2.0196E-02
551284.23	4173086.1	2100.43379	3002.11613	596.1967	4281.43266	698.87406	2623.79201	2113.17165	1781.50073	337.41555	3572.54552	2247.24677	3262.193	0.27494	0.27783	3.07E-03	2.61E-03	5.19E-04	2.73E-03	5.61E-04	2.11E-03	2.00E-03	1.49E-03	2.83E-04	1.90E-03	8.27E-04	1.20E-03	3.85E-06	4.71E-06	1.9310E-02
551258.4	4173014.37	2089.26077	2974.42308	634.45358	4590.27286	726.03823	2280.43056	2095.83066	1745.27816	359.58904	3855.90396	2362.30485	2866.78621	0.26309	0.26616	3.05E-03	2.59E-03	5.53E-04	2.92E-03	5.82E-04	1.83E-03	1.99E-03	1.46E-03	3.02E-04	2.05E-03	8.69E-04	1.05E-03	3.68E-06	4.51E-06	1.9265E-02
551452.36	4173335.43	2363.27022	2911.34853	575.2568	3517.6103	615.46066	3290.4154	2384.69679	1752.9747	328.70941	3103.96856	1738.4876	3993.79515	0.37623	0.37845	3.45E-03	2.54E-03	5.01E-04	2.24E-03	4.94E-04	2.64E-03	2.26E-03	1.47E-03	2.76E-04	1.65E-03	6.40E-04	1.47E-03	5.26E-06	6.41E-06	1.9640E-02
551316.23	4172670.86	1945.94684	2437.1517	746.65471	5486.47273	1021.1408	1657.84775	1942.56394	1403.80687	413.34794	4043.71986	3329.58806	2119.09013	0.2398	0.24412	2.84E-03	2.12E-03	6.50E-04	3.49E-03	8.19E-04	1.33E-03	1.84E-03	1.18E-03	3.47E-04	2.15E-03	1.23E-03	7.80E-04	3.36E-06	4.14E-06	1.8787E-02
551320.31	4173158.13	2074.53957	2878.44555	592.94014	4142.19521	701.45473	2869.9456	2090.51577	1707.30238	334.56707	3464.42937	2173.70765	3514.32751	0.29239	0.29479	3.03E-03	2.51E-03	5.16E-04	2.64E-03	5.63E-04	2.30E-03	1.98E-03	1.43E-03	2.81E-04	1.84E-03	8.00E-04	1.29E-03	4.09E-06	5.00E-06	1.9195E-02
551287.46	4173095.05	2091.60362	2977.1712	591.87661	4241.8834	696.03065	2654.40486	2104.9458	1767.06949	334.83663	3533.73481	2231.98597	3293.87233	0.27576	0.2786	3.05E-03	2.59E-03	5.16E-04	2.70E-03	5.58E-04	2.13E-03	2.00E-03	1.48E-03	2.81E-04	1.88E-03	8.21E-04	1.21E-03	3.86E-06	4.72E-06	1.9232E-02
551259.1	4172874.62	1981.33517	2642.36361	705.172	5245.4026	852.94722	1855.38943	1980.71577	1525.55236	395.00781	4112.17382	2868.6609	2354.52262	0.25594	0.25982	2.89E-03	2.30E-03	6.14E-04	3.34E-03	6.84E-04	1.49E-03	1.88E-03	1.28E-03	3.31E-04	2.19E-03	1.06E-03	8.66E-04	3.58E-06	4.40E-06	1.8928E-02
551543.69	4173397.09	2534.45115	2880.95886	576.94112	3143.6807	586.91138	3518.65077	2565.39017	1730.07409	330.39214	2906.51985	1490.24976	4252.03508	0.49859	0.49976	3.70E-03	2.51E-03	5.03E-04	2.00E-03	4.71E-04	2.82E-03	2.43E-03	1.45E-03	2.77E-04	1.55E-03	5.48E-04	1.56E-03	6.98E-06	8.47E-06	1.9842E-02
551565.94	4173405.86	2589.46152	2865.17286	579.33817	3030.11111	559.90262	3577.72979	2621.76289	1719.85077	332.30539	2829.97504	1438.59282	4324.36739	0.54345	0.54525	3.78E-03	2.50E-03	5.05E-04	1.93E-03	4.49E-04	2.87E-03	2.48E-03	1.44E-03	2.79E-04	1.51E-03	5.29E-04	1.59E-03	7.60E-06	9.24E-06	1.9879E-02
551577.19	4173409.41	2625.39823	2853.01124	580.37772	2970.66625	553.84918	3608.45178	2658.48282	1711.52026	333.23263	2786.86861	1413.83564	4363.19119	0.57343	0.57374	3.83E-03	2.48E-03	5.05E-04	1.89E-03	4.44E-04	2.90E-03	2.52E-03	1.44E-03	2.80E-04	1.48E-03	5.20E-04	1.61E-03	8.02E-06	9.72E-06	1.9916E-02
551255.18	4173005.4	2075.77623	2939.82271	638.25895	4617.1857	729.49089	2231.14688	2081.57633	1721.70491	361.691	3872.1884	2376.07653	2807.37139	0.26088	0.26425	3.03E-03	2.56E-03	5.56E-04	2.94E-03	5.85E-04	1.79E-03	1.97E-03	1.44E-03	3.03E-04	2.06E-03	8.74E-04	1.03E-03	3.65E-06	4.48E-06	1.9159E-02
551273.53	4172808.67	1949.23123	2501.15314	724.96555	5382.58209	924.94599	1759.42193	1946.48674	1443.05605	404.44121	4061.44348	3103.8881	2233.38891	0.25338	0.2577	2.85E-03	2.18E-03	6.31E-04	3.43E-03	7.42E-04	1.41E-03	1.84E-03	1.21E-03	3.39E-04	2.16E-03	1.14E-03	8.22E-04	3.55E-06	4.37E-06	1.8765E-02
551251.54	4172966.21	2045.29959	2851.35035	662.42973	4805.67245	757.72123	2093.33813	2048.59973	1658.06144	374.85304	3986.49019	2496.40232	2643.17688	0.26044	0.26368	2.99E-03	2.48E-03	5.77E-04	3.06E-03	6.08E-04	1.68E-03	1.94E-03	1.39E-03	3.15E-04	2.12E-03	9.19E-04	9.73E-04	3.64E-06	4.47E-06	1.9062E-02
551290.68	4173104	2081.27701	2948.43129	587.90516	4203.4822	693.35311	2680.63653	2095.16663	1750.10776	332.4666	3496.88122	2216.20446	3319.77529	0.27647	0.27925	3.04E-03	2.57E-03	5.12E-04	2.68E-03	5.56E-04	2.15E-03	1.99E-03	1.47E-03	2.79E-04	1.86E-03	8.15E-04	1.22E-03	3.87E-06	4.73E-06	1.9141E-02
551299.71	4172724.09	1927.21849	2447.01839	737.92742	5389.78679	992.58094	1714.26847	1923.69201	1411.52881	409.24192	3992.36658	3252.91453	2179.09955	0.24494	0.24936	2.81E-03	2.13E-03	6.43E-04	3.43E-03	7.96E-04	1.38E-03	1.82E-03	1.18E-03	3.43E-04	2.13E-03	1.20E-03	8.02E-04	3.43E-06	4.23E-06	1.8673E-02
551253.21	4172898.89	1986.28542	2683.35413	694.12417	5113.28152	822.71818	1897.64198	1986.52599	1551.18853	389.76619	4078.77417	2755.6848	2406.14006	0.25591	0.25967	2.90E-03	2.34E-03	6.05E-04	3.26E-03	6.60E-04	1.52E-03	1.88E-03	1.30E-03	3.27E-04	2.17E-03	1.01E-03	8.85E-04	3.58E-06	4.40E-06	1.8869E-02
551461.88	4173344.4	2363.37881	2867.35986	567.9355	3454.10426	608.19327	3289.68712	2385.95723	1725.14264	324.416	3051.77564	1704.09033	3987.90661	0.38274	0.38449	3.45E-03	2.50E-03	4.95E-04	2.20E-03	4.88E-04	2.64E-03	2.26E-03	1.45E-03	2.72E-04	1.62E-03	6.27E-04	1.47E-03	5.36E-06	6.52E-06	1.9480E-02
551293.91	4173112.96	2070.62096	2918.53558	584.64014	4168.61952	691.12324	2703.06067	2084.9482	1732.17325	330.47114	3464.38985	2200.58005	3340.88042	0.2772	0.27992	3.02E-03	2.54E-03	5.09E-04	2.65E-03	5.54E-04	2.17E-03	1.98E-03	1.45E-03	2.77E-04	1.84E-03	8.10E-04	1.23E-03	3.88E-06	4.74E-06	1.9049E-02
551251.95	4172996.44	2057.72379	2896.65243	640.65131	4631.2953	731.82905	2179.62682	2062.81451	1693.41419	362.93669	3875.36965	2386.4335	2744.87441	0.25838	0.26146	3.00E-03	2.52E-03	5.58E-04	2.95E-03	5.87E-04	1.75E-03	1.96E-03	1.42E-03	3.05E-04	2.06E-03	8.78E-04	1.01E-03	3.62E-06	4.43E-06	1.9009E-02
551361.8	4173244.48	2126.54531	2908.26504	613.15443	3917.37098	669.43866	2878.97356	2141.01186	1733.0932	347.48726	3418.80747	1976.09629	3521.64463	0.30918	0.31112	3.10E-03	2.53E-03	5.34E-04	2.49E-03	5.37E-04	2.31E-03	2.03E-03	1.45E-03	2.92E-04	1.82E-03	7.27E-04	1.30E-03	4.33E-06	5.27E-06	1.9139E-02
551471.4	4173353.36	2374.11099	2845.54961	564.66461	3406.21712	603.33777	3301.12612	2397.90581	1710.58217	322.49619	3020.78483	1670.52993	3998.45582	0.39043	0.39249	3.47E-03	2.48E-03	4.92E-04	2.17E-03	4.84E-04	2.65E-03	2.27E-03	1.44E-03	2.71E-04	1.61E-03	6.15E-04	1.47E-03	5.46E-06	6.65E-06	1.9421E-02
551521.13	4173388.02	2462.84496	2845.52129	568.43374	3217.44116	590.14276	3409.82666	2491.90352	1709.16692	325.07532	2934.71408	1534.00796	4121.89937	0.45495	0.4564	3.59E-03	2.48E-03	4.95E-04	2.05E-03	4.73E-04	2.74E-03	2.36E-03	1.43E-03	2.73E-04	1.56E-03	5.64E-04	1.52E-03	6.37E-06	7.73E-06	1.9552E-02
551251.13	4172935.98	2006.98563	2761.30782	674.08608	4899.79376	775.64003	1989.95901	2008.8091	1601.07029	380.43917	4015.5251	2577.77364	2517.81775	0.25592	0.25951	2.93E-03	2.41E-03	5.87E-04	3.12E-03	6.22E-04	1.60E-03	1.90E-03	1.34E-03	3.19E-04	2.14E-03	9.48E-04	9.26E-04	3.58E-06	4.40E-06	1.8847E-02
551593.9	4173415.94	2671.07648	2802.77607	577.18561	2857.78138	541.27671	3608.28205	2705.23164	1678.41926	331.94946	2696.01089	1368.85752	4368.92636	0.61548	0.61485	3.90E-03	2.44E-03	5.03E-04	1.82E-03	4.34E-04	2.89E-03	2.56E-03	1.41E-03	2.79E-04	1.44E-03	5.04E-04	1.61E-03	8.61E-06	1.04E-05	1.9808E-02
551400.56	4173298.82	2232.00051	2937.8416	594.69793	3671.13857	631.86985	3010.02537	2247.75771	1766.07236	339.38269	3238.36386	1826.25439	3680.80977	0.32831	0.33045	3.26E-03	2.56E-03	5.18E-04	2.34E-03	5.07E-04	2.41E-03	2.13E-03	1.48E-03	2.85E-04	1.72E-03	6.72E-04	1.35E-03	4.59E-06	5.60E-06	1.9251E-02
551274.24	4172799.15	1930.60205	2463.62968	720.76327	5326.46187	924.54773	1736.99464	1927.71098	1421.66915	401.82615	4006.65099	3092.38258	2204.73734	0.24977	0.25405	2.82E-03	2.15E-03	6.28E-04	3.39E-03	7.42E-04	1.39E-03	1.83E-03	1.19E-03	3.37E-04	2.13E-03	1.14E-03	8.11E-04	3.49E-06	4.31E-06	1.8565E-02
551390.96	4173289.78	2205.64824	2934.67741	599.05306	3710.8814	637.11445	2961.24964	2220.73762	1760.90919	341.52328	3273.19747	1847.26986	3624.17169	0.32376	0.32531	3.22E-03	2.56E-03	5.22E-04	2.36E-03	5.11E-04	2.38E-03	2.10E-03	1.48E-03	2.87E-04	1.74E-03	6.80E-04	1.33E-03	4.53E-06	5.51E-06	1.9181E-02
551410.15	4173307.86	2249.10959	2920.25939	587.52898	3617.38747	624.86907	3046.36762	2265.65984	1758.25943	335.5515	3188.1581	1801.12511	3720.82807	0.33425	0.33637	3.28E-03	2.54E-03	5.12E-04	2.30E-03	5.01E-04	2.44E-03	2.15E-03	1.48E-03	2.82E-04	1.70E-03	6.63E-04	1.37E-03	4.68E-06	5.70E-06	1.9230E-02
551624.12	4173420.51	2818.85761	2737.27205	574.79024	2693.55107	525.76646	3639.32315	2856.68327	1630.82083	331.71154	2560.89035	1307.86694	4421.28233	0.76128	0.75936	4.11E-03	2.38E-03	5.01E-04	1.72E-03	4.22E-04	2.92E-03	2.71E-03	1.37E-03	2.78E-04	1.36E-03	4.81E-04	1.63E-03	1.07E-05	1.29E-05	1.9905E-02
551329.91	4173185.09	2047.3766	2811.5932	592.40046	4037.76927	690.95632	2830.39658	2062.87779	1667.75263	334.12831	3412.14861	2099.04429	3459.5306	0.29252	0.29448	2.99E-03	2.45E-03	5.16E-04	2.57E-03	5.54E-04	2.27E-03	1.96E-03	1.40E-03	2.80E-04	1.82E-03	7.72E-04	1.27E-03	4.09E-06	4.99E-06	1.8855E-02
551299.19	4173127.93	2048.56764	2861.20148	579.13643	4105.36832	686.69209	2725.06578	2063.43306	1697.59728	327.14959	3409.73705	2169.99506	3357.36342	0.27754	0.28044	2.99E-03	2.49E-03	5.04E-04	2.61E-03	5.51E-04	2.19E-03	1.96E-03	1.42E-03	2.74E-04	1.81E-03	7.98E-04	1.24E-03	3.88E-06	4.75E-06	1.8850E-02
551257.38	4172864.1	1946.13033	2567.62405	695.81102	5167.37326	850.25025	1804.08329	1945.22681	1482.27648	389.4562	4023.84207	2850.50037	2289.99368	0.24998	0.25379	2.84E-03	2.24E-03	6.06E-04	3.29E-03	6.82E-04	1.45E-03	1.84E-03	1.24E-03	3.27E-04	2.14E-03	1.05E-03	8.43E-04	3.50E-06	4.30E-06	1.8558E-02
551480.91	4173362.33	2374.76523	2814.27187	560.40299	3348.76369	597.33571	3291.55523	2399.65154	1691.09601	320.02215	2980.711	1634.81051	3984.21038	0.39756	0.39951	3.47E-03	2.45E-03	4.88E-04	2.13E-03	4.79E-04	2.64E-03	2.27E-03	1.42E-03	2.69E-04	1.59E-03	6.01E-04	1.47E-03	5.56E-06	6.77E-06	1.9286E-02
551326.23	4173174.87	2039.30015	2803.62438	586.43256	4034.89733	690.58466	2826.50148	2055.01023	1663.32971	330.75563	3391.99174	2115.79361	3455.45364	0.29149	0.29422	2.98E-03	2.44E-03	5.11E-04	2.57E-03	5.54E-04	2.27E-03	1.95E-03	1.40E-03	2.78E-04	1.81E-03	7.78E-04	1.27E-03	4.08E-06	4.99E-06	1.8806E-02
551295.4	4172732.46	1906.12601	2413.08865	726.79197	5286.85462	971.62887	1700.53828	1902.71069	1392.55173	403.32344	3925.35566	3182.06861	2160.16682	0.24138	0.24567	2.78E-03	2.10E-03	6.33E-04	3.37E-03	7.80E-04	1.36E-03	1.80E-03	1.17E-03	3.38E-04	2.09E-03	1.17E-03	7.95E-04	3.38E-06	4.16E-06	1.8400E-02
551248.72	4172987.47	2031.70728	2840.64036	639.66298	4617.25742	730.84802	2122.99143	2036.17921	1657.73224	362.2807	3854.06579	2386.11883	2675.80741	0.25462	0.25793	2.97E-03	2.47E-03	5.57E-04	2.94E-03	5.86E-04	1.70E-03	1.93E-03	1.39E-03	3.04E-04	2.05E-03	8.78E-04	9.85E-04	3.56E-06	4.37E-06	1.8773E-02
551419.75	4173316.89	2252.56575	2876.53371	576.9052	3546.07137	615.55225	3062.03955	2269.93935	1734.24897	329.63206	3118.50981	1772.00342	3734.57972	0.33919	0.34085	3.29E-03	2.51E-03	5.02E-04	2.26E-03	4.94E-04	2.46E-03	2.15E-03	1.46E-03	2.77E-04	1.66E-03	6.52E-04	1.37E-03	4.75E-06	5.78E-06	1.9084E-02
551327.22	4172639.75	1932.64844	2343.12833	735.75346	5351.50903	1002.30627	1579.24487	1929.60633	1350.56784	407.64742	3936.43924	3255.10946	2026.31581	0.22691	0.23081	2.82E-03	2.04E-03	6.41E-04	3.41E-03	8.04E-04	1.27E-03	1.83E-03	1.13E-03	3.42E-04	2.10E-03	1.20E-03	7.46E-04	3.18E-06	3.91E-06	1.8331E-02
551275.19	4172789.77	1909.68054	2423.93916	714.69458	5251.9376	921.41092	1713.59307	1906.69676	1399.0009	398.18883	3941.83754	3068.3965	2174.90801	0.24537	0.24957	2.79E-03	2.11E-03	6.22E-04	3.34E-03	7.39E-04	1.37E-03	1.81E-03	1.17E-03	3.34E-04	2.10E-03	1.13E-03	8.00E-04	3.43E-06	4.23E-06	1.8329E-02
551610.93	4173422.42	2720.40236	2731.60062	570.50986	2733.18278	527.02443	3572.53337	2755.88618	1631.1277	328.71249	2590.09981	1320.1526	4335.0918	0.66325	0.663	3.97E-03	2.38E-03	4.97E-04	1.74E-03	4.23E-04	2.87E-03	2.61E-03	1.37E-03	2.76E-04	1.38E-03	4.86E-04	1.60E-03	9.28E-06	1.12E-05	1.9613E-02
551333	4173193.68	2032.21109	2780.83836	589.63454	3981.66218	684.33769	2801.01184	2047.46931	1650.06934	332.58753	3376.04332	2068.04946	3422.77262	0.2917	0.29431	2.97E-03	2.42E-03	5.14E-04	2.54E-03	5.49E-04	2.25E-03	1.94E-03	1.38E-03	2.79E-04	1.80E-03	7.61E-04	1.26E-03	4.08E-06	4.99E-06	1.8664E-02
551530.83	4173397.16	2444.41371	2794.97004	562.22914	3128.40226	580.04271	3361.06703	2473.64758	1678.97658	321.63634	2866.21197	1490.66943	4063.66002	0.46023	0.46171	3.57E-03	2.43E-03	4.90E-04	1.99E-03	4.65E-04	2.70E-03	2.34E-03	1.41E-03	2.70E-04	1.53E-03	5.48E-04	1.50E-03	6.44E-06	7.82E-06	1.9253E-02
551429.34	4173325.93	2262.90775	2842.6832	568.48216	3488.12247	608.10835	3087.46434	2281.26343	1713.72129	324.85413	3065.38213	1743.60397	3760.31264	0.34454	0.34658	3.30E-03	2.48E-03	4.95E-04	2.22E-03	4.88E-04	2.48E-03	2.16E-03	1.44E-03	2.73E-04	1.63E-03	6.42E-04	1.38E-03	4.82E-06	5.87E-06	1.9000E-02
551248.31	4172957.24	1996.41436	2761.0479	651.27018	4698.92483	743.64413	2021.52583	1999.33271	1604.29608	368.37327	3896.69722	2451.00433	2553.96284	0.25217	0.25559	2.91E-03	2.40E-03	5.67E-04	2.99E-03	5.97E-04	1.62E-03	1.89E-03	1.35E-03	3.09E-04	2.07E-03	9.02E-04	9.40E-04	3.53E-06	4.33E-06	1.8570E-02
551251.5	4172888.41	1943.50503	2598.10367	681.91484	5015.82727	813.35685	1836.12898	1943.49393	1501.39051	382.51829	3977.85864	2717.5841	2329.23657	0.24774	0.25137	2.84E-03	2.26E-03	5.94E-04	3.19E-03	6.53E-04	1.47E-03	1.84E-03	1.26E-03	3.21E-04	2.12E-03	1.00E-03	8.57E-04	3.47E-06	4.26E-06	1.8418E-02
551320.98	4172646.71	1915.23089	2344.5484	729.50463	5314.20422	994.64142	1585.7537	1912.17373	1350.96849	404.08555	3916.58708	3227.38249	2032.3131	0.22743	0.23138	2.80E-03	2.04E-03	6.35E-04	3.38E-03	7.98E-04	1.27E-03	1.81E-03	1.13E-03	3.39E-04	2.08E-03	1.19E-03	7.48E-04	3.18E-06	3.92E-06	1.8239E-02
551490.43	4173371.29	2368.72203	2778.80368	555.81721	3285.69015	590.6962	3267.96644	2394.52955	1669.73795	317.3964	2935.78557	1597.73769	3953.76621	0.40407	0.40588	3.46E-03	2.42E-03	4.84E-04	2.09E-03	4.74E-04	2.62E-03	2.27E-03	1.40E-03	2.66E-04	1.56E-03	5.88E-04	1.45E-03	5.65E-06	6.88E-06	1.9104E-02
551291.1	4172740.83	1892.27509	2390.13661	719.17933	5221.14874	955.94179	1690.9313	1888.92806	1379.65214	399.33739	3883.16847	3133.23231	2146.95919	0.2394	0.2436	2.76E-03	2.08E-03	6.26E-04	3.32E-03	7.67E-04	1.36E-03	1.79E-03	1.16E-03	3.35E-04	2.07E-03	1.15E-03	7.90E-04	3.35E-06	4.13E-06	1.8218E-02
551580.82	4173417.84	2575.90542	2763.56219	567.55601	2876.45059	539.7036	3488.15629	2608.13854	1656.57543	325.93723	2699.68454	1373.97739	4222.63025	0.55054	0.5516	3.76E-03	2.41E-03	4.94E-04	1.83E-03	4.33E-04	2.80E-03	2.47E-03	1.39E-03	2.73E-04	1.44E-03	5.06E-04	1.55E-03	7.70E-06	9.35E-06	1.9373E-02
551305.11	4173144.67	2021.37708	2794.95458	573.74952	4032.45525	681.2251	2729.49525	2036.53578	1657.7119	323.88088	3353.21868	2131.39965	3352.54078	0.27779	0.28058	2.95E-03	2.43E-03	5.00E-04	2.57E-03	5.47E-04	2.19E-03	1.93E-03	1.39E-03	2.72E-04	1.78E-03	7.84E-04	1.23E-03	3.89E-06	4.75E-06	1.8593E-02
551367.29	4173258.51	2105.58094	2853.31048	601.24445	3791.98163	651.88633	2823.88941	2119.7146	1705.03688	341.21601	3315.81094	1918.60185	3455.41991	0.30607	0.30834	3.07E-03	2.49E-03	5.24E-04	2.41E-03	5.23E-04	2.27E-03	2.01E-03	1.43E-03	2.86E-04	1.76E-03	7.06E-04	1.27E-03	4.28E-06	5.23E-06	1.8763E-02
551245.5	4172978.51	2006.68287	2786.9116	639.34652	4607.85766	731.14965	2069.66727	2010.55653	1623.65295	361.92911	3834.08747	2389.70478	2611.00017	0.25128	0.25457	2.93E-03	2.43E-03	5.57E-04	2.93E-03	5.87E-04	1.66E-03	1.91E-03	1.36E-03	3.04E-04	2.04E-03	8.79E-04	9.61E-04	3.52E-06	4.31E-06	1.8555E-02
551262.25	4172827.77	1910.57009	2459.64692	698.49171	5171.96334	879.2335	1730.68268	1908.54205	1419.28798	390.2236	3946.34942	2938.21364	2197.47514	0.24551	0.2495	2.79E-03	2.14E-03	6.08E-04	3.29E-03	7.05E-04	1.39E-03	1.81E-03	1.19E-03	3.27E-04	2.10E-03	1.08E-03	8.09E-04	3.44E-06	4.23E-06	1.8252E-02
551247.29	4172922.99	1961.23771	2668.04636	667.11301	4844.03308	773.78648	1913.63259	1962.51655	1545.67674	375.84076	3937.53347	2568.90866	2423.26742	0.24873	0.25223	2.86E-03	2.32E-03	5.81E-04	3.08E-03	6.21E-04	1.54E-03	1.86E-03	1.30E-03	3.15E-04	2.10E-03	9.45E-04	8.92E-04	3.48E-06	4.27E-06	1.8421E-02
551262.07	4173053.63	2036.74138	2892.54688	591.236	4229.59419	683.88682	2356.52589	2046.21037	1709.90976	334.97436	3550.43052	2201.72934	2949.22649	0.25666	0.25973	2.97E-03	2.52E-03	5.15E-04	2.69E-03	5.49E-04	1.89E-03	1.94E-03	1.43E-03	2.81E-04	1.89E-03	8.10E-04	1.09E-03	3.59E-06	4.40E-06	1.8588E-02
551258.84	4173044.68	2035.36304	2888.30966	596.14909	4268.13047	687.43092	2316.05934	2044.07999	1704.76914	337.81998	3586.14297	2215.41882	2902.28386	0.25528	0.25837	2.97E-03	2.52E-03	5.19E-04	2.72E-03	5.52E-04	1.86E-03	1.94E-03	1.43E-03	2.83E-04	1.91E-03	8.15E-04	1.07E-03	3.57E-06	4.38E-06	1.8584E-02
551336.09	4173202.26	2024.15065	2762.84293	588.84511	3938.79896	678.74072	2778.08745	2039.15065	1639.98016	332.20454	3352.47527	2040.49034	3394.75386	0.29133	0.29318	2.95E-03	2.41E-03	5.13E-04	2.51E-03	5.45E-04	2.23E-03	1.93E-03	1.38E-03	2.79E-04	1.78E-03	7.51E-04	1.25E-03	4.08E-06	4.97E-06	1.8536E-02
551265.29	4173062.58	2035.81335	2890.30294	586.39817	4190.91149	680.53835	2395.24401	2046.01473	1710.82179	332.16197	3513.18079	2188.26927	2993.46961	0.25791	0.26072	2.97E-03	2.52E-03	5.11E-04	2.67E-03	5.46E-04	1.92E-03	1.94E-03	1.44E-03	2.79E-04	1.87E-03	8.05E-04	1.10E-03	3.61E-06	4.42E-06	1.8574E-02
551255.59	4173035.63	2031.40895	2877.13601	600.97989	4305.51238	691.06977	2273.64794	2039.34383	1695.20787	340.57897	3619.1214	2229.40477	2852.45503	0.25371	0.25682	2.97E-03	2.51E-03	5.23E-04	2.74E-03	5.54E-04	1.82E-03	1.93E-03	1.42E-03	2.86E-04	1.93E-03	8.20E-04	1.05E-03	3.55E-06	4.35E-06	1.8560E-02

551540.53	4173406.29	2430.88529	2747.55465	556.52812	3038.73009	569.54225	3318.62984	2460.17771	1650.02095	318.53534	2797.84432	1447.5983	4014.16901	0.46478	0.46557	3.55E-03	2.39E-03	4.85E-04	1.93E-03	4.57E-04	2.66E-03	2.33E-03	1.38E-03	2.67E-04	1.49E-03	5.33E-04	1.48E-03	6.50E-06	7.89E-06	1.8977E-02
551278.19	4173098.39	2014.75618	2829.52446	569.80584	4049.84717	669.93322	2527.12551	2027.51383	1678.66772	322.32044	3371.48571	2137.86824	3136.6243	0.2621	0.26472	2.94E-03	2.46E-03	4.96E-04	2.58E-03	5.37E-04	2.03E-03	1.92E-03	1.41E-03	2.70E-04	1.79E-03	7.87E-04	1.15E-03	3.67E-06	4.49E-06	1.8389E-02
551282.49	4172757.58	1873.74612	2359.40735	707.65229	5134.22369	929.88865	1675.44105	1870.53265	1362.2339	393.41656	3830.98178	3058.05896	2126.34608	0.23715	0.24124	2.74E-03	2.05E-03	6.16E-04	3.27E-03	7.46E-04	1.34E-03	1.77E-03	1.14E-03	3.30E-04	2.04E-03	1.13E-03	7.82E-04	3.32E-06	4.09E-06	1.7966E-02
551311.03	4173161.41	1993.83764	2731.92099	569.34785	3957.41624	675.00027	2713.88477	2008.99558	1619.99785	321.23225	3301.5036	2088.47049	3325.89517	0.27767	0.28034	2.91E-03	2.38E-03	4.96E-04	2.52E-03	5.42E-04	2.18E-03	1.90E-03	1.36E-03	2.70E-04	1.76E-03	7.68E-04	1.22E-03	3.89E-06	4.75E-06	1.8315E-02
551370.83	4173266.98	2089.26529	2811.62404	592.22219	3708.68224	640.30462	2787.1097	2103.2342	1683.46291	336.3796	3243.44824	1883.45976	3410.72748	0.30409	0.30584	3.05E-03	2.45E-03	5.16E-04	2.36E-03	5.14E-04	2.24E-03	1.99E-03	1.41E-03	2.82E-04	1.73E-03	6.93E-04	1.25E-03	4.25E-06	5.18E-06	1.8497E-02
551509.47	4173389.22	2368.36878	2735.00786	550.85725	3165.25414	578.46346	3237.68738	2395.62233	1643.001	314.7477	2860.69187	1523.06538	3916.71673	0.41867	0.41983	3.46E-03	2.38E-03	4.80E-04	2.02E-03	4.64E-04	2.60E-03	2.27E-03	1.38E-03	2.64E-04	1.52E-03	5.60E-04	1.44E-03	5.86E-06	7.11E-06	1.8846E-02
551245.91	4173008.74	2002.01411	2801.74373	612.92638	4392.25207	700.95324	2139.33276	2007.73799	1641.72163	347.28583	3683.02768	2268.05235	2691.6821	0.24807	0.2512	2.92E-03	2.44E-03	5.34E-04	2.80E-03	5.62E-04	1.72E-03	1.90E-03	1.38E-03	2.91E-04	1.96E-03	8.34E-04	9.90E-04	3.47E-06	4.26E-06	1.8337E-02
551306.44	4172668.8	1869.37981	2329.27189	711.61489	5168.67215	968.78662	1598.88355	1866.32365	1342.52943	394.09129	3829.05781	3131.33215	2041.96327	0.2267	0.23067	2.73E-03	2.03E-03	6.20E-04	3.29E-03	7.77E-04	1.28E-03	1.77E-03	1.13E-03	3.31E-04	2.04E-03	1.15E-03	7.51E-04	3.17E-06	3.91E-06	1.7903E-02
551243.89	4172902.11	1919.53881	2572.26097	665.89515	4853.3228	787.95961	1830.54935	1920.01261	1488.04369	374.03347	3882.84344	2618.92209	2320.77184	0.24357	0.24706	2.80E-03	2.24E-03	5.80E-04	3.09E-03	6.32E-04	1.47E-03	1.82E-03	1.25E-03	3.14E-04	2.07E-03	9.64E-04	8.54E-04	3.41E-06	4.19E-06	1.8087E-02
551281.42	4173107.34	2005.18779	2803.39453	566.20073	4016.03046	667.60499	2550.83841	2018.45035	1663.22926	320.16358	3338.42971	2124.25788	3159.97031	0.26283	0.2654	2.93E-03	2.44E-03	4.93E-04	2.56E-03	5.36E-04	2.05E-03	1.91E-03	1.40E-03	2.69E-04	1.78E-03	7.82E-04	1.16E-03	3.68E-06	4.50E-06	1.8308E-02
551294.62	4172712.89	1860.9275	2342.81337	707.77355	5114.18722	952.0849	1646.86488	1857.72775	1351.97506	392.47966	3801.82997	3088.22162	2093.97128	0.23142	0.23548	2.72E-03	2.04E-03	6.16E-04	3.26E-03	7.64E-04	1.32E-03	1.76E-03	1.13E-03	3.29E-04	2.02E-03	1.14E-03	7.70E-04	3.24E-06	3.99E-06	1.7877E-02
551810.67	4173342.58	3752.89472	2297.09903	529.48116	2217.10318	476.76912	3217.60595	3831.76925	1339.29827	297.02081	2116.85236	1131.93143	3956.13553	0.88716	0.84288	5.48E-03	2.00E-03	4.61E-04	1.41E-03	3.83E-04	2.58E-03	3.63E-03	1.12E-03	2.49E-04	1.13E-03	4.16E-04	1.46E-03	1.24E-05	1.43E-05	2.0346E-02
551985.01	4173243.64	3395.29407	2395.70838	456.73639	2006.02794	406.26459	3779.30803	3475.70596	1392.40324	266.26254	1957.51489	976.94807	4615.40683	0.33125	0.32489	4.96E-03	2.09E-03	3.98E-04	1.28E-03	3.26E-04	3.03E-03	3.29E-03	1.17E-03	2.23E-04	1.04E-03	3.59E-04	1.70E-03	4.64E-06	5.51E-06	1.9871E-02
551284.64	4173116.29	1994.69354	2775.19969	563.00199	3983.72542	665.45209	2570.14982	2008.3565	1646.35015	318.21759	3307.83845	2110.1791	3177.80479	0.26322	0.26601	2.91E-03	2.42E-03	4.90E-04	2.54E-03	5.34E-04	2.06E-03	1.90E-03	1.38E-03	2.67E-04	1.76E-03	7.76E-04	1.17E-03	3.68E-06	4.51E-06	1.8218E-02
551242.68	4172999.77	1984.09537	2760.64249	614.65306	4401.28858	702.55049	2090.51182	1989.15251	1614.85162	348.16716	3683.22815	2275.76307	2632.40769	0.24556	0.24841	2.90E-03	2.40E-03	5.35E-04	2.80E-03	5.64E-04	1.68E-03	1.89E-03	1.35E-03	2.92E-04	1.96E-03	8.37E-04	9.69E-04	3.44E-06	4.21E-06	1.8186E-02
551241.86	4172939.31	1939.12205	2642.36821	647.02455	4657.25011	744.64882	1917.57124	1941.08364	1533.14707	365.19854	3821.72667	2456.89578	2425.74915	0.24373	0.24705	2.83E-03	2.30E-03	5.64E-04	2.97E-03	5.97E-04	1.54E-03	1.84E-03	1.29E-03	3.06E-04	2.03E-03	9.04E-04	8.93E-04	3.41E-06	4.19E-06	1.8068E-02
551302.14	4172677.15	1855.10719	2318.65349	705.65239	5112.19935	958.90196	1601.49658	1852.05366	1336.8437	390.8478	3792.99199	3095.66341	2042.92462	0.22596	0.22992	2.71E-03	2.02E-03	6.15E-04	3.26E-03	7.69E-04	1.28E-03	1.76E-03	1.12E-03	3.28E-04	2.02E-03	1.14E-03	7.52E-04	3.16E-06	3.90E-06	1.7773E-02
551467.71	4173362.08	2280.35513	2701.09683	542.71643	3268.4392	582.51331	3116.99384	2303.16231	1623.23152	309.81833	2886.77494	1618.13614	3778.21112	0.36783	0.36955	3.33E-03	2.35E-03	4.73E-04	2.08E-03	4.67E-04	2.50E-03	2.18E-03	1.36E-03	2.60E-04	1.54E-03	5.95E-04	1.39E-03	5.15E-06	6.26E-06	1.8541E-02
551584.56	4173426.26	2528.24042	2676.803	554.96434	2785.25571	525.96886	3371.96461	2559.66547	1603.27591	318.78143	2615.09681	1335.43419	4086.81328	0.52911	0.52939	3.69E-03	2.33E-03	4.83E-04	1.77E-03	4.22E-04	2.71E-03	2.43E-03	1.35E-03	2.67E-04	1.39E-03	4.91E-04	1.50E-03	7.40E-06	8.97E-06	1.8848E-02
551396.41	4173307.09	2141.70771	2780.37512	569.98577	3500.46701	607.99467	2844.0568	2156.70419	1673.56362	325.22996	3075.52107	1761.71751	3479.1156	0.31153	0.31346	3.13E-03	2.42E-03	4.96E-04	2.23E-03	4.88E-04	2.28E-03	2.04E-03	1.40E-03	2.73E-04	1.64E-03	6.48E-04	1.28E-03	4.36E-06	5.31E-06	1.8339E-02
551518.99	4173398.19	2352.08165	2693.14089	545.61561	3088.50468	570.00168	3196.29344	2379.62858	1618.21921	311.84431	2803.63853	1483.32877	3866.78469	0.42341	0.42435	3.43E-03	2.35E-03	4.75E-04	1.97E-03	4.57E-04	2.56E-03	2.26E-03	1.36E-03	2.62E-04	1.49E-03	5.46E-04	1.42E-03	5.92E-06	7.19E-06	1.8591E-02
551406.07	4173316.2	2161.66723	2768.5108	563.67582	3455.53595	601.8195	2883.53643	2177.44803	1668.24958	321.87385	3033.84656	1739.36028	3523.64602	0.31736	0.31885	3.16E-03	2.41E-03	4.91E-04	2.20E-03	4.83E-04	2.31E-03	2.06E-03	1.40E-03	2.70E-04	1.61E-03	6.40E-04	1.30E-03	4.44E-06	5.40E-06	1.8349E-02
551342.27	4173219.44	1988.65312	2694.14764	579.73153	3799.55562	660.74489	2700.1928	2003.04933	1601.60455	327.23522	3253.68182	1970.28806	3299.76959	0.28863	0.29075	2.90E-03	2.35E-03	5.05E-04	2.42E-03	5.30E-04	2.17E-03	1.90E-03	1.34E-03	2.75E-04	1.73E-03	7.25E-04	1.21E-03	4.04E-06	4.93E-06	1.8067E-02
551248.08	4172867.46	1880.32617	2464.05349	666.5343	4897.67641	811.36646	1740.1545	1879.7472	1423.35613	373.18277	3830.71363	2698.1397	2208.85645	0.23745	0.24096	2.74E-03	2.15E-03	5.81E-04	3.12E-03	6.51E-04	1.40E-03	1.78E-03	1.19E-03	3.13E-04	2.04E-03	9.93E-04	8.13E-04	3.32E-06	4.08E-06	1.7778E-02
551289.91	4173131.22	1972.59826	2720.41783	557.38643	3923.61871	661.03552	2587.35903	1986.74836	1613.46202	314.84607	3254.83659	2082.15852	3189.34507	0.26395	0.26637	2.88E-03	2.37E-03	4.85E-04	2.50E-03	5.30E-04	2.08E-03	1.88E-03	1.35E-03	2.64E-04	1.73E-03	7.66E-04	1.17E-03	3.69E-06	4.51E-06	1.8020E-02
551477.31	4173371.11	2284.47893	2678.92536	539.85724	3220.99252	577.70681	3113.29816	2308.34016	1609.24419	308.15885	2856.5454	1584.93432	3771.53497	0.37452	0.37579	3.33E-03	2.33E-03	4.70E-04	2.05E-03	4.63E-04	2.50E-03	2.19E-03	1.35E-03	2.59E-04	1.52E-03	5.83E-04	1.39E-03	5.24E-06	6.37E-06	1.8450E-02
552035.98	4173220.4	3443.1992	2431.21044	439.70003	1980.75841	387.75475	3628.84387	3533.74791	1397.27135	256.69875	1942.77063	941.32379	4453.61338	0.27385	0.26931	5.03E-03	2.12E-03	3.83E-04	1.26E-03	3.11E-04	2.91E-03	3.35E-03	1.17E-03	2.15E-04	1.03E-03	3.46E-04	1.64E-03	3.83E-06	4.56E-06	1.9775E-02
551290.29	4172721.29	1840.44241	2310.60395	697.38435	5017.86454	933.02004	1634.3063	1837.3323	1333.91116	386.94108	3737.9818	3023.82166	2076.49433	0.22821	0.23216	2.69E-03	2.01E-03	6.07E-04	3.20E-03	7.49E-04	1.31E-03	1.74E-03	1.12E-03	3.25E-04	1.99E-03	1.11E-03	7.64E-04	3.19E-06	3.93E-06	1.7620E-02
551316.95	4173178.15	1962.5179	2666.38439	564.00126	3866.10569	666.02876	2675.09356	1977.42215	1581.44183	318.07241	3240.85867	2037.72856	3273.447	0.27688	0.27913	2.86E-03	2.32E-03	4.91E-04	2.46E-03	5.34E-04	2.15E-03	1.87E-03	1.33E-03	2.67E-04	1.73E-03	7.50E-04	1.20E-03	3.87E-06	4.73E-06	1.7976E-02
551297.85	4172685.5	1838.69203	2301.17312	698.39925	5042.28909	946.47919	1600.07409	1835.66825	1327.27694	386.93535	3747.10355	3051.50266	2038.8975	0.22447	0.22839	2.68E-03	2.00E-03	6.08E-04	3.21E-03	7.59E-04	1.28E-03	1.74E-03	1.11E-03	3.25E-04	1.99E-03	1.12E-03	7.50E-04	3.14E-06	3.87E-06	1.7603E-02
551242.19	4172891.68	1884.42844	2502.06644	656.94504	4786.2336	783.03442	1777.79956	1884.63424	1446.76389	368.59575	3806.08615	2598.3256	2255.032	0.23734	0.24074	2.75E-03	2.18E-03	5.72E-04	3.05E-03	6.28E-04	1.43E-03	1.79E-03	1.21E-03	3.09E-04	2.03E-03	9.56E-04	8.30E-04	3.32E-06	4.08E-06	1.7733E-02
551239.46	4172990.81	1952.78898	2699.01588	610.43528	4361.40216	697.6879	2031.91684	1957.30477	1575.73985	345.73541	3643.73943	2262.8775	2560.91088	0.24136	0.24394	2.85E-03	2.35E-03	5.32E-04	2.78E-03	5.60E-04	1.63E-03	1.86E-03	1.32E-03	2.90E-04	1.94E-03	8.33E-04	9.42E-04	3.38E-06	4.13E-06	1.7889E-02
551528.5	4173407.15	2351.74312	2669.59597	542.99003	3017.98257	562.1553	3180.17347	2379.5575	1603.21703	310.51814	2757.33304	1444.61165	3849.02742	0.42955	0.43024	3.43E-03	2.33E-03	4.73E-04	1.92E-03	4.51E-04	2.55E-03	2.26E-03	1.35E-03	2.61E-04	1.47E-03	5.32E-04	1.42E-03	6.01E-06	7.29E-06	1.8445E-02
551345.36	4173228.02	1981.75447	2677.97298	577.72491	3749.82631	653.35818	2674.25849	1995.8601	1593.31412	326.28016	3221.79728	1940.85376	3268.98448	0.28805	0.29011	2.89E-03	2.33E-03	5.03E-04	2.39E-03	5.24E-04	2.15E-03	1.89E-03	1.34E-03	2.74E-04	1.71E-03	7.14E-04	1.20E-03	4.03E-06	4.92E-06	1.7929E-02
551486.9	4173380.15	2284.44585	2655.78591	537.05005	3169.374	572.46188	3100.51112	2309.20346	1595.15325	306.57212	2823.69991	1550.45003	3754.69767	0.38085	0.38199	3.33E-03	2.31E-03	4.68E-04	2.02E-03	4.59E-04	2.49E-03	2.19E-03	1.34E-03	2.57E-04	1.50E-03	5.70E-04	1.38E-03	5.33E-06	6.47E-06	1.8331E-02
551374.58	4173275.79	2054.74538	2737.62928	577.67101	3591.37807	624.53584	2724.62112	2068.5104	1643.53138	328.37549	3134.65398	1830.70678	3334.09324	0.29975	0.30184	3.00E-03	2.38E-03	5.03E-04	2.29E-03	5.01E-04	2.19E-03	1.96E-03	1.38E-03	2.76E-04	1.67E-03	6.74E-04	1.23E-03	4.19E-06	5.11E-06	1.8054E-02
551415.74	4173325.3	2161.40132	2721.22045	552.3923	3383.49975	592.12753	2892.71274	2178.00398	1641.42504	315.55141	2962.59365	1711.83934	3529.63384	0.32098	0.32283	3.15E-03	2.37E-03	4.81E-04	2.15E-03	4.75E-04	2.32E-03	2.06E-03	1.38E-03	2.65E-04	1.58E-03	6.30E-04	1.30E-03	4.49E-06	5.47E-06	1.8178E-02
551237.96	4172926.13	1898.15971	2559.63472	641.9351	4617.10809	744.96833	1847.69361	1899.57277	1483.84916	361.70151	3757.8775	2456.76762	2339.34453	0.23765	0.24091	2.77E-03	2.23E-03	5.59E-04	2.94E-03	5.98E-04	1.48E-03	1.80E-03	1.25E-03	3.03E-04	2.00E-03	9.04E-04	8.61E-04	3.33E-06	4.08E-06	1.7700E-02
551425.41	4173334.41	2175.87496	2696.64246	545.50256	3336.69668	586.01546	2923.47039	2193.47686	1625.70704	311.63478	2921.08539	1686.1786	3562.43214	0.32637	0.32817	3.18E-03	2.35E-03	4.75E-04	2.12E-03	4.70E-04	2.35E-03	2.08E-03	1.36E-03	2.61E-04	1.55E-03	6.20E-04	1.31E-03	4.57E-06	5.56E-06	1.8141E-02
551239.05	4172960.58	1923.08865	2631.91068	622.79223	4448.74855	710.85072	1941.35447	1926.11354	1530.27485	352.30961	3694.49174	2326.16302	2452.13157	0.23915	0.2423	2.81E-03	2.29E-03	5.42E-04	2.83E-03	5.70E-04	1.56E-03	1.83E-03	1.28E-03	2.96E-04	1.97E-03	8.56E-04	9.02E-04	3.35E-06	4.11E-06	1.7740E-02
551295.83	4173147.96	1947.20522	2660.08379	552.46459	3859.43189	656.33833	2590.11735	1961.61156	1577.1942	311.84669	3204.04817	2048.34611	3183.53318	0.264	0.2666	2.84E-03	2.32E-03	4.81E-04	2.46E-03	5.27E-04	2.08E-03	1.86E-03	1.32E-03	2.62E-04	1.71E-03	7.54E-04	1.17E-03	3.69E-06	4.52E-06	1.7785E-02
551293.56	4172693.84	1822.0133	2280.1598	690.8397	4969.37829	933.09988	1596.00582	1819.02245	1315.65079	382.8821	3698.47087	3005.13857	2031.72254	0.22269	0.22655	2.66E-03	1.99E-03	6.02E-04	3.16E-03	7.49E-04	1.28E-03	1.72E-03	1.10E-03	3.21E-04	1.97E-03	1.11E-03	7.48E-04	3.12E-06	3.84E-06	1.7419E-02
552054.51	4173212.58	3417.08661	2421.3867	434.84755	1974.17259	382.05118	3537.98392	3507.26835	1392.22772	254.08112	1937.8978	931.18371	4351.42708	0.25713	0.25306	4.99E-03	2.11E-03	3.79E-04	1.26E-03	3.07E-04	2.84E-03	3.32E-03	1.17E-03	2.13E-04	1.03E-03	3.43E-04	1.60E-03	3.60E-06	4.29E-06	1.9566E-02
551285.97	4172729.7	1824.81876	2285.03658	689.27763	4945.71394	917.23435	1623.69753	1821.7723	1319.54371	382.66073	3690.33329	2973.30453	2061.88508	0.22595	0.22982	2.66E-03	1.99E-03	6.00E-04	3.15E-03	7.36E-04	1.30E-03	1.73E-03	1.11E-03	3.21E-04	1.96E-03	1.09E-03	7.59E-04	3.16E-06	3.89E-06	1.7421E-02
551320.64	4173188.43	1944.13447	2629.46783	560.91436	3807.48706	659.71629	2644.66	1958.79776	1559.898	316.28731	3203.23161	2004.85149	3234.57169	0.27606	0.27822	2.84E-03	2.29E-03	4.89E-04	2.42E-03	5.29E-04	2.12E-03	1.86E-03	1.31E-03	2.65E-04	1.70E-03	7.38E-04	1.19E-03	3.86E-06	4.71E-06	1.7764E-02
551236.23	4172981.84	1933.06856	2655.33969	611.92746	4367.16977	699.99113	1985.68668	1936.99568	1547.91077	346.41168	3636.84839	2272.46281	2504.69484	0.23889	0.24149	2.82E-03	2.31E-03	5.33E-04	2.78E-03	5.62E-04	1.59E-03	1.84E-03	1.30E-03	2.91E-04	1.94E-03	8.36E-04	9.22E-04	3.34E-06	4.09E-06	1.7729E-02
551246.37	4172856.98	1850.12206	2400.3487	658.654	4829.97716	809.60035	1696.15758	1849.27644	1386.3482	368.54765	3755.48724	2683.58002	2153.53809	0.2326	0.23607	2.70E-03	2.09E-03	5.74E-04	3.08E-03	6.50E-04	1.36E-03	1.75E-03	1.16E-03	3.09E-04	2.00E-03	9.87E-04	7.92E-04	3.25E-06	4.00E-06	1.7462E-02
551571.37	4173428.18	2437.45535	2630.35021	544.49315	2796.46362	523.78746	3250.52731	2467.17154	1576.7175	312.3382	2610.33868	1338.67481	3939.37622	0.48035	0.48054	3.56E-03	2.29E-03	4.74E-04	1.78E-03	4.20E-04	2.61E-03	2.34E-03	1.32E-03	2.62E-04	1.39E-03	4.93E-04	1.45E-03	6.72E-06	8.14E-06	1.8401E-02
551496.5	4173389.18	2280.28455	2630.75989	534.04441	3112.74217	566.64093	3080.41977	2305.75471	1580.24271	304.91197	2786.91419	1514.91433	3729.66636	0.38638	0.38766	3.33E-03	2.29E-03	4.65E-04	1.98E-03	4.55E-04	2.47E-03	2.19E-03	1.33E-03	2.56E-04	1.48E-03	5.57E-04	1.37E-03	5.41E-06	6.57E-06	1.8185E-02
551386.74	4173297.99	2078.1581	2716.96178	565.25156	3477.83118	605.90398	2741.21526	2092.28782	1635.95837	322.15028	3043.7127	1772.18458	3354.52872	0.30184	0.30376	3.03E-03	2.37E-03	4.92E-04	2.21E-03	4.86E-04	2.20E-03	1.98E-03	1.37E-03	2.70E-04	1.62E-03	6.52E-04	1.23E-03	4.22E-06	5.15E-06	1.7934E-02
551435.07	4173343.51	2182.12399	2660.79324	537.79455	3282.96816	579.24311	2939.12814	2200.79548	1602.69766	307.16843	2873.56558	1658.15383	3576.55274	0.33152	0.33287	3.19E-03	2.32E-03	4.68E-04	2.09E-03	4.65E-04	2.36E-03	2.09E-03	1.34E-03	2.58E-04	1.53E-03	6.10E-04	1.32E-03	4.64E-06	5.64E-06	1.8038E-02
551235.82	4172951.61	1903.09667	2587.18344	624.52826	4459.00937	716.02959	1897.93003	1905.59824	1503.03775	352.90888	3681.76378	2345.41506	2398.96404	0.23656	0.23969	2.78E-03	2.25E-03	5.44E-04	2.84E-03	5.74E-04	1.52E-03	1.81E-03	1.26E-03	2.96E-04	1.96E-03	8.63E-04	8.83E-04	3.31E-06	4.06E-06	1.7588E-02
551267.6	4172778.27	1824.06686	2284.23752	679.56149	4914.79965	878.47268	1626.08727	1821.2897	1319.21631	378.46488	3694.89043	2888.87762	2063.8092	0.22882	0.23262	2.66E-03	1.99E-03	5.92E-04	3.13E-03	7.05E-04	1.30E-03	1.73E-03	1.11E-03	3.18E-04	1.97E-03	1.06E-03	7.59E-04	3.20E-06	3.94E-06	1.7330E-02
551348.45	4173236.61	1964.21266	2643.19531	571.78923	3674.3691	642.88534	2633.29853	1978.02073	1574.50709	323.12229	3164.42174	1904.17549	3219.5587	0.28598	0.28796	2.87E-03	2.30E-03	4.98E-04	2.34E-03	5.16E-04	2.11E-03	1.87E-03	1.32E-03	2.71E-04	1.68E-03	7.01E-04	1.18E-03	4.00E-06	4.88E-06	1.7681E-02
551233	4172972.88	1911.52511	2609.11876	612.70499	4366.6191	702.05366	1939.75859	1914.89049	1519.11444	346.65703	3623.14244	2281.24218	2448.5389	0.23628	0.23907	2.79E-03	2.27E-03	5.34E-04	2.78E-03	5.63E-04	1.56E-03	1.81E-03	1.27E-03	2.91E-04	1.93E-03	8.39E-04	9.01E-04	3.31E-06	4.05E-06	1.7553E-02
551323.73	4173197.01	1930.12717	2601.82636	558.64041	3758.76039	654.1164	2617.37497	1944.56038	1543.9208	314.99958	3172.65887	1977.03271	3200.50136	0.27536	0.27775	2.82E-03	2.27E-03	4.87E-04	2.39E-03	5.25E-04	2.10E-03	1.84E-03	1.30E-03	2.64E-04	1.69E-03	7.27E-04	1.18E-03	3.85E-06	4.71E-06	1.7593E-02
551281.65	4172738.1	1811.12405	2262.13001	681.86757	4882.68218	902.3403	1612.97909	1808.14412	1306.63989	378.76556	3649.36367	2926.98774	2047.47086	0.22398	0.22777	2.64E-03	1.97E-03	5.94E-04	3.11E-03	7.24E-04	1.29E-03	1.71E-03	1.10E-03	3.18E-04	1.94E-03	1.08E-03	7.53E-04	3.13E-06	3.86E-06	1.7242E-02
551240.48	4172881.24	1848.85116	2430.69705	647.28985	4711.79951	777.55911	1725.91064	1848.80671	1405.17193	362.82407	3724.05693	2573.69788	2190.04251	0.23101	0.23432	2.70E-03	2.12E-03	5.64E-04	3.00E-03	6.24E-04	1.38E-03	1.75E-03	1.18E-03	3.04E-04	1.98E-03	9.47E-04	8.06E-04	3.23E-06	3.97E-06	1.7366E-02
551444.74	4173352.62	2187.23947	2626.93832	531.34747	3232.69892	573.22986	2949.2885	2206.98635	1580.63327	303.39223	2831.84915	1637.80033	3584.46841	0.33655	0.3382	3.19E-03	2.29E-03	4.63E-04	2.06E-03	4.60E-04	2.37E-03	2.09E-03	1.33E-03	2.55E-04	1.51E-03	6.03E-04	1.32E-03	4.71E-06	5.73E-06	1.7940E-02
551269.51	4172769.36	1813.03723	2264.73231	677.0454	4877.62446	879.5347	1615.01956	1810.19983	1308.14971	376.85104	3661.46927	2882.2023	2049.58722	0.22642	0.23019	2.65E-03	1.97E-03	5.90E-04	3.11E-03	7.06E-04	1.30E-03	1.72E-03	1.10E-03	3.16E-04	1.95E-03	1.06E-03	7.54E-04	3.17E-06	3.90E-06	1.7216E-02
552092.91	4173195.34	3487.90612	2399.38075	429.68923	1974.25648	373.79512	3340.53346	3578.56215	1381.3289	251.46635	1939.81732	918.17191	4128.93726	0.22768	0.22439	5.09E-03	2.09E-03	3.74E-04	1.26E-03	3.00E-04	2.68E-03	3.39E-03	1.16E-03	2.11E-04	1.03E-03	3.38E-04	1.52E-03	3.19E-06	3.80E-06	1.9451E-02
551301.74	4173164.7	1920.46375	2600.85209	548.0771	3790.63813	650.67946	2573.38501	1934.85912	1541.83605	309.21053	3155.52918	2009.57848	3156.28126	0.26384	0.26633	2.80E-03	2.27E-03	4.77E-04	2.41E-03	5.22E-04	2.06E-03	1.83E-03	1.29E-03	2.59E-04	1.68E-03	7.39E-04	1.16E-03	3.69E-06	4.51E-06	1.7522E-02
551253.13	4172818.03	1821.2649	2307.66744	663.65324	4839.78297	837.57952	1634.33977	1819.31997	1332.48295	370.66183	3693.28254	2767.71651	2075.27383	0.22882	0.23247	2.66E-03	2.01E-03	5.78E-04	3.08E-03	6.72E-04	1.31E-03	1.72E-03	1.12E-03	3.11E-04	1.97E-03	1.02E-03	7.64E-04	3.20E-06	3.94E-06	1.7220E-02
551506.09	4173398.22	2269.14734	2598.66964	530.03565	3048.20323	559.76147	3049.29787	2295.07004	1561.29057	302.69756	2741.86869	1478.03037	3691.77131	0.39106	0.39213	3.31E-03	2.26E-03	4.62E-04	1.94E-03	4.49E-04	2.45E-03	2.18E-03	1.31E-03	2.54E-04	1.46E-03	5.44E-04	1.36E-03	5.47E-06	6.64E-06	1.7987E-02
551277.33	4172746.51	1803.40929	2248.95409	677.25965	4848.99112	891.54995	1606.1522	1800.46769	1299.19726	376.41375	3628.69755	2897.29848	2038.36739	0.22325	0.227	2.63E-03	1.96E-03	5.90E-04	3.09E-03	7.15E-04	1.29E-03	1.71E-03	1.09E-03	3.16E-04	1.93E-03	1.07E-03	7.50E-04	3.12E-06	3.85E-06	1.7139E-02
551232.59	4172942.65	1876.77524	2533.69988	622.6699	4441.42174	717.15376	1850.68312	1878.84949	1470.99211	351.46922	3647.68104	2350.23299	2340.70824	0.23284	0.23593	2.74E-03	2.21E-03	5.42E-04	2.83E-03	5.75E-04	1.48E-03	1.78E-03	1.23E-03	2.95E-04	1.94E-03	8.65E-04	8.61E-04	3.26E-06	4.00E-06	1.7361E-02
551234.57	4172905.33	1850.08766	2458.34227	636.39919	4587.28257	750.59071	1761.18614	1850.80175	1423.06566	357.60716	3682.93004	2474.71227	2232.65153	0.23063	0.23383	2.70E-03	2.14E-03	5.54E-04	2.92E-03	6.02E-04	1.41E-03	1.75E-03	1.19E-03	3.00E-04	1.96E-03	9.11E-04	8.21E-04	3.23E-06	3.96E-06	1.7280E-02
551326.82	4173205.6	1918.68572	2579.15668	556.97416	3713.2104	648.52571	2590.90968	1932.86446	1531.06152	314.0906	3145.23602	1949.84672	3167.92729	0.2748	0.27684	2.80E-03	2.25E-03	4.85E-04	2.36E-03	5.20E-04	2.08E-03	1.83E-03	1.28E-03	2.64E-04	1.67E-03	7.17E-04	1.17E-03	3.85E-06	4.69E-06	1.7441E-02
551990.2	4173248.87	3241.32125	2290.91204	442.3876	1941.96617	395.03312	3576.14836	3316.22498	1333.20408	257.75376	1890.94378	949.97959	4369.89849	0.32073	0.31452	4.73E-03	2.00E-03	3.85E-04	1.24E-03	3.17E-04	2.87E-03	3.14E-03	1.12E-03	2.16E-04	1.01E-03	3.50E-04	1.61E-03	4.49E-06	5.33E-06	1.8986E-02
551581.23	4173435.71	2433.36997	2571.89545	537.56658	2705.91532	511.79274	3200.74214	2463.09189	1540.09668	308.62078	2533.79886	1300.66341	3883.32203	0.48263	0.48094	3.55E-03	2.24E-03	4.68E-04	1.72E-03	4.11E-04	2.57E-03	2.33E-03	1.29E-03	2.59E-04	1.35E-03	4.79E-04	1.43E-03	6.75E-06	8.15E-06	1.8118E-02
551273.01	4172754.92	1796.98511	2238.48458	672.96835	4820.73312	881.12603	1599.69684	1794.09556	1293.23379	374.24296	3612.74072	2869.41318	2030.02283	0.22269	0.2264	2.62E-03	1.95E-03	5.86E-04	3.07E-03	7.07E-04	1.28E-03	1.70E-03	1.09E-03	3.14E-04	1.92E-03	1.06E-03	7.47E-04	3.12E-06	3.84E-06	1.7051E-02
551297.11	4172665.83	1791.85578	2217.85847	675.92161	4848.19105	915.49058	1536.7111	1789.15293	1279.25598	374.4894	3611.36784	2931.96377	1961.07431	0.21318	0.21679	2.62E-03	1.93E-03	5.89E-04	3.09E-03	7.34E-04	1.23E-03	1.70E-03	1.07E-03	3.14E-04	1.92E-03	1.08E-03	7.22E-04	2.98E-06	3.67E-06	1.7003E-02
551253.86	4172808.38	1802.70996	2269.2791	659.37696	4785.43345	836.03384	1611.09167	1800.59987	1310.5795	368.06755	3640.54556	2754.18629	2045.57215	0.22533	0.22895	2.63E-03	1.98E-03	5.74E-04	3.05E-03	6.71E-04	1.29E-03	1.71E-03	1.10E-03	3.09E-04	1.94E-03	1.01E-03	7.53E-04	3.15E-06	3.88E-06	1.7018E-02
551301.42	4172657.45	1792.87531	2207.77734	674.75829	4837.49329	913.43143	1523.71358	1790.28585	1273.40308	373.88974	3603.84715	2924.17341	1946.52399	0.21099	0.21453	2.62E-03	1.92E-03	5.88E-04	3.08E-03	7.33E-04	1.22E-03	1.70E-03	1.07E-03	3.14E-04	1.92E-03	1.08E-03	7.16E-04	2.95E-06	3.64E-06	1.6959E-02
551352.6	4173248	1945.81601	2603.81171	564.31833	3581.5584	629.3349	2585.86645	1959.2303	1553.90711	319.23462	3093.08686	1857.87377	3162.66613	0.28421	0.28569	2.84E-03	2.27E-03	4.92E-04	2.28E-03	5.05E-04	2.07E-03	1.86E-03	1.30E-03	2.68E-04	1.65E-03	6.84E-04	1.16E-03	3.98E-06	4.84E-06	1.7391E-02
551292.81	4172674.21	1783.11149	2213.18508	672.90576	4818.74216	910.33921	1541.77628	1780.36442	1276.8531	372.85276	3591.78485	2914.21733	1965.47455	0.21349	0.21712	2.60E-03	1.93E-03	5.86E-04	3.07E-03	7.30E-04	1.24E-03	1.69E-03	1.07E-03	3.13E-04	1.91E-03	1.07E-03	7.23E-04	2.99E-06	3.68E-06	1.6938E-02
551515.68	4173407.26	2258.9275	2568.36956	526.29784	2981.47089	552.54359	3020.30166	2285.12051	1543.19572	300.66748	2695.67006	1440.74074	3657.13623	0.39544	0.39601	3.30E-03	2.24E-03	4.58E-04	1.90E-03	4.43E-04	2.42E-03	2.17E-03	1.29E-03	2.52E-04	1.43E-03	5.30E-04	1.35E-03	5.53E-06	6.71E-06	1.7793E-02
551329.91	4173214.18	1907.87385	2557.89427	555.14981	3665.85559	642.36187	2563.34979	1921.77804	1519.16354	313.11317	3116.08427	1921.99823	3134.44831	0.27413	0.27611	2.78E-03	2.23E-03	4.84E-04	2.33E-03	5.15E-04	2.06E-03	1.82E-03	1.27E-03	2.63E-04	1.66E-03	7.07E-04	1.15E-03	3.84E-06	4.68E-06	1.7289E-02
551238.78	4172870.81	1818.00737	2366.85204	639.25624	4649.58711	775.37603	1680.05566	1817.70467	1368.01236	358.02106	3651.61944	2558.91694	2132.52693	0.22594	0.22918	2.65E-03	2.06E-03	5.57E-04	2.96E-03	6.22E-04	1.35E-03	1.72E-03	1.15E-03	3.00E-04	1.94E-03	9.42E-04	7.85E-04	3.16E-06	3.88E-06	1.7050E-02
551473.73	4173379.93	2201.47655	2556.51888	520.94224	3102.37965	559.33095	2952.59293	2224.38372	1535.13599	297.24857	2742.81411	1537.52907	3579.96316	0.35354	0.35452	3.21E-03	2.23E-03	4.54E-04	1.98E-03	4.49E-04	2.37E-03	2.11E-03	1.29E-03	2.49E-04	1.46E-03	5.66E-04	1.32E-03	4.95E-06	6.01E-06	1.7686E-02
551307.66	4173181.44	1893.20525	2544.40415	543.92376	3714.62734	643.49317	2539.55537	1907.35906	1508.59443	306.7258	3106.1611	1965.67099	3110.54534	0.26345	0.26553	2.76E-03	2.22E-03	4.74E-04	2.37E-03	5.16E-04	2.04E-03	1.81E-03	1.27E-03	2.57E-04	1.65E-03	7.23E-04	1.14E-03	3.69E-06	4.50E-06	1.7232E-02
551307.05	4172647.52	1795.77115	2193.24793	673.96678	4827.02915	911.1222	1507.02612	1793.30692	1265.12798	373.55503	3594.50507	2916.58817	1927.78486	0.20834	0.21177	2.62E-03	1.91E-03	5.87E-04	3.07E-03	7.31E-04	1.21E-03	1.70E-03	1.06E-03	3.13E-04	1.91E-03	1.07E-03	7.09E-04	2.92E-06	3.59E-06	1.6909E-02
551232.87	4172894.93	1825.05484	2406.0581	632.03199	4560.24858	752.35495	1719.25479	1825.4681	1392.10758	354.71732	3636.44914	2479.24539	2180.53882	0.22688	0.23005	2.66E-03	2.10E-03	5.50E-04	2.90E-03	6.04E-04	1.38E-03	1.73E-03	1.17E-03	2.98E-04	1.94E-03	9.12E-04	8.02E-04	3.17E-06	3.90E-06	1.7050E-02
551402.05	4173324.59	2076.61407	2623.73871	540.33578	3299.20396	579.28295	2729.70985	2091.72905	1582.08884	308.50124	2885.01935	1680.70513	3336.94912	0.30098	0.30267	3.03E-03	2.29E-03	4.71E-04	2.10E-03	4.65E-04	2.19E-03	1.98E-03	1.33E-03	2.59E-04	1.54E-03	6.18E-04	1.23E-03	4.21E-06	5.13E-06	1.7502E-02
551229.78	4172963.91	1868.95542	2533.26673	603.50444	4279.17578	690.92702	1878.34397	1871.96344	1473.69572	341.31624	3549.35822	2246.59774	2372.27297	0.22999	0.23295	2.73E-03	2.21E-03	5.26E-04	2.72E-03	5.54E-04	1.51E-03	1.77E-03	1.24E-03	2.86E-04	1.89E-03	8.27E-04	8.73E-04	3.22E-06	3.95E-06	1.7139E-02
551525.28	4173416.29	2267.62098	2558.9268	525.57579	2921.8317	546.08386	3020.49738	2294.12499	1536.22897	300.45384	2661.84905	1404.55817	3659.477	0.40127	0.40187	3.31E-03	2.23E-03	4.58E-04	1.86E-03	4.38E-04	2.42E-03	2.17E-03	1.29E-03	2.52E-04	1.42E-03	5.17E-04	1.35E-03	5.61E-06	6.81E-06	1.7726E-02
551483.4	4173389.03	2206.16418	2543.225	519.5977	3060.55056	555.2792	2948.30989	2229.96297	1526.89842	296.51465	2719.90833	1505.41891	3573.69237	0.3593	0.36015	3.22E-03	2.22E-03	4.53E-04	1.95E-03	4.45E-04	2.37E-03	2.11E-03	1.28E-03	2.49E-04	1.45E-03	5.54E-04	1.31E-03	5.03E-06	6.10E-06	1.7619E-02
551288.5	4172682.58	1769.24844	2197.72637	667.03457	4762.13101	900.20359	1540.59918	1766.50391	1268.35602	369.69064	3553.72617	2879.02414	1962.0146	0.21245	0.21605	2.58E-03	1.91E-03	5.81E-04	3.03E-03	7.22E-04	1.24E-03	1.67E-03	1.06E-03	3.10E-04	1.89E-03	1.06E-03	7.22E-04	2.97E-06	3.66E-06	1.6796E-02
551228.62	4172929.27	1837.5603	2456.35425	617.95334	4404.03484	717.3805	1784.28443	1839.09756	1424.85544	348.23046	3588.73744	2350.46836	2258.67271	0.22716	0.23021	2.68E-03	2.14E-03	5.38E-04	2.80E-03	5.76E-04	1.43E-03	1.74E-03	1.20E-03	2.92E-04	1.91E-03	8.65E-04	8.31E-04	3.18E-06	3.90E-06	1.7015E-02
551411.78	4173333.76	2083.66526	2590.25282	531.23552	3242.18146	571.45257	2749.23727	2099.61069	1562.40323	303.39992	2830.07471	1656.36616	3356.45922	0.3051	0.30673	3.04E-03	2.26E-03	4.63E-04	2.06E-03	4.58E-04	2.21E-03	1.99E-03	1.31E-03	2.55E-04	1.51E-03	6.09E-04	1.23E-03	4.27E-06	5.20E-06	1.7405E-02
551641.3	4173444.89	2674.33943	2431.54183	528.22138	2403.91061	481.86792	3193.81148	2710.32619	1442.50708	305.11807	2280.99134	1188.96027	3900.86763	0.6613	0.65264	3.90E-03	2.12E-03	4.60E-04	1.53E-03	3.87E-04	2.56E-03	2.57E-03	1.21E-03	2.56E-04	1.21E-03	4.37E-04	1.44E-03	9.25E-06	1.11E-05	1.8103E-02
551280.69	4172718.88	1765.82503	2194.84586	663.45302	4714.69058	883.61975	1564.71944	1763.03007	1267.8618	368.26369	3527.85901	2838.31534	1987.35624	0.2147	0.21829	2.58E-03	1.91E-03	5.78E-04	3.00E-03	7.09E-04	1.26E-03	1.67E-03	1.06E-03	3.09E-04	1.88E-03	1.04E-03	7.31E-04	3.00E-06	3.70E-06	1.6737E-02
551702.32	4173427.06	3051.75587	2310.60487	516.13797	2243.0615	469.05148	3120.65287	3100.48179	1354.8539	299.57432	2099.20064	1131.94674	3839.29163	1.60353	1.48359	4.45E-03	2.01E-03	4.50E-04	1.43E-03	3.76E-04	2.50E-03	2.94E-03	1.14E-03	2.51E-04	1.12E-03	4.16E-04	1.41E-03	2.24E-05	2.51E-05	1.8546E-02
551654.44	4173442.98	2752.58292	2406.73475	526.22535	2344.02753	478.16799	3188.74713	2790.89882	1423.71096	304.3616	2237.2583	1173.14472	3901.67652	0.754	0.74078	4.02E-03	2.10E-03	4.58E-04	1.49E-03	3.84E-04	2.56E-03	2.65E-03	1.19E-03	2.55E-04	1.19E-03	4.32E-04	1.44E-03	1.06E-05	1.26E-05	1.8183E-02
551333	4173222.77	1893.32599	2530.30943	551.6395	3606.43711	634.45319	2529.25142	1906.94573	1503.76058	311.21342	3075.48572	1890.46815	3093.15109	0.27281	0.275	2.76E-03	2.20E-03	4.80E-04	2.30E-03	5.09E-04	2.03E-03	1.81E-03	1.26E-03	2.61E-04	1.64E-03	6.96E-04	1.14E-03	3.82E-06	4.66E-06	1.7092E-02
551311.37	4173191.76	1877.27205	2512.73589	541.57631	3665.30644	638.33489	2512.98577	1891.19624	1490.09685	305.34593	3075.65115	1936.81508	3076.61547	0.26289	0.2649	2.74E-03	2.19E-03	4.72E-04	2.33E-03	5.12E-04	2.02E-03	1.79E-03	1.25E-03	2.56E-04	1.64E-03	7.13E-04	1.13E-03	3.68E-06	4.49E-06	1.7051E-02
551421.52	4173342.93	2096.4714	2565.42526	524.45348	3197.80196	565.5854	2776.35898	2113.37176	1546.34227	299.53305	2790.48332	1631.19667	3385.04864	0.30984	0.31142	3.06E-03	2.23E-03	4.57E-04	2.04E-03	4.54E-04	2.23E-03	2.00E-03	1.30E-03	2.51E-04	1.49E-03	6.00E-04	1.25E-03	4.34E-06	5.28E-06	1.7361E-02
551493.07	4173398.14	2201.85853	2520.8687	516.90662	3008.37762	549.90195	2929.3748	2226.28465	1513.62144	295.03544	2686.6617	1471.5536	3550.18079	0.36417	0.36486	3.21E-03	2.20E-03	4.50E-04	1.92E-03	4.41E-04	2.35E-03	2.11E-03	1.27E-03	2.48E-04	1.43E-03	5.41E-04	1.31E-03	5.10E-06	6.18E-06	1.7483E-02
551226.55	4172954.95	1844.23691	2483.5211	602.35706	4264.91935	691.62197	1832.8232	1846.78935	1443.62092	340.36847	3521.94395	2250.67032	2316.28431	0.22648	0.22941	2.69E-03	2.16E-03	5.25E-04	2.72E-03	5.55E-04	1.47E-03	1.75E-03	1.21E-03	2.86E-04	1.87E-03	8.28E-04	8.52E-04	3.17E-06	3.89E-06	1.6930E-02
551237.08	4172860.37	1789.31343	2307.08552	631.72794	4587.40491	773.5797	1637.89311	1788.75524	1333.2027	353.58555	3582.0677	2545.04223	2079.60753	0.22136	0.22457	2.61E-03	2.01E-03	5.50E-04	2.92E-03	6.21E-04	1.31E-03	1.70E-03	1.12E-03	2.97E-04	1.91E-03	9.36E-04	7.65E-04	3.10E-06	3.81E-06	1.6753E-02
551667.58	4173441.07	2816.42958	2366.84969	521.76383	2302.81733	473.38102	3154.20339	2856.94495	1396.79453	302.10209	2185.90492	1155.92712	3865.81182	0.86093	0.84006	4.11E-03	2.06E-03	4.54E-04	1.47E-03	3.80E-04	2.53E-03	2.71E-03	1.17E-03	2.53E-04	1.16E-03	4.25E-04	1.42E-03	1.20E-05	1.42E-05	1.8174E-02
551377.08	4173288.89	1977.81927	2587.88317	549.39538	3382.03975	595.59725	2589.26748	1991.11988	1558.7139	312.58227	2940.15636	1745.97626	3168.45386	0.28899	0.2905	2.89E-03	2.25E-03	4.79E-04	2.15E-03	4.78E-04	2.08E-03	1.89E-03	1.31E-03	2.62E-04	1.56E-03	6.42E-04	1.17E-03	4.04E-06	4.92E-06	1.7168E-02
552001.38	4173247.62	3145.98149	2241.66323	432.13954	1904.53738	386.28145	3466.46487	3218.90209	1305.48034	251.75075	1854.12023	930.36318	4239.22314	0.3054	0.29961	4.59E-03	1.95E-03	3.76E-04	1.21E-03	3.10E-04	2.78E-03	3.05E-03	1.10E-03	2.11E-04	9.87E-04	3.42E-04	1.56E-03	4.27E-06	5.08E-06	1.8480E-02
551284.19	4172690.96	1753.06781	2176.10036	659.76239	4692.72651	887.43784	1535.26529	1750.35418	1256.31709	365.78973	3506.78873	2835.23622	1953.44259	0.21068	0.21422	2.56E-03	1.90E-03	5.75E-04	2.99E-03	7.12E-04	1.23E-03	1.66E-03	1.05E-03	3.07E-04	1.87E-03	1.04E-03	7.19E-04	2.95E-06	3.63E-06	1.6616E-02
551431.25	4173352.1	2100.17367	2528.61367	516.68533	3145.47321	558.92711	2787.13445	2118.1113	1522.7275	295.01747	2743.78867	1606.38271	3393.58574	0.31419	0.31533	3.07E-03	2.20E-03	4.50E-04	2.00E-03	4.48E-04	2.24E-03	2.01E-03	1.28E-03	2.48E-04	1.46E-03	5.91E-04	1.25E-03	4.40E-06	5.34E-06	1.7248E-02
551358.17	4173262.22	1924.15307	2553.51694	553.42265	3463.18206	611.60476	2530.71543	1937.18348	1528.1582	313.5355	2997.90623	1800.23101	3096.43683	0.28109	0.2827	2.81E-03	2.22E-03	4.82E-04	2.21E-03	4.91E-04	2.03E-03	1.84E-03	1.28E-03	2.63E-04	1.60E-03	6.62E-04	1.14E-03	3.93E-06	4.79E-06	1.7028E-02
551231.17	4172884.53	1792.09351	2341.16301	623.24393	4494.19401	747.30483	1670.94014	1792.27308	1354.17946	349.43094	3563.3701	2457.31542	2120.11999	0.22112	0.22421	2.62E-03	2.04E-03	5.43E-04	2.86E-03	6.00E-04	1.34E-03	1.70E-03	1.14E-03	2.93E-04	1.90E-03	9.04E-04	7.80E-04	3.09E-06	3.80E-06	1.6715E-02
551314.46	4173200.35	1864.37216	2487.77609	539.62151	3622.08216	633.47587	2488.09579	1878.08629	1475.64852	304.22588	3049.09029	1911.67057	3045.52818	0.26228	0.26423	2.72E-03	2.17E-03	4.70E-04	2.31E-03	5.08E-04	2.00E-03	1.78E-03	1.24E-03	2.55E-04	1.62E-03	7.03E-04	1.12E-03	3.67E-06	4.48E-06	1.6897E-02
551242.56	4172827.74	1772.20761	2241.78861	638.31499	4627.56627	800.02222	1590.94322	1770.71747	1294.81657	356.75533	3555.43093	2628.5217	2020.52791	0.2198	0.22318	2.59E-03	1.95E-03	5.56E-04	2.95E-03	6.42E-04	1.28E-03	1.68E-03	1.09E-03	2.99E-04	1.89E-03	9.67E-04	7.43E-04	3.08E-06	3.78E-06	1.6634E-02
551336.09	4173231.36	1882.00304	2508.00773	548.67212	3551.71662	626.72445	2498.77487	1895.33513	1491.70322	309.66218	3038.44928	1860.36792	3056.51769	0.27169	0.27381	2.75E-03	2.18E-03	4.78E-04	2.26E-03	5.03E-04	2.00E-03	1.80E-03	1.25E-03	2.60E-04	1.62E-03	6.84E-04	1.12E-03	3.80E-06	4.64E-06	1.6921E-02
551680.72	4173439.16	2876.89872	2321.17224	515.51519	2258.55623	467.82186	3103.2588	2919.76207	1366.2114	298.77264	2132.21758	1136.95538	3810.4968	0.99976	0.96255	4.20E-03	2.02E-03	4.49E-04	1.44E-03	3.75E-04	2.49E-03	2.77E-03	1.15E-03	2.51E-04	1.13E-03	4.18E-04	1.40E-03	1.40E-05	1.63E-05	1.8123E-02
551392.32	4173315.42	2012.76653	2565.20518	535.18532	3270.36893	576.15512	2626.30025	2026.81589	1548.58737	305.31443	2848.24243	1678.44176	3212.74271	0.29156	0.29326	2.94E-03	2.23E-03	4.66E-04	2.08E-03	4.62E-04	2.11E-03	1.92E-03	1.30E-03	2.56E-04	1.52E-03	6.18E-04	1.18E-03	4.08E-06	4.97E-06	1.7091E-02
551276.39	4172727.22	1747.32879	2164.60523	653.93129	4630.33284	866.09719	1550.37089	1744.62209	1250.83179	363.18849	3471.80102	2780.84569	1968.16758	0.21176	0.21525	2.55E-03	1.89E-03	5.70E-04	2.95E-03	6.95E-04	1.24E-03	1.65E-03	1.05E-03	3.05E-04	1.85E-03	1.02E-03	7.24E-04	2.96E-06	3.65E-06	1.6502E-02
551223.33	4172945.98	1820.53261	2435.70956	601.24766	4253.2104	693.49075	1789.55721	1822.66358	1414.88054	339.37529	3494.02011	2258.16091	2263.02266	0.22327	0.22617	2.66E-03	2.12E-03	5.24E-04	2.71E-03	5.56E-04	1.44E-03	1.73E-03	1.19E-03	2.85E-04	1.86E-03	8.31E-04	8.33E-04	3.12E-06	3.83E-06	1.6732E-02
551502.73	4173407.24	2189.68315	2490.1661	512.98978	2947.53893	543.35922	2898.50306	2214.48272	1495.56594	292.87023	2644.13184	1436.30022	3512.57777	0.36748	0.36825	3.20E-03	2.17E-03	4.47E-04	1.88E-03	4.36E-04	2.33E-03	2.10E-03	1.25E-03	2.46E-04	1.41E-03	5.28E-04	1.29E-03	5.14E-06	6.24E-06	1.7289E-02
551440.99	4173361.27	2105.3236	2498.16355	510.90519	3100.56525	553.53519	2796.50246	2124.30454	1502.68681	291.60852	2707.01325	1582.83157	3400.84921	0.31871	0.32011	3.07E-03	2.18E-03	4.45E-04	1.97E-03	4.44E-04	2.24E-03	2.01E-03	1.26E-03	2.45E-04	1.44E-03	5.82E-04	1.25E-03	4.46E-06	5.42E-06	1.7159E-02
551450.72	4173370.43	2117.98374	2484.08004	508.57271	3069.6482	550.25931	2813.11557	2138.10084	1492.5318	290.18348	2687.84049	1561.86632	3417.94537	0.32446	0.32543	3.09E-03	2.16E-03	4.43E-04	1.95E-03	4.41E-04	2.26E-03	2.03E-03	1.25E-03	2.43E-04	1.43E-03	5.75E-04	1.26E-03	4.54E-06	5.51E-06	1.7146E-02
551715.36	4173425.16	3080.38232	2246.16207	505.59108	2190.50961	461.2744	3026.28438	3131.12517	1314.56549	293.58468	2038.85142	1109.30648	3729.11701	1.77243	1.57329	4.50E-03	1.96E-03	4.40E-04	1.39E-03	3.70E-04	2.43E-03	2.97E-03	1.10E-03	2.46E-04	1.09E-03	4.08E-04	1.37E-03	2.48E-05	2.67E-05	1.8320E-02
551361.76	4173270.8	1921.87517	2538.47766	548.89819	3411.62473	603.05345	2514.42939	1934.75014	1521.79555	311.30455	2957.19269	1772.02532	3077.38732	0.28041	0.28196	2.81E-03	2.21E-03	4.78E-04	2.17E-03	4.84E-04	2.02E-03	1.83E-03	1.28E-03	2.61E-04	1.57E-03	6.52E-04	1.13E-03	3.92E-06	4.78E-06	1.6907E-02
551279.88	4172699.34	1736.53657	2151.81078	652.08465	4620.75501	873.69518	1527.36206	1733.85878	1242.72304	361.69223	3457.90369	2789.08945	1941.82722	0.20863	0.21211	2.53E-03	1.87E-03	5.68E-04	2.94E-03	7.01E-04	1.23E-03	1.64E-03	1.04E-03	3.03E-04	1.84E-03	1.03E-03	7.14E-04	2.92E-06	3.59E-06	1.6423E-02
551317.55	4173208.93	1852.41534	2464.94474	537.75865	3578.15234	628.2163	2462.15606	1865.8922	1462.62318	303.19341	3022.30125	1885.9873	3013.55219	0.26163	0.26352	2.70E-03	2.15E-03	4.68E-04	2.28E-03	5.04E-04	1.98E-03	1.77E-03	1.23E-03	2.54E-04	1.61E-03	6.94E-04	1.11E-03	3.66E-06	4.47E-06	1.6747E-02
551243.27	4172818.3	1755.54099	2205.98554	634.8877	4583.81422	799.20177	1568.54865	1753.86967	1274.32776	354.68702	3510.54129	2619.56129	1991.99355	0.21681	0.22018	2.56E-03	1.92E-03	5.53E-04	2.92E-03	6.41E-04	1.26E-03	1.66E-03	1.07E-03	2.98E-04	1.87E-03	9.64E-04	7.33E-04	3.03E-06	3.73E-06	1.6456E-02
551339.18	4173239.94	1871.81086	2487.16026	545.45009	3496.84905	618.67854	2469.52415	1884.86796	1480.72088	308.0169	3000.2871	1830.34025	3021.5476	0.27052	0.27257	2.73E-03	2.17E-03	4.75E-04	2.23E-03	4.96E-04	1.98E-03	1.79E-03	1.24E-03	2.58E-04	1.60E-03	6.73E-04	1.11E-03	3.79E-06	4.62E-06	1.6756E-02
551257.87	4172776.78	1745.67732	2161.65423	644.25496	4596.38436	829.29327	1548.37514	1743.246	1249.2993	358.93335	3472.60349	2699.52295	1965.16657	0.21401	0.21743	2.55E-03	1.88E-03	5.61E-04	2.93E-03	6.65E-04	1.24E-03	1.65E-03	1.05E-03	3.01E-04	1.85E-03	9.93E-04	7.23E-04	2.99E-06	3.68E-06	1.6399E-02
551225.24	4172908.54	1785.40446	2353.12401	609.42374	4347.46617	716.81142	1696.81534	1786.3279	1363.04058	342.55977	3501.23693	2345.92169	2150.7474	0.21901	0.22197	2.61E-03	2.05E-03	5.31E-04	2.77E-03	5.75E-04	1.36E-03	1.69E-03	1.14E-03	2.87E-04	1.86E-03	8.63E-04	7.91E-04	3.06E-06	3.76E-06	1.6540E-02
551693.86	4173437.25	2918.40571	2263.57303	507.28186	2210.66226	461.33616	3028.83157	2963.30677	1329.69284	294.18378	2073.47649	1117.04466	3724.89623	1.13313	1.07066	4.26E-03	1.97E-03	4.42E-04	1.41E-03	3.70E-04	2.43E-03	2.81E-03	1.12E-03	2.47E-04	1.10E-03	4.11E-04	1.37E-03	1.59E-05	1.81E-05	1.7971E-02
551512.4	4173416.34	2177.53735	2460.05059	509.15286	2883.94682	536.42747	2868.47882	2202.52381	1477.7154	290.77024	2599.65348	1400.56063	3476.62029	0.37064	0.37117	3.18E-03	2.14E-03	4.43E-04	1.84E-03	4.30E-04	2.30E-03	2.09E-03	1.24E-03	2.44E-04	1.38E-03	5.15E-04	1.28E-03	5.19E-06	6.29E-06	1.7094E-02
551320.64	4173217.52	1841.85194	2444.82906	536.05836	3534.40275	622.62815	2436.30194	1855.0735	1451.30367	302.27352	2995.83266	1860.09282	2982.06279	0.26096	0.26279	2.69E-03	2.13E-03	4.67E-04	2.25E-03	5.00E-04	1.95E-03	1.76E-03	1.22E-03	2.54E-04	1.59E-03	6.84E-04	1.10E-03	3.65E-06	4.45E-06	1.6603E-02
551272.1	4172735.57	1728.18125	2133.17613	643.80221	4542.6743	847.56589	1533.97284	1725.5928	1233.114	357.78644	3414.09754	2720.08907	1946.63897	0.20855	0.21193	2.52E-03	1.86E-03	5.61E-04	2.89E-03	6.80E-04	1.23E-03	1.64E-03	1.03E-03	3.00E-04	1.82E-03	1.00E-03	7.16E-04	2.92E-06	3.59E-06	1.6256E-02
551229.47	4172874.14	1758.25911	2274.32664	613.48398	4418.22101	741.5261	1622.7524	1758.21609	1315.29285	343.68067	3483.2709	2429.61562	2059.71031	0.21519	0.21819	2.57E-03	1.98E-03	5.34E-04	2.81E-03	5.95E-04	1.30E-03	1.67E-03	1.10E-03	2.88E-04	1.85E-03	8.94E-04	7.58E-04	3.01E-06	3.70E-06	1.6363E-02
551223.55	4172898.18	1765.17288	2310.05209	607.02548	4336.69112	720.98215	1660.4507	1765.78963	1337.40442	340.77821	3468.53687	2359.34551	2105.68993	0.21632	0.21927	2.58E-03	2.01E-03	5.29E-04	2.76E-03	5.78E-04	1.33E-03	1.67E-03	1.12E-03	2.86E-04	1.85E-03	8.68E-04	7.75E-04	3.03E-06	3.72E-06	1.6367E-02
551243.97	4172808.86	1737.11926	2168.37307	630.31621	4528.4629	796.69399	1545.59154	1735.29591	1252.82341	351.95469	3458.50796	2603.22695	1962.68439	0.21334	0.21667	2.54E-03	1.89E-03	5.49E-04	2.88E-03	6.39E-04	1.24E-03	1.64E-03	1.05E-03	2.95E-04	1.84E-03	9.58E-04	7.22E-04	2.99E-06	3.67E-06	1.6255E-02
551259.79	4172767.85	1730.08313	2134.98157	639.26248	4537.16326	826.35398	1533.63507	1727.63131	1234.24086	355.97632	3424.80013	2677.74274	1946.1268	0.21066	0.21402	2.53E-03	1.86E-03	5.57E-04	2.89E-03	6.63E-04	1.23E-03	1.64E-03	1.04E-03	2.99E-04	1.82E-03	9.85E-04	7.16E-04	2.95E-06	3.63E-06	1.6227E-02
551275.58	4172707.71	1718.24625	2123.33119	643.24065	4539.64996	857.88879	1515.83586	1715.63185	1226.71233	356.96496	3403.06381	2736.29527	1925.85625	0.20602	0.20942	2.51E-03	1.85E-03	5.60E-04	2.89E-03	6.88E-04	1.22E-03	1.63E-03	1.03E-03	3.00E-04	1.81E-03	1.01E-03	7.09E-04	2.88E-06	3.55E-06	1.6201E-02
551267.81	4172743.92	1724.27904	2125.85615	641.24807	4527.99652	840.40405	1529.51701	1721.6986	1228.92357	356.57746	3405.49334	2703.09204	1940.81227	0.20858	0.21195	2.52E-03	1.85E-03	5.59E-04	2.88E-03	6.74E-04	1.23E-03	1.63E-03	1.03E-03	2.99E-04	1.81E-03	9.95E-04	7.14E-04	2.92E-06	3.59E-06	1.6201E-02
551479.92	4173397.94	2127.34939	2431.76949	502.08211	2952.90003	538.2553	2800.12204	2150.1898	1459.55487	286.42077	2616.52526	1461.80069	3397.03118	0.33879	0.33969	3.11E-03	2.12E-03	4.37E-04	1.88E-03	4.32E-04	2.25E-03	2.04E-03	1.22E-03	2.40E-04	1.39E-03	5.38E-04	1.25E-03	4.74E-06	5.76E-06	1.6913E-02
551645.56	4173453.23	2617.19783	2338.70322	513.14422	2300.41806	468.36909	3053.56538	2652.36538	1385.89421	296.44352	2199.38348	1153.68942	3735.47403	0.61511	0.605	3.82E-03	2.04E-03	4.47E-04	1.46E-03	3.76E-04	2.45E-03	2.51E-03	1.16E-03	2.49E-04	1.17E-03	4.24E-04	1.37E-03	8.61E-06	1.03E-05	1.7508E-02
551658.79	4173451.31	2691.65451	2312.17411	510.39986	2264.13224	464.50599	3041.62095	2729.09297	1366.07097	295.24796	2155.73505	1137.60953	3727.93422	0.69349	0.67826	3.93E-03	2.01E-03	4.45E-04	1.44E-03	3.73E-04	2.44E-03	2.59E-03	1.15E-03	2.48E-04	1.15E-03	4.19E-04	1.37E-03	9.70E-06	1.15E-05	1.7581E-02
551728.4	4173423.26	3095.09012	2180.45283	494.14426	2136.88821	452.96262	2926.63388	3147.56687	1274.00401	287.0083	1979.76985	1085.68779	3611.60968	1.70948	1.47538	4.52E-03	1.90E-03	4.30E-04	1.36E-03	3.63E-04	2.35E-03	2.98E-03	1.07E-03	2.41E-04	1.05E-03	3.99E-04	1.33E-03	2.39E-05	2.50E-05	1.8043E-02
551365.63	4173279.9	1901.70842	2491.3354	538.09528	3319.82762	589.3905	2472.93564	1914.39958	1496.80081	305.51537	2877.1859	1730.92777	3026.98767	0.27818	0.27975	2.78E-03	2.17E-03	4.69E-04	2.11E-03	4.73E-04	1.98E-03	1.81E-03	1.26E-03	2.56E-04	1.53E-03	6.37E-04	1.11E-03	3.89E-06	4.74E-06	1.6603E-02
551632.33	4173455.16	2534.77326	2352.36779	513.42989	2364.35676	471.25119	3039.79961	2567.72012	1398.18129	296.18362	2235.90155	1168.0275	3711.93733	0.55011	0.5431	3.70E-03	2.05E-03	4.47E-04	1.51E-03	3.78E-04	2.44E-03	2.43E-03	1.17E-03	2.49E-04	1.19E-03	4.30E-04	1.37E-03	7.70E-06	9.20E-06	1.7376E-02
551343.41	4173251.51	1857.06569	2456.03109	539.72005	3416.56644	606.66643	2428.91453	1869.74965	1464.59053	305.07764	2941.11016	1788.24865	2973.00133	0.26855	0.27051	2.71E-03	2.14E-03	4.70E-04	2.18E-03	4.87E-04	1.95E-03	1.77E-03	1.23E-03	2.56E-04	1.57E-03	6.58E-04	1.09E-03	3.76E-06	4.58E-06	1.6513E-02
551323.73	4173226.11	1830.0425	2422.71989	533.56298	3484.58853	616.01656	2407.50325	1843.00119	1438.95803	300.92815	2963.61094	1832.30601	2947.25602	0.25996	0.26173	2.67E-03	2.11E-03	4.65E-04	2.22E-03	4.94E-04	1.93E-03	1.75E-03	1.21E-03	2.52E-04	1.58E-03	6.74E-04	1.08E-03	3.64E-06	4.44E-06	1.6441E-02
551244.68	4172799.41	1724.5604	2142.18555	628.3463	4498.62829	797.92461	1529.55785	1722.57917	1237.74136	350.64368	3425.08442	2601.95781	1942.21337	0.21118	0.21449	2.52E-03	1.87E-03	5.47E-04	2.86E-03	6.40E-04	1.23E-03	1.63E-03	1.04E-03	2.94E-04	1.82E-03	9.57E-04	7.15E-04	2.95E-06	3.63E-06	1.6129E-02
551489.66	4173407.11	2127.64974	2418.27676	500.66923	2909.376	533.93685	2789.76571	2151.09194	1451.46244	285.68641	2592.08708	1430.07875	3384.13015	0.34344	0.34388	3.11E-03	2.11E-03	4.36E-04	1.85E-03	4.28E-04	2.24E-03	2.04E-03	1.22E-03	2.40E-04	1.38E-03	5.26E-04	1.25E-03	4.81E-06	5.83E-06	1.6825E-02
551749.44	4173411.24	3183.08773	2136.22797	487.21106	2105.41454	449.70161	2872.28563	3239.90117	1246.84064	283.11122	1935.96538	1074.10211	3546.69672	1.57921	1.35386	4.65E-03	1.86E-03	4.24E-04	1.34E-03	3.61E-04	2.30E-03	3.07E-03	1.05E-03	2.38E-04	1.03E-03	3.95E-04	1.30E-03	2.21E-05	2.29E-05	1.8067E-02
551263.52	4172752.26	1714.39286	2109.77098	635.32743	4483.70629	828.07173	1519.39742	1711.88817	1219.80416	353.45194	3378.25236	2666.46469	1927.86406	0.20718	0.21048	2.50E-03	1.84E-03	5.53E-04	2.85E-03	6.64E-04	1.22E-03	1.62E-03	1.02E-03	2.97E-04	1.80E-03	9.81E-04	7.09E-04	2.90E-06	3.57E-06	1.6069E-02
551411.18	4173345.38	2013.5855	2459.16436	508.7017	3093.57518	549.76112	2624.15779	2029.2702	1482.97812	290.47742	2691.85489	1588.94723	3204.10693	0.29161	0.29304	2.94E-03	2.14E-03	4.43E-04	1.97E-03	4.41E-04	2.11E-03	1.92E-03	1.24E-03	2.44E-04	1.43E-03	5.85E-04	1.18E-03	4.08E-06	4.97E-06	1.6657E-02
551672.03	4173449.39	2746.90487	2269.11737	505.23327	2222.78655	459.48533	2999.33809	2786.3703	1337.8097	292.52156	2103.9108	1120.40018	3681.86464	0.77332	0.75022	4.01E-03	1.98E-03	4.40E-04	1.42E-03	3.69E-04	2.41E-03	2.64E-03	1.12E-03	2.45E-04	1.12E-03	4.12E-04	1.35E-03	1.08E-05	1.27E-05	1.7535E-02
551707	4173435.34	2949.67917	2201.95486	497.67657	2160.67682	454.14612	2942.81234	2996.52298	1291.14232	288.74595	2014.02453	1095.8451	3624.74523	1.24985	1.15173	4.31E-03	1.92E-03	4.33E-04	1.38E-03	3.64E-04	2.36E-03	2.84E-03	1.08E-03	2.42E-04	1.07E-03	4.03E-04	1.33E-03	1.75E-05	1.95E-05	1.7770E-02
551619.1	4173457.08	2455.2207	2358.10852	511.72374	2403.51715	473.27349	3008.55591	2486.20111	1404.83003	294.76838	2267.00473	1180.12654	3668.7113	0.49963	0.49444	3.58E-03	2.05E-03	4.46E-04	1.53E-03	3.80E-04	2.41E-03	2.36E-03	1.18E-03	2.47E-04	1.21E-03	4.34E-04	1.35E-03	6.99E-06	8.38E-06	1.7196E-02
551420.75	4173354.39	2025.3588	2436.50443	502.81271	3055.13453	544.70118	2647.86849	2041.95332	1467.83076	287.0883	2658.41359	1569.18062	3228.84144	0.29585	0.29721	2.96E-03	2.12E-03	4.38E-04	1.95E-03	4.37E-04	2.12E-03	1.94E-03	1.23E-03	2.41E-04	1.42E-03	5.77E-04	1.19E-03	4.14E-06	5.04E-06	1.6620E-02
551382.58	4173306.25	1932.30779	2475.34291	524.79649	3204.82492	568.97679	2501.58401	1945.43655	1494.96991	299.02082	2779.33049	1665.82096	3061.5044	0.2817	0.28302	2.82E-03	2.16E-03	4.57E-04	2.04E-03	4.56E-04	2.01E-03	1.84E-03	1.25E-03	2.51E-04	1.48E-03	6.13E-04	1.13E-03	3.94E-06	4.80E-06	1.6514E-02
551219.29	4172932.41	1765.16466	2337.17435	587.95354	4145.79576	680.1236	1710.57521	1766.90666	1356.57473	331.48662	3389.89325	2209.51494	2164.97876	0.21415	0.21693	2.58E-03	2.04E-03	5.12E-04	2.64E-03	5.46E-04	1.37E-03	1.67E-03	1.14E-03	2.78E-04	1.80E-03	8.13E-04	7.97E-04	3.00E-06	3.68E-06	1.6194E-02
551221.86	4172887.82	1736.73895	2254.2362	600.04584	4286.87864	718.15071	1617.44887	1737.11714	1304.64432	336.50932	3409.26252	2346.18293	2052.03292	0.2116	0.21449	2.54E-03	1.96E-03	5.23E-04	2.73E-03	5.76E-04	1.30E-03	1.65E-03	1.09E-03	2.82E-04	1.81E-03	8.63E-04	7.55E-04	2.96E-06	3.63E-06	1.6087E-02
551227.78	4172863.74	1728.7786	2214.7245	605.26314	4351.48357	738.1995	1580.18062	1728.51008	1280.51291	338.86688	3412.11361	2410.37882	2006.37389	0.21034	0.21329	2.52E-03	1.93E-03	5.27E-04	2.77E-03	5.92E-04	1.27E-03	1.64E-03	1.07E-03	2.84E-04	1.82E-03	8.87E-04	7.38E-04	2.94E-06	3.61E-06	1.6055E-02
551326.82	4173234.69	1818.82439	2401.46707	530.80525	3433.2575	608.89905	2378.82779	1831.51746	1427.34699	299.46721	2929.45664	1804.05076	2912.69556	0.25886	0.26056	2.65E-03	2.09E-03	4.62E-04	2.19E-03	4.89E-04	1.91E-03	1.74E-03	1.20E-03	2.51E-04	1.56E-03	6.64E-04	1.07E-03	3.62E-06	4.42E-06	1.6279E-02
551283.46	4172671.28	1696.51949	2086.19731	632.65381	4460.69057	850.02028	1470.14048	1694.2133	1204.81202	350.7662	3347.59281	2691.9492	1872.61573	0.1981	0.20132	2.48E-03	1.82E-03	5.51E-04	2.84E-03	6.82E-04	1.18E-03	1.61E-03	1.01E-03	2.94E-04	1.78E-03	9.90E-04	6.89E-04	2.77E-06	3.41E-06	1.5925E-02
551430.32	4173363.41	2029.55635	2405.37192	496.4179	3010.97263	539.13718	2657.55797	2047.16538	1447.45178	283.32813	2620.29833	1547.23067	3236.50492	0.29984	0.30077	2.96E-03	2.10E-03	4.32E-04	1.92E-03	4.33E-04	2.13E-03	1.94E-03	1.21E-03	2.38E-04	1.39E-03	5.69E-04	1.19E-03	4.20E-06	5.10E-06	1.6528E-02
551279.14	4172679.69	1691.65219	2082.42795	631.47064	4446.89257	847.4088	1474.29908	1689.26888	1202.78826	350.15708	3336.99187	2684.51671	1876.34267	0.19881	0.20205	2.47E-03	1.81E-03	5.50E-04	2.83E-03	6.80E-04	1.18E-03	1.60E-03	1.01E-03	2.94E-04	1.78E-03	9.88E-04	6.90E-04	2.78E-06	3.42E-06	1.5892E-02
551685.26	4173447.46	2798.86157	2221.71017	498.4557	2178.89828	453.73782	2943.56125	2840.48455	1306.67168	288.8427	2050.65586	1101.56386	3619.80005	0.86904	0.83169	4.09E-03	1.94E-03	4.34E-04	1.39E-03	3.64E-04	2.36E-03	2.69E-03	1.10E-03	2.42E-04	1.09E-03	4.05E-04	1.33E-03	1.22E-05	1.41E-05	1.7453E-02
551499.39	4173416.28	2114.14845	2388.30162	496.75007	2851.53906	527.64334	2758.57425	2137.88321	1433.90813	283.51328	2551.3555	1396.29819	3346.1258	0.34608	0.34634	3.09E-03	2.08E-03	4.33E-04	1.82E-03	4.23E-04	2.21E-03	2.03E-03	1.20E-03	2.38E-04	1.36E-03	5.14E-04	1.23E-03	4.84E-06	5.87E-06	1.6632E-02
551439.9	4173372.42	2039.49153	2387.11029	493.01957	2979.44086	535.49393	2672.15982	2058.11964	1434.72735	281.28128	2597.51846	1527.95092	3250.94452	0.30413	0.30531	2.98E-03	2.08E-03	4.29E-04	1.90E-03	4.30E-04	2.14E-03	1.95E-03	1.20E-03	2.36E-04	1.38E-03	5.62E-04	1.20E-03	4.26E-06	5.17E-06	1.6497E-02
551401.61	4173336.36	1971.4244	2435.66932	507.67256	3089.07377	549.41648	2554.00575	1986.0048	1471.05085	289.83074	2681.33842	1595.84269	3121.50505	0.28449	0.28595	2.88E-03	2.12E-03	4.42E-04	1.97E-03	4.41E-04	2.05E-03	1.88E-03	1.23E-03	2.43E-04	1.43E-03	5.87E-04	1.15E-03	3.98E-06	4.85E-06	1.6429E-02
551349.04	4173265.94	1843.48452	2422.02595	532.097	3320.63906	591.63739	2387.00212	1855.79241	1447.95638	301.21887	2867.71961	1737.94373	2923.07761	0.26639	0.26824	2.69E-03	2.11E-03	4.63E-04	2.11E-03	4.75E-04	1.92E-03	1.76E-03	1.21E-03	2.53E-04	1.53E-03	6.39E-04	1.08E-03	3.73E-06	4.55E-06	1.6244E-02
551274.82	4172688.09	1682.5607	2070.28154	627.91387	4412.39343	840.63406	1473.01131	1680.14341	1196.00174	348.27929	3312.41454	2663.13476	1873.27215	0.19847	0.2017	2.46E-03	1.80E-03	5.47E-04	2.81E-03	6.74E-04	1.18E-03	1.59E-03	1.00E-03	2.92E-04	1.76E-03	9.80E-04	6.89E-04	2.78E-06	3.42E-06	1.5798E-02
551459.04	4173390.45	2060.56961	2367.35909	490.51716	2926.06558	530.11621	2692.48214	2081.21792	1420.53124	279.75055	2568.97759	1488.64013	3271.41354	0.31387	0.31483	3.01E-03	2.06E-03	4.27E-04	1.86E-03	4.25E-04	2.16E-03	1.97E-03	1.19E-03	2.35E-04	1.37E-03	5.48E-04	1.20E-03	4.39E-06	5.33E-06	1.6473E-02
551232.71	4172827.79	1704.59814	2137.09292	609.19774	4368.80642	761.58918	1523.56244	1703.36952	1235.00186	340.56395	3368.68764	2480.80156	1935.15771	0.20754	0.21064	2.49E-03	1.86E-03	5.31E-04	2.78E-03	6.11E-04	1.22E-03	1.61E-03	1.04E-03	2.86E-04	1.79E-03	9.13E-04	7.12E-04	2.90E-06	3.57E-06	1.5856E-02
551449.47	4173381.44	2044.94421	2367.38331	489.98444	2945.72814	531.76005	2676.16461	2064.59496	1421.63416	279.45691	2574.16872	1507.25735	3253.13125	0.30847	0.30953	2.98E-03	2.06E-03	4.27E-04	1.88E-03	4.27E-04	2.15E-03	1.96E-03	1.19E-03	2.34E-04	1.37E-03	5.55E-04	1.20E-03	4.32E-06	5.25E-06	1.6438E-02
552008.68	4173253.38	2972.51992	2120.22545	415.97942	1833.09603	373.47122	3252.47476	3039.37939	1241.42147	242.16354	1780.25006	899.81286	3980.02923	0.29282	0.28724	4.34E-03	1.85E-03	3.62E-04	1.17E-03	3.00E-04	2.61E-03	2.88E-03	1.04E-03	2.03E-04	9.48E-04	3.31E-04	1.46E-03	4.10E-06	4.87E-06	1.7502E-02
551329.91	4173243.28	1808.3768	2381.14531	527.76069	3380.92624	601.34738	2350.82362	1820.79892	1416.48434	297.88537	2893.60714	1775.50478	2879.09263	0.25766	0.2593	2.64E-03	2.07E-03	4.60E-04	2.15E-03	4.82E-04	1.89E-03	1.73E-03	1.19E-03	2.50E-04	1.54E-03	6.53E-04	1.06E-03	3.61E-06	4.39E-06	1.6119E-02
551720.14	4173433.43	2974.92192	2141.8216	487.20479	2109.82332	446.48168	2854.25382	3023.66666	1253.30996	282.78627	1957.29302	1073.28493	3521.53046	1.31232	1.17908	4.34E-03	1.87E-03	4.24E-04	1.34E-03	3.58E-04	2.29E-03	2.87E-03	1.05E-03	2.37E-04	1.04E-03	3.95E-04	1.30E-03	1.84E-05	2.00E-05	1.7549E-02
551372.85	4173297.09	1887.61033	2435.37536	522.93561	3196.61073	569.49595	2432.60359	1900.1791	1468.10592	297.51322	2769.95875	1669.35996	2978.45228	0.27489	0.27658	2.76E-03	2.12E-03	4.55E-04	2.04E-03	4.57E-04	1.95E-03	1.80E-03	1.23E-03	2.50E-04	1.47E-03	6.14E-04	1.10E-03	3.85E-06	4.69E-06	1.6251E-02
551245.96	4172785.4	1693.86891	2086.42039	618.95105	4391.53661	790.46509	1496.79005	1691.77165	1206.02833	345.13259	3335.75357	2562.27492	1900.19898	0.20516	0.20836	2.47E-03	1.82E-03	5.39E-04	2.80E-03	6.34E-04	1.20E-03	1.60E-03	1.01E-03	2.90E-04	1.78E-03	9.43E-04	6.99E-04	2.87E-06	3.53E-06	1.5789E-02
551741.45	4173421.37	3079.47462	2105.19004	481.41646	2081.10948	443.982	2812.32355	3132.83515	1229.47648	279.62042	1916.74355	1062.17212	3473.41348	1.45237	1.25672	4.50E-03	1.83E-03	4.19E-04	1.33E-03	3.56E-04	2.26E-03	2.97E-03	1.03E-03	2.35E-04	1.02E-03	3.91E-04	1.28E-03	2.03E-05	2.13E-05	1.7652E-02
551782.37	4173397.49	3184.70534	2029.00743	475.64608	2016.90522	434.93361	2816.83373	3244.42909	1229.59217	276.41252	1917.69393	1034.93797	3353.89943	0.9467	0.86945	4.65E-03	1.77E-03	4.14E-04	1.28E-03	3.49E-04	2.26E-03	3.08E-03	1.03E-03	2.32E-04	1.02E-03	3.81E-04	1.23E-03	1.32E-05	1.47E-05	1.7725E-02
551352.69	4173274.61	1838.24958	2404.0921	527.25349	3266.05195	582.76266	2367.51527	1850.38483	1439.74791	298.77422	2824.46165	1709.27474	2899.98756	0.26535	0.26712	2.68E-03	2.09E-03	4.59E-04	2.08E-03	4.68E-04	1.90E-03	1.75E-03	1.21E-03	2.51E-04	1.50E-03	6.29E-04	1.07E-03	3.71E-06	4.53E-06	1.6103E-02
551270.49	4172696.5	1671.41919	2053.44475	623.06778	4367.48948	831.49142	1468.0274	1668.99581	1186.52767	345.71792	3280.91926	2634.26836	1865.69991	0.19752	0.20072	2.44E-03	1.79E-03	5.43E-04	2.78E-03	6.67E-04	1.18E-03	1.58E-03	9.96E-04	2.90E-04	1.75E-03	9.69E-04	6.86E-04	2.76E-06	3.40E-06	1.5672E-02
551698.49	4173445.54	2833.91328	2164.70399	489.93281	2131.79486	447.18672	2868.52532	2877.41462	1270.81233	284.05491	1993.52624	1081.75598	3532.87031	0.9501	0.89433	4.14E-03	1.89E-03	4.27E-04	1.36E-03	3.59E-04	2.30E-03	2.73E-03	1.07E-03	2.38E-04	1.06E-03	3.98E-04	1.30E-03	1.33E-05	1.52E-05	1.7285E-02
551215.92	4172911.75	1722.41828	2251.81929	583.36729	4119.5032	684.01474	1634.44278	1723.53091	1305.17074	328.04168	3328.17326	2222.62659	2071.3675	0.2079	0.21063	2.51E-03	1.96E-03	5.08E-04	2.62E-03	5.49E-04	1.31E-03	1.63E-03	1.10E-03	2.75E-04	1.77E-03	8.18E-04	7.62E-04	2.91E-06	3.57E-06	1.5828E-02
551762.38	4173409.36	3149.85481	2065.65302	479.32012	2048.73017	439.82875	2761.82792	3206.99681	1205.17201	275.32919	1878.24869	1048.68602	3412.73039	1.19818	1.06185	4.60E-03	1.80E-03	4.17E-04	1.30E-03	3.53E-04	2.22E-03	3.04E-03	1.01E-03	2.31E-04	1.00E-03	3.86E-04	1.26E-03	1.68E-05	1.80E-05	1.7645E-02
551233.4	4172818.53	1689.98618	2105.37169	606.37692	4332.41846	761.20491	1503.42136	1688.57968	1216.79886	338.84913	3330.33009	2474.12457	1909.50825	0.20499	0.20808	2.47E-03	1.83E-03	5.28E-04	2.76E-03	6.11E-04	1.21E-03	1.60E-03	1.02E-03	2.84E-04	1.77E-03	9.10E-04	7.03E-04	2.87E-06	3.53E-06	1.5702E-02

551641.05	4173462.85	2513.24705	2264.08272	499.54587	2270.20246	457.58709	2921.50201	2546.24285	1342.65346	288.3608	2147.63617	1129.41721	3575.3077	0.53355	0.52565	3.67E-03	1.97E-03	4.35E-04	1.45E-03	3.67E-04	2.34E-03	2.41E-03	1.13E-03	2.42E-04	1.14E-03	4.16E-04	1.32E-03	7.47E-06	8.91E-06	1.6904E-02
551654.06	4173460.96	2584.06851	2242.0662	497.57697	2212.91421	454.14088	2916.37905	2619.13653	1325.866	287.58817	2108.07573	1114.70181	3575.40257	0.58903	0.57659	3.77E-03	1.95E-03	4.33E-04	1.41E-03	3.64E-04	2.34E-03	2.48E-03	1.11E-03	2.41E-04	1.12E-03	4.10E-04	1.32E-03	8.24E-06	9.77E-06	1.6973E-02
551220.17	4172877.45	1702.84125	2189.2495	589.96616	4209.75292	711.02319	1569.95547	1703.01831	1266.78249	330.59709	3330.43761	2314.46572	1992.54893	0.20557	0.20837	2.49E-03	1.91E-03	5.14E-04	2.68E-03	5.70E-04	1.26E-03	1.61E-03	1.06E-03	2.77E-04	1.77E-03	8.52E-04	7.33E-04	2.88E-06	3.53E-06	1.5735E-02
551214.23	4172901.42	1708.35787	2219.58635	583.60302	4130.22948	691.80313	1604.75013	1709.14679	1285.79591	327.71088	3312.37604	2249.03353	2034.77332	0.20656	0.2093	2.49E-03	1.93E-03	5.08E-04	2.63E-03	5.55E-04	1.29E-03	1.62E-03	1.08E-03	2.75E-04	1.76E-03	8.27E-04	7.49E-04	2.89E-06	3.55E-06	1.5727E-02
551628.04	4173464.74	2433.43828	2272.69882	499.10221	2310.35725	460.02191	2901.52264	2464.37021	1351.71128	287.69462	2179.51486	1142.53536	3544.68152	0.48521	0.47979	3.55E-03	1.98E-03	4.35E-04	1.47E-03	3.69E-04	2.33E-03	2.34E-03	1.13E-03	2.41E-04	1.16E-03	4.20E-04	1.30E-03	6.79E-06	8.13E-06	1.6745E-02
551392.04	4173327.34	1918.36694	2393.60548	504.13062	3065.4982	546.93534	2468.20654	1931.96584	1447.19682	287.66843	2654.40171	1595.7288	3019.28543	0.27762	0.27876	2.80E-03	2.08E-03	4.39E-04	1.95E-03	4.39E-04	1.98E-03	1.83E-03	1.21E-03	2.41E-04	1.41E-03	5.87E-04	1.11E-03	3.88E-06	4.72E-06	1.6101E-02
551667.07	4173459.07	2641.39182	2206.62931	493.37431	2175.46053	449.71247	2886.05436	2678.42532	1301.91153	285.45529	2061.65185	1098.73288	3543.9573	0.64695	0.62939	3.86E-03	1.92E-03	4.30E-04	1.39E-03	3.61E-04	2.32E-03	2.54E-03	1.09E-03	2.40E-04	1.10E-03	4.04E-04	1.30E-03	9.05E-06	1.07E-05	1.6964E-02
551334.21	4173255.03	1795.17474	2354.08095	522.94085	3307.53214	590.38106	2314.20783	1807.24429	1402.44179	295.42484	2841.26896	1736.17071	2835.31603	0.2559	0.25772	2.62E-03	2.05E-03	4.55E-04	2.11E-03	4.74E-04	1.86E-03	1.71E-03	1.18E-03	2.48E-04	1.51E-03	6.39E-04	1.04E-03	3.58E-06	4.37E-06	1.5902E-02
551356.69	4173284.01	1832.82247	2382.83614	521.21457	3206.0382	572.92414	2347.9288	1844.82463	1429.8332	295.69772	2775.15212	1678.2035	2876.69156	0.26408	0.26578	2.68E-03	2.08E-03	4.54E-04	2.04E-03	4.60E-04	1.88E-03	1.75E-03	1.20E-03	2.48E-04	1.48E-03	6.17E-04	1.06E-03	3.70E-06	4.50E-06	1.5947E-02
551248.06	4172775.64	1672.05639	2048.31538	611.38606	4306.5618	783.73724	1475.73033	1669.94714	1184.57489	340.7435	3268.83276	2526.66349	1872.99351	0.20058	0.20367	2.44E-03	1.78E-03	5.33E-04	2.74E-03	6.29E-04	1.18E-03	1.58E-03	9.94E-04	2.86E-04	1.74E-03	9.30E-04	6.89E-04	2.81E-06	3.45E-06	1.5540E-02
551234.09	4172809.28	1676.0252	2075.81922	603.63812	4296.31509	760.8186	1484.99963	1674.45315	1199.79647	337.15019	3292.91503	2467.43052	1886.02472	0.20251	0.20559	2.45E-03	1.81E-03	5.26E-04	2.74E-03	6.10E-04	1.19E-03	1.59E-03	1.01E-03	2.83E-04	1.75E-03	9.08E-04	6.94E-04	2.83E-06	3.48E-06	1.5555E-02
551615.03	4173466.64	2368.05946	2281.76451	497.63047	2347.03281	461.89159	2877.03464	2397.3864	1359.12164	286.48017	2210.30862	1153.30966	3511.26929	0.44927	0.44439	3.46E-03	1.99E-03	4.33E-04	1.49E-03	3.71E-04	2.31E-03	2.27E-03	1.14E-03	2.40E-04	1.18E-03	4.24E-04	1.29E-03	6.29E-06	7.53E-06	1.6610E-02
551266.17	4172704.9	1655.89127	2028.83641	615.70288	4301.23039	818.20433	1457.54249	1653.51029	1172.65963	341.78612	3235.5256	2591.02473	1851.29948	0.19548	0.19862	2.42E-03	1.77E-03	5.36E-04	2.74E-03	6.56E-04	1.17E-03	1.57E-03	9.84E-04	2.87E-04	1.72E-03	9.53E-04	6.81E-04	2.74E-06	3.37E-06	1.5486E-02
551733.28	4173431.52	2980.54123	2077.53701	475.77625	2057.60104	438.19829	2757.51604	3030.67734	1213.98497	276.22856	1900.10166	1050.11175	3406.63146	1.23495	1.09529	4.35E-03	1.81E-03	4.14E-04	1.31E-03	3.52E-04	2.21E-03	2.87E-03	1.02E-03	2.32E-04	1.01E-03	3.86E-04	1.25E-03	1.73E-05	1.86E-05	1.7258E-02
551487.75	4173417.5	2051.82006	2313.47954	483.9996	2804.28504	517.38145	2650.52821	2074.34153	1388.25997	276.09723	2493.24921	1385.16194	3217.96478	0.32424	0.32474	2.99E-03	2.01E-03	4.22E-04	1.79E-03	4.15E-04	2.13E-03	1.97E-03	1.16E-03	2.32E-04	1.33E-03	5.10E-04	1.18E-03	4.54E-06	5.50E-06	1.6152E-02
551234.78	4172800.03	1666.93937	2055.67499	603.08755	4281.22702	763.57637	1472.41063	1665.1994	1188.14515	336.64504	3270.83462	2473.13103	1869.94619	0.20111	0.20418	2.43E-03	1.79E-03	5.25E-04	2.73E-03	6.13E-04	1.18E-03	1.58E-03	9.97E-04	2.82E-04	1.74E-03	9.10E-04	6.88E-04	2.81E-06	3.46E-06	1.5472E-02
551680.09	4173457.18	2690.69718	2163.45734	487.44803	2134.88304	444.5163	2838.44599	2729.6557	1273.60253	282.26271	2011.73018	1081.35766	3491.19839	0.70859	0.6821	3.93E-03	1.88E-03	4.25E-04	1.36E-03	3.57E-04	2.28E-03	2.59E-03	1.07E-03	2.37E-04	1.07E-03	3.98E-04	1.28E-03	9.91E-06	1.16E-05	1.6897E-02
551711.73	4173443.61	2854.7847	2102.34274	480.05901	2082.68923	439.90769	2781.17922	2899.93237	1232.38388	278.43427	1934.85237	1060.9569	3429.90883	0.9981	0.92192	4.17E-03	1.83E-03	4.18E-04	1.33E-03	3.53E-04	2.23E-03	2.75E-03	1.03E-03	2.34E-04	1.03E-03	3.90E-04	1.26E-03	1.40E-05	1.56E-05	1.7055E-02
551382.47	4173318.33	1877.90221	2367.34773	503.9672	3061.80775	547.47038	2402.43359	1890.71395	1430.82801	287.30214	2649.71513	1600.64496	2941.22137	0.27155	0.2728	2.74E-03	2.06E-03	4.39E-04	1.95E-03	4.39E-04	1.93E-03	1.79E-03	1.20E-03	2.41E-04	1.41E-03	5.89E-04	1.08E-03	3.80E-06	4.62E-06	1.5882E-02
551754.49	4173419.47	3051.8487	2033.30322	468.39181	2025.73585	434.58827	2702.03652	3105.72558	1187.15046	272.02623	1857.32677	1037.97215	3339.703	1.17051	1.0339	4.45E-03	1.77E-03	4.08E-04	1.29E-03	3.49E-04	2.17E-03	2.94E-03	9.96E-04	2.28E-04	9.89E-04	3.82E-04	1.23E-03	1.64E-05	1.75E-05	1.7241E-02
551602.02	4173468.53	2291.13419	2272.74206	493.43103	2376.22243	462.65566	2824.4241	2318.79162	1356.27249	283.6678	2229.48748	1161.98138	3443.4738	0.41562	0.41166	3.34E-03	1.98E-03	4.30E-04	1.51E-03	3.71E-04	2.27E-03	2.20E-03	1.14E-03	2.38E-04	1.19E-03	4.28E-04	1.27E-03	5.82E-06	6.98E-06	1.6372E-02
551212.54	4172891.09	1681.89356	2168.59983	577.26016	4085.99095	689.31473	1564.54236	1682.45764	1255.79132	323.82088	3259.20024	2237.54349	1984.68253	0.20224	0.20494	2.46E-03	1.89E-03	5.03E-04	2.60E-03	5.53E-04	1.26E-03	1.59E-03	1.05E-03	2.72E-04	1.73E-03	8.23E-04	7.30E-04	2.83E-06	3.47E-06	1.5471E-02
551250.16	4172765.88	1655.81806	2020.81514	606.11786	4245.91239	780.45694	1460.63702	1653.68757	1168.96198	337.6388	3219.77618	2504.18752	1853.49396	0.19721	0.20023	2.42E-03	1.76E-03	5.28E-04	2.70E-03	6.26E-04	1.17E-03	1.57E-03	9.81E-04	2.83E-04	1.71E-03	9.21E-04	6.82E-04	2.76E-06	3.39E-06	1.5361E-02
551218.48	4172867.09	1672.29014	2129.39341	580.97393	4137.86972	706.01543	1526.7657	1672.25933	1231.82247	325.35437	3257.04852	2289.34822	1938.49946	0.2004	0.20314	2.44E-03	1.85E-03	5.06E-04	2.63E-03	5.66E-04	1.22E-03	1.58E-03	1.03E-03	2.73E-04	1.73E-03	8.42E-04	7.13E-04	2.80E-06	3.44E-06	1.5415E-02
551372.9	4173309.31	1851.40049	2358.0755	507.2719	3083.90341	551.76992	2359.48442	1863.66495	1422.84845	288.80582	2670.45935	1613.39628	2890.47576	0.26651	0.26778	2.70E-03	2.05E-03	4.42E-04	1.96E-03	4.43E-04	1.89E-03	1.77E-03	1.19E-03	2.42E-04	1.42E-03	5.94E-04	1.06E-03	3.73E-06	4.54E-06	1.5787E-02
551497.32	4173426.51	2044.90639	2294.51456	481.63661	2756.26321	512.30048	2631.43023	2067.70903	1377.03918	274.8249	2462.75894	1354.20028	3194.96292	0.3269	0.32695	2.98E-03	2.00E-03	4.19E-04	1.76E-03	4.11E-04	2.11E-03	1.96E-03	1.16E-03	2.31E-04	1.31E-03	4.98E-04	1.18E-03	4.57E-06	5.54E-06	1.6021E-02
551258.35	4172741.22	1647.90257	2008.99061	606.87643	4227.45633	791.76761	1455.99245	1645.66281	1162.20361	337.55976	3195.3279	2521.66604	1847.19636	0.19488	0.1979	2.41E-03	1.75E-03	5.29E-04	2.69E-03	6.35E-04	1.17E-03	1.56E-03	9.75E-04	2.83E-04	1.70E-03	9.28E-04	6.80E-04	2.73E-06	3.35E-06	1.5311E-02
551775.31	4173407.48	3094.4606	1993.11405	468.315	1992.13699	429.71599	2649.3897	3151.18665	1163.08238	267.23885	1892.88776	1023.66026	3275.24267	0.95395	0.86776	4.52E-03	1.74E-03	4.08E-04	1.27E-03	3.45E-04	2.13E-03	2.99E-03	9.76E-04	2.24E-04	1.01E-03	3.77E-04	1.21E-03	1.33E-05	1.47E-05	1.7204E-02
551261.85	4172713.31	1637.69313	1999.51398	606.7249	4222.25136	802.25963	1443.14191	1635.3852	1156.11537	336.97873	3181.96781	2538.78509	1832.13091	0.19274	0.19578	2.39E-03	1.74E-03	5.28E-04	2.69E-03	6.44E-04	1.16E-03	1.55E-03	9.70E-04	2.83E-04	1.69E-03	9.34E-04	6.74E-04	2.70E-06	3.32E-06	1.5261E-02
551339.92	4173269.66	1779.66951	2319.09395	515.39538	3211.5255	575.58742	2271.59199	1791.36505	1384.87338	291.57607	2768.58751	1686.56868	2784.30482	0.25388	0.25523	2.60E-03	2.02E-03	4.49E-04	2.04E-03	4.62E-04	1.82E-03	1.70E-03	1.16E-03	2.45E-04	1.47E-03	6.21E-04	1.02E-03	3.55E-06	4.33E-06	1.5627E-02
551693.1	4173455.28	2727.8958	2112.70945	479.92369	2091.57565	438.59073	2774.714	2768.66435	1241.38811	278.07727	1958.83854	1062.93997	3417.97142	0.76399	0.72635	3.98E-03	1.84E-03	4.18E-04	1.33E-03	3.52E-04	2.23E-03	2.62E-03	1.04E-03	2.33E-04	1.04E-03	3.91E-04	1.26E-03	1.07E-05	1.23E-05	1.6763E-02
551795.55	4173395.58	3106.3324	1958.72274	463.45844	1959.04176	423.98359	2700.36148	3164.75311	1187.31616	269.28961	1859.89438	1008.36434	3218.88403	0.79623	0.74334	4.53E-03	1.71E-03	4.04E-04	1.25E-03	3.40E-04	2.17E-03	3.00E-03	9.96E-04	2.26E-04	9.90E-04	3.71E-04	1.18E-03	1.11E-05	1.26E-05	1.7189E-02
551363.32	4173300.3	1822.46347	2339.22428	508.84387	3100.73101	555.55016	2315.26109	1834.31897	1408.11685	289.25965	2685.11642	1624.20995	2837.56309	0.26123	0.26279	2.66E-03	2.04E-03	4.43E-04	1.97E-03	4.46E-04	1.86E-03	1.74E-03	1.18E-03	2.43E-04	1.43E-03	5.98E-04	1.04E-03	3.66E-06	4.45E-06	1.5660E-02
551222.87	4172827.71	1649.62031	2053.91543	586.19526	4170.21265	731.91215	1468.9447	1648.57254	1187.31413	327.74432	3223.40913	2368.97522	1866.0003	0.19822	0.20112	2.41E-03	1.79E-03	5.11E-04	2.66E-03	5.87E-04	1.18E-03	1.56E-03	9.96E-04	2.75E-04	1.72E-03	8.72E-04	6.87E-04	2.77E-06	3.41E-06	1.5242E-02
551254.04	4172749.6	1637.90799	1992.83016	601.04256	4183.81249	780.00679	1445.35483	1635.74496	1153.01993	334.50366	3168.0338	2486.53396	1833.68812	0.19344	0.1964	2.39E-03	1.74E-03	5.23E-04	2.66E-03	6.26E-04	1.16E-03	1.55E-03	9.67E-04	2.81E-04	1.69E-03	9.15E-04	6.75E-04	2.71E-06	3.33E-06	1.5180E-02
551589	4173470.42	2217.40594	2255.03882	487.6711	2398.80083	462.57036	2759.20227	2243.55678	1347.46944	279.97898	2241.23214	1168.33819	3361.60462	0.38674	0.38374	3.24E-03	1.96E-03	4.25E-04	1.53E-03	3.71E-04	2.21E-03	2.13E-03	1.13E-03	2.35E-04	1.19E-03	4.30E-04	1.24E-03	5.41E-06	6.50E-06	1.6101E-02
551724.96	4173441.69	2876.45371	2046.44173	469.73962	2033.51262	432.40601	2698.5008	2923.33497	1197.042	272.56285	1881.7697	1038.51369	3333.63657	1.01538	0.92394	4.20E-03	1.78E-03	4.09E-04	1.29E-03	3.47E-04	2.16E-03	2.77E-03	1.00E-03	2.29E-04	1.00E-03	3.82E-04	1.23E-03	1.42E-05	1.57E-05	1.6841E-02
551343.62	4173278.43	1773.51354	2301.17369	510.72663	3157.32116	566.88279	2251.77575	1785.02494	1376.47939	289.21225	2726.21356	1658.42993	2760.69282	0.25272	0.25401	2.59E-03	2.00E-03	4.45E-04	2.01E-03	4.55E-04	1.81E-03	1.69E-03	1.15E-03	2.43E-04	1.45E-03	6.10E-04	1.02E-03	3.54E-06	4.30E-06	1.5484E-02
551746.42	4173429.61	2961.85765	2007.70202	463.3996	2004.04131	429.34709	2652.08022	3012.73033	1172.60868	269.038	1841.17815	1026.92274	3279.10089	1.07894	0.96066	4.32E-03	1.75E-03	4.04E-04	1.28E-03	3.44E-04	2.13E-03	2.86E-03	9.84E-04	2.26E-04	9.80E-04	3.78E-04	1.21E-03	1.51E-05	1.63E-05	1.6885E-02
551236.23	4172783.93	1632.15862	1992.97511	592.3297	4161.40115	754.44185	1435.40703	1630.29529	1152.48835	330.35914	3171.32689	2427.11197	1822.46494	0.19443	0.19738	2.38E-03	1.74E-03	5.16E-04	2.65E-03	6.05E-04	1.15E-03	1.55E-03	9.67E-04	2.77E-04	1.69E-03	8.93E-04	6.71E-04	2.72E-06	3.34E-06	1.5088E-02
551210.86	4172880.75	1650.69754	2109.69627	568.19839	4018.65254	683.03085	1520.49257	1651.07033	1221.38913	318.4761	3189.30917	2209.91487	1929.58709	0.19681	0.19942	2.41E-03	1.84E-03	4.95E-04	2.56E-03	5.48E-04	1.22E-03	1.56E-03	1.02E-03	2.67E-04	1.70E-03	8.13E-04	7.10E-04	2.75E-06	3.38E-06	1.5152E-02
551257.53	4172721.71	1619.82481	1970.45695	597.6925	4144.90211	786.12805	1427.60475	1617.60368	1139.71006	332.14677	3129.82987	2486.48377	1811.77236	0.18995	0.19291	2.36E-03	1.72E-03	5.21E-04	2.64E-03	6.31E-04	1.15E-03	1.53E-03	9.56E-04	2.79E-04	1.67E-03	9.15E-04	6.67E-04	2.66E-06	3.27E-06	1.5038E-02
551767.53	4173417.57	3015.46905	1968.14933	461.67087	1971.51985	424.87603	2601.03781	3069.47404	1148.59762	264.56649	1871.89692	1013.03474	3217.19184	0.94961	0.8582	4.40E-03	1.71E-03	4.02E-04	1.26E-03	3.41E-04	2.09E-03	2.91E-03	9.64E-04	2.22E-04	9.96E-04	3.73E-04	1.18E-03	1.33E-05	1.45E-05	1.6876E-02
551706.11	4173453.39	2752.5703	2056.52005	471.07594	2045.93695	431.96773	2698.61136	2794.9598	1206.4478	273.06638	1904.22126	1043.50744	3328.79516	0.8031	0.75317	4.02E-03	1.79E-03	4.10E-04	1.30E-03	3.47E-04	2.17E-03	2.65E-03	1.01E-03	2.29E-04	1.01E-03	3.84E-04	1.22E-03	1.12E-05	1.28E-05	1.6570E-02
551223.58	4172818.15	1631.01266	2016.008	581.38347	4116.05641	728.3969	1444.86224	1629.80983	1165.5989	324.94258	3173.26133	2350.38014	1835.36455	0.19479	0.19766	2.38E-03	1.76E-03	5.06E-04	2.62E-03	5.84E-04	1.16E-03	1.54E-03	9.78E-04	2.73E-04	1.69E-03	8.65E-04	6.75E-04	2.73E-06	3.35E-06	1.5038E-02
551807.69	4173390.87	3066.12743	1921.41115	456.30252	1924.8462	417.30154	2634.90097	3124.0842	1162.48417	265.12161	1825.11159	991.98057	3149.70221	0.71409	0.67207	4.48E-03	1.67E-03	3.97E-04	1.23E-03	3.35E-04	2.11E-03	2.96E-03	9.75E-04	2.22E-04	9.71E-04	3.65E-04	1.16E-03	9.99E-06	1.14E-05	1.6896E-02
551347.74	4173288.12	1768.98777	2282.99182	505.37951	3100.69478	557.48398	2234.15858	1780.36025	1368.25936	286.51588	2680.7527	1628.61114	2739.79406	0.25153	0.25275	2.58E-03	1.99E-03	4.40E-04	1.97E-03	4.47E-04	1.79E-03	1.69E-03	1.15E-03	2.40E-04	1.43E-03	5.99E-04	1.01E-03	3.52E-06	4.28E-06	1.5343E-02
551788.25	4173405.6	3030.64433	1927.46873	457.05402	1937.12047	419.36939	2644.99692	3086.5184	1169.43969	265.4682	1838.25688	998.19405	3150.43741	0.79828	0.74096	4.42E-03	1.68E-03	3.98E-04	1.23E-03	3.36E-04	2.12E-03	2.93E-03	9.81E-04	2.23E-04	9.78E-04	3.67E-04	1.16E-03	1.12E-05	1.26E-05	1.6850E-02
551215.09	4172846.36	1631.35984	2044.59955	571.92373	4060.05842	706.4581	1465.1935	1630.8577	1182.40161	320.00759	3166.14295	2281.16719	1861.10442	0.19468	0.19741	2.38E-03	1.78E-03	4.98E-04	2.59E-03	5.67E-04	1.18E-03	1.55E-03	9.92E-04	2.69E-04	1.69E-03	8.39E-04	6.85E-04	2.72E-06	3.35E-06	1.5009E-02
552013.69	4173261.9	2796.96324	1993.34402	399.12022	1755.5292	360.25004	3024.71566	2857.50043	1170.72064	232.163	1699.6603	867.69782	3703.69108	0.2821	0.27663	4.08E-03	1.74E-03	3.48E-04	1.12E-03	2.89E-04	2.43E-03	2.71E-03	9.82E-04	1.95E-04	9.05E-04	3.19E-04	1.36E-03	3.95E-06	4.69E-06	1.6481E-02
551269.43	4172677.46	1605.56586	1955.51678	591.91481	4102.56158	788.56986	1401.17459	1603.61058	1130.65106	328.44187	3099.2036	2471.32215	1781.82828	0.18395	0.18681	2.34E-03	1.70E-03	5.16E-04	2.61E-03	6.33E-04	1.12E-03	1.52E-03	9.49E-04	2.76E-04	1.65E-03	9.09E-04	6.56E-04	2.57E-06	3.17E-06	1.4896E-02
551265.14	4172685.82	1602.76873	1951.51122	591.53834	4096.15811	786.85879	1403.28405	1600.72589	1128.40907	328.29726	3093.2307	2468.18566	1783.41752	0.1847	0.18758	2.34E-03	1.70E-03	5.15E-04	2.61E-03	6.31E-04	1.13E-03	1.52E-03	9.47E-04	2.75E-04	1.65E-03	9.08E-04	6.56E-04	2.58E-06	3.18E-06	1.4876E-02
551260.84	4172694.17	1598.57153	1944.30452	590.2151	4083.14676	783.35069	1402.44153	1596.46482	1124.2978	327.64796	3082.8277	2459.77963	1781.47762	0.18505	0.18793	2.33E-03	1.69E-03	5.14E-04	2.60E-03	6.28E-04	1.13E-03	1.51E-03	9.43E-04	2.75E-04	1.64E-03	9.05E-04	6.55E-04	2.59E-06	3.18E-06	1.4833E-02
551738.19	4173439.76	2873.6732	1983.90516	458.39254	1982.78276	424.1322	2605.09762	2921.65174	1159.10704	266.02263	1826.64258	1015.85461	3222.0113	0.94859	0.85808	4.19E-03	1.73E-03	3.99E-04	1.26E-03	3.40E-04	2.09E-03	2.77E-03	9.73E-04	2.23E-04	9.72E-04	3.74E-04	1.19E-03	1.33E-05	1.45E-05	1.6539E-02
551224.3	4172808.59	1612.35089	1979.20165	576.29886	4058.35834	724.41962	1422.00797	1611.01308	1144.43643	321.96425	3121.54405	2330.29695	1806.27132	0.19131	0.19414	2.35E-03	1.72E-03	5.02E-04	2.58E-03	5.81E-04	1.14E-03	1.53E-03	9.60E-04	2.70E-04	1.66E-03	8.57E-04	6.65E-04	2.68E-06	3.29E-06	1.4832E-02
551238.33	4172774.14	1604.81955	1946.40695	581.89313	4051.77152	743.36817	1409.48046	1602.985	1126.22022	324.40566	3087.84001	2375.73346	1789.02489	0.18878	0.1916	2.34E-03	1.70E-03	5.07E-04	2.58E-03	5.96E-04	1.13E-03	1.52E-03	9.45E-04	2.72E-04	1.64E-03	8.74E-04	6.58E-04	2.64E-06	3.25E-06	1.4770E-02
551209.17	4172870.42	1620.76977	2052.31804	559.23659	3948.94613	677.51234	1478.42233	1620.94974	1187.82257	313.25378	3118.87046	2183.52412	1876.98471	0.19171	0.19426	2.37E-03	1.79E-03	4.87E-04	2.51E-03	5.44E-04	1.19E-03	1.54E-03	9.97E-04	2.63E-04	1.66E-03	8.03E-04	6.91E-04	2.68E-06	3.29E-06	1.4840E-02
551719.12	4173451.5	2768.04448	1999.14718	461.28758	1999.30449	424.81893	2617.01572	2811.89827	1170.95679	267.49475	1850.43495	1023.0958	3232.61731	0.82286	0.7621	4.04E-03	1.74E-03	4.02E-04	1.27E-03	3.41E-04	2.10E-03	2.67E-03	9.82E-04	2.24E-04	9.85E-04	3.76E-04	1.19E-03	1.15E-05	1.29E-05	1.6344E-02
551256.55	4172702.52	1588.21325	1927.18467	585.50573	4041.89059	774.3973	1394.95692	1586.10437	1114.59469	325.15785	3053.78257	2432.44599	1771.21136	0.18402	0.18687	2.32E-03	1.68E-03	5.10E-04	2.57E-03	6.21E-04	1.12E-03	1.50E-03	9.35E-04	2.73E-04	1.63E-03	8.95E-04	6.52E-04	2.57E-06	3.17E-06	1.4710E-02
551759.56	4173427.69	2930.25007	1940.51023	450.82693	1950.80378	420.16418	2549.97894	2981.41175	1133.00815	261.69617	1785.37049	1003.2371	3155.09024	0.91421	0.82555	4.28E-03	1.69E-03	3.93E-04	1.24E-03	3.37E-04	2.05E-03	2.83E-03	9.51E-04	2.20E-04	9.50E-04	3.69E-04	1.16E-03	1.28E-05	1.40E-05	1.6488E-02
551213.01	4172827.76	1601.14739	1981.75228	566.20847	4000.64218	706.5013	1421.12236	1600.24753	1145.88376	316.5936	3098.50665	2274.41861	1805.44843	0.19035	0.1931	2.34E-03	1.73E-03	4.93E-04	2.55E-03	5.67E-04	1.14E-03	1.52E-03	9.61E-04	2.66E-04	1.65E-03	8.37E-04	6.64E-04	2.66E-06	3.27E-06	1.4711E-02
551225.01	4172799.02	1596.82484	1949.00622	572.59045	4013.36609	722.33588	1403.55333	1595.3625	1127.15626	319.72755	3079.89377	2317.7268	1782.63354	0.18853	0.19132	2.33E-03	1.70E-03	4.99E-04	2.56E-03	5.80E-04	1.13E-03	1.51E-03	9.46E-04	2.68E-04	1.64E-03	8.53E-04	6.56E-04	2.64E-06	3.24E-06	1.4668E-02
551780.57	4173415.68	2956.25344	1899.46957	450.87875	1917.05312	414.98985	2496.21608	3009.62744	1108.8734	261.73618	1818.26486	988.68426	3088.63083	0.79417	0.73244	4.32E-03	1.65E-03	3.93E-04	1.22E-03	3.33E-04	2.00E-03	2.85E-03	9.30E-04	2.20E-04	9.68E-04	3.64E-04	1.14E-03	1.11E-05	1.24E-05	1.6413E-02
551240.43	4172764.35	1587.70014	1918.00573	576.11509	3988.10393	738.97333	1393.98692	1585.85701	1110.1281	321.03474	3037.34025	2350.50365	1768.91569	0.18536	0.18811	2.32E-03	1.67E-03	5.02E-04	2.54E-03	5.93E-04	1.12E-03	1.50E-03	9.31E-04	2.69E-04	1.62E-03	8.65E-04	6.51E-04	2.59E-06	3.19E-06	1.4583E-02
551252.25	4172710.87	1574.19909	1904.21033	578.71557	3983.88479	762.09153	1383.08011	1572.13803	1101.59958	321.53539	3013.88447	2393.56957	1755.50408	0.18213	0.18491	2.30E-03	1.66E-03	5.04E-04	2.54E-03	6.11E-04	1.11E-03	1.49E-03	9.24E-04	2.70E-04	1.60E-03	8.81E-04	6.46E-04	2.55E-06	3.13E-06	1.4539E-02
551207.49	4172860.09	1598.35534	2007.40639	553.59836	3903.36065	676.34802	1445.26977	1598.31799	1161.62844	309.94674	3068.6753	2174.11765	1835.4129	0.18838	0.19091	2.33E-03	1.75E-03	4.82E-04	2.49E-03	5.43E-04	1.16E-03	1.51E-03	9.75E-04	2.60E-04	1.63E-03	8.00E-04	6.75E-04	2.64E-06	3.24E-06	1.4615E-02
551801.19	4173403.72	2954.28328	1864.33653	445.51213	1883.4989	409.00615	2539.75992	3008.79188	1130.60255	258.74626	1784.70092	973.04582	3030.67084	0.69372	0.65046	4.31E-03	1.62E-03	3.88E-04	1.20E-03	3.28E-04	2.04E-03	2.85E-03	9.49E-04	2.17E-04	9.50E-04	3.58E-04	1.12E-03	9.71E-06	1.10E-05	1.6350E-02
551732.13	4173449.61	2780.11147	1946.689	451.15709	1952.54256	417.41156	2539.04953	2825.35271	1138.03513	261.7072	1801.30128	1001.28214	3141.18476	0.8067	0.74161	4.06E-03	1.70E-03	3.93E-04	1.24E-03	3.35E-04	2.04E-03	2.68E-03	9.55E-04	2.20E-04	9.59E-04	3.68E-04	1.16E-03	1.13E-05	1.26E-05	1.6121E-02
551751.43	4173437.84	2848.81634	1916.94596	446.27566	1930.93485	415.35096	2505.08617	2897.27576	1119.60867	258.95829	1770.22716	993.1077	3100.54608	0.84673	0.76918	4.16E-03	1.67E-03	3.89E-04	1.23E-03	3.33E-04	2.01E-03	2.75E-03	9.39E-04	2.17E-04	9.42E-04	3.65E-04	1.14E-03	1.18E-05	1.30E-05	1.6165E-02
551995.03	4173278.23	2733.08052	1898.99782	395.73346	1721.7806	359.06082	2882.39075	2788.52982	1123.34527	230.04477	1659.61323	861.9242	3502.559	0.29721	0.29097	3.99E-03	1.65E-03	3.45E-04	1.10E-03	2.88E-04	2.31E-03	2.64E-03	9.43E-04	1.93E-04	8.83E-04	3.17E-04	1.29E-03	4.16E-06	4.93E-06	1.5962E-02
551213.72	4172818.38	1577.29072	1936.29295	558.70864	3923.46015	698.60881	1392.21839	1576.28178	1119.88619	312.32873	3033.34392	2239.75407	1768.70915	0.18577	0.18845	2.30E-03	1.69E-03	4.87E-04	2.50E-03	5.60E-04	1.12E-03	1.49E-03	9.40E-04	2.62E-04	1.61E-03	8.24E-04	6.51E-04	2.60E-06	3.19E-06	1.4442E-02
551244.56	4172746.93	1569.91404	1890.68156	571.17142	3929.31045	738.5467	1379.34169	1568.03167	1094.56762	317.98292	2987.62936	2333.99392	1749.83194	0.18181	0.1845	2.29E-03	1.65E-03	4.97E-04	2.50E-03	5.93E-04	1.11E-03	1.49E-03	9.18E-04	2.67E-04	1.59E-03	8.59E-04	6.44E-04	2.54E-06	3.13E-06	1.4407E-02
551772.7	4173425.78	2886.93779	1877.32504	444.87191	1898.39516	410.61238	2453.67822	2937.92992	1095.92486	258.16066	1799.29989	979.06756	3037.73386	0.77774	0.71428	4.21E-03	1.64E-03	3.87E-04	1.21E-03	3.29E-04	1.97E-03	2.78E-03	9.20E-04	2.17E-04	9.58E-04	3.60E-04	1.12E-03	1.09E-05	1.21E-05	1.6123E-02
551247.96	4172719.22	1559.57103	1880.2565	571.38288	3922.88835	748.85115	1369.59868	1557.57498	1088.04695	317.62358	2972.41682	2351.78778	1737.95294	0.18	0.18271	2.28E-03	1.64E-03	4.98E-04	2.50E-03	6.01E-04	1.10E-03	1.48E-03	9.13E-04	2.67E-04	1.58E-03	8.65E-04	6.39E-04	2.52E-06	3.10E-06	1.4357E-02
551205.8	4172849.76	1577.09882	1964.96021	548.37161	3857.72097	674.76114	1414.55831	1576.85099	1136.95082	306.91184	3020.69747	2163.65879	1796.78856	0.18525	0.18777	2.30E-03	1.71E-03	4.78E-04	2.46E-03	5.41E-04	1.13E-03	1.49E-03	9.54E-04	2.58E-04	1.61E-03	7.96E-04	6.61E-04	2.59E-06	3.18E-06	1.4401E-02
551226.49	4172782.46	1565.20079	1892.15167	563.2375	3910.41096	714.92014	1369.89513	1563.61035	1094.84723	314.22615	2992.2827	2279.55692	1739.37653	0.18274	0.18541	2.28E-03	1.65E-03	4.91E-04	2.49E-03	5.74E-04	1.10E-03	1.48E-03	9.19E-04	2.64E-04	1.59E-03	8.39E-04	6.40E-04	2.56E-06	3.14E-06	1.4327E-02
551793.61	4173413.78	2887.5907	1835.79448	439.87473	1864.0151	404.97127	2492.0603	2939.91195	1114.94686	255.3573	1765.67727	964.23249	2969.30776	0.68838	0.64341	4.21E-03	1.60E-03	3.83E-04	1.19E-03	3.25E-04	2.00E-03	2.79E-03	9.36E-04	2.14E-04	9.40E-04	3.55E-04	1.09E-03	9.63E-06	1.09E-05	1.6052E-02
551813.21	4173399.03	2910.89677	1828.68037	438.646	1851.10343	402.65069	2479.13359	2964.76393	1107.33902	254.73229	1751.94468	957.62427	2965.53703	0.63274	0.59721	4.25E-03	1.59E-03	3.82E-04	1.18E-03	3.23E-04	1.99E-03	2.81E-03	9.29E-04	2.14E-04	9.33E-04	3.52E-04	1.09E-03	8.85E-06	1.01E-05	1.6062E-02
551825.61	4173390.64	2902.88586	1818.96119	436.01764	1837.97937	399.84734	2459.14226	2956.99252	1097.964	253.22219	1737.51174	950.6317	3053.19849	0.5937	0.56343	4.24E-03	1.58E-03	3.80E-04	1.17E-03	3.21E-04	1.97E-03	2.80E-03	9.21E-04	2.12E-04	9.25E-04	3.50E-04	1.12E-03	8.31E-06	9.55E-06	1.6017E-02
551214.42	4172809	1558.58167	1900.06612	553.38568	3865.00373	693.90113	1369.4931	1557.45498	1099.04986	309.23875	2982.10616	2217.71359	1739.81114	0.1823	0.18493	2.28E-03	1.65E-03	4.82E-04	2.46E-03	5.57E-04	1.10E-03	1.48E-03	9.22E-04	2.59E-04	1.59E-03	8.16E-04	6.40E-04	2.55E-06	3.13E-06	1.4235E-02
551833.7	4173385.11	2893.69797	1812.99298	434.21867	1829.90821	397.93722	2447.06018	2947.8227	1091.89384	252.1595	1728.31982	946.11592	3037.08091	0.56985	0.54248	4.22E-03	1.58E-03	3.78E-04	1.17E-03	3.19E-04	1.96E-03	2.79E-03	9.16E-04	2.12E-04	9.20E-04	3.48E-04	1.12E-03	7.97E-06	9.19E-06	1.5953E-02
551841.8	4173379.57	2885.72649	1872.25132	432.30952	1822.47712	395.959	2438.69052	2939.831	1086.48944	251.08795	1719.65711	941.35611	3024.23308	0.54756	0.52276	4.21E-03	1.63E-03	3.77E-04	1.16E-03	3.18E-04	1.96E-03	2.79E-03	9.12E-04	2.11E-04	9.15E-04	3.46E-04	1.11E-03	7.66E-06	8.86E-06	1.5954E-02
551204.11	4172839.43	1557.59429	1926.11998	543.85917	3815.66834	673.16938	1386.85561	1557.1368	1114.3823	304.29487	2976.81239	2153.93205	1761.8656	0.18242	0.18494	2.27E-03	1.68E-03	4.74E-04	2.43E-03	5.40E-04	1.11E-03	1.48E-03	9.35E-04	2.55E-04	1.58E-03	7.92E-04	6.48E-04	2.55E-06	3.13E-06	1.4204E-02
551745.15	4173447.71	2762.60759	1883.88446	439.90057	1903.7624	409.31958	2446.74306	2808.46981	1100.77323	255.16613	1747.3945	979.92873	3029.362	0.75066	0.68925	4.03E-03	1.64E-03	3.83E-04	1.21E-03	3.28E-04	1.96E-03	2.66E-03	9.24E-04	2.14E-04	9.30E-04	3.61E-04	1.11E-03	1.05E-05	1.17E-05	1.5787E-02
551243.66	4172727.57	1542.05776	1852.17871	562.39022	3849.03311	733.10039	1352.89308	1540.16444	1072.16591	312.80834	2922.74874	2301.08583	1716.43872	0.1772	0.17983	2.25E-03	1.61E-03	4.90E-04	2.45E-03	5.88E-04	1.09E-03	1.46E-03	9.00E-04	2.62E-04	1.56E-03	8.47E-04	6.32E-04	2.48E-06	3.05E-06	1.4140E-02
551849.9	4173374.03	2872.06478	1861.3058	430.22238	1813.97623	393.98067	2429.86456	2926.02069	1080.66727	249.88913	1710.64205	936.68317	3010.61606	0.52644	0.50387	4.19E-03	1.62E-03	3.75E-04	1.16E-03	3.16E-04	1.95E-03	2.77E-03	9.07E-04	2.10E-04	9.11E-04	3.45E-04	1.11E-03	7.37E-06	8.54E-06	1.5877E-02
551228.6	4172772.64	1544.16406	1856.09038	555.75886	3830.54403	707.84236	1349.90919	1542.56655	1074.42383	309.91778	2929.56888	2245.08422	1713.55492	0.17856	0.18114	2.25E-03	1.62E-03	4.84E-04	2.44E-03	5.68E-04	1.08E-03	1.46E-03	9.02E-04	2.60E-04	1.56E-03	8.26E-04	6.30E-04	2.50E-06	3.07E-06	1.4090E-02
551764.66	4173435.92	2810.12238	1851.62486	438.69301	1879.40987	406.3261	2407.27526	2858.59137	1081.35429	251.76096	1716.13523	970.141	2981.21234	0.74248	0.68165	4.10E-03	1.61E-03	3.82E-04	1.20E-03	3.26E-04	1.93E-03	2.71E-03	9.07E-04	2.11E-04	9.13E-04	3.57E-04	1.10E-03	1.04E-05	1.16E-05	1.5768E-02
551203.17	4172827.68	1546.64493	1900.32547	543.54216	3807.38763	677.0367	1367.77533	1545.92686	1099.23818	303.96975	2956.79989	2164.95622	1737.81756	0.18122	0.18377	2.26E-03	1.66E-03	4.73E-04	2.42E-03	5.43E-04	1.10E-03	1.47E-03	9.22E-04	2.55E-04	1.57E-03	7.97E-04	6.39E-04	2.54E-06	3.11E-06	1.4109E-02
552019.6	4173271.82	2610.15946	1856.71477	380.72619	1671.47853	345.71457	2784.48419	2664.27281	1095.53064	221.27233	1612.62168	832.46858	3398.16991	0.26971	0.2644	3.81E-03	1.62E-03	3.32E-04	1.06E-03	2.77E-04	2.23E-03	2.53E-03	9.19E-04	1.86E-04	8.58E-04	3.06E-04	1.25E-03	3.77E-06	4.48E-06	1.5388E-02
551785.84	4173423.87	2821.80937	1810.11306	434.23518	1845.72265	401.02263	2353.04162	2871.94409	1057.22767	251.93742	1747.50466	955.65259	2913.63582	0.67554	0.62926	4.12E-03	1.58E-03	3.78E-04	1.18E-03	3.22E-04	1.89E-03	2.72E-03	8.87E-04	2.11E-04	9.30E-04	3.52E-04	1.07E-03	9.45E-06	1.07E-05	1.5653E-02
551251.45	4172691.34	1519.09755	1826.73626	554.14947	3776.96829	730.69937	1331.09203	1517.37042	1057.25265	307.81929	2868.95587	2271.34801	1689.9706	0.17156	0.1741	2.22E-03	1.59E-03	4.83E-04	2.40E-03	5.86E-04	1.07E-03	1.44E-03	8.87E-04	2.58E-04	1.53E-03	8.36E-04	6.22E-04	2.40E-06	2.95E-06	1.3924E-02
551215.12	4172799.63	1532.40187	1853.42676	544.45099	3772.81522	683.98775	1341.29645	1531.2252	1072.54769	304.13181	2908.54451	2176.07121	1703.7022	0.17735	0.17988	2.24E-03	1.61E-03	4.74E-04	2.40E-03	5.49E-04	1.08E-03	1.45E-03	9.00E-04	2.55E-04	1.55E-03	8.01E-04	6.27E-04	2.48E-06	3.05E-06	1.3940E-02
551230.7	4172762.82	1527.54394	1828.8091	550.15645	3770.35425	703.40538	1335.02113	1525.93057	1058.97532	306.6543	2881.68005	2220.85451	1694.19178	0.17536	0.17788	2.23E-03	1.59E-03	4.79E-04	2.40E-03	5.64E-04	1.07E-03	1.45E-03	8.89E-04	2.57E-04	1.53E-03	8.17E-04	6.23E-04	2.45E-06	3.01E-06	1.3910E-02
551247.14	4172699.71	1514.72197	1818.19407	552.4743	3762.37022	726.61131	1327.54717	1512.94985	1052.37151	306.97723	2857.72944	2261.11743	1684.98211	0.17162	0.17415	2.21E-03	1.58E-03	4.81E-04	2.40E-03	5.83E-04	1.07E-03	1.43E-03	8.83E-04	2.58E-04	1.52E-03	8.32E-04	6.20E-04	2.40E-06	2.95E-06	1.3872E-02
551806.66	4173411.88	2811.09958	1776.61583	428.6624	1812.70844	394.94141	2393.84843	2861.96416	1078.18094	248.80985	1714.47296	939.93352	2858.56962	0.60935	0.57363	4.10E-03	1.55E-03	3.73E-04	1.15E-03	3.17E-04	1.92E-03	2.71E-03	9.05E-04	2.09E-04	9.13E-04	3.46E-04	1.05E-03	8.53E-06	9.72E-06	1.5570E-02
551203.89	4172818.01	1523.82478	1857.07042	536.44681	3735.38567	669.54246	1339.87138	1522.98998	1074.44087	299.93464	2895.68313	2132.42539	1702.40107	0.17691	0.1794	2.22E-03	1.62E-03	4.67E-04	2.38E-03	5.37E-04	1.07E-03	1.44E-03	9.02E-04	2.52E-04	1.54E-03	7.85E-04	6.26E-04	2.48E-06	3.04E-06	1.3854E-02
551242.83	4172708.09	1508.72598	1807.13959	549.75533	3740.57071	720.71857	1321.58402	1506.93733	1046.07878	305.56956	2842.05317	2245.23646	1677.07634	0.17126	0.17379	2.20E-03	1.57E-03	4.79E-04	2.38E-03	5.78E-04	1.06E-03	1.43E-03	8.78E-04	2.56E-04	1.51E-03	8.26E-04	6.17E-04	2.40E-06	2.94E-06	1.3799E-02
551758.16	4173445.82	2731.04592	1821.31371	428.24659	1854.80443	400.87014	2354.19003	2777.09556	1064.02341	248.38598	1694.8514	958.23468	2916.55157	0.68173	0.62899	3.99E-03	1.59E-03	3.73E-04	1.18E-03	3.22E-04	1.89E-03	2.63E-03	8.93E-04	2.08E-04	9.02E-04	3.53E-04	1.07E-03	9.54E-06	1.07E-05	1.5418E-02
551232.81	4172753.01	1515.04732	1809.31433	546.23892	3727.95736	701.31562	1324.43198	1513.41664	1047.89566	304.32324	2847.00527	2205.59706	1680.38788	0.173	0.17548	2.21E-03	1.58E-03	4.76E-04	2.37E-03	5.63E-04	1.06E-03	1.43E-03	8.79E-04	2.55E-04	1.52E-03	8.12E-04	6.18E-04	2.42E-06	2.97E-06	1.3782E-02
551777.89	4173433.99	2760.67644	1790.04304	428.80798	1828.72152	397.02712	2315.01092	2808.74555	1045.44168	248.69512	1730.33516	946.86236	2868.19547	0.65414	0.60786	4.03E-03	1.56E-03	3.73E-04	1.16E-03	3.19E-04	1.86E-03	2.66E-03	8.77E-04	2.09E-04	9.21E-04	3.48E-04	1.06E-03	9.15E-06	1.03E-05	1.5395E-02
551215.82	4172790.25	1515.1741	1822.11459	539.44702	3718.79799	679.92644	1322.49131	1513.91172	1054.70623	301.18946	2861.89257	2156.01454	1679.55117	0.17428	0.17676	2.21E-03	1.59E-03	4.70E-04	2.37E-03	5.46E-04	1.06E-03	1.43E-03	8.85E-04	2.53E-04	1.52E-03	7.93E-04	6.18E-04	2.44E-06	3.00E-06	1.3755E-02
551238.52	4172716.47	1498.3295	1789.66594	544.60374	3699.44383	711.02902	1311.12704	1496.57057	1036.16472	302.8404	2813.76891	2216.21229	1663.56148	0.16996	0.17244	2.19E-03	1.56E-03	4.74E-04	2.36E-03	5.70E-04	1.05E-03	1.42E-03	8.69E-04	2.54E-04	1.50E-03	8.15E-04	6.12E-04	2.38E-06	2.92E-06	1.3671E-02
551818.72	4173407.19	2768.39667	1744.60619	422.01162	1782.13617	388.68971	2337.76921	2818.56146	1056.29892	244.92546	1683.45903	924.75623	2905.54245	0.56325	0.53306	4.04E-03	1.52E-03	3.68E-04	1.13E-03	3.12E-04	1.88E-03	2.67E-03	8.86E-04	2.06E-04	8.96E-04	3.40E-04	1.07E-03	7.88E-06	9.03E-06	1.5336E-02
551798.98	4173421.96	2754.50412	1752.00338	423.61628	1795.17636	391.21039	2352.32182	2803.52349	1064.28586	245.76186	1697.43491	931.72125	2805.89924	0.59982	0.56337	4.02E-03	1.53E-03	3.69E-04	1.14E-03	3.14E-04	1.89E-03	2.66E-03	8.93E-04	2.06E-04	9.03E-04	3.43E-04	1.03E-03	8.39E-06	9.55E-06	1.5313E-02
551204.62	4172808.34	1502.92663	1817.88835	530.07737	3667.95331	663.09917	1315.21219	1501.98607	1051.94587	296.27588	2838.83154	2104.52684	1671.01846	0.17304	0.17546	2.19E-03	1.58E-03	4.62E-04	2.34E-03	5.32E-04	1.06E-03	1.42E-03	8.83E-04	2.49E-04	1.51E-03	7.74E-04	6.15E-04	2.42E-06	2.97E-06	1.3622E-02
551216.75	4172780.99	1500.05858	1795.25144	535.09976	3671.16046	676.87542	1306.69805	1498.72625	1039.3568	298.62088	2820.75312	2139.37815	1659.23374	0.17161	0.17404	2.19E-03	1.56E-03	4.66E-04	2.34E-03	5.43E-04	1.05E-03	1.42E-03	8.72E-04	2.51E-04	1.50E-03	7.87E-04	6.10E-04	2.40E-06	2.95E-06	1.3596E-02
551831.17	4173398.77	2753.81547	1732.8465	419.30035	1768.62287	385.96749	2316.99458	2804.01114	1046.85124	243.35439	1669.01599	918.21603	2879.03018	0.53414	0.50789	4.02E-03	1.51E-03	3.65E-04	1.13E-03	3.10E-04	1.86E-03	2.66E-03	8.78E-04	2.04E-04	8.88E-04	3.38E-04	1.06E-03	7.47E-06	8.61E-06	1.5231E-02
551839.26	4173393.23	2743.86495	1727.66683	417.49153	1760.99094	384.12294	2305.58783	2794.00628	1041.09245	242.34298	1660.28107	913.78976	2863.79908	0.5161	0.49204	4.01E-03	1.50E-03	3.64E-04	1.12E-03	3.08E-04	1.85E-03	2.65E-03	8.74E-04	2.03E-04	8.84E-04	3.36E-04	1.05E-03	7.22E-06	8.34E-06	1.5167E-02
551847.36	4173387.7	2732.94545	1783.55246	415.57735	1753.80919	382.23156	2295.89654	2782.9767	1035.54151	241.2098	1651.59674	909.31473	2849.89002	0.49868	0.47664	3.99E-03	1.55E-03	3.62E-04	1.12E-03	3.07E-04	1.84E-03	2.64E-03	8.69E-04	2.02E-04	8.79E-04	3.35E-04	1.05E-03	6.98E-06	8.08E-06	1.5156E-02
551771.17	4173443.93	2690.38098	1762.61231	422.24406	1806.65745	392.15037	2267.14661	2736.26443	1029.64624	241.59905	1708.11921	936.14479	2810.16682	0.61489	0.57183	3.93E-03	1.54E-03	3.68E-04	1.15E-03	3.15E-04	1.82E-03	2.59E-03	8.64E-04	2.03E-04	9.09E-04	3.44E-04	1.03E-03	8.60E-06	9.69E-06	1.5080E-02
551234.21	4172724.85	1481.82571	1763.45457	536.21008	3631.88662	696.47415	1294.98242	1480.1633	1021.31124	298.34113	2768.00482	2169.91799	1642.86668	0.1674	0.1698	2.16E-03	1.54E-03	4.67E-04	2.31E-03	5.59E-04	1.04E-03	1.40E-03	8.57E-04	2.50E-04	1.47E-03	7.98E-04	6.04E-04	2.34E-06	2.88E-06	1.3468E-02
551218.86	4172771.15	1487.27743	1772.5937	531.52967	3628.73825	675.05495	1294.36164	1485.88823	1026.50647	296.48203	2784.40615	2126.02208	1643.17096	0.16924	0.17161	2.17E-03	1.54E-03	4.63E-04	2.31E-03	5.42E-04	1.04E-03	1.41E-03	8.61E-04	2.49E-04	1.48E-03	7.82E-04	6.05E-04	2.37E-06	2.91E-06	1.3461E-02
551855.46	4173382.16	2720.0424	1773.40407	413.56385	1745.74396	380.3017	2287.71664	2769.93185	1030.17957	240.06991	1643.09904	904.73158	2837.25851	0.48203	0.46175	3.97E-03	1.54E-03	3.60E-04	1.11E-03	3.05E-04	1.84E-03	2.63E-03	8.64E-04	2.01E-04	8.75E-04	3.33E-04	1.04E-03	6.74E-06	7.82E-06	1.5084E-02
551863.55	4173376.62	2712.94678	1765.48995	411.68779	1737.52904	378.23091	2288.55528	2762.81231	1026.55073	238.90296	1636.53535	899.82473	2832.94316	0.46652	0.44788	3.96E-03	1.54E-03	3.59E-04	1.11E-03	3.03E-04	1.84E-03	2.62E-03	8.61E-04	2.00E-04	8.71E-04	3.31E-04	1.04E-03	6.53E-06	7.59E-06	1.5041E-02
551229.9	4172733.23	1475.19364	1752.35607	532.52088	3606.18098	688.79068	1286.90696	1473.56901	1014.97263	296.4187	2751.37382	2148.58065	1632.70829	0.16665	0.16903	2.15E-03	1.53E-03	4.64E-04	2.30E-03	5.53E-04	1.03E-03	1.40E-03	8.52E-04	2.49E-04	1.46E-03	7.91E-04	6.01E-04	2.33E-06	2.86E-06	1.3383E-02
551791.13	4173432.07	2697.00573	1728.88274	418.49482	1778.51072	387.60324	2224.28608	2744.16382	1050.7802	242.72183	1680.93074	923.83048	2756.3379	0.58379	0.54723	3.94E-03	1.51E-03	3.64E-04	1.13E-03	3.11E-04	1.78E-03	2.60E-03	8.82E-04	2.04E-04	8.95E-04	3.40E-04	1.01E-03	8.17E-06	9.27E-06	1.4987E-02
551871.65	4173371.08	2696.75752	1755.41142	409.53724	1729.76062	376.31775	2284.13998	2746.34507	1021.53829	237.68623	1628.18373	895.49792	2823.79848	0.45126	0.43406	3.94E-03	1.53E-03	3.57E-04	1.10E-03	3.02E-04	1.83E-03	2.60E-03	8.57E-04	1.99E-04	8.67E-04	3.29E-04	1.04E-03	6.31E-06	7.36E-06	1.4966E-02
551879.75	4173365.54	2683.94236	1747.08515	407.52125	1722.07198	374.37507	2287.17565	2733.37341	1017.93734	236.4777	1621.2972	891.10884	2821.87594	0.43694	0.42103	3.92E-03	1.52E-03	3.55E-04	1.10E-03	3.00E-04	1.83E-03	2.59E-03	8.54E-04	1.98E-04	8.63E-04	3.28E-04	1.04E-03	6.11E-06	7.13E-06	1.4912E-02
551205.34	4172798.67	1476.25929	1770.94028	520.88523	3575.54693	652.74448	1286.63152	1475.27565	1025.26795	291.02957	2765.06624	2061.82382	1634.43844	0.1681	0.17043	2.15E-03	1.54E-03	4.54E-04	2.28E-03	5.24E-04	1.03E-03	1.40E-03	8.60E-04	2.44E-04	1.47E-03	7.59E-04	6.01E-04	2.35E-06	2.89E-06	1.3323E-02
551220.98	4172761.3	1472.80588	1748.82468	526.8807	3578.71627	671.75002	1281.43685	1471.3951	1013.04119	293.75214	2743.69486	2106.87269	1626.31763	0.16656	0.16889	2.15E-03	1.52E-03	4.59E-04	2.28E-03	5.39E-04	1.03E-03	1.39E-03	8.50E-04	2.46E-04	1.46E-03	7.75E-04	5.98E-04	2.33E-06	2.86E-06	1.3308E-02
551812.12	4173420.05	2679.85514	1697.60135	412.78988	1746.35886	381.47817	2261.0957	2727.42266	1029.51615	239.45839	1648.65436	908.15195	2705.10554	0.53878	0.50921	3.91E-03	1.48E-03	3.60E-04	1.11E-03	3.06E-04	1.81E-03	2.59E-03	8.64E-04	2.01E-04	8.78E-04	3.34E-04	9.95E-04	7.54E-06	8.63E-06	1.4855E-02
551223.09	4172751.46	1463.06435	1733.53654	524.22116	3548.28322	671.22101	1273.26315	1461.61732	1004.321	292.12574	2717.45937	2098.15422	1615.62437	0.1648	0.1671	2.14E-03	1.51E-03	4.57E-04	2.26E-03	5.39E-04	1.02E-03	1.39E-03	8.43E-04	2.45E-04	1.45E-03	7.72E-04	5.94E-04	2.31E-06	2.83E-06	1.3213E-02
551784.18	4173442.04	2638.13474	1705.75371	412.78845	1759.05318	383.24547	2183.10746	2683.41844	1035.22809	239.28021	1661.51762	914.08142	2706.85441	0.55678	0.52171	3.85E-03	1.49E-03	3.60E-04	1.12E-03	3.07E-04	1.75E-03	2.54E-03	8.69E-04	2.01E-04	8.84E-04	3.36E-04	9.96E-04	7.79E-06	8.84E-06	1.4721E-02
551206.06	4172789	1460.36547	1742.02538	516.42937	3527.53436	649.32016	1269.12348	1459.29	1008.71307	288.39857	2722.92015	2044.79872	1611.97684	0.16535	0.16763	2.13E-03	1.52E-03	4.50E-04	2.25E-03	5.21E-04	1.02E-03	1.38E-03	8.46E-04	2.42E-04	1.45E-03	7.52E-04	5.93E-04	2.31E-06	2.84E-06	1.3155E-02
551824.24	4173415.35	2631.70495	1663.88756	406.18409	1716.24692	375.49695	2206.89142	2678.41768	1008.25915	235.58343	1618.46334	893.81769	2744.94281	0.50287	0.47743	3.84E-03	1.45E-03	3.54E-04	1.09E-03	3.01E-04	1.77E-03	2.54E-03	8.46E-04	1.98E-04	8.61E-04	3.29E-04	1.01E-03	7.04E-06	8.09E-06	1.4607E-02
551804.36	4173430.14	2629.57876	1674.55105	408.17926	1730.18475	378.10956	2224.02055	2675.53922	1016.9626	236.69583	1633.11623	900.64002	2656.72449	0.52691	0.49701	3.84E-03	1.46E-03	3.56E-04	1.10E-03	3.03E-04	1.78E-03	2.54E-03	8.53E-04	1.99E-04	8.69E-04	3.31E-04	9.77E-04	7.37E-06	8.42E-06	1.4623E-02
551207.01	4172779.52	1444.38309	1714.15586	511.62869	3476.51825	645.43831	1252.72972	1443.24619	992.80888	285.59002	2679.92476	2025.64718	1590.84993	0.16257	0.1648	2.11E-03	1.49E-03	4.46E-04	2.21E-03	5.18E-04	1.01E-03	1.37E-03	8.33E-04	2.40E-04	1.43E-03	7.45E-04	5.85E-04	2.27E-06	2.79E-06	1.2986E-02
551836.73	4173406.9	2617.76062	1654.79322	403.56972	1703.81218	372.75378	2188.05256	2664.43893	999.4994	234.09078	1604.90656	887.15226	2720.75181	0.48196	0.45918	3.82E-03	1.44E-03	3.51E-04	1.08E-03	2.99E-04	1.76E-03	2.53E-03	8.39E-04	1.96E-04	8.54E-04	3.26E-04	1.00E-03	6.74E-06	7.78E-06	1.4510E-02
551224.76	4172722.14	1431.04835	1689.67266	514.7297	3457.43738	666.7805	1245.56429	1429.55156	978.91534	286.45393	2642.29743	2065.02715	1580.21154	0.15952	0.16175	2.09E-03	1.47E-03	4.48E-04	2.20E-03	5.35E-04	9.99E-04	1.35E-03	8.21E-04	2.40E-04	1.41E-03	7.60E-04	5.81E-04	2.23E-06	2.74E-06	1.2914E-02
551229.08	4172713.73	1430.02638	1690.00637	514.44329	3450.74596	668.25052	1247.19952	1428.56446	979.15916	286.20919	2637.48721	2064.97431	1582.1203	0.15882	0.16104	2.09E-03	1.47E-03	4.48E-04	2.20E-03	5.36E-04	1.00E-03	1.35E-03	8.22E-04	2.40E-04	1.40E-03	7.60E-04	5.82E-04	2.22E-06	2.73E-06	1.2908E-02
551844.82	4173401.36	2605.88803	1649.19223	401.7271	1696.26553	370.9546	2176.71465	2652.43348	993.88851	233.04827	1596.33355	882.97551	2705.67458	0.46831	0.4472	3.80E-03	1.44E-03	3.50E-04	1.08E-03	2.98E-04	1.75E-03	2.51E-03	8.34E-04	1.96E-04	8.50E-04	3.25E-04	9.96E-04	6.55E-06	7.58E-06	1.4442E-02
551852.92	4173395.82	2594.79076	1701.88111	399.84995	1689.18845	369.11673	2167.62034	2641.22678	988.66764	231.94433	1588.16326	878.59389	2692.56497	0.45493	0.43537	3.79E-03	1.48E-03	3.48E-04	1.08E-03	2.96E-04	1.74E-03	2.50E-03	8.30E-04	1.95E-04	8.45E-04	3.23E-04	9.91E-04	6.37E-06	7.38E-06	1.4429E-02
551209.13	4172769.65	1433.22123	1694.26983	508.72049	3441.48026	644.32015	1241.91743	1432.02216	981.52493	283.82672	2649.02068	2015.59415	1576.72487	0.16059	0.16278	2.09E-03	1.48E-03	4.43E-04	2.19E-03	5.17E-04	9.96E-04	1.36E-03	8.24E-04	2.38E-04	1.41E-03	7.42E-04	5.80E-04	2.25E-06	2.76E-06	1.2871E-02
551220.44	4172730.54	1426.6508	1682.05796	512.17807	3441.58162	660.96979	1239.32686	1425.17976	974.53522	285.14811	2632.26781	2050.08569	1572.45383	0.15917	0.16138	2.08E-03	1.47E-03	4.46E-04	2.19E-03	5.30E-04	9.94E-04	1.35E-03	8.18E-04	2.39E-04	1.40E-03	7.54E-04	5.79E-04	2.23E-06	2.73E-06	1.2856E-02
551797.19	4173440.15	2573.39543	1648.8596	402.9379	1711.98556	374.31645	2182.89582	2617.64864	1002.77556	233.59683	1615.21058	892.3642	2604.11213	0.50707	0.478	3.76E-03	1.44E-03	3.51E-04	1.09E-03	3.00E-04	1.75E-03	2.48E-03	8.41E-04	1.96E-04	8.60E-04	3.28E-04	9.58E-04	7.10E-06	8.10E-06	1.4365E-02
551861.02	4173390.29	2581.22517	1692.03766	397.88706	1681.32757	367.27151	2159.21023	2627.48817	983.45889	230.81732	1579.89737	874.25106	2679.92456	0.44178	0.42362	3.77E-03	1.47E-03	3.47E-04	1.07E-03	2.95E-04	1.73E-03	2.49E-03	8.25E-04	1.94E-04	8.41E-04	3.22E-04	9.86E-04	6.18E-06	7.18E-06	1.4357E-02
551903.63	4173360.99	2631.35392	1652.11392	387.68875	1643.84926	357.48723	2173.85995	2678.4919	966.27418	224.79748	1546.11807	852.01379	2671.20638	0.38036	0.3679	3.84E-03	1.44E-03	3.38E-04	1.05E-03	2.87E-04	1.74E-03	2.54E-03	8.11E-04	1.89E-04	8.23E-04	3.13E-04	9.83E-04	5.32E-06	6.23E-06	1.4364E-02
551869.11	4173384.75	2570.35309	1683.43816	395.95445	1673.54748	365.32047	2155.79194	2616.4748	979.16385	229.6426	1572.66781	869.73432	2671.95754	0.42923	0.41238	3.75E-03	1.47E-03	3.45E-04	1.07E-03	2.93E-04	1.73E-03	2.48E-03	8.22E-04	1.93E-04	8.37E-04	3.20E-04	9.83E-04	6.01E-06	6.99E-06	1.4299E-02
551918.16	4173350.8	2607.22241	1644.43773	384.56505	1634.35967	354.56547	2200.49807	2653.83634	964.71988	222.90631	1538.32625	845.60588	2692.13379	0.36223	0.35118	3.81E-03	1.43E-03	3.35E-04	1.04E-03	2.84E-04	1.77E-03	2.52E-03	8.09E-04	1.87E-04	8.19E-04	3.11E-04	9.91E-04	5.07E-06	5.95E-06	1.4307E-02
551211.25	4172759.78	1420.40188	1673.17561	504.75727	3398.91767	641.78805	1230.44998	1419.17321	969.55807	281.48633	2613.70887	2000.04935	1561.74812	0.1583	0.16045	2.07E-03	1.46E-03	4.40E-04	2.16E-03	5.15E-04	9.87E-04	1.35E-03	8.14E-04	2.36E-04	1.39E-03	7.36E-04	5.75E-04	2.22E-06	2.72E-06	1.2738E-02
551216.11	4172738.95	1416.19164	1666.20445	506.50561	3400.0969	650.55262	1228.05455	1414.80447	965.48563	282.13461	2605.2615	2018.71216	1558.27238	0.15762	0.15979	2.07E-03	1.45E-03	4.41E-04	2.16E-03	5.22E-04	9.85E-04	1.34E-03	8.10E-04	2.37E-04	1.39E-03	7.43E-04	5.73E-04	2.21E-06	2.71E-06	1.2727E-02
551877.21	4173379.21	2557.18343	1674.5194	393.96197	1665.9934	363.48623	2153.43598	2603.10885	974.90206	228.50862	1565.31985	865.41873	2664.96456	0.41696	0.40131	3.73E-03	1.46E-03	3.43E-04	1.06E-03	2.92E-04	1.73E-03	2.47E-03	8.18E-04	1.92E-04	8.33E-04	3.18E-04	9.81E-04	5.83E-06	6.80E-06	1.4236E-02
551885.31	4173373.67	2542.77819	1665.70249	391.94972	1658.69321	361.59319	2152.15293	2588.50184	970.70644	227.33515	1557.90322	861.31272	2659.22818	0.40506	0.39048	3.71E-03	1.45E-03	3.41E-04	1.06E-03	2.90E-04	1.73E-03	2.45E-03	8.14E-04	1.91E-04	8.29E-04	3.17E-04	9.78E-04	5.67E-06	6.62E-06	1.4172E-02
551817.59	4173428.22	2552.30819	1620.75929	397.6239	1682.89238	368.69548	2137.67891	2596.75638	983.68226	230.56878	1586.01296	878.13476	2558.70691	0.4789	0.45411	3.73E-03	1.41E-03	3.46E-04	1.07E-03	2.96E-04	1.72E-03	2.46E-03	8.25E-04	1.93E-04	8.44E-04	3.23E-04	9.41E-04	6.70E-06	7.70E-06	1.4169E-02
551893.41	4173368.13	2529.8865	1657.80712	389.89583	1651.71098	359.77923	2155.43538	2575.4191	967.36634	226.0993	1551.23948	857.11022	2658.04803	0.39366	0.38006	3.69E-03	1.44E-03	3.40E-04	1.05E-03	2.89E-04	1.73E-03	2.44E-03	8.12E-04	1.90E-04	8.26E-04	3.15E-04	9.78E-04	5.51E-06	6.44E-06	1.4119E-02
551829.75	4173423.51	2508.05229	1591.90785	391.2829	1654.84508	362.84471	2088.22751	2551.68363	963.85411	226.83082	1557.6457	864.03612	2599.12901	0.45163	0.42981	3.66E-03	1.39E-03	3.41E-04	1.05E-03	2.91E-04	1.68E-03	2.42E-03	8.09E-04	1.90E-04	8.29E-04	3.18E-04	9.56E-04	6.32E-06	7.28E-06	1.3943E-02
551810.2	4173438.25	2506.33823	1598.3101	393.09056	1666.73315	365.34451	2102.25287	2549.3685	971.35043	227.81014	1570.49094	870.55018	2512.60919	0.46475	0.44026	3.66E-03	1.39E-03	3.42E-04	1.06E-03	2.93E-04	1.69E-03	2.42E-03	8.15E-04	1.91E-04	8.36E-04	3.20E-04	9.24E-04	6.50E-06	7.46E-06	1.3951E-02
551842.29	4173415.03	2490.5768	1581.9	388.63135	1642.48972	360.16065	2069.52846	2534.03449	955.27378	225.31285	1544.39748	857.62991	2575.09456	0.4361	0.41632	3.64E-03	1.38E-03	3.38E-04	1.05E-03	2.89E-04	1.66E-03	2.40E-03	8.02E-04	1.89E-04	8.22E-04	3.16E-04	9.47E-04	6.10E-06	7.05E-06	1.3837E-02
551850.38	4173409.49	2478.81689	1635.13932	386.85167	1635.45293	358.45451	2059.06658	2522.154	950.04116	224.29761	1536.25669	853.57007	2561.02408	0.42592	0.40741	3.62E-03	1.42E-03	3.37E-04	1.04E-03	2.88E-04	1.65E-03	2.39E-03	7.97E-04	1.88E-04	8.18E-04	3.14E-04	9.42E-04	5.96E-06	6.90E-06	1.3823E-02
551858.48	4173403.95	2466.65059	1625.80691	384.98843	1627.99997	356.65009	2049.98489	2509.82341	944.95774	223.20755	1528.32703	849.34945	2548.09035	0.41566	0.39831	3.60E-03	1.42E-03	3.35E-04	1.04E-03	2.86E-04	1.64E-03	2.38E-03	7.93E-04	1.87E-04	8.13E-04	3.13E-04	9.38E-04	5.82E-06	6.75E-06	1.3754E-02
551866.58	4173398.41	2453.91379	1616.61031	383.1169	1620.47741	354.85604	2042.42461	2496.88147	940.13093	222.09801	1520.64418	845.1776	2536.46184	0.40542	0.38921	3.58E-03	1.41E-03	3.34E-04	1.03E-03	2.85E-04	1.64E-03	2.37E-03	7.89E-04	1.86E-04	8.09E-04	3.11E-04	9.33E-04	5.67E-06	6.60E-06	1.3686E-02
551956.27	4173335.84	2427.61282	1578.70681	365.49128	1560.05481	336.88662	2194.19435	2470.20337	935.59146	211.59771	1480.38868	805.05389	2655.49307	0.30924	0.30111	3.54E-03	1.38E-03	3.18E-04	9.93E-04	2.70E-04	1.76E-03	2.34E-03	7.85E-04	1.78E-04	7.88E-04	2.96E-04	9.77E-04	4.33E-06	5.10E-06	1.3635E-02
551874.68	4173392.88	2442.2053	1608.12876	381.1987	1612.86342	352.98891	2038.07	2485.00261	935.8365	220.96123	1513.45597	840.8059	2527.88399	0.39539	0.3802	3.56E-03	1.40E-03	3.32E-04	1.03E-03	2.83E-04	1.64E-03	2.36E-03	7.85E-04	1.85E-04	8.06E-04	3.09E-04	9.30E-04	5.53E-06	6.44E-06	1.3626E-02
551909.29	4173369.05	2499.72506	1577.79102	373.23709	1584.22834	345.47886	2050.80663	2543.47999	923.10658	216.27747	1487.73661	823.75467	2523.01362	0.35513	0.3436	3.65E-03	1.37E-03	3.25E-04	1.01E-03	2.77E-04	1.65E-03	2.41E-03	7.75E-04	1.81E-04	7.92E-04	3.03E-04	9.28E-04	4.97E-06	5.82E-06	1.3680E-02
551945.6	4173343.57	2440.55317	1568.83944	366.37431	1563.46881	338.60044	2136.79781	2483.18012	925.84815	212.20669	1475.05312	808.81092	2598.32084	0.31857	0.3098	3.56E-03	1.37E-03	3.19E-04	9.96E-04	2.72E-04	1.71E-03	2.35E-03	7.77E-04	1.78E-04	7.85E-04	2.98E-04	9.56E-04	4.46E-06	5.25E-06	1.3586E-02
551823.22	4173436.36	2433.43078	1549.86031	383.16483	1622.66244	356.41552	2023.70877	2474.97897	940.60635	222.04587	1526.62158	849.13674	2520.19581	0.4277	0.40693	3.55E-03	1.35E-03	3.34E-04	1.03E-03	2.86E-04	1.62E-03	2.35E-03	7.89E-04	1.86E-04	8.13E-04	3.12E-04	9.27E-04	5.98E-06	6.90E-06	1.3565E-02
551938.34	4173348.67	2451.96456	1566.95858	367.52558	1566.94585	339.94961	2109.2856	2494.75934	922.63227	212.86019	1475.13604	811.73584	2572.11979	0.32538	0.31613	3.58E-03	1.36E-03	3.20E-04	9.98E-04	2.73E-04	1.69E-03	2.36E-03	7.74E-04	1.79E-04	7.85E-04	2.99E-04	9.46E-04	4.55E-06	5.36E-06	1.3584E-02
551882.77	4173387.34	2428.22664	1599.2292	379.28662	1605.74247	351.23888	2033.95317	2470.81221	931.45532	219.83304	1506.12801	836.84079	2519.53459	0.38544	0.37122	3.54E-03	1.39E-03	3.30E-04	1.02E-03	2.82E-04	1.63E-03	2.34E-03	7.82E-04	1.84E-04	8.02E-04	3.08E-04	9.27E-04	5.39E-06	6.29E-06	1.3560E-02
551923.81	4173358.86	2475.36095	1567.51291	370.04873	1575.20338	342.74747	2064.31129	2518.5461	919.11653	214.3785	1477.78048	817.92357	2531.49404	0.33961	0.32928	3.61E-03	1.37E-03	3.22E-04	1.00E-03	2.75E-04	1.66E-03	2.39E-03	7.71E-04	1.80E-04	7.87E-04	3.01E-04	9.31E-04	4.75E-06	5.58E-06	1.3602E-02
551890.87	4173381.8	2415.08432	1590.96613	377.29662	1598.67743	349.40538	2032.62252	2457.50172	927.51188	218.71357	1499.15713	832.75548	2514.04848	0.37573	0.36241	3.53E-03	1.39E-03	3.29E-04	1.02E-03	2.80E-04	1.63E-03	2.33E-03	7.78E-04	1.84E-04	7.98E-04	3.06E-04	9.25E-04	5.26E-06	6.14E-06	1.3500E-02
551898.97	4173376.26	2400.31033	1582.33506	375.29718	1592.06224	347.72297	2031.08784	2442.53228	923.4135	217.52611	1491.80459	828.9626	2508.5464	0.36615	0.35366	3.50E-03	1.38E-03	3.27E-04	1.01E-03	2.79E-04	1.63E-03	2.32E-03	7.75E-04	1.83E-04	7.94E-04	3.05E-04	9.23E-04	5.12E-06	5.99E-06	1.3436E-02
551835.27	4173431.67	2388.15479	1521.54944	377.07686	1595.785	350.86896	1977.39872	2428.83989	921.88532	218.47002	1499.60277	836.00225	2462.84826	0.4067	0.3881	3.49E-03	1.33E-03	3.28E-04	1.02E-03	2.81E-04	1.59E-03	2.30E-03	7.74E-04	1.83E-04	7.98E-04	3.08E-04	9.06E-04	5.69E-06	6.58E-06	1.3307E-02
551847.85	4173423.16	2372.22905	1572.72181	374.47187	1584.59821	348.17096	1960.56438	2412.77014	913.94269	216.97695	1487.27912	829.50303	2440.98542	0.3958	0.3786	3.46E-03	1.37E-03	3.26E-04	1.01E-03	2.79E-04	1.57E-03	2.29E-03	7.67E-04	1.82E-04	7.92E-04	3.05E-04	8.98E-04	5.54E-06	6.42E-06	1.3263E-02
551855.94	4173417.62	2359.79631	1563.61871	372.72562	1577.586	346.55481	1950.42475	2400.1676	908.92954	215.98963	1479.44437	825.64137	2427.34996	0.38824	0.37197	3.44E-03	1.36E-03	3.25E-04	1.00E-03	2.78E-04	1.56E-03	2.27E-03	7.63E-04	1.81E-04	7.87E-04	3.04E-04	8.93E-04	5.43E-06	6.30E-06	1.3193E-02
551989.41	4173325.24	2270.29688	1527.57165	347.46045	1494.20232	320.9952	2172.4306	2310.02905	911.25997	201.38698	1421.80129	768.82517	2614.75269	0.27136	0.26495	3.31E-03	1.33E-03	3.03E-04	9.51E-04	2.58E-04	1.74E-03	2.19E-03	7.65E-04	1.69E-04	7.57E-04	2.83E-04	9.62E-04	3.80E-06	4.49E-06	1.3032E-02
551864.04	4173412.08	2346.84227	1554.56054	370.92265	1570.12467	344.82781	1941.31408	2387.01915	903.96807	214.93981	1471.73206	821.59581	2414.61751	0.38042	0.36504	3.43E-03	1.35E-03	3.23E-04	1.00E-03	2.77E-04	1.56E-03	2.26E-03	7.58E-04	1.80E-04	7.83E-04	3.02E-04	8.88E-04	5.32E-06	6.19E-06	1.3123E-02
551981.43	4173330.65	2279.36006	1518.05145	348.73255	1496.37479	322.36457	2134.88777	2318.92982	904.20633	202.13725	1422.39659	771.62305	2574.86744	0.2773	0.27055	3.33E-03	1.32E-03	3.04E-04	9.53E-04	2.59E-04	1.71E-03	2.20E-03	7.59E-04	1.70E-04	7.57E-04	2.84E-04	9.47E-04	3.88E-06	4.58E-06	1.3000E-02
551872.14	4173406.54	2335.92674	1546.22403	369.124	1562.87036	343.01597	1935.24066	2375.95886	899.68701	213.85214	1464.74485	817.42871	2404.63335	0.37258	0.35808	3.41E-03	1.35E-03	3.21E-04	9.95E-04	2.75E-04	1.55E-03	2.25E-03	7.55E-04	1.79E-04	7.80E-04	3.01E-04	8.85E-04	5.21E-06	6.07E-06	1.3064E-02
551973.46	4173336.05	2288.76593	1507.44883	350.05316	1499.22003	323.83805	2090.35767	2328.13868	894.92261	202.50236	1420.74513	774.77959	2529.03392	0.28331	0.2762	3.34E-03	1.31E-03	3.05E-04	9.55E-04	2.60E-04	1.68E-03	2.21E-03	7.51E-04	1.70E-04	7.56E-04	2.85E-04	9.31E-04	3.96E-06	4.68E-06	1.2958E-02
551880.24	4173401	2324.26082	1538.07034	367.30992	1555.51481	341.28478	1930.7565	2364.13767	895.57015	212.8042	1457.85182	813.29838	2396.17324	0.36466	0.35099	3.39E-03	1.34E-03	3.20E-04	9.90E-04	2.74E-04	1.55E-03	2.24E-03	7.51E-04	1.79E-04	7.76E-04	2.99E-04	8.82E-04	5.10E-06	5.95E-06	1.3004E-02
551914.94	4173377.11	2377.94767	1508.83126	359.62394	1527.84873	334.03705	1939.41663	2418.5781	883.06842	208.29156	1432.97892	796.90831	2388.38244	0.33167	0.32104	3.47E-03	1.31E-03	3.13E-04	9.73E-04	2.68E-04	1.56E-03	2.29E-03	7.41E-04	1.75E-04	7.63E-04	2.93E-04	8.79E-04	4.64E-06	5.44E-06	1.3048E-02
551962.09	4173343.78	2305.77727	1499.97534	351.41793	1504.11779	325.88517	2042.57043	2345.24663	887.14307	203.37454	1418.03449	779.24112	2480.98608	0.29212	0.28447	3.37E-03	1.31E-03	3.06E-04	9.58E-04	2.61E-04	1.64E-03	2.22E-03	7.44E-04	1.71E-04	7.55E-04	2.87E-04	9.13E-04	4.09E-06	4.82E-06	1.2937E-02
551888.33	4173395.47	2313.03744	1530.38782	365.49195	1548.52363	339.49802	1929.01421	2352.74745	891.99182	211.74948	1451.49409	809.24327	2390.38468	0.35679	0.34391	3.38E-03	1.33E-03	3.18E-04	9.86E-04	2.72E-04	1.55E-03	2.23E-03	7.48E-04	1.78E-04	7.73E-04	2.98E-04	8.79E-04	4.99E-06	5.83E-06	1.2950E-02
551951.26	4173351.64	2320.97077	1498.04859	352.95492	1507.31558	327.43043	2010.86563	2360.32467	883.92025	204.32337	1419.34836	782.48043	2449.46113	0.30055	0.29231	3.39E-03	1.30E-03	3.07E-04	9.60E-04	2.63E-04	1.61E-03	2.24E-03	7.42E-04	1.71E-04	7.55E-04	2.88E-04	9.01E-04	4.21E-06	4.95E-06	1.2939E-02
551936.73	4173361.83	2343.59103	1498.66323	355.39446	1514.62629	330.04102	1971.9703	2383.57132	880.94474	205.76825	1422.49772	788.10258	2413.63133	0.31254	0.30342	3.42E-03	1.31E-03	3.10E-04	9.64E-04	2.65E-04	1.58E-03	2.26E-03	7.39E-04	1.73E-04	7.57E-04	2.90E-04	8.88E-04	4.37E-06	5.14E-06	1.2963E-02
551896.43	4173389.93	2296.12277	1521.02192	363.46404	1541.91208	337.86885	1922.1198	2335.57961	887.01504	210.55309	1443.4737	805.68705	2379.86925	0.34864	0.3365	3.35E-03	1.32E-03	3.17E-04	9.82E-04	2.71E-04	1.54E-03	2.21E-03	7.44E-04	1.77E-04	7.68E-04	2.96E-04	8.76E-04	4.88E-06	5.70E-06	1.2873E-02
551904.53	4173384.39	2283.96011	1513.38417	361.58572	1535.48377	336.17582	1922.82828	2323.26934	883.53859	209.46729	1437.01755	801.9063	2376.10869	0.34085	0.32939	3.33E-03	1.32E-03	3.15E-04	9.78E-04	2.70E-04	1.54E-03	2.20E-03	7.41E-04	1.76E-04	7.65E-04	2.95E-04	8.74E-04	4.77E-06	5.58E-06	1.2820E-02
551929.47	4173366.92	2255.31943	1496.56178	356.37688	1519.14763	331.4751	1942.81084	2294.38248	877.26282	206.36724	1421.36251	791.51177	2387.20641	0.31837	0.30878	3.29E-03	1.30E-03	3.10E-04	9.67E-04	2.66E-04	1.56E-03	2.17E-03	7.36E-04	1.73E-04	7.57E-04	2.91E-04	8.78E-04	4.45E-06	5.23E-06	1.2717E-02
CONCUNIT ug/	m^3																													
DEPUNIT g/m^	2																													

Midway Village Project—All Off-site Receptors Scenario

All Off-site Receptors: Exposed to Phases 1+2+3+4 Demolition and Phases 1+2+3+4 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

Unmitigated Concentrations

Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.59E-06
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	1.13E-06
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	1.13E-06
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	8.62E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	8.68E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	8.68E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	1.44E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	1.02E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	1.02E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	1.21E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	8.14E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	8.14E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	4.69E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	4.74E-04

Unmitigated PM2.5 Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
5.5064E-01	551763.51	4172840.85

MIR UTM	551763.51	4172840.85
Latitude, Longitude	37°42'04.8"N 122°24'46.1"W	

X	Y	Unit Emissions Demolition Area 1A (Phase 1) AREA8	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) AREA9	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) AREA10	Unit Emissions Demolition Area 3A (Phase 3) AREA11	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Construction Area 1B (Phase 1) AREA2	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) AREA3	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) AREA4	Unit Emissions Construction Area 3B (Phase 3) AREA5	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Road Segment 1 LINE1	Unit Emissions Road Segment 2 LINE2
551763.51	4172840.85	64602.40637	13983.34295	65769.74448	58987.55675	40337.01297	5357.08967	61830.48958	8101.26788	27676.37478	52416.22872	87627.14487	7526.48473	0.87588	0.86566
551760.24	4172831.56	53670.68708	12353.06854	56620.45345	57660.10853	50770.23164	4979.1095	51644.11565	6940.80097	21234.25424	48622.61948	99583.36673	6983.56985	0.89425	0.88382
551785.57	4172857.1	84715.16033	17456.05793	45188.73925	50959.76905	20261.38392	6226.90249	80196.12675	10544.76826	26589.68961	49102.60533	46279.46112	8691.89029	0.76041	0.7526
551568.65	4173003.88	14589.91369	113158.5989	4489.87338	48624.12408	3752.77982	38156.84601	14676.38996	69908.17452	2570.385	74494.21139	11031.91488	49344.55997	12.06746	13.52869
551565.43	4172994.93	14467.87805	108774.6102	4613.40206	56349.10018	3969.76135	33720.81783	14536.9892	62431.58858	2638.7479	83877.88486	12040.77064	43646.06742	12.05368	13.54158
551562.21	4172985.98	14066.59961	102795.9946	4741.13472	65921.19248	4191.96335	29989.06749	14117.10949	54700.12339	2709.35668	92519.68259	13184.76867	38843.05428	11.99866	13.47263
551756.98	4172822.27	42121.234	10375.77459	38914.57823	55270.30929	61363.46572	4451.6105	40794.006	5741.86225	14494.50852	42766.24139	113485.7243	6228.55513	0.92281	0.91182
551558.98	4172977.03	13841.71438	95047.52039	4868.99275	77587.17648	4419.02431	26809.85554	13876.38617	47457.36852	2779.76878	99560.97041	14498.51234	34750.67984	11.92408	13.3595
551555.76	4172968.07	13572.44385	83764.12702	4992.92204	89279.52393	4652.18449	24072.07486	13591.84775	41103.93444	2848.07336	104513.4984	16036.98576	31220.24591	11.88962	13.30544
551552.53	4172959.12	13261.72429	73400.10118	5113.134	99370.84802	4887.46591	21703.38888	13266.81246	35703.70907	2913.8782	107586.6156	17848.0931	27901.4077	11.85687	13.24135
551782.31	4172847.81	67443.38143	15538.32949	47264.15042	50617.80712	24626.85985	5659.13668	64373.25066	9199.19041	25333.88133	47485.85795	53930.07467	7894.99939	0.77392	0.76597
551753.71	4172812.98	36018.56154	9159.85729	27632.38664	52318.79664	69380.53949	4158.98699	34987.66964	5089.38488	11137.84419	37957.97187	118267.5784	5803.01847	0.9526	0.93975
551572.47	4173027.61	13973.10185	96793.41386	3899.35237	34418.80583	3195.81892	49021.33777	14095.4356	65291.25079	2250.28627	47914.38351	8958.03968	62632.09772	9.93891	10.86632
551779.04	4172838.52	53879.43835	13365.9277	46661.53071	50279.81348	29930.58086	5099.40256	51794.98055	7869.97528	22327.28324	45319.01746	62323.64113	6989.5063	0.78825	0.78042
551750.44	4172803.69	32224.16239	8361.49007	20981.58636	49604.30544	75141.35912	3975.87284	31349.38408	4682.86528	9191.22965	34012.30132	119594.9011	5537.76763	0.97683	0.96346

X	Y	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Total PM2.5 (ug/m3)
551763.51	4172840.85	1.03E-01	1.57E-02	7.41E-02	5.09E-02	3.50E-02	4.65E-03	8.90E-02	8.27E-03	2.83E-02	6.36E-02	7.13E-02	6.13E-03	4.11E-04	4.10E-04	5.5064E-01
551760.24	4172831.56	8.54E-02	1.39E-02	6.38E-02	4.97E-02	4.41E-02	4.32E-03	7.44E-02	7.09E-03	2.17E-02	5.90E-02	8.10E-02	5.68E-03	4.19E-04	4.19E-04	5.1096E-01
551785.57	4172857.1	1.35E-01	1.97E-02	5.09E-02	4.39E-02	1.76E-02	5.41E-03	1.15E-01	1.08E-02	2.71E-02	5.96E-02	3.77E-02	7.07E-03	3.56E-04	3.57E-04	5.3078E-01
551568.65	4173003.88	2.32E-02	1.27E-01	5.06E-03	4.19E-02	3.26E-03	3.31E-02	2.11E-02	7.14E-02	2.62E-03	9.04E-02	8.98E-03	4.02E-02	5.66E-03	6.41E-03	4.8082E-01
551565.43	4172994.93	2.30E-02	1.23E-01	5.20E-03	4.86E-02	3.45E-03	2.93E-02	2.09E-02	6.37E-02	2.69E-03	1.02E-01	9.80E-03	3.55E-02	5.65E-03	6.42E-03	4.7863E-01
551562.21	4172985.98	2.24E-02	1.16E-01	5.34E-03	5.69E-02	3.64E-03	2.60E-02	2.03E-02	5.58E-02	2.77E-03	1.12E-01	1.07E-02	3.16E-02	5.62E-03	6.39E-03	4.7564E-01
551756.98	4172822.27	6.70E-02	1.17E-02	4.38E-02	4.77E-02	5.33E-02	3.87E-03	5.87E-02	5.86E-03	1.48E-02	5.19E-02	9.24E-02	5.07E-03	4.33E-04	4.32E-04	4.5698E-01
551558.98	4172977.03	2.20E-02	1.07E-01	5.48E-03	6.69E-02	3.84E-03	2.33E-02	2.00E-02	4.85E-02	2.84E-03	1.21E-01	1.18E-02	2.83E-02	5.59E-03	6.33E-03	4.7273E-01
551555.76	4172968.07	2.16E-02	9.43E-02	5.62E-03	7.70E-02	4.04E-03	2.09E-02	1.96E-02	4.20E-02	2.91E-03	1.27E-01	1.31E-02	2.54E-02	5.57E-03	6.31E-03	4.6516E-01
551552.53	4172959.12	2.11E-02	8.27E-02	5.76E-03	8.57E-02	4.24E-03	1.88E-02	1.91E-02	3.65E-02	2.97E-03	1.31E-01	1.45E-02	2.27E-02	5.56E-03	6.28E-03	4.5653E-01
551782.31	4172847.81	1.07E-01	1.75E-02	5.32E-02	4.37E-02	2.14E-02	4.91E-03	9.27E-02	9.39E-03	2.59E-02	5.76E-02	4.39E-02	6.43E-03	3.63E-04	3.63E-04	4.8466E-01
551753.71	4172812.98	5.73E-02	1.03E-02	3.11E-02	4.51E-02	6.02E-02	3.61E-03	5.04E-02	5.20E-03	1.14E-02	4.61E-02	9.63E-02	4.72E-03	4.46E-04	4.45E-04	4.2263E-01
551572.47	4173027.61	2.22E-02	1.09E-01	4.39E-03	2.97E-02	2.77E-03	4.26E-02	2.03E-02	6.67E-02	2.30E-03	5.82E-02	7.29E-03	5.10E-02	4.66E-03	5.15E-03	4.2616E-01
551779.04	4172838.52	8.57E-02	1.51E-02	5.26E-02	4.34E-02	2.60E-02	4.43E-03	7.46E-02	8.03E-03	2.28E-02	5.50E-02	5.07E-02	5.69E-03	3.69E-04	3.70E-04	4.4471E-01
551750.44	4172803.69	5.13E-02	9.42E-03	2.36E-02	4.28E-02	6.52E-02	3.45E-03	4.51E-02	4.78E-03	9.38E-03	4.13E-02	9.73E-02	4.51E-03	4.58E-04	4.57E-04	3.9916E-01

551715	4172753.51	19749.94235	6118.97361	10836.84028	32775.35942	35368.66486	3492.36629	19308.26449	3643.18558	5134.7141	16974.07369	67860.29679	4833.95208	1.29964	1.29859	3.14E-02	6.89E-03	1.22E-02	2.83E-02	3.07E-02	3.03E-03	2.78E-02	3.72E-03	5.24E-03	2.06E-02	5.52E-02	3.93E-03	6.09E-04	6.15E-04	2.3030E-01
551505.38	4172915.37	8740.21615	24039.815	3893.55462	62457.34516	4296.32993	10723.999	8712.17865	12878.31553	2200.15373	49510.68885	24242.73326	13729.92996	4.21032	4.4209	1.39E-02	2.71E-02	4.39E-03	5.39E-02	3.73E-03	9.31E-03	1.25E-02	1.31E-02	2.25E-03	6.01E-02	1.97E-02	1.12E-02	1.97E-03	2.10E-03	2.3530E-01
551668.12	4172745.39	16636.59623	7208.8456	12329.82452	31707.82735	36442.77016	4072.02882	16298.57228	4395.42632	6087.30295	17927.0401	65334.29581	5609.12507	1.89405	1.95931	2.65E-02	8.12E-03	1.39E-02	2.73E-02	3.16E-02	3.54E-03	2.35E-02	4.49E-03	6.21E-03	2.18E-02	5.32E-02	4.56E-03	8.88E-04	9.29E-04	2.2650E-01
551793.14	4172793.87	20238.08094	7330.38237	16833.22194	34870.73047	30176.11736	3169.36176	19799.50216	4109.20334	7380.26947	26245.94215	49536.26112	4345.34711	0.68914	0.68498	3.22E-02	8.26E-03	1.90E-02	3.01E-02	2.62E-02	2.75E-03	2.85E-02	4.20E-03	7.53E-03	3.19E-02	4.03E-02	3.54E-03	3.23E-04	3.25E-04	2.3505E-01
551525.14	4172999.33	9831.1499	39839.36006	3178.05312	37606.42911	3118.86749	20114.08565	9874.36697	22996.78809	1812.80744	39496.73749	10648.48631	25395.84294	3.49638	3.65366	1.56E-02	4.49E-02	3.58E-03	3.24E-02	2.71E-03	1.75E-02	1.42E-02	2.35E-02	1.85E-03	4.79E-02	8.67E-03	2.07E-02	1.64E-03	1.73E-03	2.3690E-01
551567.75	4173089.8	10194.56776	32460.2978	2490.88209	17429.25109	2130.2843	46859.10094	10328.70356	20307.97024	1440.14695	19607.63064	5749.47184	54747.54854	4.41425	4.57489	1.62E-02	3.66E-02	2.81E-03	1.50E-02	1.85E-03	4.07E-02	1.49E-02	2.07E-02	1.47E-03	2.38E-02	4.68E-03	4.46E-02	2.07E-03	2.17E-03	2.2751E-01
551528.37	4173008.28	9903.18838	40655.64831	3111.38982	34820.35709	3008.84584	21768.96616	9955.57152	23957.73972	1775.65646	37356.37935	9937.77111	27393.66961	3.51311	3.66885	1.58E-02	4.58E-02	3.50E-03	3.00E-02	2.61E-03	1.89E-02	1.43E-02	2.45E-02	1.81E-03	4.54E-02	8.09E-03	2.23E-02	1.65E-03	1.74E-03	2.3632E-01
551695.88	4172749.8	18504.81565	6413.51454	11720.6252	31476.03045	35621.15847	3686.53632	18102.66994	3872.94767	5566.14455	16171.38242	67221.44197	5101.43258	1.64785	1.68457	2.94E-02	7.22E-03	1.32E-02	2.71E-02	3.09E-02	3.20E-03	2.61E-02	3.95E-03	5.68E-03	1.96E-02	5.47E-02	4.15E-03	7.72E-04	7.98E-04	2.2692E-01
551527.61	4172782.74	7844.2331	11403.07825	4672.44247	70299.22278	8338.75559	5577.35774	7779.41389	6408.63489	2542.17051	32214.64283	58770.40892	7321.58155	5.12239	5.50009	1.25E-02	1.28E-02	5.26E-03	6.06E-02	7.24E-03	4.84E-03	1.12E-02	6.54E-03	2.60E-03	3.91E-02	4.78E-02	5.96E-03	2.40E-03	2.61E-03	2.2155E-01
551531.59	4173017.23	9956.93442	41039.20559	3045.06035	32103.08438	2897.75441	23577.72728	10018.37734	24633.93949	1738.96637	35159.81292	9283.4164	29551.77691	3.52999	3.68271	1.58E-02	4.62E-02	3.43E-03	2.77E-02	2.52E-03	2.05E-02	1.44E-02	2.51E-02	1.78E-03	4.27E-02	7.56E-03	2.41E-02	1.65E-03	1.75E-03	2.3521E-01
551521.92	4172990.38	9738.63007	37797.96829	3244.54872	40256.72362	3228.40706	18603.77807	9772.70523	21829.1439	1850.00046	41481.52304	11425.98907	23550.67767	3.4809	3.63842	1.55E-02	4.26E-02	3.65E-03	3.47E-02	2.80E-03	1.62E-02	1.41E-02	2.23E-02	1.89E-03	5.04E-02	9.30E-03	1.92E-02	1.63E-03	1.72E-03	2.3583E-01
551734.11	4172757.23	19903.88901	5832.76033	9341.08603	32737.3487	36437.62426	3260.65184	19467.35855	3408.004	4558.41445	17972.37776	65028.76662	4502.40171	1.01849	1.01386	3.17E-02	6.57E-03	1.05E-02	2.82E-02	3.16E-02	2.83E-03	2.80E-02	3.48E-03	4.65E-03	2.18E-02	5.29E-02	3.66E-03	4.77E-04	4.80E-04	2.2700E-01
551518.69	4172981.42	9622.7141	36203.81406	3310.34643	42849.68589	3337.31231	17220.62002	9647.70453	20528.98571	1886.91889	43210.97724	12279.52047	21573.36677	3.46522	3.62211	1.53E-02	4.08E-02	3.73E-03	3.70E-02	2.90E-03	1.50E-02	1.39E-02	2.10E-02	1.93E-03	5.25E-02	9.99E-03	1.76E-02	1.62E-03	1.72E-03	2.3475E-01
551515.47	4172972.47	9465.1816	34182.33092	3368.67125	45206.16603	3447.98726	15919.88638	9481.58015	19124.1612	1919.1978	44459.57304	13244.7049	19973.61316	3.4464	3.60493	1.51E-02	3.85E-02	3.79E-03	3.90E-02	2.99E-03	1.38E-02	1.37E-02	1.95E-02	1.96E-03	5.40E-02	1.08E-02	1.63E-02	1.62E-03	1.71E-03	2.3263E-01
551502.15	4172906.4	8444.1288	21985.15045	3886.32122	62099.50058	4374.96698	9976.13987	8412.60292	11830.37128	2190.18284	47545.87341	25702.29809	12779.79086	4.18436	4.39752	1.34E-02	2.48E-02	4.38E-03	5.36E-02	3.80E-03	8.66E-03	1.21E-02	1.21E-02	2.24E-03	5.77E-02	2.09E-02	1.04E-02	1.96E-03	2.08E-03	2.2811E-01
551498.51	4172867.21	7753.63061	16886.42191	4011.0997	67647.35659	5020.96594	7917.5985	7711.33121	9188.72298	2229.36447	42588.4936	37974.15362	10198.38875	5.24083	5.5538	1.23E-02	1.90E-02	4.52E-03	5.83E-02	4.36E-03	6.87E-03	1.11E-02	9.38E-03	2.28E-03	5.17E-02	3.09E-02	8.30E-03	2.46E-03	2.63E-03	2.2421E-01
551592.46	4173129.39	10002.92381	22956.32664	2121.22262	12600.56585	1752.16004	58526.94575	10162.4658	14157.16516	1236.91742	13748.57278	4483.87105	65721.37347	5.87395	6.15755	1.59E-02	2.59E-02	2.39E-03	1.09E-02	1.52E-03	5.08E-02	1.46E-02	1.45E-02	1.26E-03	1.67E-02	3.65E-03	5.35E-02	2.75E-03	2.92E-03	2.1722E-01
551540.62	4173042.59	9909.39199	39150.86853	2825.04292	25569.84395	2596.70028	29016.14517	9994.93374	24246.58961	1617.6213	28623.75589	7764.20941	35830.4815	3.54542	3.68495	1.58E-02	4.41E-02	3.18E-03	2.21E-02	2.25E-03	2.52E-02	1.44E-02	2.48E-02	1.65E-03	3.47E-02	6.32E-03	2.92E-02	1.66E-03	1.75E-03	2.2698E-01
551499.47	4172838.8	7352.12576	14222.07702	3978.82193	69638.18631	5633.73716	6818.82179	7306.70422	7811.38305	2193.38636	37188.45489	46060.00525	8822.88704	6.5143	7.20839	1.17E-02	1.60E-02	4.48E-03	6.01E-02	4.89E-03	5.92E-03	1.05E-02	7.97E-03	2.24E-03	4.51E-02	3.75E-02	7.18E-03	3.05E-03	3.42E-03	2.2009E-01
551773.67	4172774.52	18595.96842	5959.648	10517.63372	32914.52147	36339.32727	2945.34172	18240.42495	3346.48692	4833.78684	21685.65806	57446.00652	4035.98124	0.76764	0.76199	2.96E-02	6.71E-03	1.18E-02	2.84E-02	3.16E-02	2.56E-03	2.63E-02	3.42E-03	4.93E-03	2.63E-02	4.68E-02	3.28E-03	3.60E-04	3.61E-04	2.2235E-01
551570.84	4173098.38	10006.60046	29657.82193	2389.80896	16225.1879	2040.06777	47706.17374	10143.55891	18509.97552	1383.74094	18041.13614	5453.60175	55200.35043	4.4119	4.57152	1.59E-02	3.34E-02	2.69E-03	1.40E-02	1.77E-03	4.14E-02	1.46E-02	1.89E-02	1.41E-03	2.19E-02	4.44E-03	4.49E-02	2.07E-03	2.17E-03	2.1962E-01
551512.24	4172963.52	9298.18744	32048.81357	3381.70832	47548.37754	3554.86347	14600.89578	9306.18858	17438.9269	1923.64121	44172.93861	14282.67749	18539.76468	3.42189	3.57492	1.48E-02	3.61E-02	3.81E-03	4.10E-02	3.09E-03	1.27E-02	1.34E-02	1.78E-02	1.96E-03	5.36E-02	1.16E-02	1.51E-02	1.60E-03	1.69E-03	2.2828E-01
551505.44	4172809.34	7193.29349	12293.92935	4022.39127	69666.61402	6402.31527	5997.2811	7144.12712	6821.26881	2201.96572	32995.11639	52392.17824	7802.76281	7.19873	8.17425	1.14E-02	1.38E-02	4.53E-03	6.01E-02	5.56E-03	5.21E-03	1.03E-02	6.96E-03	2.25E-03	4.01E-02	4.26E-02	6.35E-03	3.37E-03	3.87E-03	2.1647E-01
551498.93	4172897.44	8154.02856	20170.15904	3862.73638	61423.42825	4379.97839	9305.86037	8119.97999	10901.1873	2170.33115	45351.58035	27191.76424	11928.10522	4.15616	4.36876	1.30E-02	2.27E-02	4.35E-03	5.30E-02	3.80E-03	8.08E-03	1.17E-02	1.11E-02	2.22E-03	5.51E-02	2.21E-02	9.71E-03	1.95E-03	2.07E-03	2.2085E-01
551509.02	4172954.57	9085.99007	29688.87665	3415.52102	49430.55954	3633.33968	13503.39992	9086.40909	16068.13261	1941.87258	44282.60255	15462.61675	17167.59107	3.40459	3.55639	1.45E-02	3.34E-02	3.85E-03	4.26E-02	3.15E-03	1.17E-02	1.31E-02	1.64E-02	1.98E-03	5.38E-02	1.26E-02	1.40E-02	1.60E-03	1.69E-03	2.2432E-01
551500.57	4172818.79	7133.93626	12737.30985	3932.99147	68527.65484	6033.54935	6204.0396	7087.26861	7043.95316	2157.92477	33672.83585	49264.63896	8051.87943	6.71979	7.59086	1.14E-02	1.43E-02	4.43E-03	5.91E-02	5.24E-03	5.39E-03	1.02E-02	7.19E-03	2.20E-03	4.09E-02	4.01E-02	6.55E-03	3.15E-03	3.60E-03	2.1373E-01
551789.87	4172784.58	18577.42735	6650.98411	13913.40487	33182.06955	30862.67595	3006.42019	18207.25809	3723.80343	6133.90005	23952.60308	49510.48585	4115.02367	0.69322	0.68949	2.96E-02	7.49E-03	1.57E-02	2.86E-02	2.68E-02	2.61E-03	2.62E-02	3.80E-03	6.26E-03	2.91E-02	4.03E-02	3.35E-03	3.25E-04	3.27E-04	2.2041E-01
551546.53	4173059.33	9892.24749	36171.39922	2673.67507	22056.77068	2403.35895	32743.8617	9993.32822	22502.65757	1534.29881	24818.61441	6933.66195	39856.49057	3.54197	3.67057	1.57E-02	4.07E-02	3.01E-03	1.90E-02	2.09E-03	2.84E-02	1.44E-02	2.30E-02	1.57E-03	3.01E-02	5.64E-03	3.24E-02	1.66E-03	1.74E-03	2.1957E-01
551811.62	4172804.06	21030.3943	8422.74618	18567.19601	33073.36332	21442.18218	3366.40464	20417.38919	4827.71061	8781.08577	27145.29854	38737.29162	4619.07577	0.62385	0.62013	3.35E-02	9.49E-03	2.09E-02	2.85E-02	1.86E-02	2.92E-03	2.94E-02	4.93E-03	8.96E-03	3.30E-02	3.15E-02	3.76E-03	2.92E-04	2.94E-04	2.2605E-01
551505.79	4172945.6	8884.19154	27541.46375	3461.0709	51302.96936	3707.04952	12554.62524	8877.46197	14860.96009	1966.19362	44323.88199	16690.1723	15980.61366	3.39281	3.54237	1.41E-02	3.10E-02	3.90E-03	4.42E-02	3.22E-03	1.09E-02	1.28E-02	1.52E-02	2.01E-03	5.38E-02	1.36E-02	1.30E-02	1.59E-03	1.68E-03	2.2105E-01
551573.93	4173106.97	9822.29203	27168.97488	2294.50712	15109.91061	1951.53829	48083.12978	9961.11514	16916.55164	1330.32112	16660.79409	5169.98963	55233.0191	4.41806	4.57925	1.56E-02	3.06E-02	2.58E-03	1.30E-02	1.69E-03	4.18E-02	1.43E-02	1.73E-02	1.36E-03	2.02E-02	4.21E-03	4.50E-02	2.07E-03	2.17E-03	2.1189E-01
551495.29	4172858.24	7426.71734	15469.64606	3870.92106	64171.5317	5029.88275	7390.89243	7385.19662	8457.259	2145.95239	38763.40943	37220.63708	9524.36041	5.0457	5.36077	1.18E-02	1.74E-02	4.36E-03	5.53E-02	4.37E-03	6.42E-03	1.06E-02	8.63E-03	2.19E-03	4.71E-02	3.03E-02	7.75E-03	2.36E-03	2.54E-03	2.1120E-01
551502.56	4172936.63	8652.84685	25419.80023	3493.06294	52680.07146	3772.98431	11668.76827	8639.91489	13709.26809	1982.25618	43823.21505	18033.12605	14869.82475	3.37864	3.52699	1.38E-02	2.86E-02	3.93E-03	4.54E-02	3.28E-03	1.01E-02	1.24E-02	1.40E-02	2.02E-03	5.32E-02	1.47E-02	1.21E-02	1.58E-03	1.67E-03	2.1687E-01
551595.55	4173137.97	9784.99444	20914.40886	2030.08863	11747.22545	1671.29233	56349.90045	9943.59951	12852.82327	1184.76205	12759.32096	4250.62552	63203.27295	5.89893	6.19123	1.56E-02	2.36E-02	2.29E-03	1.01E-02	1.45E-03	4.89E-02	1.43E-02	1.31E-02	1.21E-03	1.55E-02	3.46E-03	5.14E-02	2.76E-03	2.93E-03	2.0666E-01
551537.55	4172769.12	8063.62114	10638.77988	4922.17386	61712.56354	9200.44182	5276.55903	7990.71256	6032.47111	2674.91408	29992.96073	52214.1845	6952.1324	3.5356	3.74798	1.28E-02	1.20E-02	5.54E-03	5.32E-02	7.99E-03	4.58E-03	1.15E-02	6.16E-03	2.73E-03	3.64E-02	4.25E-02	5.66E-03	1.66E-03	1.78E-03	2.0454E-01
551495.7	4172888.47	7849.25785	18473.86154	3805.92691	59995.10646	4424.44233	8673.83754	7813.72134	10031.11818	2131.73929	42638.16862	28479.21121	11123.72048	4.10316	4.31838	1.25E-02	2.08E-02	4.29E-03	5.17E-02	3.84E-03	7.53E-03	1.13E-02	1.02E-02	2.18E-03	5.18E-02	2.32E-02	9.05E-03	1.92E-03	2.05E-03	2.1233E-01
551613.53	4173158.15	9968.69783	17477.32964	1842.21087	9838.75629	1490.2956	59233.3244	10148.28636	10419.42326	1082.42073	10593.37103	3695.5933	68525.7845	8.26894	8.82829	1.59E-02	1.97E-02	2.07E-03	8.49E-03	1.29E-03	5.14E-02	1.46E-02	1.06E-02	1.11E-03	1.29E-02	3.01E-03	5.58E-02	3.88E-03	4.18E-03	2.0489E-01
551552.45	4173076.07	9684.8966	32300.81577	2515.28399	19121.26354	2219.60173	36043.85293	9796.44964	20088.50059	1447.13293	21436.25803	6219.53422	43106.39204	3.53498	3.65436	1.54E-02	3.64E-02	2.83E-03	1.65E-02	1.93E-03	3.13E-02	1.41E-02	2.05E-02	1.48E-03	2.60E-02	5.06E-03	3.51E-02	1.66E-03	1.73E-03	2.0999E-01
551824.24	4172810.26	23345.14786	9411.89775	17738.80982	30914.94092	16923.03174	3767.80454	22508.76345	5663.07475	9016.30936	26857.02891	32431.67655	5070.75707	0.58993	0.58656	3.71E-02	1.06E-02	2.00E-02	2.67E-02	1.47E-02	3.27E-03	3.24E-02	5.78E-03	9.20E-03	3.26E-02	2.64E-02	4.13E-03	2.76E-04	2.78E-04	2.2344E-01
551657.73	4172738.09	15134.01181	7184.40506	11165.14372	29396.35563	31556.75471	4051.11675	14843.43876	4376.27229	5616.34758	17818.62158	55962.48633	5558.06502	1.77898	1.84391	2.41E-02	8.09E-03	1.26E-02	2.54E-02	2.74E-02	3.52E-03	2.14E-02	4.47E-03	5.73E-03	2.16E-02	4.55E-02	4.52E-03	8.34E-04	8.74E-04	2.0601E-01
551577.02	4173115.55	9503.24686	24785.05525	2196.10853	14107.02255	1869.04751	47641.45309	9751.55038	15376.64183	1274.83989	15376.99718	4913.78544	54431.67488	4.41003	4.57453	1.51E-02	2.79E-02	2.47E-03	1.22E-02	1.62E-03	4.14E-02	1.40E-02	1.57E-02	1.30E-03	1.87E-02	4.00E-03	4.43E-02	2.07E-03	2.17E-03	2.0291E-01
551499.34	4172927.67	8400.14499	23394.18612	3511.68304	51939.45607	3834.26189	10851.18304	8381.94922	12639.45154	1989.91098	42882.48548	19469.19459	13838.9198	3.36221	3.50977	1.34E-02	2.63E-02	3.96E-03	4.48E-02	3.33E-03	9.42E-03	1.21E-02	1.29E-02	2.03E-03	5.21E-02	1.58E-02	1.13E-02	1.58E-03	1.66E-03	2.1063E-01
551858.63	4172835.89	34644.64367	12314.09168	12587.00952	26062.00595	9734.4578	5326.86204	33575.58957	7551.13371	7148.76417	23967.06254	20204.3409	7315.76109	0.50992	0.50683	5.51E-02	1.39E-02	1.42E-02	2.25E-02	8.45E-03	4.63E-03	4.84E-02	7.71E-03	7.30E-03	2.91E-02	1.64E-02	5.95E-03	2.39E-04	2.40E-04	2.3406E-01
551683.56	4172741.04	16687.4594	6386.69684	10999.49244	28125.37277	30883.15308	3687.83671	16343.7305	3876.69033	5335.12915	15327.90469	57329.22414	5086.88794	1.52852	1.57552	2.66E-02	7.19E-03	1.24E-02	2.43E-02	2.68E-02	3.20E-03	2.35E-02	3.96E-03	5.45E-03	1.86E-02	4.67E-02	4.14E-03	7.16E-04	7.47E-04	2.0422E-01
551808.36	4172794.77	18265.34501	7450.06217	16099.78653	32056.84823	23377.81017	3090.93071	17815.47503	4221.47193	7390.52862	25045.43292	39855.32701	4230.3617	0.62777	0.62435	2.91E-02	8.39E-03	1.81E-02	2.76E-02	2.03E-02	2.68E-03	2.57E-02	4.31E-03	7.55E-03	3.04E-02	3.24E-02	3.44E-03	2.94E-04	2.96E-04	2.1060E-01
551555.41	4173084.44	9530.49111	29998.22369	2423.95445	17878.96364	2136.36427	37147.54858	9645.76443	18616.61545	1396.68263	19804.53456	5918.17176	44000.79954	3.51084	3.62659	1.52E-02	3.38E-02	2.73E-03	1.54E-02	1.86E-03	3.23E-02	1.39E-02	1.90E-02	1.43E-03	2.40E-02	4.82E-03	3.58E-02	1.65E-03	1.72E-03	2.0357E-01
551770.2	4172765.21	17264.3788	5501.84013	8624.35861	30630.75022	32986.01596	2828.53907	16944.56134	3108.48764	4107.80119	19344.02341	53001.23332	3871.72254	0.77112	0.7663	2.75E-02	6.20E-03	9.71E-03	2.64E-02	2.86E-02	2.46E-03	2.44E-02	3.17E-03	4.19E-03	2.35E-02	4.31E-02	3.15E-03	3.61E-04	3.63E-04	2.0316E-01
551492.47	4172879.51	7550.04859	16960.89016	3728.40098	58231.26774	4462.65674	8098.95975	7513.82712	9249.0817	2081.82372	39760.28879	29614.71718	10392.22839	4.03691	4.24222	1.20E-02	1.91E-02	4.20E-03	5.02E-02	3.87E-03	7.03E-03	1.08E-02	9.44E-03	2.13E-03	4.83E-02	2.41E-02	8.46E-03	1.89E-03	2.01E-03	2.0356E-01
551496.11	4172918.7	8147.41151	21563.96539	3524.77136	52206.45718	3901.32293	10117.96664	8124.8422	11680.31021	1993.21523	41778.80469	20884.65431	12913.07058	3.34385	3.49053	1.30E-02	2.43E-02	3.97E-03	4.50E-02	3.39E-03	8.79E-03	1.17E-02	1.19E-02	2.03E-03	5.07E-02	1.70E-02	1.05E-02	1.57E-03	1.65E-03	2.0553E-01
551598.64	4173146.56	9584.69222	19157.58733	1940.60902	10951.638	1592.5009	53912.54609	9742.58284	11738.36378	1135.91436	11864.86868	4025.6418	60427.08046	5.89714	6.19006	1.53E-02	2.16E-02	2.19E-03	9.45E-03	1.38E-03	4.68E-02	1.40E-02	1.20E-02	1.16E-03	1.44E-02	3.28E-03	4.92E-02	2.76E-03	2.93E-03	1.9638E-01
551848.61	4172824.4	29595.14358	11150.8227	14142.62041	27233.3471	11626.94934	4564.27255	28535.77907	6801.56882	7838.09392	24825.67947	23485.91171	6266.58914	0.52975	0.52664	4.71E-02	1.26E-02	1.59E-02	2.35E-02	1.01E-02	3.96E-03	4.11E-02	6.94E-03	8.00E-03	3.01E-02	1.91E-02	5.10E-03	2.48E-04	2.50E-04	2.2402E-01
551526.49	4172772.86	7521.44747	10495.15185	4422.51487	59635.77778	7925.90979	5228.94276	7459.45373	5922.05091	2406.63713	28807.69362	48744.33526	6864.91474	3.57168	3.7841	1.20E-02	1.18E-02	4.98E-03	5.14E-02	6.88E-03	4.54E-03	1.07E-02	6.05E-03	2.46E-03	3.50E-02	3.97E-02	5.59E-03	1.67E-03	1.79E-03	1.9457E-01
551519.1	4173011.62	9105.89423	33668.30366	2844.67451	31043.10753	2813.57948	19411.29217	9155.17428	19883.49724	1622.58842	31909.49265	9418.55466	24349.40999	2.86164	2.97576	1.45E-02	3.79E-02	3.20E-03	2.68E-02	2.44E-03	1.69E-02	1.32E-02	2.03E-02	1.66E-03	3.87E-02	7.67E-03	1.98E-02	1.34E-03	1.41E-03	2.0580E-01
551522.33	4173020.57	9153.9089	33915.34155	2790.19537	28971.8288	2718.31048	20872.08714	9211.02289	20306.68582	1592.38191	30291.32386	8835.50402	26076.35866	2.87265	2.98645	1.46E-02	3.82E-02	3.14E-03	2.50E-02	2.36E-03	1.81E-02	1.33E-02	2.07E-02	1.63E-03	3.68E-02	7.19E-03	2.12E-02	1.35E-03	1.42E-03	2.0495E-01
551711.73	4172744.22	17970.74875	5768.00277	9666.26096	28863.53188	27897.66005	3344.17802	17587.10817	3445.55085	4630.93115	14979.71723	55600.19572	4618.74937	1.26248	1.27219	2.86E-02	6.50E-03	1.09E-02	2.49E-02	2.42E-02	2.90E-03	2.53E-02	3.52E-03	4.73E-03	1.82E-02	4.52E-02	3.76E-03	5.92E-04	6.03E-04	1.9996E-01
551515.88	4173002.66	9029.77741	32310.2506	2895.91116	32832.19119	2909.69043	18027.13008	9071.0596	19216.83113	1651.2558	33420.80992	10061.21468	22684.83294	2.84923	2.96377	1.44E-02	3.64E-02	3.26E-03	2.83E-02	2.53E-03	1.57E-02	1.31E-02	1.96E-02	1.69E-03	4.06E-02	8.19E-03	1.85E-02	1.34E-03	1.40E-03	2.0485E-01
551790.41	4172775.51	16897.98297	6146.21613	11688.17155	30925.34376	28661.04021	2859.65013	16578.11404	3448.83017	5246.34616	21752.03977	45492.01376	3906.8914	0.67803	0.67515	2.69E-02	6.92E-03	1.32E-02	2.67E-02	2.49E-02	2.48E-03	2.39E-02	3.52E-03	5.36E-03	2.64E-02	3.70E-02	3.18E-03	3.18E-04	3.20E-04	2.0102E-01
551623.11	4172746.07	12633.05063	8344.09091	9481.24206	34089.6476	25177.23028	4508.24953	12430.25974	5032.82369	5007.106	22194.7157	48527.74332	6127.7898	2.08394	2.18707	2.01E-02	9.40E-03	1.07E-02	2.94E-02	2.19E-02	3.91E-03	1.79E-02	5.14E-03	5.11E-03	2.69E-02	3.95E-02	4.99E-03	9.77E-04	1.04E-03	1.9694E-01
551512.65	4172993.71	8951.85324	31472.73112	2951.71999	34784.60334	3001.96645	16782.86679	8985.17666	18413.99402	1682.53772	34916.9649	10735.28759	20865.92729	2.84173	2.95606	1.42E-02	3.54E-02	3.32E-03	3.00E-02	2.61E-03	1.46E-02	1.29E-02	1.88E-02	1.72E-03	4.24E-02	8.74E-03	1.70E-02	1.33E-03	1.40E-03	2.0449E-01
551580.11	4173124.14	9426.25281	22757.60071	2108.24592	13162.99777	1786.67232	46976.01526	9565.95017	14078.68953	1225.11682	14269.85449	4660.73626	53484.18703	4.42553	4.59451	1.50E-02	2.56E-02	2.37E-03	1.14E-02	1.55E-03	4.08E-02	1.38E-02	1.44E-02	1.25E-03	1.73E-02	3.79E-03	4.35E-02	2.07E-03	2.18E-03	1.9499E-01
551558.48	4173093.13	9270.78192	27779.79836	2334.31048	16674.66634	2050.25666	38019.36548	9489.84979	17224.75003	1346.99556	18307.61532	5616.35129	44610.89281	3.49519	3.60905	1.48E-02	3.13E-02	2.63E-03	1.44E-02	1.78E-03	3.30E-02	1.37E-02	1.76E-02	1.38E-03	2.22E-02	4.57E-03	3.63E-02	1.64E-03	1.71E-03	1.9692E-01
551509.43	4172984.76	8848.74461	30322.7167	3005.33103	36701.94275	3094.15945	15424.20798	8874.03692	17476.31653	1712.42477	36192.24459	11471.97047	19459.68743	2.82735	2.94028	1.41E-02	3.42E-02	3.38E-03	3.17E-02	2.69E-03	1.34E-02	1.28E-02	1.78E-02	1.75E-03	4.39E-02	9.34E-03	1.58E-02	1.33E-03	1.39E-03	2.0355E-01
551663.04	4172734.21	15050.791	6820.7199	10699.35322	27439.62863	29578.835	3886.82248	14760.1463	4151.93503	5345.62651	16534.89876	52528.00661	5334.98319	1.59227	1.64401	2.40E-02	7.68E-03	1.21E-02	2.37E-02	2.57E-02	3.37E-03	2.13E-02	4.24E-03	5.46E-03	2.01E-02	4.27E-02	4.34E-03	7.46E-04	7.79E-04	1.9605E-01
551492.89	4172909.74	7887.34342	19881.21862	3521.95384	52036.95792	3967.3766	9446.39101	7861.34209	10801.9912	1986.65655	40372.35141	21908.28584	12063.90571	3.31662	3.46667	1.26E-02	2.24E-02	3.97E-03	4.49E-02	3.44E-03	8.20E-03	1.13E-02	1.10E-02	2.03E-03	4.90E-02	1.78E-02	9.82E-03	1.55E-03	1.64E-03	1.9967E-01
551506.2	4172975.81	8744.18316	29046.35745	3064.02636	38723.78223	3183.00171	14403.32655	8761.73438	16204.6665	1722.58733	37341.96725	12240.13359	18203.7512	2.81683	2.9302	1.39E-02	3.27E-02	3.45E-03	3.34E-02	2.76E-03	1.25E-02	1.26E-02	1.65E-02	1.76E-03	4.53E-02	9.96E-03	1.48E-02	1.32E-03	1.39E-03	2.0249E-01
551692.61	4172740.5	16813.18279	6039.22163	10302.92773	27230.28001	28281.59022	3515.13459	16464.94838	3651.36256	4967.05212	14492.06224	54088.15412	4851.20849	1.42287	1.46569	2.68E-02	6.80E-03	1.16E-02	2.35E-02	2.46E-02	3.05E-03	2.37E-02	3.73E-03	5.07E-03	1.76E-02	4.40E-02	3.95E-03	6.67E-04	6.95E-04	1.9569E-01
551623.16	4173169.15	9901.04794	15513.7239	1736.82994	8969.31172	1402.96359	55213.42521	10088.35436	9188.55517	1021.79335	9565.9151	3445.94193	64481.49556	10.42052	11.31665	1.58E-02	1.75E-02	1.96E-03	7.74E-03	1.22E-03	4.79E-02	1.45E-02	9.38E-03	1.04E-03	1.16E-02	2.80E-03	5.25E-02	4.88E-03	5.36E-03	1.9417E-01
551805.09	4172785.48	16980.8339	6843.76353	14079.21269	30805.27623	23961.105	2952.4505	16607.21075	3865.33149	6383.79873	23296.09611	40062.38628	4033.95867	0.63021	0.62713	2.70E-02	7.71E-03	1.59E-02	2.66E-02	2.08E-02	2.56E-03	2.39E-02	3.95E-03	6.52E-03	2.83E-02	3.26E-02	3.28E-03	2.95E-04	2.97E-04	1.9966E-01
551531.33	4173045.88	9103.38891	32387.63987	2605.67121	23644.6111	2457.7154	25070.8129	9181.12886	19844.00161	1490.6023	25347.38943	7466.88693	30872.16522	2.86697	2.97248	1.45E-02	3.65E-02	2.93E-03	2.04E-02	2.13E-03	2.18E-02	1.32E-02	2.03E-02	1.52E-03	3.08E-02	6.08E-03	2.51E-02	1.34E-03	1.41E-03	1.9792E-01
551489.25	4172870.54	7253.82547	15601.11967	3630.2191	56062.86165	4489.36361	7570.55036	7217.51149	8538.98369	2021.11914	36796.96519	30441.96412	9720.67565	3.92448	4.15152	1.15E-02	1.76E-02	4.09E-03	4.84E-02	3.90E-03	6.57E-03	1.04E-02	8.72E-03	2.06E-03	4.47E-02	2.48E-02	7.91E-03	1.84E-03	1.97E-03	1.9436E-01
551739.25	4172750.61	17941.92082	5341.81371	7797.43096	29301.43343	28561.12928	3021.49075	17574.25296	3114.68321	3870.28329	16083.99431	52569.9405	4158.68298	0.96586	0.96299	2.86E-02	6.02E-03	8.78E-03	2.53E-02	2.48E-02	2.62E-03	2.53E-02	3.18E-03	3.95E-03	1.95E-02	4.28E-02	3.38E-03	4.53E-04	4.56E-04	1.9509E-01
551502.98	4172966.86	8598.36636	27470.43471	3069.36165	40474.59804	3270.12206	13414.98657	8608.49707	15173.44178	1745.85072	37056.22418	13098.78846	16980.70551	2.79998	2.91284	1.37E-02	3.09E-02	3.46E-03	3.49E-02	2.84E-03	1.16E-02	1.24E-02	1.55E-02	1.78E-03	4.50E-02	1.07E-02	1.38E-02	1.31E-03	1.38E-03	1.9930E-01
551535.53	4173055.24	9105.192	31644.95043	2547.73371	22014.97382	2370.567	27009.2787	9190.44892	19454.35695	1459.26192	23798.57347	7041.39657	33023.62904	2.91127	3.01574	1.45E-02	3.56E-02	2.87E-03	1.90E-02	2.06E-03	2.35E-02	1.32E-02	1.99E-02	1.49E-03	2.89E-02	5.73E-03	2.69E-02	1.36E-03	1.43E-03	1.9637E-01
551561.57	4173101.72	9114.74353	25759.50618	2249.09031	15575.5188	1967.1912	38559.16359	9234.18045	15964.89646	1299.57265	16979.47019	5333.24282	44894.43636	3.49007	3.60306	1.45E-02	2.90E-02	2.53E-03	1.34E-02	1.71E-03	3.35E-02	1.33E-02	1.63E-02	1.33E-03	2.06E-02	4.34E-03	3.65E-02	1.64E-03	1.71E-03	1.9043E-01
551499.75	4172957.9	8427.31403	25768.52903	3104.98755	42019.00863	3329.11024	12491.72986	8430.49223	14140.97125	1765.40642	37316.84896	14027.92824	15834.11227	2.78691	2.89892	1.34E-02	2.90E-02	3.50E-03	3.62E-02	2.89E-03	1.08E-02	1.21E-02	1.44E-02	1.80E-03	4.53E-02	1.14E-02	1.29E-02	1.31E-03	1.37E-03	1.9657E-01
551730.84	4172747.94	17945.0581	5401.86065	8172.57024	28917.58797	26744.40013	3097.06492	17571.52782	3175.92408	4012.36941	15440.88067	51848.32876	4268.17511	1.05242	1.05222	2.86E-02	6.08E-03	9.20E-03	2.49E-02	2.32E-02	2.69E-03	2.53E-02	3.24E-03	4.10E-03	1.87E-02	4.22E-02	3.47E-03	4.93E-04	4.99E-04	1.9275E-01
551872.38	4172837.31	32946.10034	12047.37778	10769.39368	23716.9527	8383.05429	5453.66064	32069.48572	7353.91059	6155.90272	21902.61649	17546.31228	7511.49743	0.47979	0.47704	5.24E-02	1.36E-02	1.21E-02	2.05E-02	7.28E-03	4.74E-03	4.62E-02	7.51E-03	6.28E-03	2.66E-02	1.43E-02	6.11E-03	2.25E-04	2.26E-04	2.1800E-01
551583.2	4173132.72	9254.18879	20976.9362	2027.26359	12285.25343	1706.35633	46027.04119	9393.88328	12943.63004	1179.20223	13292.00176	4417.28157	52274.67407	4.45854	4.63353	1.47E-02	2.36E-02	2.28E-03	1.06E-02	1.48E-03	4.00E-02	1.35E-02	1.32E-02	1.20E-03	1.61E-02	3.59E-03	4.25E-02	2.09E-03	2.20E-03	1.8718E-01
551490.13	4172841.93	6871.21281	13282.83653	3599.36575	57146.67171	4980.61587	6546.56076	6831.81839	7320.7554	1988.12673	32683.0828	35872.7662	8443.12872	4.49948	4.8268	1.09E-02	1.50E-02	4.05E-03	4.93E-02	4.32E-03	5.68E-03	9.84E-03	7.47E-03	2.03E-03	3.97E-02	2.92E-02	6.87E-03	2.11E-03	2.29E-03	1.8872E-01
551489.66	4172900.77	7605.63047	18270.05386	3489.76548	51150.59195	3951.35076	8806.08185	7577.31275	9963.69838	1963.09471	38478.40252	22772.4998	11252.53659	3.27883	3.42646	1.21E-02	2.06E-02	3.93E-03	4.41E-02	3.43E-03	7.65E-03	1.09E-02	1.02E-02	2.00E-03	4.67E-02	1.85E-02	9.16E-03	1.54E-03	1.62E-03	1.9245E-01
551496.52	4172948.93	8257.20972	24147.06863	3147.256	43505.20153	3394.3219	11675.17041	8253.89877	13197.12245	1788.19481	37460.03865	14986.03615	14818.09393	2.78048	2.88877	1.31E-02	2.72E-02	3.54E-03	3.75E-02	2.95E-03	1.01E-02	1.19E-02	1.35E-02	1.83E-03	4.55E-02	1.22E-02	1.21E-02	1.30E-03	1.37E-03	1.9408E-01
551617.39	4173167.49	9662.82795	15739.83811	1747.35462	9164.55695	1418.83911	52408.74739	9839.39458	9373.72388	1026.84841	9786.397	3504.29971	60816.946	8.42393	9.02303	1.54E-02	1.77E-02	1.97E-03	7.90E-03	1.23E-03	4.55E-02	1.42E-02	9.57E-03	1.05E-03	1.19E-02	2.85E-03	4.95E-02	3.95E-03	4.28E-03	1.8695E-01
551537.25	4173062.62	8992.68155	30163.79085	2477.67399	20662.47341	2287.82756	27823.7362	9081.79796	18544.59951	1420.23317	22371.80346	6705.20665	33813.0592	2.86289	2.96138	1.43E-02	3.40E-02	2.79E-03	1.78E-02	1.99E-03	2.42E-02	1.31E-02	1.89E-02	1.45E-03	2.72E-02	5.46E-03	2.75E-02	1.34E-03	1.40E-03	1.9138E-01
551862.97	4172827.05	29697.47676	11275.16139	11772.23807	24807.55291	9749.82262	4897.56743	28777.20771	6896.92832	6626.81732	22521.96056	19955.75645	6707.68883	0.49597	0.49317	4.73E-02	1.27E-02	1.33E-02	2.14E-02	8.47E-03	4.25E-03	4.14E-02	7.04E-03	6.77E-03	2.73E-02	1.62E-02	5.46E-03	2.32E-04	2.34E-04	2.1209E-01
551656.64	4172729.8	14278.01475	6827.75731	10144.66563	26540.30634	27538.13267	3883.29706	14010.95777	4152.46322	5117.30098	16592.8643	48513.28178	5317.84168	1.54604	1.59778	2.27E-02	7.69E-03	1.14E-02	2.29E-02	2.39E-02	3.37E-03	2.02E-02	4.24E-03	5.22E-03	2.01E-02	3.95E-02	4.33E-03	7.25E-04	7.57E-04	1.8709E-01
551627.68	4172740.32	12563.06547	7860.30402	9261.86939	30689.898	24267.47591	4306.87742	12358.10378	4750.01244	4864.70773	20332.25928	45386.50514	5858.88402	1.83371	1.9199	2.00E-02	8.85E-03	1.04E-02	2.65E-02	2.11E-02	3.74E-03	1.78E-02	4.85E-03	4.97E-03	2.47E-02	3.69E-02	4.77E-03	8.59E-04	9.10E-04	1.8633E-01
551493.3	4172939.97	8059.6395	22502.10095	3177.77584	44624.28249	3452.06619	10904.78813	8050.58522	12277.84871	1803.7908	37187.00986	16014.58415	13856.9388	2.7665	2.8743	1.28E-02	2.53E-02	3.58E-03	3.85E-02	3.00E-03	9.47E-03	1.16E-02	1.25E-02	1.84E-03	4.51E-02	1.30E-02	1.13E-02	1.30E-03	1.36E-03	1.9078E-01
551498.98	4172801.72	6680.34654	11085.77081	3642.46149	56603.05909	5809.61066	5545.96666	6636.58024	6172.61655	1994.23876	28403.15496	41360.55534	7209.63813	4.62473	5.20252	1.06E-02	1.25E-02	4.10E-03	4.88E-02	5.04E-03	4.82E-03	9.56E-03	6.30E-03	2.04E-03	3.45E-02	3.37E-02	5.87E-03	2.17E-03	2.47E-03	1.8243E-01
551564.66	4173110.3	8964.0975	23911.44005	2167.39823	14557.83038	1886.03761	38752.50874	9085.12744	14811.3364	1253.92313	15786.28615	5063.7761	44853.34103	3.4938	3.60656	1.43E-02	2.69E-02	2.44E-03	1.26E-02	1.64E-03	3.36E-02	1.31E-02	1.51E-02	1.28E-03	1.92E-02	4.12E-03	3.65E-02	1.64E-03	1.71E-03	1.8410E-01
551486.02	4172861.58	6983.20298	14437.6116	3530.42941	54045.92431	4521.63229	7109.0708	6947.08699	7929.91306	1960.34615	34122.18863	30142.9911	9133.05721	3.79865	4.00635	1.11E-02	1.63E-02	3.98E-03	4.66E-02	3.93E-03	6.17E-03	1.00E-02	8.10E-03	2.00E-03	4.14E-02	2.45E-02	7.43E-03	1.78E-03	1.90E-03	1.8523E-01
551548.16	4173085.55	8883.84039	26937.25288	2316.36783	17416.57757	2085.66179	32241.47598	8987.73337	16588.22066	1332.9124	18875.95812	5853.41199	38293.33405	2.99395	3.08948	1.41E-02	3.03E-02	2.61E-03	1.50E-02	1.81E-03	2.80E-02	1.29E-02	1.69E-02	1.36E-03	2.29E-02	4.76E-03	3.12E-02	1.40E-03	1.46E-03	1.8486E-01
551786.8	4172766.2	15465.75081	5543.08776	9378.65226	28945.92151	27593.1578	2700.41799	15194.17118	3114.94054	4311.01583	19452.74007	44346.60653	3682.97233	0.67895	0.67688	2.46E-02	6.24E-03	1.06E-02	2.50E-02	2.40E-02	2.34E-03	2.19E-02	3.18E-03	4.40E-03	2.36E-02	3.61E-02	3.00E-03	3.18E-04	3.21E-04	1.8549E-01
551530.62	4172762.55	7478.66971	9844.79915	4417.71095	52992.95513	8053.7585	4970.05539	7414.52584	5584.51142	2403.53593	26704.8475	43306.83354	6535.41093	2.82839	2.97067	1.19E-02	1.11E-02	4.98E-03	4.57E-02	6.99E-03	4.32E-03	1.07E-02	5.70E-03	2.45E-03	3.24E-02	3.52E-02	5.32E-03	1.33E-03	1.41E-03	1.7953E-01
551486.43	4172891.81	7342.57372	16873.02797	3449.75787	50292.25932	3994.11814	8242.09909	7312.55462	9232.39193	1934.78569	36563.54515	23713.26369	10538.48685	3.23023	3.3831	1.17E-02	1.90E-02	3.89E-03	4.34E-02	3.47E-03	7.16E-03	1.05E-02	9.43E-03	1.98E-03	4.44E-02	1.93E-02	8.58E-03	1.51E-03	1.60E-03	1.8588E-01
551620.75	4172739.13	12024.1283	7991.67274	8787.95648	31596.6985	22655.02034	4346.90745	11834.97551	4811.19615	4639.93063	20913.78224	43624.24966	5898.86311	1.82108	1.9061	1.91E-02	9.00E-03	9.90E-03	2.72E-02	1.97E-02	3.77E-03	1.70E-02	4.91E-03	4.74E-03	2.54E-02	3.55E-02	4.80E-03	8.54E-04	9.03E-04	1.8287E-01
551586.29	4173141.31	9086.77517	19375.47134	1950.77857	11470.82861	1628.67231	44760.53184	9226.22718	11926.21511	1135.69619	12412.08841	4185.80472	50716.53121	4.49735	4.6754	1.45E-02	2.18E-02	2.20E-03	9.89E-03	1.41E-03	3.89E-02	1.33E-02	1.22E-02	1.16E-03	1.51E-02	3.41E-03	4.13E-02	2.11E-03	2.22E-03	1.7935E-01
551491.07	4172816.18	6583.95665	11594.6691	3521.37562	55235.24134	5346.51671	5807.99326	6543.50994	6434.31555	1934.00611	29007.50936	38195.91811	7519.78434	4.5379	4.94444	1.05E-02	1.31E-02	3.97E-03	4.76E-02	4.64E-03	5.04E-03	9.42E-03	6.57E-03	1.97E-03	3.52E-02	3.11E-02	6.12E-03	2.13E-03	2.34E-03	1.7968E-01
551852.96	4172815.56	24303.84394	10062.41411	13233.08326	25773.39571	11513.69751	4084.58896	23433.19547	6086.35341	7199.77951	23327.01242	22982.39246	5616.98212	0.51448	0.51174	3.87E-02	1.13E-02	1.49E-02	2.22E-02	1.00E-02	3.55E-03	3.37E-02	6.21E-03	7.35E-03	2.83E-02	1.87E-02	4.57E-03	2.41E-04	2.43E-04	2.0007E-01
551543.16	4173079.36	8814.02084	27289.06279	2341.29191	18109.81643	2124.9733	30118.10514	8911.99766	16781.05951	1345.17481	19628.00337	6046.61535	36042.88688	2.85539	2.94616	1.40E-02	3.07E-02	2.64E-03	1.56E-02	1.85E-03	2.62E-02	1.28E-02	1.71E-02	1.37E-03	2.38E-02	4.92E-03	2.93E-02	1.34E-03	1.40E-03	1.8317E-01
551490.07	4172931	7829.60512	20843.3573	3190.54656	43976.37434	3499.56849	10167.88284	7815.76244	11381.29438	1808.68733	36449.56463	17111.01745	12931.4288	2.74285	2.85113	1.25E-02	2.35E-02	3.59E-03	3.79E-02	3.04E-03	8.83E-03	1.13E-02	1.16E-02	1.85E-03	4.43E-02	1.39E-02	1.05E-02	1.29E-03	1.35E-03	1.8538E-01
551720.75	4172740.44	17144.72361	5374.49924	8328.10847	26960.73112	23590.18084	3130.61336	16790.76538	3190.71546	4050.70675	14167.88434	47887.84685	4314.29873	1.09527	1.10144	2.73E-02	6.05E-03	9.38E-03	2.33E-02	2.05E-02	2.72E-03	2.42E-02	3.26E-03	4.14E-03	1.72E-02	3.90E-02	3.51E-03	5.13E-04	5.22E-04	1.8146E-01
551567.75	4173118.89	8789.52143	22116.97429	2083.36896	13629.9647	1809.26087	38422.73345	8911.15152	13675.07241	1206.71961	14666.18006	4816.62133	44276.38535	3.48829	3.60244	1.40E-02	2.49E-02	2.35E-03	1.18E-02	1.57E-03	3.34E-02	1.28E-02	1.40E-02	1.23E-03	1.78E-02	3.92E-03	3.60E-02	1.63E-03	1.71E-03	1.7706E-01
551604.41	4173161.87	9225.10839	16440.07422	1781.95623	9703.31422	1463.88954	46898.60949	9381.48738	9898.87569	1044.52751	10398.80419	3665.32618	54029.5569	5.87257	6.16948	1.47E-02	1.85E-02	2.01E-03	8.37E-03	1.27E-03	4.07E-02	1.35E-02	1.01E-02	1.07E-03	1.26E-02	2.98E-03	4.40E-02	2.75E-03	2.92E-03	1.7550E-01
551483.21	4172882.84	7086.31146	15622.78475	3394.82327	49227.80274	4036.73991	7730.55105	7055.27785	8574.43563	1898.14855	34530.62394	24590.62109	9890.87572	3.17218	3.32217	1.13E-02	1.76E-02	3.82E-03	4.25E-02	3.51E-03	6.71E-03	1.02E-02	8.75E-03	1.94E-03	4.19E-02	2.00E-02	8.05E-03	1.49E-03	1.57E-03	1.7926E-01
551486.84	4172922.04	7609.61045	19366.89074	3204.83662	44259.05355	3557.09154	9519.35068	7591.60153	10589.98824	1813.34029	35683.4315	18153.51421	12116.04684	2.72284	2.8311	1.21E-02	2.18E-02	3.61E-03	3.82E-02	3.09E-03	8.27E-03	1.09E-02	1.08E-02	1.85E-03	4.33E-02	1.48E-02	9.86E-03	1.28E-03	1.34E-03	1.8122E-01
551807.15	4172776.5	15239.02172	6305.42457	12024.15267	28629.17816	22230.03578	2789.63683	14923.65009	3564.16031	5493.06374	21234.79067	37185.9357	3803.07398	0.6121	0.60964	2.42E-02	7.10E-03	1.35E-02	2.47E-02	1.93E-02	2.42E-03	2.15E-02	3.64E-03	5.61E-03	2.58E-02	3.03E-02	3.10E-03	2.87E-04	2.89E-04	1.8176E-01
551881.84	4172834.87	30437.37456	11514.91153	9710.79758	22150.21239	7750.45771	5335.26955	29685.32792	7001.31533	5545.95889	20407.56106	16223.35125	7392.23677	0.45952	0.45704	4.84E-02	1.30E-02	1.09E-02	1.91E-02	6.73E-03	4.63E-03	4.28E-02	7.15E-03	5.66E-03	2.48E-02	1.32E-02	6.02E-03	2.15E-04	2.17E-04	2.0279E-01
551842.94	4172804.07	20041.44537	8771.51226	13834.38541	26683.42567	13441.86207	3571.78557	19328.77549	5313.35643	7204.07369	23213.16073	26048.59745	4794.36644	0.53186	0.52921	3.19E-02	9.88E-03	1.56E-02	2.30E-02	1.17E-02	3.10E-03	2.78E-02	5.42E-03	7.35E-03	2.82E-02	2.12E-02	3.90E-03	2.49E-04	2.51E-04	1.8954E-01
551820.31	4172786.38	15558.96109	6930.39345	13342.95396	28458.60829	19232.27642	2890.16857	15160.18314	3955.55701	6290.86972	22234.57403	33322.61173	3944.9408	0.57809	0.57563	2.48E-02	7.81E-03	1.50E-02	2.45E-02	1.67E-02	2.51E-03	2.18E-02	4.04E-03	6.42E-03	2.70E-02	2.71E-02	3.21E-03	2.71E-04	2.73E-04	1.8150E-01
551521.88	4172765.52	7072.40935	9697.07417	4058.51012	50939.9418	7170.6506	4919.17653	7016.15079	5482.98192	2210.30761	25714.80624	40450.5959	6451.28382	2.80582	2.95018	1.13E-02	1.09E-02	4.57E-03	4.39E-02	6.23E-03	4.27E-03	1.01E-02	5.60E-03	2.26E-03	3.12E-02	3.29E-02	5.25E-03	1.32E-03	1.40E-03	1.7124E-01
551870.82	4172822.23	27019.1247	10683.99968	10685.79054	23267.10409	9167.33431	4771.55436	26229.29444	6522.62453	5967.42432	21006.44609	18696.9898	6515.8572	0.4761	0.47363	4.30E-02	1.20E-02	1.20E-02	2.01E-02	7.96E-03	4.14E-03	3.78E-02	6.66E-03	6.09E-03	2.55E-02	1.52E-02	5.30E-03	2.23E-04	2.24E-04	1.9623E-01
551589.38	4173149.9	8921.25565	17918.34056	1866.21332	10719.25411	1554.39303	43016.22831	9060.40197	10976.18458	1090.10433	11563.18671	3968.31211	48813.36576	4.49025	4.66755	1.42E-02	2.02E-02	2.10E-03	9.24E-03	1.35E-03	3.74E-02	1.30E-02	1.12E-02	1.11E-03	1.40E-02	3.23E-03	3.97E-02	2.10E-03	2.21E-03	1.7110E-01
551708.46	4172734.93	16425.73378	5457.33377	8680.79797	25386.89453	22760.482	3206.80953	16090.29633	3268.13118	4203.11602	13387.59143	45717.8736	4419.35655	1.18234	1.20114	2.61E-02	6.15E-03	9.78E-03	2.19E-02	1.98E-02	2.78E-03	2.32E-02	3.34E-03	4.29E-03	1.63E-02	3.72E-02	3.60E-03	5.54E-04	5.69E-04	1.7548E-01
551483.62	4172913.07	7372.8676	17952.50893	3200.84575	44086.19048	3609.50103	8908.02984	7351.6413	9838.38872	1806.98807	34585.99498	18846.67088	11345.77554	2.69158	2.8033	1.17E-02	2.02E-02	3.60E-03	3.80E-02	3.13E-03	7.73E-03	1.06E-02	1.00E-02	1.84E-03	4.20E-02	1.53E-02	9.23E-03	1.26E-03	1.33E-03	1.7607E-01
551549.08	4173096.1	8552.59374	24098.699	2193.14117	15952.0876	1973.39562	31455.38238	8656.33585	14813.53974	1263.30491	17106.23282	5484.82514	37062.64944	2.82351	2.90926	1.36E-02	2.71E-02	2.47E-03	1.38E-02	1.71E-03	2.73E-02	1.25E-02	1.51E-02	1.29E-03	2.08E-02	4.46E-03	3.02E-02	1.32E-03	1.38E-03	1.7298E-01
551696.47	4172733.59	15869.90275	5623.35828	9082.90918	24470.99505	23317.40688	3310.01982	15550.59092	3391.54856	4409.30413	13200.78344	45638.34613	4560.5566	1.24498	1.28127	2.53E-02	6.33E-03	1.02E-02	2.11E-02	2.02E-02	2.87E-03	2.24E-02	3.46E-03	4.50E-03	1.60E-02	3.71E-02	3.71E-03	5.84E-04	6.07E-04	1.7447E-01
551570.84	4173127.47	8734.75678	20559.25265	2007.80947	12756.44097	1732.74541	37936.70454	8857.75667	12694.60935	1164.14295	13690.24021	4573.62166	43585.64847	3.50641	3.62231	1.39E-02	2.32E-02	2.26E-03	1.10E-02	1.50E-03	3.29E-02	1.28E-02	1.30E-02	1.19E-03	1.66E-02	3.72E-03	3.55E-02	1.64E-03	1.72E-03	1.7084E-01
551500.22	4172787.09	6507.76286	10196.36892	3550.87442	51242.14843	5835.93151	5171.55601	6464.14661	5705.67934	1940.48103	25953.68168	38018.1001	6734.52834	3.47365	3.75095	1.04E-02	1.15E-02	4.00E-03	4.42E-02	5.07E-03	4.49E-03	9.31E-03	5.83E-03	1.98E-03	3.15E-02	3.09E-02	5.48E-03	1.63E-03	1.78E-03	1.6804E-01
551479.98	4172873.88	6815.1555	14431.97622	3310.26619	47509.18584	4054.08928	7238.57424	6783.82427	7943.67381	1845.65709	32200.18764	25154.59557	9268.13822	3.07813	3.22649	1.08E-02	1.63E-02	3.73E-03	4.10E-02	3.52E-03	6.29E-03	9.77E-03	8.11E-03	1.88E-03	3.91E-02	2.05E-02	7.54E-03	1.44E-03	1.53E-03	1.7145E-01
551727.58	4172738.65	16550.52043	5129.50601	7504.40244	25923.41672	21577.9817	2990.5091	16218.43895	3030.32566	3694.28631	13755.87857	43928.82277	4114.43452	1.00776	1.01233	2.63E-02	5.78E-03	8.45E-03	2.24E-02	1.87E-02	2.60E-03	2.34E-02	3.09E-03	3.77E-03	1.67E-02	3.58E-02	3.35E-03	4.72E-04	4.80E-04	1.7123E-01
551480.39	4172904.11	7129.14137	16631.93657	3179.81378	43562.4429	3598.7691	8340.35648	7105.48645	9138.4035	1790.4263	33236.41933	19497.53396	10629.58824	2.65334	2.76304	1.13E-02	1.87E-02	3.58E-03	3.76E-02	3.12E-03	7.24E-03	1.02E-02	9.33E-03	1.83E-03	4.03E-02	1.59E-02	8.65E-03	1.24E-03	1.31E-03	1.7041E-01
551552.3	4173105.05	8419.99272	22547.89612	2118.05679	14914.04674	1894.11657	31826.65987	8525.78135	13872.10663	1221.61739	15939.27038	5204.26313	37253.06948	2.82214	2.9065	1.34E-02	2.54E-02	2.39E-03	1.29E-02	1.64E-03	2.76E-02	1.23E-02	1.42E-02	1.25E-03	1.94E-02	4.24E-03	3.03E-02	1.32E-03	1.38E-03	1.6761E-01
551620.13	4173176.71	9308.39194	14248.71324	1657.36705	8570.52854	1352.59535	44908.26578	9479.61984	8473.18342	973.80368	9083.79845	3331.76334	52233.96054	8.22267	8.8034	1.48E-02	1.60E-02	1.87E-03	7.39E-03	1.17E-03	3.90E-02	1.37E-02	8.65E-03	9.94E-04	1.10E-02	2.71E-03	4.25E-02	3.85E-03	4.17E-03	1.6786E-01
551859.8	4172809.59	21353.30453	9232.10154	12077.22353	24353.27337	10886.53926	3814.34155	20611.6492	5635.69985	6522.83547	21810.64622	21671.5982	5249.35925	0.49493	0.49269	3.40E-02	1.04E-02	1.36E-02	2.10E-02	9.45E-03	3.31E-03	2.97E-02	5.75E-03	6.66E-03	2.65E-02	1.76E-02	4.27E-03	2.32E-04	2.33E-04	1.8270E-01
551736.87	4172740.92	16362.97633	4995.69373	6954.39147	26085.53137	22029.25776	2886.08197	16042.15485	2927.9817	3466.17177	14084.17691	43384.66497	3965.03665	0.94016	0.94137	2.60E-02	5.63E-03	7.83E-03	2.25E-02	1.91E-02	2.51E-03	2.31E-02	2.99E-03	3.54E-03	1.71E-02	3.53E-02	3.23E-03	4.41E-04	4.46E-04	1.6978E-01
551803.4	4172767.18	14028.04949	5710.83181	10063.21708	27249.55078	22270.72178	2635.05746	13768.16901	3219.23915	4616.03655	19372.52011	36562.10736	3586.07038	0.61303	0.61123	2.23E-02	6.43E-03	1.13E-02	2.35E-02	1.93E-02	2.29E-03	1.98E-02	3.29E-03	4.71E-03	2.35E-02	2.98E-02	2.92E-03	2.87E-04	2.90E-04	1.6981E-01
551783.24	4172756.89	14075.35375	4970.71361	7404.27432	26686.09883	25054.04012	2537.97415	13844.94451	2802.98304	3509.20244	17090.10687	41589.39539	3455.24559	0.69195	0.68877	2.24E-02	5.60E-03	8.34E-03	2.30E-02	2.18E-02	2.20E-03	1.99E-02	2.86E-03	3.58E-03	2.07E-02	3.38E-02	2.81E-03	3.24E-04	3.26E-04	1.6775E-01
551480.79	4172845.06	6463.69555	12444.53415	3289.67733	48407.55979	4468.65122	6299.10935	6429.17937	6883.10111	1820.03145	29095.7756	29223.99716	8100.15427	3.34179	3.58585	1.03E-02	1.40E-02	3.71E-03	4.17E-02	3.88E-03	5.47E-03	9.26E-03	7.03E-03	1.86E-03	3.53E-02	2.38E-02	6.59E-03	1.57E-03	1.70E-03	1.6621E-01
551573.93	4173136.06	8599.1679	19188.06673	1939.46733	11932.44019	1656.82417	37339.18907	8722.39051	11834.40491	1125.5535	12829.04703	4336.13345	42785.65019	3.54908	3.66739	1.37E-02	2.16E-02	2.18E-03	1.03E-02	1.44E-03	3.24E-02	1.26E-02	1.21E-02	1.15E-03	1.56E-02	3.53E-03	3.48E-02	1.66E-03	1.74E-03	1.6475E-01
551885.77	4172825.56	26631.79185	10611.63572	9233.82016	21258.90052	7801.657	4927.41346	25958.13235	6442.41461	5215.47638	19347.69897	16138.76576	6799.2046	0.44781	0.4456	4.24E-02	1.20E-02	1.04E-02	1.83E-02	6.77E-03	4.28E-03	3.74E-02	6.58E-03	5.32E-03	2.35E-02	1.31E-02	5.53E-03	2.10E-04	2.11E-04	1.8598E-01
551555.39	4173113.64	8300.54928	21170.88283	2048.92792	13984.55235	1819.22938	31944.2457	8407.65412	13037.2502	1183.10282	14923.28466	4946.38131	37209.06658	2.83151	2.91575	1.32E-02	2.38E-02	2.31E-03	1.21E-02	1.58E-03	2.77E-02	1.21E-02	1.33E-02	1.21E-03	1.81E-02	4.03E-03	3.03E-02	1.33E-03	1.38E-03	1.6250E-01
551608.48	4173171.67	8964.71412	14869.31677	1690.06085	9022.73776	1391.96701	42119.31788	9118.92532	8918.19454	990.98664	9594.22499	3467.98214	48726.43166	5.95123	6.26052	1.43E-02	1.67E-02	1.90E-03	7.78E-03	1.21E-03	3.66E-02	1.31E-02	9.10E-03	1.01E-03	1.16E-02	2.82E-03	3.97E-02	2.79E-03	2.97E-03	1.6161E-01
551476.76	4172864.91	6556.12648	13372.10517	3217.00561	45675.31934	4066.42622	6794.77129	6524.87936	7382.73969	1789.12062	29958.5596	24786.50569	8704.62295	2.95457	3.11704	1.04E-02	1.51E-02	3.62E-03	3.94E-02	3.53E-03	5.90E-03	9.40E-03	7.54E-03	1.83E-03	3.64E-02	2.02E-02	7.08E-03	1.38E-03	1.48E-03	1.6319E-01
551477.17	4172895.14	6881.60327	15403.4789	3140.2904	42743.09401	3624.05975	7811.66459	6856.30403	8486.66732	1763.23769	31660.79846	20104.41757	9962.13244	2.60058	2.71219	1.10E-02	1.73E-02	3.54E-03	3.69E-02	3.15E-03	6.78E-03	9.87E-03	8.66E-03	1.80E-03	3.84E-02	1.64E-02	8.11E-03	1.22E-03	1.29E-03	1.6438E-01
551626.73	4173182.05	9336.31384	13456.12491	1612.3228	8183.522	1313.66579	43334.79294	9513.96332	7988.64651	948.08973	8634.792	3218.02768	50339.35131	9.93073	10.73483	1.49E-02	1.52E-02	1.82E-03	7.06E-03	1.14E-03	3.76E-02	1.37E-02	8.16E-03	9.68E-04	1.05E-02	2.62E-03	4.10E-02	4.65E-03	5.09E-03	1.6429E-01
551848.78	4172796.95	17316.77432	8007.13939	12456.14297	25255.38386	12686.68955	3215.65648	16725.12991	4740.01197	6413.75628	21555.79205	24539.86098	4398.82202	0.50895	0.50674	2.76E-02	9.02E-03	1.40E-02	2.18E-02	1.10E-02	2.79E-03	2.41E-02	4.84E-03	6.55E-03	2.62E-02	2.00E-02	3.58E-03	2.39E-04	2.40E-04	1.7187E-01
551530.59	4172750.69	7146.34396	8960.95524	4160.37837	44476.22507	7557.44627	4616.18085	7084.85081	5105.90294	2265.20396	23576.15076	35822.99762	6071.87254	2.14589	2.23443	1.14E-02	1.01E-02	4.69E-03	3.84E-02	6.56E-03	4.01E-03	1.02E-02	5.21E-03	2.31E-03	2.86E-02	2.92E-02	4.94E-03	1.01E-03	1.06E-03	1.5759E-01
551874.84	4172813.02	22928.46045	9673.14884	10211.95052	22207.78446	9141.3682	4199.82881	22237.99211	5881.00222	5660.98154	20024.95831	18471.0984	5751.73829	0.46411	0.46197	3.65E-02	1.09E-02	1.15E-02	1.92E-02	7.94E-03	3.65E-03	3.20E-02	6.00E-03	5.78E-03	2.43E-02	1.50E-02	4.68E-03	2.18E-04	2.19E-04	1.7789E-01
551577.02	4173144.64	8461.13903	17904.89838	1869.02304	11170.64273	1584.12219	36493.89565	8584.4053	11027.10647	1087.89559	12025.74479	4113.57721	41696.04156	3.58086	3.69957	1.35E-02	2.02E-02	2.11E-03	9.63E-03	1.38E-03	3.17E-02	1.24E-02	1.13E-02	1.11E-03	1.46E-02	3.35E-03	3.39E-02	1.68E-03	1.75E-03	1.5848E-01
551491.32	4172795.53	6210.81079	10102.43376	3303.62783	47008.666	5240.23234	5173.56074	6172.10771	5642.47402	1809.56656	24825.88285	33401.78112	6716.28065	3.17147	3.42701	9.88E-03	1.14E-02	3.72E-03	4.05E-02	4.55E-03	4.49E-03	8.89E-03	5.76E-03	1.85E-03	3.01E-02	2.72E-02	5.47E-03	1.49E-03	1.62E-03	1.5696E-01
551558.48	4173122.22	8258.3078	19866.0633	1980.89761	13123.13901	1746.68411	31791.7502	8367.08925	12237.93342	1145.03709	13983.25255	4703.46874	36896.86493	2.84457	2.92925	1.31E-02	2.24E-02	2.23E-03	1.13E-02	1.52E-03	2.76E-02	1.20E-02	1.25E-02	1.17E-03	1.70E-02	3.83E-03	3.00E-02	1.33E-03	1.39E-03	1.5745E-01
551479.3	4172822.77	6137.83058	10971.60802	3168.32854	45840.06416	4635.20419	5637.27826	6103.28196	6098.19109	1744.87408	25894.45873	29903.59367	7270.14586	3.22407	3.44547	9.77E-03	1.24E-02	3.57E-03	3.95E-02	4.02E-03	4.89E-03	8.79E-03	6.23E-03	1.78E-03	3.14E-02	2.43E-02	5.92E-03	1.51E-03	1.63E-03	1.5578E-01
551485.84	4172805.25	6124.29524	10322.64697	3213.84551	45942.93435	4950.48751	5300.42394	6087.73736	5753.31982	1764.02185	24893.13779	31668.25119	6864.02124	3.11028	3.35776	9.75E-03	1.16E-02	3.62E-03	3.96E-02	4.30E-03	4.60E-03	8.77E-03	5.87E-03	1.80E-03	3.02E-02	2.58E-02	5.59E-03	1.46E-03	1.59E-03	1.5459E-01
551473.94	4172886.18	6636.59288	14287.54425	3085.57572	41691.76835	3645.65978	7326.61095	6610.27637	7890.66312	1727.53509	29955.65474	20662.38853	9350.18247	2.53509	2.65158	1.06E-02	1.61E-02	3.48E-03	3.60E-02	3.17E-03	6.36E-03	9.52E-03	8.06E-03	1.76E-03	3.64E-02	1.68E-02	7.61E-03	1.19E-03	1.26E-03	1.5819E-01
551837.77	4172784.31	14460.99887	6926.66968	11821.12341	25440.13236	14983.46987	2847.60189	14035.93309	4012.8669	5807.90929	20533.45033	27170.76443	3883.58434	0.52539	0.52347	2.30E-02	7.80E-03	1.33E-02	2.19E-02	1.30E-02	2.47E-03	2.02E-02	4.10E-03	5.93E-03	2.49E-02	2.21E-02	3.16E-03	2.46E-04	2.48E-04	1.6249E-01
551595.29	4173165.58	8587.12973	15474.86282	1719.08361	9527.15567	1432.68413	37954.30209	8724.63711	9337.20356	1005.44188	10161.11804	3620.54739	43954.6201	4.4795	4.65891	1.37E-02	1.74E-02	1.94E-03	8.22E-03	1.24E-03	3.30E-02	1.26E-02	9.53E-03	1.03E-03	1.23E-02	2.95E-03	3.58E-02	2.10E-03	2.21E-03	1.5393E-01
551481.6	4172813.49	6079.95536	10535.97275	3157.28836	45166.3	4742.88386	5423.34197	6044.86814	5864.06143	1735.90823	25034.4505	30304.10979	7008.49091	3.18386	3.44899	9.67E-03	1.19E-02	3.56E-03	3.90E-02	4.12E-03	4.71E-03	8.71E-03	5.99E-03	1.77E-03	3.04E-02	2.47E-02	5.70E-03	1.49E-03	1.63E-03	1.5323E-01
551799.73	4172757.87	12571.90076	5038.04279	8014.90898	25374.15445	21614.6433	2441.05915	12365.90894	2834.94288	3723.93948	17181.6708	35971.87728	3313.9495	0.61065	0.60928	2.00E-02	5.67E-03	9.03E-03	2.19E-02	1.88E-02	2.12E-03	1.78E-02	2.89E-03	3.80E-03	2.09E-02	2.93E-02	2.70E-03	2.86E-04	2.89E-04	1.5539E-01
551539.8	4173099.38	7951.30268	21183.47408	2068.21677	15159.77213	1890.52562	26619.38399	8043.77241	12941.87976	1189.34209	16003.696	5317.19668	31486.2621	2.36567	2.42667	1.27E-02	2.39E-02	2.33E-03	1.31E-02	1.64E-03	2.31E-02	1.16E-02	1.32E-02	1.21E-03	1.94E-02	4.33E-03	2.56E-02	1.11E-03	1.15E-03	1.5432E-01
551863.91	4172800.49	18319.86912	8396.57281	11053.22309	23162.13299	10632.68487	3506.91899	17703.01399	5113.37772	5893.31805	20318.64036	20969.84234	4702.59165	0.47946	0.47731	2.92E-02	9.46E-03	1.24E-02	2.00E-02	9.23E-03	3.05E-03	2.55E-02	5.22E-03	6.02E-03	2.47E-02	1.71E-02	3.83E-03	2.25E-04	2.26E-04	1.6605E-01
551520.05	4172754.25	6707.38893	8835.06297	3780.46463	42980.63204	6635.89028	4571.93348	6654.66609	5014.75516	2060.28519	22724.61278	33523.84568	5995.16436	2.15133	2.24409	1.07E-02	9.95E-03	4.26E-03	3.71E-02	5.76E-03	3.97E-03	9.58E-03	5.12E-03	2.10E-03	2.76E-02	2.73E-02	4.88E-03	1.01E-03	1.06E-03	1.5031E-01
551580.11	4173153.23	8315.32648	16679.19342	1791.97833	10471.03692	1515.32755	35063.20678	8438.3926	10201.11065	1044.71087	11224.85109	3907.56218	40266.55601	3.57815	3.69629	1.32E-02	1.88E-02	2.02E-03	9.03E-03	1.32E-03	3.04E-02	1.22E-02	1.04E-02	1.07E-03	1.36E-02	3.18E-03	3.28E-02	1.68E-03	1.75E-03	1.5147E-01
551561.57	4173130.81	8125.27571	18625.56944	1913.80719	12322.79757	1676.5403	31376.57023	8234.30048	11469.60812	1107.34699	13110.76796	4474.38966	36317.74695	2.86021	2.94597	1.29E-02	2.10E-02	2.16E-03	1.06E-02	1.46E-03	2.72E-02	1.19E-02	1.17E-02	1.13E-03	1.59E-02	3.64E-03	2.96E-02	1.34E-03	1.40E-03	1.5194E-01
551889.77	4172816.33	23250.13241	9762.30179	8728.66783	20375.82791	7793.36044	4530.9086	22645.90813	5931.50658	4880.26924	18313.6756	15966.9205	6185.59808	0.43632	0.43436	3.70E-02	1.10E-02	9.83E-03	1.76E-02	6.77E-03	3.93E-03	3.26E-02	6.06E-03	4.98E-03	2.22E-02	1.30E-02	5.03E-03	2.04E-04	2.06E-04	1.7042E-01
551470.71	4172877.21	6393.95416	13268.9073	3016.15307	40406.04502	3661.25832	6879.66107	6367.11984	7344.54304	1684.03015	28163.84517	20571.59405	8786.19834	2.45332	2.57078	1.02E-02	1.49E-02	3.40E-03	3.48E-02	3.18E-03	5.97E-03	9.17E-03	7.50E-03	1.72E-03	3.42E-02	1.67E-02	7.15E-03	1.15E-03	1.22E-03	1.5135E-01
551543.04	4173108.39	7842.00583	20003.45653	2003.87775	14221.72633	1817.87436	26876.41827	7936.42084	12240.53316	1153.71954	15009.46274	5051.44049	31612.96355	2.36915	2.42984	1.25E-02	2.25E-02	2.26E-03	1.23E-02	1.58E-03	2.33E-02	1.14E-02	1.25E-02	1.18E-03	1.82E-02	4.11E-03	2.57E-02	1.11E-03	1.15E-03	1.4987E-01
551779.73	4172747.59	12958.79857	4520.83073	5982.26564	24416.33257	21553.74317	2404.83025	12757.174	2559.27801	2920.89747	14969.76356	37376.20335	3270.66519	0.71323	0.71154	2.06E-02	5.09E-03	6.74E-03	2.11E-02	1.87E-02	2.09E-03	1.84E-02	2.61E-03	2.98E-03	1.82E-02	3.04E-02	2.66E-03	3.34E-04	3.37E-04	1.5020E-01
551852.99	4172787.95	14812.30901	7228.93655	11076.41163	23804.7101	12482.42047	2933.94888	14333.1092	4242.86783	5635.92939	19822.37585	23374.23545	4008.47115	0.49094	0.48916	2.36E-02	8.14E-03	1.25E-02	2.05E-02	1.08E-02	2.55E-03	2.06E-02	4.33E-03	5.75E-03	2.41E-02	1.90E-02	3.26E-03	2.30E-04	2.32E-04	1.5564E-01
551471.45	4172848.19	6071.73357	11571.48471	3002.54341	41130.11844	4008.44914	6023.96784	6041.63195	6426.46694	1663.83671	25796.35917	24098.80217	7725.48166	2.60836	2.74691	9.66E-03	1.30E-02	3.38E-03	3.55E-02	3.48E-03	5.23E-03	8.70E-03	6.56E-03	1.70E-03	3.13E-02	1.96E-02	6.29E-03	1.22E-03	1.30E-03	1.4696E-01
551564.66	4173139.39	8000.99945	17497.92549	1851.23354	11570.98038	1607.58337	30835.83996	8110.12731	10770.22153	1072.10648	12324.84739	4253.54938	35605.67712	2.89409	2.9811	1.27E-02	1.97E-02	2.08E-03	9.98E-03	1.40E-03	2.68E-02	1.17E-02	1.10E-02	1.09E-03	1.50E-02	3.46E-03	2.90E-02	1.36E-03	1.41E-03	1.4661E-01
551493.38	4172780.05	6031.44588	9255.4272	3202.87613	42324.55324	5200.81126	4802.91133	5993.17868	5195.31786	1751.39765	22596.9331	30476.61262	6247.09472	2.55835	2.72774	9.60E-03	1.04E-02	3.61E-03	3.65E-02	4.52E-03	4.17E-03	8.63E-03	5.30E-03	1.79E-03	2.74E-02	2.48E-02	5.08E-03	1.20E-03	1.29E-03	1.4435E-01
551878.92	4172803.88	19175.79928	8763.25741	9719.44582	21144.67265	9023.98621	3735.28373	18580.16548	5292.57069	5305.54281	19013.23373	18104.23137	5131.14545	0.45137	0.44952	3.05E-02	9.87E-03	1.09E-02	1.82E-02	7.84E-03	3.24E-03	2.68E-02	5.40E-03	5.42E-03	2.31E-02	1.47E-02	4.18E-03	2.12E-04	2.13E-04	1.6064E-01
551546.13	4173116.97	7809.2096	18934.45247	1943.76759	13385.80242	1749.94707	26925.76177	7905.6555	11604.23424	1120.30663	14130.14124	4810.67223	31538.62255	2.37868	2.43925	1.24E-02	2.13E-02	2.19E-03	1.15E-02	1.52E-03	2.34E-02	1.14E-02	1.18E-02	1.14E-03	1.72E-02	3.92E-03	2.57E-02	1.11E-03	1.16E-03	1.4577E-01
551615.09	4173184.14	8679.3056	13129.78588	1582.41595	8233.1862	1306.9637	36619.69685	8832.8352	7849.9887	928.28549	8672.80824	3234.49309	42323.98901	6.31626	6.66483	1.38E-02	1.48E-02	1.78E-03	7.10E-03	1.13E-03	3.18E-02	1.27E-02	8.01E-03	9.48E-04	1.05E-02	2.63E-03	3.44E-02	2.96E-03	3.16E-03	1.4582E-01
551904.61	4172819.53	23225.73577	9693.01564	7652.80029	18693.58131	6715.80293	4683.47374	22718.86357	5836.23216	4318.47781	16939.94073	13921.81656	6517.88851	0.41146	0.40967	3.70E-02	1.09E-02	8.62E-03	1.61E-02	5.83E-03	4.07E-03	3.27E-02	5.96E-03	4.41E-03	2.06E-02	1.13E-02	5.30E-03	1.93E-04	1.94E-04	1.6319E-01
551528.21	4172741.1	6798.62492	8289.13614	3885.67792	38732.85494	6989.35036	4341.18648	6740.92851	4734.56975	2117.35853	21227.7281	30759.06596	5707.71646	1.76992	1.83458	1.08E-02	9.34E-03	4.38E-03	3.34E-02	6.07E-03	3.77E-03	9.71E-03	4.83E-03	2.16E-03	2.58E-02	2.50E-02	4.65E-03	8.30E-04	8.69E-04	1.4162E-01
551468.4	4172859.62	6079.76322	11902.38803	2942.21021	39338.98897	3777.14972	6235.3672	6051.7282	6610.1788	1635.11217	25849.26799	21827.46188	7978.34973	2.41345	2.54977	9.67E-03	1.34E-02	3.31E-03	3.39E-02	3.28E-03	5.41E-03	8.72E-03	6.75E-03	1.67E-03	3.14E-02	1.78E-02	6.49E-03	1.13E-03	1.21E-03	1.4413E-01
551467.49	4172868.25	6149.57039	12317.96734	2930.80976	38810.36498	3660.0788	6459.9417	6122.70055	6836.61682	1632.42576	26308.49147	20661.90765	8254.55916	2.34972	2.46419	9.79E-03	1.39E-02	3.30E-03	3.35E-02	3.18E-03	5.61E-03	8.82E-03	6.98E-03	1.67E-03	3.19E-02	1.68E-02	6.72E-03	1.10E-03	1.17E-03	1.4442E-01
551599.56	4173175.85	8356.41776	14044.84951	1631.04652	8850.89644	1361.50533	34526.22193	8492.55621	8436.27934	954.38238	9370.15523	3420.8517	40126.90056	4.5262	4.71126	1.33E-02	1.58E-02	1.84E-03	7.63E-03	1.18E-03	3.00E-02	1.22E-02	8.61E-03	9.74E-04	1.14E-02	2.78E-03	3.27E-02	2.12E-03	2.23E-03	1.4274E-01
551581.69	4173161.5	8090.18944	15445.21983	1715.121	9864.4843	1452.61387	32495.6195	8210.51902	9384.21431	1000.17626	10510.24501	3730.30024	37632.65565	3.47037	3.58243	1.29E-02	1.74E-02	1.93E-03	8.51E-03	1.26E-03	2.82E-02	1.18E-02	9.58E-03	1.02E-03	1.28E-02	3.04E-03	3.06E-02	1.63E-03	1.70E-03	1.4236E-01
551567.75	4173147.98	7885.51442	16471.76637	1788.46528	10860.7737	1539.65612	30239.57242	7994.79601	10134.7458	1039.09407	11598.39312	4040.02324	34813.82163	2.93183	3.01748	1.25E-02	1.86E-02	2.01E-03	9.37E-03	1.34E-03	2.63E-02	1.15E-02	1.03E-02	1.06E-03	1.41E-02	3.29E-03	2.83E-02	1.37E-03	1.43E-03	1.4150E-01
551842.06	4172775.42	12374.74111	6227.77012	10197.27351	23801.14151	14426.55646	2604.79772	12034.90028	3588.73389	4987.75421	18649.40157	25422.83106	3544.53302	0.50528	0.5038	1.97E-02	7.01E-03	1.15E-02	2.05E-02	1.25E-02	2.26E-03	1.73E-02	3.66E-03	5.09E-03	2.26E-02	2.07E-02	2.88E-03	2.37E-04	2.39E-04	1.4628E-01
551549.22	4173125.56	7700.45558	17923.51794	1885.25354	12599.84263	1683.16988	26801.18916	7797.51511	10999.41375	1087.6869	13314.95091	4580.34093	31291.35029	2.39604	2.45753	1.23E-02	2.02E-02	2.12E-03	1.09E-02	1.46E-03	2.33E-02	1.12E-02	1.12E-02	1.11E-03	1.62E-02	3.73E-03	2.55E-02	1.12E-03	1.16E-03	1.4138E-01
551868.07	4172791.43	15799.20428	7627.7129	10074.30936	22021.06195	10297.8299	3142.867	15284.42244	4552.00082	5330.5113	18978.81549	20176.55081	4296.13372	0.46283	0.46107	2.51E-02	8.59E-03	1.13E-02	1.90E-02	8.94E-03	2.73E-03	2.20E-02	4.65E-03	5.44E-03	2.30E-02	1.64E-02	3.50E-03	2.17E-04	2.19E-04	1.5123E-01
551708.36	4173184.48	12985.76307	10561.60716	1454.27455	6334.66034	1140.29412	35053.93881	13399.5424	5963.74815	863.04532	6532.42544	2679.72099	40571.93148	2.87781	2.7824	2.07E-02	1.19E-02	1.64E-03	5.46E-03	9.90E-04	3.04E-02	1.93E-02	6.09E-03	8.81E-04	7.93E-03	2.18E-03	3.30E-02	1.35E-03	1.32E-03	1.4315E-01
551893.82	4172807.15	20309.26191	8968.18342	8294.38753	19500.13424	7726.11165	4107.97555	19770.21242	5440.25753	4619.49496	17438.29204	15706.3408	5608.01561	0.42502	0.4233	3.23E-02	1.01E-02	9.34E-03	1.68E-02	6.71E-03	3.57E-03	2.85E-02	5.55E-03	4.72E-03	2.12E-02	1.28E-02	4.56E-03	1.99E-04	2.01E-04	1.5651E-01
551483.66	4172789.35	5812.49326	9285.7868	3026.57649	40183.70261	4775.96436	4854.51351	5777.91319	5200.35204	1658.32065	22060.37103	27973.83654	6294.30126	2.46933	2.63844	9.25E-03	1.05E-02	3.41E-03	3.47E-02	4.15E-03	4.22E-03	8.32E-03	5.31E-03	1.69E-03	2.68E-02	2.28E-02	5.12E-03	1.16E-03	1.25E-03	1.3854E-01
551468.9	4172830.1	5805.31277	10482.49432	2907.81564	39514.4661	4116.67881	5514.73016	5775.15379	5839.1772	1605.33953	23585.16196	24593.18339	7087.16274	2.49852	2.6434	9.24E-03	1.18E-02	3.27E-03	3.41E-02	3.57E-03	4.79E-03	8.32E-03	5.96E-03	1.64E-03	2.86E-02	2.00E-02	5.77E-03	1.17E-03	1.25E-03	1.3952E-01
551494.53	4173030.58	7271.34708	20660.1088	2198.04797	21373.2778	2248.71391	14885.48314	7317.64033	12549.48601	1252.19442	20657.14876	7493.51784	18496.05227	1.77901	1.82466	1.16E-02	2.33E-02	2.48E-03	1.84E-02	1.95E-03	1.29E-02	1.05E-02	1.28E-02	1.28E-03	2.51E-02	6.10E-03	1.51E-02	8.34E-04	8.65E-04	1.4318E-01
551491.3	4173021.63	7238.8688	20576.86387	2230.00758	22263.43039	2309.67071	14080.01298	7279.90187	12440.76425	1270.08432	21398.29118	7888.01767	17243.07624	1.77194	1.81874	1.15E-02	2.32E-02	2.51E-03	1.92E-02	2.01E-03	1.22E-02	1.05E-02	1.27E-02	1.30E-03	2.60E-02	6.42E-03	1.40E-02	8.30E-04	8.62E-04	1.4324E-01
551488.08	4173012.68	7197.69081	20371.60552	2262.58785	23183.03727	2369.06324	13306.71034	7233.22931	12234.84428	1288.30714	22122.63236	8298.06468	16336.46991	1.76485	1.81146	1.15E-02	2.29E-02	2.55E-03	2.00E-02	2.06E-03	1.16E-02	1.04E-02	1.25E-02	1.32E-03	2.69E-02	6.75E-03	1.33E-02	8.27E-04	8.58E-04	1.4337E-01
551782.91	4172743.95	12116.1019	4338.95022	5580.51263	23218.61717	19678.98461	2316.49925	11934.87757	2455.66209	2731.13673	14212.33016	34476.28585	3145.58762	0.69424	0.69325	1.93E-02	4.89E-03	6.29E-03	2.00E-02	1.71E-02	2.01E-03	1.72E-02	2.51E-03	2.79E-03	1.73E-02	2.81E-02	2.56E-03	3.25E-04	3.29E-04	1.4058E-01

551796.12	4172748.56	11410.01835	4480.53486	6323.51587	23330.88291	19501.32215	2276.42885	11240.43277	2521.19152	3003.70136	15059.24111	33643.63677	3085.6668	0.63834	0.63661	1.82E-02	5.05E-03	7.12E-03	2.01E-02	1.69E-02	1.98E-03	1.62E-02	2.57E-03	3.07E-03	1.83E-02	2.74E-02	2.51E-03	2.99E-04	3.02E-04	1.3996E-01
551558.96	4172725.14	7705.21744	7711.8707	4693.29938	33037.97201	9265.86134	4110.78139	7623.49596	4481.68205	2543.69524	19778.78525	28857.00423	5457.52142	1.35502	1.39737	1.23E-02	8.69E-03	5.29E-03	2.85E-02	8.05E-03	3.57E-03	1.10E-02	4.58E-03	2.60E-03	2.40E-02	2.35E-02	4.44E-03	6.35E-04	6.62E-04	1.3773E-01
551484.85	4173003.72	7141.49558	20018.86254	2271.02509	24097.1281	2426.9358	12343.76109	7171.56101	11705.08806	1291.231	22311.30589	8727.42672	15452.90116	1.7497	1.79712	1.14E-02	2.25E-02	2.56E-03	2.08E-02	2.11E-03	1.07E-02	1.03E-02	1.20E-02	1.32E-03	2.71E-02	7.10E-03	1.26E-02	8.20E-04	8.52E-04	1.4211E-01
551753.61	4173170.73	16050.15999	9688.2295	1366.30491	5713.5122	1060.11176	32261.97732	16742.46957	5476.54626	813.78814	5902.80569	2478.786	37167.70285	1.47536	1.44443	2.55E-02	1.09E-02	1.54E-03	4.93E-03	9.20E-04	2.80E-02	2.41E-02	5.59E-03	8.31E-04	7.17E-03	2.02E-03	3.02E-02	6.91E-04	6.85E-04	1.4319E-01
551476.45	4172802.4	5720.48149	9540.1581	2932.69081	39255.06774	4474.30962	5009.23202	5688.1718	5330.37981	1610.93768	22140.12645	26402.36314	6474.37845	2.43219	2.59596	9.10E-03	1.07E-02	3.30E-03	3.39E-02	3.89E-03	4.35E-03	8.19E-03	5.44E-03	1.64E-03	2.69E-02	2.15E-02	5.27E-03	1.14E-03	1.23E-03	1.3652E-01
551631.49	4173193.36	8892.90741	11899.7259	1513.58047	7564.89216	1243.07789	35173.292	9064.27906	7078.53531	889.1821	7898.14574	3037.53078	40280.35398	10.23233	11.05907	1.42E-02	1.34E-02	1.70E-03	6.52E-03	1.08E-03	3.05E-02	1.31E-02	7.23E-03	9.08E-04	9.59E-03	2.47E-03	3.28E-02	4.80E-03	5.24E-03	1.4347E-01
551481.63	4172994.77	7067.84829	19517.14436	2294.53131	24978.77974	2477.3617	11635.20425	7092.40839	11299.96153	1304.64198	22807.31984	9177.68056	14596.68289	1.73696	1.78496	1.12E-02	2.20E-02	2.58E-03	2.15E-02	2.15E-03	1.01E-02	1.02E-02	1.15E-02	1.33E-03	2.77E-02	7.47E-03	1.19E-02	8.14E-04	8.46E-04	1.4139E-01
551469.73	4172820.18	5715.48533	10031.78686	2880.42611	38838.41007	4191.73177	5288.58478	5685.05785	5593.60729	1587.38125	22718.68173	24872.97878	6808.57788	2.46529	2.61582	9.09E-03	1.13E-02	3.24E-03	3.35E-02	3.64E-03	4.59E-03	8.19E-03	5.71E-03	1.62E-03	2.76E-02	2.02E-02	5.54E-03	1.16E-03	1.24E-03	1.3664E-01
551586.17	4173169.3	8006.84939	14506.77635	1656.22023	9334.10045	1400.15193	31411.70237	8128.28909	8770.63314	966.61651	9898.89149	3571.49434	36548.47463	3.5755	3.69474	1.27E-02	1.63E-02	1.87E-03	8.05E-03	1.22E-03	2.73E-02	1.17E-02	8.95E-03	9.87E-04	1.20E-02	2.91E-03	2.97E-02	1.68E-03	1.75E-03	1.3723E-01
551478.41	4172985.82	7002.45737	18987.19608	2327.62986	25945.43416	2524.03852	11010.37922	7021.39932	10882.23403	1323.49558	23351.52674	9621.34223	13837.13663	1.73632	1.78439	1.11E-02	2.14E-02	2.62E-03	2.24E-02	2.19E-03	9.56E-03	1.01E-02	1.11E-02	1.35E-03	2.83E-02	7.83E-03	1.13E-02	8.14E-04	8.46E-04	1.4095E-01
551516.83	4172744.94	6363.03726	8166.41935	3516.49904	37405.04494	6111.31629	4297.20438	6314.07506	4646.22385	1918.0462	20445.29059	28707.23385	5631.92141	1.77137	1.83981	1.01E-02	9.20E-03	3.96E-03	3.23E-02	5.31E-03	3.73E-03	9.09E-03	4.74E-03	1.96E-03	2.48E-02	2.34E-02	4.58E-03	8.30E-04	8.72E-04	1.3484E-01
551552.31	4173134.14	7586.29717	16938.74983	1826.4473	11869.71012	1618.88369	26476.27386	7683.58078	10400.82023	1054.77865	12544.2553	4364.74306	30830.53587	2.41193	2.47447	1.21E-02	1.91E-02	2.06E-03	1.02E-02	1.41E-03	2.30E-02	1.11E-02	1.06E-02	1.08E-03	1.52E-02	3.55E-03	2.51E-02	1.13E-03	1.17E-03	1.3677E-01
551475.18	4172976.87	6917.69732	18330.99751	2358.49788	26841.29703	2567.50157	10409.4036	6931.27648	10414.50297	1341.05244	23757.18711	10082.02277	13102.36223	1.7315	1.78071	1.10E-02	2.06E-02	2.66E-03	2.31E-02	2.23E-03	9.04E-03	9.98E-03	1.06E-02	1.37E-03	2.88E-02	8.21E-03	1.07E-02	8.12E-04	8.44E-04	1.4008E-01
551623.41	4173191.97	8635.00418	12116.8852	1522.2861	7741.19128	1256.53734	34320.37238	8793.94353	7242.29948	893.3251	8100.10113	3089.25115	39186.40403	7.54986	8.02847	1.37E-02	1.36E-02	1.71E-03	6.68E-03	1.09E-03	2.98E-02	1.27E-02	7.39E-03	9.12E-04	9.83E-03	2.51E-03	3.19E-02	3.54E-03	3.80E-03	1.3922E-01
551472.13	4172810.81	5675.03556	9697.25016	2879.32257	38517.71947	4292.97717	5111.70702	5644.03496	5412.89875	1584.28334	22155.50907	25288.16479	6593.20672	2.36559	2.56046	9.03E-03	1.09E-02	3.24E-03	3.32E-02	3.73E-03	4.44E-03	8.13E-03	5.53E-03	1.62E-03	2.69E-02	2.06E-02	5.37E-03	1.11E-03	1.21E-03	1.3502E-01
551503.47	4173055.72	7197.11283	19729.17556	2081.21381	18514.07667	2081.56632	16922.41587	7256.61305	12110.25715	1187.52168	18210.17016	6549.89265	20765.01786	1.75904	1.80091	1.15E-02	2.22E-02	2.34E-03	1.60E-02	1.81E-03	1.47E-02	1.05E-02	1.24E-02	1.21E-03	2.21E-02	5.33E-03	1.69E-02	8.24E-04	8.53E-04	1.3853E-01
551570.84	4173156.57	7750.55226	15427.82767	1719.62225	10217.29276	1476.8118	29155.29461	7859.48607	9445.05402	1000.23131	10868.73436	3847.72194	33643.86411	2.93393	3.01947	1.23E-02	1.74E-02	1.94E-03	8.81E-03	1.28E-03	2.53E-02	1.13E-02	9.64E-03	1.02E-03	1.32E-02	3.13E-03	2.74E-02	1.38E-03	1.43E-03	1.3555E-01
551883.03	4172794.78	16630.62076	7915.22379	9025.73037	20261.20416	8814.87396	3427.72203	16120.13171	4824.36055	4871.37704	17850.81511	17567.97665	4700.05849	0.43756	0.436	2.65E-02	8.91E-03	1.02E-02	1.75E-02	7.65E-03	2.98E-03	2.32E-02	4.93E-03	4.97E-03	2.17E-02	1.43E-02	3.83E-03	2.05E-04	2.07E-04	1.4697E-01
551471.96	4172967.92	6810.68486	17565.07729	2384.54701	27628.45899	2606.15348	9827.58911	6819.14448	9909.80802	1355.65105	23982.32918	10564.06311	12388.09945	1.72225	1.77178	1.08E-02	1.98E-02	2.69E-03	2.38E-02	2.26E-03	8.53E-03	9.82E-03	1.01E-02	1.38E-03	2.91E-02	8.60E-03	1.01E-02	8.07E-04	8.40E-04	1.3869E-01
551857.22	4172778.98	12921.07496	6591.84677	9823.32121	22338.56261	12017.03879	2716.74339	12525.18207	3850.92631	4963.67452	18233.61062	22115.85676	3705.29793	0.47344	0.47196	2.06E-02	7.42E-03	1.11E-02	1.93E-02	1.04E-02	2.36E-03	1.80E-02	3.93E-03	5.07E-03	2.21E-02	1.80E-02	3.02E-03	2.22E-04	2.24E-04	1.4174E-01
551908.65	4172810.34	20666.45576	9000.35325	7268.62197	17965.34546	6678.93662	4352.79386	20204.34146	5413.19905	4068.77789	16103.20747	13738.96464	6043.0416	0.40086	0.39929	3.29E-02	1.01E-02	8.19E-03	1.55E-02	5.80E-03	3.78E-03	2.91E-02	5.53E-03	4.15E-03	1.95E-02	1.12E-02	4.92E-03	1.88E-04	1.89E-04	1.5109E-01
551700.26	4173190.02	12089.54011	10356.45271	1434.81416	6315.80548	1132.84164	32711.60593	12449.50285	5881.37528	850.26142	6509.14673	2668.99495	37957.5176	3.50942	3.37213	1.92E-02	1.17E-02	1.62E-03	5.45E-03	9.84E-04	2.84E-02	1.79E-02	6.00E-03	8.68E-04	7.90E-03	2.17E-03	3.09E-02	1.64E-03	1.60E-03	1.3636E-01
551468.72	4172958.94	6686.18998	16731.52892	2407.24982	28298.60558	2642.25973	9272.98775	6689.84045	9392.19899	1368.08859	24047.44562	11059.26411	11704.17506	1.71102	1.75946	1.06E-02	1.88E-02	2.71E-03	2.44E-02	2.29E-03	8.05E-03	9.63E-03	9.59E-03	1.40E-03	2.92E-02	9.00E-03	9.53E-03	8.02E-04	8.34E-04	1.3692E-01
551509.39	4173072.46	7121.48889	19130.56567	2003.37588	16805.94655	1965.47213	18167.32457	7187.88773	11506.93539	1144.89221	16704.51695	5976.45743	22062.31044	1.755	1.79435	1.13E-02	2.15E-02	2.26E-03	1.45E-02	1.71E-03	1.58E-02	1.04E-02	1.17E-02	1.17E-03	2.03E-02	4.86E-03	1.80E-02	8.23E-04	8.50E-04	1.3515E-01
551590.14	4172713.71	8772.48294	7004.26204	5612.89165	26437.99422	12181.86169	3846.07296	8660.62657	4146.20686	3002.88287	17494.70084	27444.57043	5156.75791	1.11444	1.14938	1.40E-02	7.89E-03	6.32E-03	2.28E-02	1.06E-02	3.34E-03	1.25E-02	4.23E-03	3.07E-03	2.12E-02	2.23E-02	4.20E-03	5.22E-04	5.45E-04	1.3350E-01
551533.23	4172729.4	6727.83619	7711.55968	3845.59206	34133.98053	6995.48705	4098.53647	6668.17962	4426.77818	2095.51456	19424.81254	27352.66766	5398.02745	1.46132	1.50777	1.07E-02	8.69E-03	4.33E-03	2.94E-02	6.07E-03	3.56E-03	9.60E-03	4.52E-03	2.14E-03	2.36E-02	2.23E-02	4.39E-03	6.85E-04	7.15E-04	1.3069E-01
551555.4	4173142.73	7477.42967	16025.56292	1770.83644	11179.15557	1555.45174	26055.77835	7574.81662	9844.00125	1023.55573	11839.91592	4156.59752	30263.52164	2.442	2.50577	1.19E-02	1.80E-02	1.99E-03	9.64E-03	1.35E-03	2.26E-02	1.09E-02	1.00E-02	1.04E-03	1.44E-02	3.38E-03	2.46E-02	1.14E-03	1.19E-03	1.3228E-01
551465.5	4172949.97	6550.96124	15880.9465	2427.93407	28214.22717	2677.86702	8756.31926	6550.23245	8887.43755	1378.93911	23988.49012	11559.70106	11063.17175	1.69707	1.74603	1.04E-02	1.79E-02	2.73E-03	2.43E-02	2.33E-03	7.60E-03	9.43E-03	9.07E-03	1.41E-03	2.91E-02	9.41E-03	9.00E-03	7.95E-04	8.27E-04	1.3438E-01
551897.91	4172798.03	17964.88285	8286.56305	7792.82773	18623.38255	7590.41629	3802.66888	17488.4533	5017.43121	4302.49715	16488.28297	15324.156	5180.28366	0.4131	0.41161	2.86E-02	9.33E-03	8.78E-03	1.61E-02	6.59E-03	3.30E-03	2.52E-02	5.12E-03	4.39E-03	2.00E-02	1.25E-02	4.22E-03	1.94E-04	1.95E-04	1.4444E-01
551497.82	4173052.15	7004.2312	18874.48905	2043.2726	18387.11572	2065.14556	15751.80734	7059.47315	11554.03524	1165.01877	17895.14273	6587.15531	19377.48175	1.66839	1.7071	1.11E-02	2.13E-02	2.30E-03	1.59E-02	1.79E-03	1.37E-02	1.02E-02	1.18E-02	1.19E-03	2.17E-02	5.36E-03	1.58E-02	7.82E-04	8.09E-04	1.3363E-01

551440.51	4172938.71	5525.09326	11725.6318	2089.48842	22427.46924	2349.94534	6830.60635	5521.38079	6612.57341	1184.27437	18475.36521	9975.19861	8627.11834	1.277	1.31087	8.79E-03	1.32E-02	2.35E-03	1.93E-02	2.04E-03	5.93E-03	7.95E-03	6.75E-03	1.21E-03	2.24E-02	8.12E-03	7.02E-03	5.99E-04	6.21E-04	1.0637E-01
551499.7	4173104.14	6038.53234	13646.44101	1661.81839	12798.02444	1638.97002	14948.83164	6098.78977	8153.75555	950.34975	12460.93139	4862.0977	17943.7938	1.35836	1.3831	9.61E-03	1.54E-02	1.87E-03	1.10E-02	1.42E-03	1.30E-02	8.78E-03	8.32E-03	9.70E-04	1.51E-02	3.96E-03	1.46E-02	6.37E-04	6.55E-04	1.0535E-01
551472.48	4172759.15	4980.86685	7260.74825	2477.50475	27658.95233	3919.87318	3979.17501	4953.62559	4102.98521	1356.89014	16233.25277	18889.59637	5161.35821	1.40479	1.47004	7.93E-03	8.18E-03	2.79E-03	2.39E-02	3.40E-03	3.46E-03	7.13E-03	4.19E-03	1.39E-03	1.97E-02	1.54E-02	4.20E-03	6.58E-04	6.97E-04	1.0295E-01
551821.5	4172731.87	7988.09805	3798.05011	4914.50193	18454.17687	12984.34105	1906.41267	7874.9066	2139.46615	2363.32765	12148.46744	23609.52765	2566.88924	0.53063	0.53056	1.27E-02	4.28E-03	5.54E-03	1.59E-02	1.13E-02	1.66E-03	1.13E-02	2.18E-03	2.41E-03	1.47E-02	1.92E-02	2.09E-03	2.49E-04	2.51E-04	1.0386E-01
551436.87	4172899.52	5230.61657	10206.34694	2204.78431	24286.21373	2565.81007	5867.78228	5217.24763	5737.39314	1239.1172	18535.69824	11725.63993	7438.4548	1.3274	1.36828	8.32E-03	1.15E-02	2.48E-03	2.09E-02	2.23E-03	5.10E-03	7.51E-03	5.86E-03	1.27E-03	2.25E-02	9.54E-03	6.05E-03	6.22E-04	6.48E-04	1.0458E-01
551466.73	4173040.59	5882.68122	14008.33013	1768.30531	16068.33825	1879.28219	10754.35743	5920.61732	8361.41145	997.80203	14908.14832	6310.32921	13321.3687	1.22304	1.24714	9.36E-03	1.58E-02	1.99E-03	1.39E-02	1.63E-03	9.34E-03	8.53E-03	8.54E-03	1.02E-03	1.81E-02	5.14E-03	1.08E-02	5.73E-04	5.91E-04	1.0528E-01
551463.51	4173031.64	5861.32406	13989.98599	1771.12064	16559.29882	1917.3876	10277.43638	5895.70057	8327.61577	1005.80047	15000.24152	6568.03973	12772.18193	1.21105	1.23558	9.33E-03	1.58E-02	1.99E-03	1.43E-02	1.66E-03	8.92E-03	8.49E-03	8.50E-03	1.03E-03	1.82E-02	5.35E-03	1.04E-02	5.68E-04	5.86E-04	1.0507E-01
551884.91	4172755.47	9530.13333	5370.41054	6725.41925	17589.50785	8847.68999	2313.6398	9265.70097	3146.65243	3446.21574	14022.20664	16507.36208	3140.92179	0.40002	0.39964	1.52E-02	6.05E-03	7.57E-03	1.52E-02	7.68E-03	2.01E-03	1.33E-02	3.21E-03	3.52E-03	1.70E-02	1.34E-02	2.56E-03	1.87E-04	1.89E-04	1.0711E-01
551960.95	4172801.24	15998.10519	7384.14283	4785.0156	13312.69937	4536.32122	4007.4093	15752.35937	4416.72488	2695.7939	11932.18852	9524.01437	5498.04021	0.32671	0.32574	2.55E-02	8.32E-03	5.39E-03	1.15E-02	3.94E-03	3.48E-03	2.27E-02	4.51E-03	2.75E-03	1.45E-02	7.75E-03	4.47E-03	1.53E-04	1.54E-04	1.1503E-01
551711.38	4173206.27	10853.64211	8488.52997	1273.35009	5520.82997	1021.93777	22001.58857	11178.43234	4821.01386	753.25886	5619.27346	2405.76833	25835.31522	3.07497	2.95679	1.73E-02	9.56E-03	1.43E-03	4.76E-03	8.87E-04	1.91E-02	1.61E-02	4.92E-03	7.69E-04	6.82E-03	1.96E-03	2.10E-02	1.44E-03	1.40E-03	1.0746E-01
551460.28	4173022.69	5829.37474	13896.08402	1784.15629	17043.13853	1945.61528	9801.47107	5859.96123	8237.53957	1013.18418	15298.11968	6830.57361	12215.71975	1.20356	1.2286	9.28E-03	1.57E-02	2.01E-03	1.47E-02	1.69E-03	8.51E-03	8.44E-03	8.41E-03	1.03E-03	1.86E-02	5.56E-03	9.94E-03	5.64E-04	5.82E-04	1.0494E-01
551457.06	4173013.74	5789.82533	13738.06066	1797.47236	17529.71607	1972.22426	9340.39759	5816.57592	8097.85215	1020.87161	15579.77605	7095.62897	11670.27232	1.19601	1.22177	9.21E-03	1.55E-02	2.02E-03	1.51E-02	1.71E-03	8.11E-03	8.38E-03	8.27E-03	1.04E-03	1.89E-02	5.77E-03	9.50E-03	5.61E-04	5.79E-04	1.0466E-01
551925.14	4172773.98	12815.14417	6635.55063	5834.75203	15143.69547	6174.23374	3159.01309	12502.57351	3993.25444	3190.34323	13172.10633	12485.86396	4286.37975	0.35895	0.35818	2.04E-02	7.47E-03	6.57E-03	1.31E-02	5.36E-03	2.74E-03	1.80E-02	4.08E-03	3.26E-03	1.60E-02	1.02E-02	3.49E-03	1.68E-04	1.70E-04	1.1092E-01
551453.83	4173004.78	5757.56916	13561.55827	1818.14836	18062.17512	2002.7935	8924.04199	5780.24256	7937.52767	1032.91861	15915.38474	7352.13814	11173.32755	1.19403	1.21967	9.16E-03	1.53E-02	2.05E-03	1.56E-02	1.74E-03	7.75E-03	8.32E-03	8.10E-03	1.05E-03	1.93E-02	5.98E-03	9.09E-03	5.60E-04	5.78E-04	1.0457E-01
551437.28	4172929.75	5390.6257	11131.93012	2091.10647	22410.76498	2344.92211	6485.42327	5384.41702	6274.29693	1183.36909	18176.78733	10164.49126	8196.76639	1.25613	1.28956	8.58E-03	1.25E-02	2.36E-03	1.93E-02	2.04E-03	5.63E-03	7.75E-03	6.41E-03	1.21E-03	2.21E-02	8.27E-03	6.67E-03	5.89E-04	6.11E-04	1.0404E-01
551502.88	4173113.14	5979.24961	13189.93137	1625.69049	12207.23014	1590.19313	15044.04964	6040.44248	7890.57961	930.54588	11937.72026	4656.52455	17992.98417	1.35634	1.3806	9.51E-03	1.49E-02	1.83E-03	1.05E-02	1.38E-03	1.31E-02	8.70E-03	8.06E-03	9.50E-04	1.45E-02	3.79E-03	1.46E-02	6.36E-04	6.54E-04	1.0309E-01
551524.51	4173144.15	6208.81439	12715.86598	1571.44614	10537.06403	1455.68374	16922.4555	6279.00785	7708.17078	903.31831	10740.15212	4040.40997	19989.85911	1.56519	1.59576	9.88E-03	1.43E-02	1.77E-03	9.09E-03	1.26E-03	1.47E-02	9.04E-03	7.87E-03	9.22E-04	1.30E-02	3.29E-03	1.63E-02	7.34E-04	7.56E-04	1.0294E-01
551484.22	4172739.84	5084.8246	6889.64383	2559.00749	26787.59244	4138.09616	3783.15185	5054.63164	3910.77231	1400.41769	15660.45603	18841.7108	4923.98008	1.26954	1.3198	8.09E-03	7.76E-03	2.88E-03	2.31E-02	3.59E-03	3.28E-03	7.28E-03	3.99E-03	1.43E-03	1.90E-02	1.53E-02	4.01E-03	5.95E-04	6.25E-04	1.0099E-01
551639.42	4172687.33	9330.02291	4987.68791	5423.92468	14613.4385	11414.42268	2979.31562	9192.65892	3009.60437	2825.62456	10770.15871	20347.01304	4036.07853	0.64579	0.66336	1.48E-02	5.62E-03	6.11E-03	1.26E-02	9.91E-03	2.59E-03	1.32E-02	3.07E-03	2.88E-03	1.31E-02	1.66E-02	3.28E-03	3.03E-04	3.14E-04	1.0441E-01
551450.61	4172995.83	5709.13075	13294.78591	1836.93574	18556.55259	2030.58851	8512.50025	5727.82447	7725.87231	1043.83556	16183.95964	7614.11349	10677.43259	1.18894	1.21537	9.08E-03	1.50E-02	2.07E-03	1.60E-02	1.76E-03	7.39E-03	8.25E-03	7.89E-03	1.07E-03	1.96E-02	6.20E-03	8.69E-03	5.57E-04	5.76E-04	1.0415E-01
551950.41	4172789.14	14819.18487	7103.84203	5048.23611	13809.41225	5015.96378	3703.89036	14545.29114	4247.25295	2814.34105	12192.4312	10396.48666	5087.95864	0.33444	0.33357	2.36E-02	8.00E-03	5.69E-03	1.19E-02	4.36E-03	3.22E-03	2.09E-02	4.34E-03	2.87E-03	1.48E-02	8.46E-03	4.14E-03	1.57E-04	1.58E-04	1.1262E-01
551616.47	4172686.42	8459.10969	5322.62775	5006.30897	16292.62897	10458.66486	3115.34303	8345.40791	3190.86677	2647.88512	11895.21523	19619.2464	4198.083	0.66498	0.68095	1.35E-02	5.99E-03	5.64E-03	1.41E-02	9.08E-03	2.71E-03	1.20E-02	3.26E-03	2.70E-03	1.44E-02	1.60E-02	3.42E-03	3.12E-04	3.23E-04	1.0337E-01
551507.17	4172717.02	5448.8946	6533.30209	2841.64766	25669.1706	4767.72421	3600.10426	5409.72409	3738.51797	1554.74671	15195.01132	19044.48258	4710.63114	1.08924	1.12133	8.67E-03	7.36E-03	3.20E-03	2.21E-02	4.14E-03	3.13E-03	7.79E-03	3.82E-03	1.59E-03	1.84E-02	1.55E-02	3.83E-03	5.11E-04	5.31E-04	1.0065E-01
551475.62	4173065.57	5843.83548	13534.97748	1700.32898	14526.67159	1766.51416	12118.36217	5890.52211	8228.16057	968.03492	13672.18787	5653.64343	14589.17805	1.22225	1.24522	9.30E-03	1.52E-02	1.92E-03	1.25E-02	1.53E-03	1.05E-02	8.48E-03	8.40E-03	9.88E-04	1.66E-02	4.60E-03	1.19E-02	5.73E-04	5.90E-04	1.0315E-01
551447.38	4172986.88	5648.87316	12958.53121	1855.43204	19017.12517	2056.96044	8115.18782	5663.67434	7479.36186	1054.57018	16397.99944	7877.15139	10194.35365	1.18249	1.2095	8.99E-03	1.46E-02	2.09E-03	1.64E-02	1.79E-03	7.05E-03	8.16E-03	7.64E-03	1.08E-03	1.99E-02	6.41E-03	8.30E-03	5.54E-04	5.73E-04	1.0352E-01
551785.55	4172720.64	9372.17226	3502.03898	3720.67751	17798.89623	12244.64722	1982.33885	9250.84428	2000.35423	1887.42276	10414.19234	23468.64481	2677.74639	0.62814	0.63115	1.49E-02	3.94E-03	4.19E-03	1.54E-02	1.06E-02	1.72E-03	1.33E-02	2.04E-03	1.93E-03	1.26E-02	1.91E-02	2.18E-03	2.94E-04	2.99E-04	1.0256E-01
551543.04	4173166.57	6339.59436	12080.71714	1511.32023	9384.79385	1358.57715	18122.99634	6416.73398	7362.35495	872.07427	9683.54887	3646.49169	21241.17396	1.78988	1.82801	1.01E-02	1.36E-02	1.70E-03	8.09E-03	1.18E-03	1.57E-02	9.24E-03	7.52E-03	8.90E-04	1.18E-02	2.97E-03	1.73E-02	8.39E-04	8.66E-04	1.0177E-01
551899.77	4172758.69	10302.22413	5695.04736	6436.20633	16506.06921	7532.35697	2500.84464	10017.68112	3384.22296	3374.73021	13697.68765	14831.22045	3393.13356	0.38136	0.38094	1.64E-02	6.41E-03	7.25E-03	1.42E-02	6.54E-03	2.17E-03	1.44E-02	3.46E-03	3.45E-03	1.66E-02	1.21E-02	2.76E-03	1.79E-04	1.81E-04	1.0615E-01
551602.74	4173209.05	7100.61183	10143.87172	1359.64835	7206.72322	1171.2149	21418.73257	7214.84601	6088.74858	792.72081	7373.3344	2934.85641	24819.13416	3.60857	3.73879	1.13E-02	1.14E-02	1.53E-03	6.22E-03	1.02E-03	1.86E-02	1.04E-02	6.22E-03	8.09E-04	8.95E-03	2.39E-03	2.02E-02	1.69E-03	1.77E-03	1.0250E-01
551436.46	4172869.29	4958.77896	9071.31456	2204.65551	24634.72382	2738.77354	5205.50382	4941.61165	5106.22059	1230.00814	17527.29716	13120.12609	6618.51497	1.31311	1.35863	7.89E-03	1.02E-02	2.48E-03	2.12E-02	2.38E-03	4.52E-03	7.12E-03	5.21E-03	1.26E-03	2.13E-02	1.07E-02	5.39E-03	6.15E-04	6.44E-04	1.0092E-01
551444.16	4172977.93	5584.12638	12584.80588	1876.55493	19116.48964	2084.36159	7744.38432	5595.08883	7219.61555	1066.60137	16586.50123	8137.76481	9740.60048	1.17718	1.20411	8.89E-03	1.42E-02	2.11E-03	1.65E-02	1.81E-03	6.72E-03	8.06E-03	7.37E-03	1.09E-03	2.01E-02	6.62E-03	7.93E-03	5.52E-04	5.71E-04	1.0252E-01
551649.03	4173219.73	8067.37501	9088.51102	1295.24785	6226.84092	1083.6585	22212.1134	8231.1134	5337.76289	760.08482	6335.25118	2623.81246	25923.78586	15.77533	13.10886	1.28E-02	1.02E-02	1.46E-03	5.37E-03	9.41E-04	1.93E-02	1.19E-02	5.45E-03	7.76E-04	7.69E-03	2.14E-03	2.11E-02	7.39E-03	6.21E-03	1.1274E-01
551505.97	4173121.73	5932.51294	12783.38216	1592.56727	11658.61533	1543.27971	15087.27923	5994.37476	7660.8778	912.33111	11470.22483	4464.47302	17992.94716	1.35937	1.38366	9.44E-03	1.44E-02	1.79E-03	1.01E-02	1.34E-03	1.31E-02	8.63E-03	7.82E-03	9.31E-04	1.39E-02	3.63E-03	1.46E-02	6.37E-04	6.56E-04	1.0101E-01
551434.06	4172920.78	5247.77813	10543.87594	2083.92624	22270.20223	2357.07065	6153.82633	5239.50759	5942.84579	1177.13028	17769.04379	10339.98095	7782.74351	1.23131	1.26561	8.35E-03	1.19E-02	2.35E-03	1.92E-02	2.05E-03	5.34E-03	7.55E-03	6.07E-03	1.20E-03	2.16E-02	8.42E-03	6.33E-03	5.77E-04	6.00E-04	1.0148E-01
551481.53	4173082.31	5797.85029	13055.68958	1652.74505	13549.40052	1686.18042	12758.42462	5848.86609	7917.05181	942.17332	12858.79799	5235.22987	15518.57993	1.22476	1.24762	9.23E-03	1.47E-02	1.86E-03	1.17E-02	1.46E-03	1.11E-02	8.42E-03	8.08E-03	9.62E-04	1.56E-02	4.26E-03	1.26E-02	5.74E-04	5.91E-04	1.0115E-01
551460.65	4172770.83	4780.95786	7249.51414	2338.77302	26253.09101	3610.00789	4012.5316	4756.51752	4090.01482	1283.04786	15761.01895	17438.141	5186.75236	1.35874	1.42269	7.61E-03	8.16E-03	2.63E-03	2.26E-02	3.13E-03	3.48E-03	6.85E-03	4.18E-03	1.31E-03	1.91E-02	1.42E-02	4.22E-03	6.37E-04	6.74E-04	9.8861E-02
551574.14	4173194.3	6651.80869	10945.27117	1417.56823	8012.70269	1239.35652	19806.2015	6744.59924	6638.80695	822.74455	8258.27468	3192.67289	23020.12207	2.38002	2.44564	1.06E-02	1.23E-02	1.60E-03	6.91E-03	1.08E-03	1.72E-02	9.71E-03	6.78E-03	8.40E-04	1.00E-02	2.60E-03	1.87E-02	1.12E-03	1.16E-03	1.0066E-01
551433.65	4172890.55	5050.78759	9581.30535	2159.08244	23602.02274	2558.43068	5542.48026	5036.66438	5393.14898	1210.69709	17687.36644	11747.51381	7029.70672	1.27628	1.31746	8.04E-03	1.08E-02	2.43E-03	2.04E-02	2.22E-03	4.81E-03	7.25E-03	5.51E-03	1.24E-03	2.15E-02	9.56E-03	5.72E-03	5.98E-04	6.24E-04	1.0062E-01
551440.92	4172968.94	5510.74462	12170.47834	1898.11186	19490.81297	2111.91955	7391.19632	5517.95567	6946.81096	1078.56157	16722.64861	8398.31911	9306.25716	1.1713	1.19863	8.77E-03	1.37E-02	2.14E-03	1.68E-02	1.83E-03	6.42E-03	7.95E-03	7.09E-03	1.10E-03	2.03E-02	6.83E-03	7.57E-03	5.49E-04	5.68E-04	1.0164E-01
551939.86	4172777.05	13285.17038	6681.9477	5260.87311	14201.26797	5503.1784	3342.3834	12998.15368	4018.62837	2910.31307	12363.12223	11257.35216	4524.13303	0.34176	0.34102	2.11E-02	7.53E-03	5.93E-03	1.22E-02	4.78E-03	2.90E-03	1.87E-02	4.10E-03	2.97E-03	1.50E-02	9.16E-03	3.68E-03	1.60E-04	1.62E-04	1.0849E-01
551703.28	4173211.81	10220.68921	8372.69735	1259.02113	5510.5656	1016.11959	21039.56482	10509.3288	4776.95537	743.87172	5609.77847	2397.75715	24750.72237	3.83807	3.66725	1.63E-02	9.43E-03	1.42E-03	4.75E-03	8.82E-04	1.83E-02	1.51E-02	4.88E-03	7.59E-04	6.81E-03	1.95E-03	2.01E-02	1.80E-03	1.74E-03	1.0423E-01
551524.13	4172701.31	5724.17628	6208.93029	3069.74309	23805.8665	5348.50139	3447.67841	5676.59561	3579.04453	1675.98199	14508.25419	18506.02025	4531.79402	0.94253	0.96533	9.11E-03	6.99E-03	3.46E-03	2.05E-02	4.64E-03	2.99E-03	8.18E-03	3.65E-03	1.71E-03	1.76E-02	1.51E-02	3.69E-03	4.42E-04	4.57E-04	9.8529E-02
551837.73	4172732.83	7357.38619	3869.15206	5159.78944	17765.00316	11808.90258	1861.00303	7237.72817	2183.77539	2485.27277	12170.52417	21666.6557	2504.22637	0.48784	0.48753	1.17E-02	4.36E-03	5.81E-03	1.53E-02	1.03E-02	1.62E-03	1.04E-02	2.23E-03	2.54E-03	1.48E-02	1.76E-02	2.04E-03	2.29E-04	2.31E-04	9.9164E-02
551527.6	4173152.73	6123.07036	12175.76763	1528.20261	10029.96494	1409.06697	16604.3595	6193.03545	7387.48853	879.20695	10220.59244	3877.40564	19590.0377	1.56153	1.59202	9.74E-03	1.37E-02	1.72E-03	8.65E-03	1.22E-03	1.44E-02	8.92E-03	7.54E-03	8.98E-04	1.24E-02	3.16E-03	1.59E-02	7.32E-04	7.54E-04	9.9821E-02
551859.31	4172739.92	7576.33696	4325.29464	5907.16897	17642.29523	10713.69648	1951.25665	7412.20652	2473.23526	2897.82711	12913.58649	19570.4491	2630.88488	0.43493	0.43432	1.21E-02	4.87E-03	6.65E-03	1.52E-02	9.30E-03	1.69E-03	1.07E-02	2.52E-03	2.96E-03	1.57E-02	1.59E-02	2.14E-03	2.04E-04	2.06E-04	1.0011E-01
551659.8	4172686.34	9858.81887	4585.38806	5414.67068	13239.09594	11129.50693	2791.90244	9705.60163	2770.42534	2784.46478	9522.3504	20014.48077	3796.70145	0.61431	0.63168	1.57E-02	5.16E-03	6.10E-03	1.14E-02	9.66E-03	2.42E-03	1.40E-02	2.83E-03	2.84E-03	1.16E-02	1.63E-02	3.09E-03	2.88E-04	2.99E-04	1.0163E-01
551452.33	4172786.01	4704.02056	7410.21562	2274.79879	25729.07967	3416.60825	4130.7924	4681.04027	4174.17607	1250.72264	15745.3106	16668.57961	5321.91351	1.35512	1.41854	7.49E-03	8.35E-03	2.56E-03	2.22E-02	2.97E-03	3.59E-03	6.74E-03	4.26E-03	1.28E-03	1.91E-02	1.36E-02	4.33E-03	6.35E-04	6.72E-04	9.7735E-02
551437.7	4172959.97	5420.53572	11705.47288	1914.76796	19761.49738	2136.56141	7044.19066	5424.38638	6656.51138	1087.50713	16751.11915	8655.52293	8877.61529	1.16158	1.18923	8.63E-03	1.32E-02	2.16E-03	1.70E-02	1.86E-03	6.12E-03	7.81E-03	6.80E-03	1.11E-03	2.03E-02	7.04E-03	7.22E-03	5.44E-04	5.64E-04	1.0041E-01
551914.57	4172761.85	10854.57147	5904.58505	5989.58919	15491.8632	6702.40052	2721.26439	10567.3198	3583.88485	3202.19767	13140.92971	13374.264	3609.32915	0.36503	0.36436	1.73E-02	6.65E-03	6.75E-03	1.34E-02	5.82E-03	2.36E-03	1.52E-02	3.66E-03	3.27E-03	1.60E-02	1.09E-02	2.94E-03	1.71E-04	1.73E-04	1.0448E-01
551509.06	4173130.31	5892.57774	12395.41068	1560.57983	11117.65672	1495.94402	15080.69694	5954.93701	7446.75512	894.6708	11029.10322	4276.73253	17943.57648	1.3672	1.39158	9.38E-03	1.40E-02	1.76E-03	9.59E-03	1.30E-03	1.31E-02	8.58E-03	7.60E-03	9.13E-04	1.34E-02	3.48E-03	1.46E-02	6.41E-04	6.60E-04	9.8942E-02
551474.81	4172746.05	4872.61996	6810.29515	2409.0887	25574.6721	3832.17068	3765.40428	4845.74348	3860.1497	1319.34485	15152.44082	17594.41698	4890.67159	1.23563	1.28681	7.75E-03	7.67E-03	2.71E-03	2.21E-02	3.33E-03	3.27E-03	6.98E-03	3.94E-03	1.35E-03	1.84E-02	1.43E-02	3.98E-03	5.79E-04	6.10E-04	9.6940E-02
551557.67	4172685.77	6456.89322	5834.8207	3639.13081	20885.97176	6869.35915	3284.51864	6390.68051	3411.49103	1964.62577	13621.37991	18207.82815	4358.8326	0.77628	0.79195	1.03E-02	6.57E-03	4.10E-03	1.80E-02	5.96E-03	2.85E-03	9.20E-03	3.48E-03	2.01E-03	1.65E-02	1.48E-02	3.55E-03	3.64E-04	3.75E-04	9.8108E-02
551636.31	4173221.58	7676.61709	9108.6633	1289.24916	6336.66208	1087.90305	21372.97101	7824.20274	5382.95046	755.122	6454.91898	2654.94846	24900.0491	8.22792	8.7747	1.22E-02	1.03E-02	1.45E-03	5.46E-03	9.45E-04	1.86E-02	1.13E-02	5.50E-03	7.71E-04	7.84E-03	2.16E-03	2.03E-02	3.86E-03	4.16E-03	1.0471E-01
551965.07	4172792.14	14688.10729	6958.24932	4594.33961	12889.20112	4490.45286	3761.73371	14457.39087	4157.34525	2575.62348	11454.79909	9393.8148	5154.0709	0.31884	0.318	2.34E-02	7.84E-03	5.17E-03	1.11E-02	3.90E-03	3.27E-03	2.08E-02	4.24E-03	2.63E-03	1.39E-02	7.65E-03	4.19E-03	1.49E-04	1.51E-04	1.0841E-01
551448	4172794.42	4662.00629	7470.96927	2236.67003	25267.82086	3302.75794	4187.91263	4639.83663	4206.91778	1231.51389	15654.41959	16128.90884	5385.54569	1.33529	1.39636	7.42E-03	8.41E-03	2.52E-03	2.18E-02	2.87E-03	3.64E-03	6.68E-03	4.29E-03	1.26E-03	1.90E-02	1.31E-02	4.38E-03	6.26E-04	6.62E-04	9.6684E-02
551434.47	4172951.01	5323.80597	11229.06908	1930.10105	19978.39256	2161.82814	6717.29458	5324.50329	6368.53896	1095.30601	16718.30962	8867.37965	8472.54072	1.1507	1.17837	8.47E-03	1.26E-02	2.17E-03	1.72E-02	1.88E-03	5.83E-03	7.67E-03	6.50E-03	1.12E-03	2.03E-02	7.22E-03	6.90E-03	5.39E-04	5.58E-04	9.9026E-02
551434.05	4172860.37	4811.5971	8592.21703	2153.48234	23915.8029	2735.30213	4954.46572	4794.21609	4839.40205	1199.34285	16688.65221	13106.15088	6305.39812	1.26307	1.30747	7.66E-03	9.68E-03	2.43E-03	2.06E-02	2.38E-03	4.30E-03	6.90E-03	4.94E-03	1.22E-03	2.03E-02	1.07E-02	5.13E-03	5.92E-04	6.20E-04	9.7401E-02
551874.27	4172743.26	7862.5137	4598.13073	6043.16055	17136.34208	9638.15029	2022.94242	7667.86448	2656.62573	3022.94486	12991.67271	17701.22432	2732.96997	0.40533	0.40484	1.25E-02	5.18E-03	6.81E-03	1.48E-02	8.37E-03	1.76E-03	1.10E-02	2.71E-03	3.09E-03	1.58E-02	1.44E-02	2.22E-03	1.90E-04	1.92E-04	9.9026E-02
551583.21	4173202.84	6673.31363	10368.80769	1371.88091	7599.13176	1200.42065	19487.27935	6770.26809	6262.92332	797.33401	7771.3106	3063.77236	22663.33343	2.5869	2.66575	1.06E-02	1.17E-02	1.55E-03	6.55E-03	1.04E-03	1.69E-02	9.75E-03	6.39E-03	8.14E-04	9.43E-03	2.49E-03	1.84E-02	1.21E-03	1.26E-03	9.8165E-02
551487.45	4173099.05	5710.32791	12411.04873	1597.61117	12537.60171	1606.10277	13167.67322	5764.30927	7521.80107	912.06632	12003.18805	4856.30612	15891.56289	1.21919	1.24044	9.09E-03	1.40E-02	1.80E-03	1.08E-02	1.39E-03	1.14E-02	8.30E-03	7.68E-03	9.31E-04	1.46E-02	3.95E-03	1.29E-02	5.71E-04	5.88E-04	9.8034E-02
551430.83	4172911.82	5083.40625	9931.05914	2058.52312	21870.79472	2354.38404	5816.28414	5073.66345	5598.8002	1160.41385	17169.46123	10461.24805	7361.62973	1.1954	1.22904	8.09E-03	1.12E-02	2.32E-03	1.89E-02	2.04E-03	5.05E-03	7.31E-03	5.72E-03	1.18E-03	2.08E-02	8.51E-03	5.99E-03	5.60E-04	5.82E-04	9.8248E-02
551546.45	4173176.22	6222.65924	11396.98894	1457.19014	8859.8113	1306.1526	17429.87915	6299.2234	6939.33739	841.75842	9120.81537	3479.08419	20422.37041	1.78124	1.8191	9.90E-03	1.28E-02	1.64E-03	7.64E-03	1.13E-03	1.51E-02	9.07E-03	7.08E-03	8.59E-04	1.11E-02	2.83E-03	1.66E-02	8.35E-04	8.62E-04	9.7526E-02
551974.56	4172799.99	15058.22563	7053.09209	4356.12058	12415.15547	4143.48368	3938.48001	14845.68691	4214.34322	2458.18549	11135.31742	8748.55701	5387.03703	0.31165	0.31077	2.40E-02	7.94E-03	4.91E-03	1.07E-02	3.60E-03	3.42E-03	2.14E-02	4.30E-03	2.51E-03	1.35E-02	7.12E-03	4.38E-03	1.46E-04	1.47E-04	1.0804E-01
551514.49	4172704.15	5452.88763	6154.69006	2859.34221	23445.91664	4855.81663	3427.22755	5410.98638	3537.61248	1564.05624	14209.90618	17729.36816	4493.23954	0.9474	0.97154	8.68E-03	6.93E-03	3.22E-03	2.02E-02	4.22E-03	2.98E-03	7.79E-03	3.61E-03	1.60E-03	1.73E-02	1.44E-02	3.66E-03	4.44E-04	4.60E-04	9.5484E-02
551626.93	4172681.43	8533.30395	4959.39648	4916.21508	14489.27582	10124.5336	2952.29594	8415.93528	2982.3455	2585.50145	10754.90493	18424.39583	3985.71486	0.59773	0.61183	1.36E-02	5.59E-03	5.54E-03	1.25E-02	8.79E-03	2.56E-03	1.21E-02	3.04E-03	2.64E-03	1.31E-02	1.50E-02	3.24E-03	2.80E-04	2.90E-04	9.8222E-02
551512.15	4173138.9	5891.55635	12017.65421	1529.07257	10592.70323	1448.57581	15021.66047	5954.87758	7240.00825	877.20316	10604.88813	4095.01195	17840.10444	1.3784	1.40318	9.38E-03	1.35E-02	1.72E-03	9.14E-03	1.26E-03	1.30E-02	8.58E-03	7.39E-03	8.96E-04	1.29E-02	3.33E-03	1.45E-02	6.46E-04	6.65E-04	9.6969E-02
551530.69	4173161.32	6034.55929	11640.36551	1484.52335	9549.38052	1363.65206	16210.54672	6104.15223	7065.69681	854.7798	9720.41214	3722.52787	19111.02818	1.55586	1.58624	9.60E-03	1.31E-02	1.67E-03	8.24E-03	1.18E-03	1.41E-02	8.79E-03	7.21E-03	8.73E-04	1.18E-02	3.03E-03	1.56E-02	7.29E-04	7.52E-04	9.6622E-02
551443.68	4172802.82	4613.97047	7499.77737	2192.57114	24640.15604	3178.80325	4233.83566	4592.68427	4223.46977	1209.10946	15480.79655	15478.3999	5434.53484	1.30097	1.35831	7.34E-03	8.45E-03	2.47E-03	2.13E-02	2.76E-03	3.68E-03	6.61E-03	4.31E-03	1.23E-03	1.88E-02	1.26E-02	4.42E-03	6.10E-04	6.44E-04	9.5173E-02
551431.24	4172942.04	5218.77508	10744.0576	1941.70175	20118.86464	2186.66122	6405.60464	5216.6416	6082.88973	1100.60884	16608.32884	9050.99485	8085.25558	1.13789	1.16636	8.30E-03	1.21E-02	2.19E-03	1.74E-02	1.90E-03	5.56E-03	7.51E-03	6.21E-03	1.12E-03	2.02E-02	7.37E-03	6.58E-03	5.33E-04	5.53E-04	9.7445E-02
551929.32	4172764.95	11402.93759	6140.62757	5516.85548	14471.30403	5982.04882	2896.18805	11123.1115	3683.84102	2994.05174	12522.27737	12081.25356	3934.1035	0.34832	0.34775	1.81E-02	6.92E-03	6.21E-03	1.25E-02	5.19E-03	2.51E-03	1.60E-02	3.76E-03	3.06E-03	1.52E-02	9.83E-03	3.20E-03	1.63E-04	1.65E-04	1.0287E-01
551954.55	4172780.08	13325.51094	6638.95263	4807.05191	13318.98528	4935.02868	3450.26205	13065.14636	3982.66206	2671.03589	11649.28904	10205.9592	4667.86309	0.32615	0.32542	2.12E-02	7.48E-03	5.41E-03	1.15E-02	4.29E-03	3.00E-03	1.88E-02	4.07E-03	2.73E-03	1.41E-02	8.31E-03	3.80E-03	1.53E-04	1.54E-04	1.0503E-01
551889.16	4172746.53	8544.11023	4954.02212	6059.37486	16539.68293	8378.67209	2164.06499	8316.8196	2895.79224	3097.5772	12997.96394	15580.23814	2931.61426	0.38523	0.38501	1.36E-02	5.58E-03	6.82E-03	1.43E-02	7.28E-03	1.88E-03	1.20E-02	2.96E-03	3.16E-03	1.58E-02	1.27E-02	2.39E-03	1.81E-04	1.82E-04	9.8723E-02
551430.42	4172881.59	4862.11395	8961.16446	2098.2357	22697.16516	2532.94926	5221.13426	4847.6295	5052.34954	1174.14413	16728.09677	11650.60027	6625.8158	1.2068	1.24639	7.74E-03	1.01E-02	2.36E-03	1.96E-02	2.20E-03	4.53E-03	6.98E-03	5.16E-03	1.20E-03	2.03E-02	9.48E-03	5.39E-03	5.66E-04	5.91E-04	9.6177E-02
551490.41	4173107.42	5661.14777	12074.86425	1568.66716	12048.41321	1565.74358	13284.5445	5716.1166	7318.65939	896.24557	11579.95409	4676.51082	15977.31717	1.21608	1.23692	9.01E-03	1.36E-02	1.77E-03	1.04E-02	1.36E-03	1.15E-02	8.23E-03	7.47E-03	9.15E-04	1.41E-02	3.81E-03	1.30E-02	5.70E-04	5.86E-04	9.6302E-02
551647.27	4172681.96	9184.29162	4639.00086	5122.42841	13143.78466	10470.84805	2811.49848	9048.83161	2800.24604	2659.38537	9725.66052	18637.95448	3812.33851	0.57763	0.59274	1.46E-02	5.22E-03	5.77E-03	1.13E-02	9.09E-03	2.44E-03	1.30E-02	2.86E-03	2.72E-03	1.18E-02	1.52E-02	3.10E-03	2.71E-04	2.81E-04	9.7713E-02
551725.04	4173208.86	10838.62271	7801.07971	1211.09144	5173.88517	974.45051	19306.86458	11179.75969	4420.99179	716.47567	5240.94745	2289.31084	22721.92659	2.4036	2.32247	1.72E-02	8.79E-03	1.36E-03	4.46E-03	8.46E-04	1.68E-02	1.61E-02	4.51E-03	7.31E-04	6.36E-03	1.86E-03	1.85E-02	1.13E-03	1.10E-03	9.9760E-02
551673.01	4172684.76	10017.53384	4295.99072	5185.77167	12514.26611	10355.57099	2646.63149	9859.06441	2591.73226	2650.24232	8721.32588	19179.81968	3604.96662	0.59215	0.60901	1.59E-02	4.84E-03	5.84E-03	1.08E-02	8.99E-03	2.30E-03	1.42E-02	2.65E-03	2.71E-03	1.06E-02	1.56E-02	2.93E-03	2.78E-04	2.89E-04	9.7950E-02
551817.89	4172722.56	7463.33608	3461.83923	4096.00944	17015.59658	11602.85311	1807.0699	7367.40222	1954.35737	1998.149	10847.06976	21544.57063	2429.25155	0.52932	0.53029	1.19E-02	3.90E-03	4.61E-03	1.47E-02	1.01E-02	1.57E-03	1.06E-02	2.00E-03	2.04E-03	1.32E-02	1.75E-02	1.98E-03	2.48E-04	2.51E-04	9.4531E-02
551451.02	4173026.03	5468.10641	12445.67401	1665.03838	15558.48063	1826.76376	8983.76181	5497.15332	7379.43876	945.2185	13826.94172	6395.27336	11191.96539	1.0815	1.10261	8.70E-03	1.40E-02	1.88E-03	1.34E-02	1.59E-03	7.80E-03	7.92E-03	7.53E-03	9.65E-04	1.68E-02	5.20E-03	9.11E-03	5.07E-04	5.23E-04	9.5943E-02
551427.61	4172902.85	4934.87256	9395.15517	2035.27029	21530.50199	2361.98498	5523.48718	4923.86603	5298.92482	1144.75398	16610.24392	10421.62217	6995.47343	1.16314	1.19683	7.85E-03	1.06E-02	2.29E-03	1.86E-02	2.05E-03	4.80E-03	7.09E-03	5.41E-03	1.17E-03	2.02E-02	8.48E-03	5.69E-03	5.45E-04	5.67E-04	9.5264E-02
551457.46	4173043.93	5501.30445	12478.68617	1637.93494	14706.69569	1772.87726	9772.26	5536.89586	7443.94155	929.86059	13272.81242	5955.58385	12100.93267	1.09102	1.11156	8.75E-03	1.41E-02	1.84E-03	1.27E-02	1.54E-03	8.49E-03	7.97E-03	7.60E-03	9.49E-04	1.61E-02	4.85E-03	9.85E-03	5.11E-04	5.27E-04	9.5731E-02
551454.24	4173034.98	5481.37212	12467.09742	1648.98123	15112.48317	1799.16104	9363.92674	5513.83379	7421.51107	935.98418	13525.73483	6178.78046	11632.7601	1.08408	1.1053	8.72E-03	1.40E-02	1.86E-03	1.30E-02	1.56E-03	8.13E-03	7.94E-03	7.58E-03	9.56E-04	1.64E-02	5.03E-03	9.47E-03	5.08E-04	5.24E-04	9.5768E-02
551465.4	4172752.27	4684.40326	6724.21852	2281.87632	24359.1625	3576.1706	3746.51343	4660.10955	3806.91027	1250.67511	14649.64205	16424.56408	4855.85284	1.19338	1.2439	7.45E-03	7.57E-03	2.57E-03	2.10E-02	3.11E-03	3.25E-03	6.71E-03	3.89E-03	1.28E-03	1.78E-02	1.34E-02	3.95E-03	5.59E-04	5.90E-04	9.3091E-02
551447.79	4173017.07	5437.48043	12335.89941	1677.95808	15974.57811	1851.01787	8592.08891	5463.05311	7278.48613	952.73247	14074.51876	6618.2809	10730.73235	1.07586	1.09735	8.65E-03	1.39E-02	1.89E-03	1.38E-02	1.61E-03	7.46E-03	7.87E-03	7.43E-03	9.73E-04	1.71E-02	5.39E-03	8.73E-03	5.04E-04	5.20E-04	9.5782E-02
551515.24	4173147.48	5827.88176	11606.04334	1494.20782	10100.67666	1403.56233	14861.80225	5891.26293	7006.40684	857.83181	10162.24093	3928.71649	17622.46967	1.38285	1.40787	9.27E-03	1.31E-02	1.68E-03	8.71E-03	1.22E-03	1.29E-02	8.48E-03	7.15E-03	8.76E-04	1.23E-02	3.20E-03	1.43E-02	6.48E-04	6.67E-04	9.4567E-02
551592.28	4173211.39	6609.16468	9780.39093	1325.24723	7186.67101	1159.49642	18963.36863	6709.61772	5882.43173	771.15983	7303.27959	2933.94071	22075.65297	2.85578	2.94866	1.05E-02	1.10E-02	1.49E-03	6.20E-03	1.01E-03	1.65E-02	9.66E-03	6.01E-03	7.87E-04	8.87E-03	2.39E-03	1.80E-02	1.34E-03	1.40E-03	9.5107E-02
551444.57	4173008.12	5400.69419	12172.92069	1692.20448	16386.80291	1874.94846	8215.34306	5422.66789	7140.2785	961.12716	14310.71652	6840.27213	10282.29606	1.07028	1.09241	8.59E-03	1.37E-02	1.91E-03	1.41E-02	1.63E-03	7.13E-03	7.81E-03	7.29E-03	9.81E-04	1.74E-02	5.57E-03	8.37E-03	5.02E-04	5.18E-04	9.5512E-02
551428.02	4172933.08	5088.35809	10209.97097	1938.8612	20042.95457	2176.81137	6082.87515	5083.95375	5776.26508	1097.50253	16319.55442	9178.57221	7683.16759	1.1156	1.1442	8.10E-03	1.15E-02	2.18E-03	1.73E-02	1.89E-03	5.28E-03	7.32E-03	5.90E-03	1.12E-03	1.98E-02	7.47E-03	6.25E-03	5.23E-04	5.42E-04	9.5177E-02
551493.61	4173116.48	5604.21866	11902.33235	1536.25832	11532.0362	1522.00968	13338.95981	5659.89374	7098.07598	878.50054	11125.43589	4489.34012	15991.09476	1.21253	1.23298	8.92E-03	1.34E-02	1.73E-03	9.95E-03	1.32E-03	1.16E-02	8.15E-03	7.25E-03	8.97E-04	1.35E-02	3.65E-03	1.30E-02	5.68E-04	5.84E-04	9.4524E-02
551772.98	4172714.29	9484.54022	3337.87004	3320.62417	16404.56866	10133.74152	1970.04483	9360.12721	1924.39274	1721.68479	9198.75858	21024.48152	2665.38571	0.65343	0.66091	1.51E-02	3.76E-03	3.74E-03	1.41E-02	8.80E-03	1.71E-03	1.35E-02	1.96E-03	1.76E-03	1.12E-02	1.71E-02	2.17E-03	3.06E-04	3.13E-04	9.5518E-02
551903.99	4172749.72	9128.98632	5215.50625	5872.4114	15680.0155	7316.12988	2297.87141	8883.55237	3080.17135	3060.28971	12762.88613	14129.40517	3115.85976	0.36726	0.36699	1.45E-02	5.87E-03	6.61E-03	1.35E-02	6.35E-03	2.00E-03	1.28E-02	3.14E-03	3.12E-03	1.55E-02	1.15E-02	2.54E-03	1.72E-04	1.74E-04	9.7823E-02
551944.03	4172768.01	12009.64058	6231.89346	5005.11107	13619.21744	5356.34422	3095.78995	11748.14795	3744.40252	2752.23212	11805.5698	10934.94347	4188.62743	0.33221	0.33162	1.91E-02	7.02E-03	5.64E-03	1.17E-02	4.65E-03	2.69E-03	1.69E-02	3.82E-03	2.81E-03	1.43E-02	8.90E-03	3.41E-03	1.56E-04	1.57E-04	1.0136E-01
551589.63	4172675.63	7158.25251	5298.05965	4102.90523	16993.47757	8139.47632	3065.01743	7073.94828	3141.36161	2194.79345	11970.22513	17238.67214	4100.55833	0.63513	0.64721	1.14E-02	5.97E-03	4.62E-03	1.47E-02	7.07E-03	2.66E-03	1.02E-02	3.21E-03	2.24E-03	1.45E-02	1.40E-02	3.34E-03	2.98E-04	3.07E-04	9.4502E-02
551441.34	4172999.17	5355.99817	11953.61987	1707.61603	16785.36005	1898.2653	7852.57935	5374.36875	6967.64286	970.17057	14524.06423	7060.80159	9845.82364	1.06462	1.08702	8.52E-03	1.35E-02	1.92E-03	1.45E-02	1.65E-03	6.82E-03	7.74E-03	7.11E-03	9.90E-04	1.76E-02	5.75E-03	8.01E-03	4.99E-04	5.15E-04	9.5102E-02
551430.64	4172839.5	4590.67254	7861.84823	2093.49106	23178.72118	2805.75272	4550.44524	4572.45705	4432.31974	1161.62015	15489.4611	13445.16998	5802.46046	1.21342	1.25848	7.31E-03	8.85E-03	2.36E-03	2.00E-02	2.44E-03	3.95E-03	6.59E-03	4.53E-03	1.19E-03	1.88E-02	1.09E-02	4.72E-03	5.69E-04	5.96E-04	9.2825E-02
551973.66	4172788.19	13847.06048	6663.31357	4316.05893	12295.35101	4264.59649	3650.12945	13635.63882	3978.09937	2418.33968	10901.31917	8940.24999	4991.46	0.3084	0.30766	2.20E-02	7.50E-03	4.86E-03	1.06E-02	3.70E-03	3.17E-03	1.96E-02	4.06E-03	2.47E-03	1.32E-02	7.28E-03	4.06E-03	1.45E-04	1.46E-04	1.0291E-01
551503.95	4172707.71	5177.94055	6085.77599	2651.07971	22897.71317	4392.71091	3402.13167	5141.58197	3488.49209	1451.86462	13847.22483	16841.54081	4448.72469	0.94833	0.9742	8.24E-03	6.85E-03	2.99E-03	1.97E-02	3.81E-03	2.95E-03	7.40E-03	3.56E-03	1.48E-03	1.68E-02	1.37E-02	3.62E-03	4.44E-04	4.62E-04	9.2088E-02
551533.78	4173169.91	5946.61761	11122.2535	1441.60943	9092.04869	1319.16014	15772.84752	6015.84671	6752.1875	830.67439	9247.76377	3573.87032	18586.24037	1.55122	1.5816	9.46E-03	1.25E-02	1.62E-03	7.84E-03	1.15E-03	1.37E-02	8.66E-03	6.89E-03	8.48E-04	1.12E-02	2.91E-03	1.51E-02	7.27E-04	7.50E-04	9.3439E-02
551477.82	4172732.5	4790.86519	6406.47824	2360.95101	23738.99196	3767.84456	3572.52432	4763.83037	3642.50931	1293.19303	14210.60433	16478.70736	4645.51148	1.09492	1.1352	7.62E-03	7.22E-03	2.66E-03	2.05E-02	3.27E-03	3.10E-03	6.86E-03	3.72E-03	1.32E-03	1.73E-02	1.34E-02	3.78E-03	5.13E-04	5.38E-04	9.1739E-02
551466.33	4173068.85	5467.3237	12083.01531	1593.97774	13426.73819	1675.21369	10740.71511	5510.58558	7224.08076	906.88709	12498.32026	5378.84001	13159.03805	1.0973	1.1178	8.70E-03	1.36E-02	1.80E-03	1.16E-02	1.45E-03	9.33E-03	7.94E-03	7.38E-03	9.26E-04	1.52E-02	4.38E-03	1.07E-02	5.14E-04	5.30E-04	9.4006E-02
551657.13	4172680.91	9349.68824	4425.13116	5043.8685	12416.18384	10134.35994	2708.63684	9208.95413	2671.93565	2604.83158	9089.27598	18169.28735	3678.89248	0.5571	0.572	1.49E-02	4.98E-03	5.68E-03	1.07E-02	8.80E-03	2.35E-03	1.33E-02	2.73E-03	2.66E-03	1.10E-02	1.48E-02	2.99E-03	2.61E-04	2.71E-04	9.5399E-02
551579.41	4172674.79	6817.17829	5355.01649	3869.88068	17608.59263	7542.13202	3079.93584	6740.52651	3161.78836	2076.09834	12169.95021	16931.00474	4110.07352	0.64896	0.66096	1.08E-02	6.03E-03	4.36E-03	1.52E-02	6.55E-03	2.67E-03	9.71E-03	3.23E-03	2.12E-03	1.48E-02	1.38E-02	3.34E-03	3.04E-04	3.13E-04	9.3218E-02
551438.12	4172990.22	5299.85581	11673.35521	1722.49617	16857.29682	1920.1087	7499.81456	5314.72835	6762.88207	978.84063	14691.40623	7282.33391	9417.44317	1.05772	1.08034	8.43E-03	1.31E-02	1.94E-03	1.45E-02	1.67E-03	6.51E-03	7.65E-03	6.90E-03	9.99E-04	1.78E-02	5.93E-03	7.66E-03	4.96E-04	5.12E-04	9.4230E-02
551469.29	4173077.22	5449.14551	11898.33958	1574.13726	13011.86212	1640.16844	11215.49903	5494.4257	7214.39647	896.10523	12164.03199	5189.88996	13457.57868	1.09744	1.11634	8.67E-03	1.34E-02	1.77E-03	1.12E-02	1.42E-03	9.74E-03	7.91E-03	7.37E-03	9.15E-04	1.48E-02	4.22E-03	1.10E-02	5.14E-04	5.29E-04	9.3409E-02
551496.7	4173125.06	5572.30589	11592.07917	1508.72636	11060.21576	1479.10548	13378.74221	5628.54388	6924.78754	863.39908	10742.68301	4309.34112	15999.06741	1.21718	1.2376	8.87E-03	1.31E-02	1.70E-03	9.54E-03	1.28E-03	1.16E-02	8.11E-03	7.07E-03	8.81E-04	1.30E-02	3.51E-03	1.30E-02	5.70E-04	5.87E-04	9.2846E-02
551568.15	4172675.45	6499.1789	5440.9176	3649.68792	18417.85653	6971.26328	3109.42413	6429.70106	3197.81976	1963.53401	12442.69525	16799.0257	4137.6244	0.67484	0.68731	1.03E-02	6.13E-03	4.11E-03	1.59E-02	6.05E-03	2.70E-03	9.26E-03	3.26E-03	2.00E-03	1.51E-02	1.37E-02	3.37E-03	3.16E-04	3.26E-04	9.2533E-02
551551.03	4173187.73	6098.0157	10646.58362	1395.22599	8279.94275	1246.80631	16638.75162	6174.35339	6472.97467	807.54452	8501.01827	3291.44995	19490.63067	1.78233	1.82066	9.70E-03	1.20E-02	1.57E-03	7.14E-03	1.08E-03	1.44E-02	8.89E-03	6.61E-03	8.24E-04	1.03E-02	2.68E-03	1.59E-02	8.35E-04	8.63E-04	9.2821E-02
551636.74	4172677.85	8621.62114	4669.33202	4829.42016	13194.06526	9793.0372	2818.27727	8500.45591	2813.27362	2526.26555	9867.32886	17547.35727	3811.31496	0.55183	0.56488	1.37E-02	5.26E-03	5.44E-03	1.14E-02	8.50E-03	2.45E-03	1.22E-02	2.87E-03	2.58E-03	1.20E-02	1.43E-02	3.10E-03	2.59E-04	2.68E-04	9.4328E-02
551716.94	4173214.4	10245.89272	7722.89255	1201.03982	5175.85832	971.67862	18528.0333	10550.9328	4388.95358	709.82977	5237.73352	2287.04003	21878.10189	2.874	2.76125	1.63E-02	8.70E-03	1.35E-03	4.46E-03	8.44E-04	1.61E-02	1.52E-02	4.48E-03	7.25E-04	6.36E-03	1.86E-03	1.78E-02	1.35E-03	1.31E-03	9.6832E-02
551427.2	4172872.62	4696.29779	8426.30094	2042.04701	21917.08372	2515.79432	4941.31998	4681.52344	4756.37253	1140.45723	15860.32438	11582.20137	6274.87142	1.14952	1.18666	7.47E-03	9.49E-03	2.30E-03	1.89E-02	2.18E-03	4.29E-03	6.74E-03	4.86E-03	1.16E-03	1.93E-02	9.43E-03	5.11E-03	5.39E-04	5.62E-04	9.2291E-02
551521.35	4172691.88	5467.19365	5834.56832	2885.21757	21611.09176	4978.74544	3278.00116	5422.3706	3366.93372	1575.21393	13384.09931	16711.71929	4306.51879	0.84404	0.86332	8.70E-03	6.57E-03	3.25E-03	1.86E-02	4.32E-03	2.85E-03	7.81E-03	3.44E-03	1.61E-03	1.62E-02	1.36E-02	3.50E-03	3.96E-04	4.09E-04	9.1341E-02
551434.89	4172981.27	5240.66069	11362.27841	1740.19402	17180.07368	1943.05556	7170.03117	5252.09433	6545.4699	988.9902	14845.01376	7499.13716	9014.57601	1.05197	1.07478	8.34E-03	1.28E-02	1.96E-03	1.48E-02	1.69E-03	6.23E-03	7.56E-03	6.68E-03	1.01E-03	1.80E-02	6.10E-03	7.34E-03	4.93E-04	5.09E-04	9.3546E-02
551424.79	4172924.11	4956.30786	9694.49001	1931.45315	19907.12514	2185.19745	5780.61542	4949.95533	5482.93991	1091.4267	15972.01162	9313.58693	7306.16642	1.09303	1.12151	7.89E-03	1.09E-02	2.18E-03	1.72E-02	1.90E-03	5.02E-03	7.13E-03	5.60E-03	1.11E-03	1.94E-02	7.58E-03	5.95E-03	5.12E-04	5.32E-04	9.2866E-02
551918.78	4172752.86	9680.41473	5434.14095	5575.20846	14818.54965	6423.8933	2449.00466	9427.8351	3238.17777	2956.59285	12391.15841	12822.0323	3320.61239	0.35122	0.35101	1.54E-02	6.12E-03	6.28E-03	1.28E-02	5.58E-03	2.13E-03	1.36E-02	3.31E-03	3.02E-03	1.50E-02	1.04E-02	2.70E-03	1.65E-04	1.66E-04	9.6702E-02
551557.34	4172675.93	6209.69049	5497.3166	3443.58783	19074.04001	6443.34211	3127.41171	6146.50259	3217.19972	1857.61926	12614.28756	16650.35802	4149.83454	0.7008	0.71398	9.88E-03	6.19E-03	3.88E-03	1.65E-02	5.59E-03	2.72E-03	8.85E-03	3.28E-03	1.90E-03	1.53E-02	1.36E-02	3.38E-03	3.28E-04	3.38E-04	9.1653E-02
551431.66	4172972.27	5181.87629	11037.45155	1762.12808	17523.14579	1968.86322	6866.94956	5189.80327	6326.62283	1001.19038	14996.8596	7710.39706	8642.70887	1.0477	1.07084	8.25E-03	1.24E-02	1.98E-03	1.51E-02	1.71E-03	5.96E-03	7.47E-03	6.46E-03	1.02E-03	1.82E-02	6.28E-03	7.03E-03	4.91E-04	5.07E-04	9.2915E-02
551495.46	4172711.26	5002.70044	6072.30703	2523.39535	22681.90199	4122.62913	3400.04504	4969.8239	3473.08559	1382.36131	13689.99814	16378.99775	4438.04476	0.96332	0.99154	7.96E-03	6.84E-03	2.84E-03	1.96E-02	3.58E-03	2.95E-03	7.16E-03	3.55E-03	1.41E-03	1.66E-02	1.33E-02	3.61E-03	4.51E-04	4.70E-04	9.0333E-02
551962.65	4172775.55	12581.41759	6356.77227	4510.68727	12701.35803	4680.65288	3343.47516	12343.36837	3808.8656	2505.3093	11081.7547	9700.91185	4518.47613	0.31526	0.31463	2.00E-02	7.16E-03	5.08E-03	1.10E-02	4.06E-03	2.90E-03	1.78E-02	3.89E-03	2.56E-03	1.35E-02	7.89E-03	3.68E-03	1.48E-04	1.49E-04	9.9727E-02
551518.33	4173156.07	5748.21688	11146.43861	1454.40741	9644.67885	1361.4988	14573.36562	5811.3238	6734.69087	835.71769	9694.03579	3779.03002	17264.38226	1.37537	1.40014	9.15E-03	1.26E-02	1.64E-03	8.32E-03	1.18E-03	1.27E-02	8.37E-03	6.88E-03	8.53E-04	1.18E-02	3.08E-03	1.41E-02	6.45E-04	6.64E-04	9.1794E-02
551834.05	4172723.51	6801.86376	3503.65161	4336.60986	16501.06934	10841.29338	1752.54116	6704.60509	1976.5709	2102.55019	10947.90221	20180.93154	2353.52979	0.48903	0.48952	1.08E-02	3.95E-03	4.88E-03	1.42E-02	9.41E-03	1.52E-03	9.66E-03	2.02E-03	2.15E-03	1.33E-02	1.64E-02	1.92E-03	2.29E-04	2.32E-04	9.0732E-02
551475.21	4173093.96	5410.08448	11503.13058	1533.29842	12218.65572	1567.31735	11673.21676	5458.49289	6947.55655	873.98899	11507.46923	4821.03944	14157.97738	1.10334	1.12181	8.61E-03	1.30E-02	1.73E-03	1.05E-02	1.36E-03	1.01E-02	7.86E-03	7.09E-03	8.92E-04	1.40E-02	3.92E-03	1.15E-02	5.17E-04	5.32E-04	9.1637E-02
551863.63	4172731.06	6769.80853	3961.57367	5164.22253	16316.22095	9746.43758	1818.66706	6631.37484	2257.78176	2538.57472	11760.18209	18209.07847	2448.57852	0.4228	0.42261	1.08E-02	4.46E-03	5.82E-03	1.41E-02	8.46E-03	1.58E-03	9.55E-03	2.31E-03	2.59E-03	1.43E-02	1.48E-02	1.99E-03	1.98E-04	2.00E-04	9.1099E-02
551424.38	4172893.89	4757.75161	8811.56158	1987.29718	20831.1488	2342.28996	5210.76381	4746.08431	4976.21292	1115.45505	15829.77137	10365.86619	6602.76629	1.11133	1.14475	7.57E-03	9.92E-03	2.24E-03	1.80E-02	2.03E-03	4.52E-03	6.84E-03	5.08E-03	1.14E-03	1.92E-02	8.44E-03	5.37E-03	5.21E-04	5.43E-04	9.1402E-02
551499.79	4173133.65	5534.61766	11269.73316	1479.99874	10581.73384	1436.55755	13354.43286	5591.22391	6746.71192	847.5788	10358.44343	4137.55024	15937.27701	1.22157	1.24199	8.81E-03	1.27E-02	1.67E-03	9.13E-03	1.25E-03	1.16E-02	8.05E-03	6.89E-03	8.65E-04	1.26E-02	3.37E-03	1.30E-02	5.73E-04	5.89E-04	9.1015E-02
551428.43	4172963.31	5101.77742	10649.36037	1777.07037	17747.36665	1990.39691	6559.48015	5106.63616	6081.19222	1009.24853	15030.69282	7899.93049	8263.38441	1.03852	1.06209	8.12E-03	1.20E-02	2.00E-03	1.53E-02	1.73E-03	5.70E-03	7.35E-03	6.21E-03	1.03E-03	1.82E-02	6.43E-03	6.73E-03	4.87E-04	5.03E-04	9.1829E-02
551452.97	4172764.65	4491.2152	6699.17062	2152.88551	23103.4301	3298.23432	3771.9156	4469.46512	3786.76244	1181.69109	14191.35118	15163.73854	4872.16457	1.1541	1.20346	7.15E-03	7.55E-03	2.42E-03	1.99E-02	2.86E-03	3.28E-03	6.44E-03	3.87E-03	1.21E-03	1.72E-02	1.23E-02	3.97E-03	5.41E-04	5.70E-04	8.9336E-02
551545.57	4172676.99	5890.5603	5517.28279	3208.81491	19488.56755	5846.8332	3131.62543	5834.19699	3215.06536	1736.86853	12639.01185	16291.35184	4142.20801	0.72195	0.73583	9.37E-03	6.21E-03	3.61E-03	1.68E-02	5.08E-03	2.72E-03	8.40E-03	3.28E-03	1.77E-03	1.53E-02	1.33E-02	3.37E-03	3.38E-04	3.49E-04	8.9923E-02
551429.66	4172828.01	4461.3216	7464.63486	2045.30832	22364.02465	2802.18461	4330.69988	4443.08479	4211.80586	1133.20628	14743.96046	13292.35129	5528.93924	1.16254	1.2065	7.10E-03	8.41E-03	2.30E-03	1.93E-02	2.43E-03	3.76E-03	6.40E-03	4.30E-03	1.16E-03	1.79E-02	1.08E-02	4.50E-03	5.45E-04	5.72E-04	8.9480E-02
551878.56	4172734.36	7098.27749	4244.29396	5386.3548	15994.90891	8928.71031	1899.02959	6931.18912	2448.34366	2695.14031	11971.04265	16566.59866	2560.61949	0.3907	0.39038	1.13E-02	4.78E-03	6.07E-03	1.38E-02	7.75E-03	1.65E-03	9.98E-03	2.50E-03	2.75E-03	1.45E-02	1.35E-02	2.08E-03	1.83E-04	1.85E-04	9.1039E-02
551622.14	4173227.33	6915.77288	8716.65113	1245.82166	6309.61703	1073.36334	18621.57799	7037.05798	5179.27891	727.70647	6377.17848	2649.27818	21736.18695	4.84135	5.06075	1.10E-02	9.82E-03	1.40E-03	5.44E-03	9.32E-04	1.62E-02	1.01E-02	5.29E-03	7.43E-04	7.74E-03	2.16E-03	1.77E-02	2.27E-03	2.40E-03	9.3189E-02
551933.52	4172755.95	10128.05736	5590.18663	5188.97856	13949.87201	5774.15258	2654.96009	9878.34415	3390.6498	2795.67553	11868.71436	11661.02566	3515.72965	0.33718	0.33669	1.61E-02	6.30E-03	5.84E-03	1.20E-02	5.01E-03	2.31E-03	1.42E-02	3.46E-03	2.85E-03	1.44E-02	9.49E-03	2.86E-03	1.58E-04	1.60E-04	9.5227E-02
551446.9	4172775.46	4433.63857	6783.70339	2109.90781	22747.63259	3177.07724	3840.77651	4412.81581	3831.38558	1159.68792	14145.79717	14692.43396	4949.4112	1.15174	1.20095	7.06E-03	7.64E-03	2.38E-03	1.96E-02	2.76E-03	3.33E-03	6.36E-03	3.91E-03	1.18E-03	1.72E-02	1.20E-02	4.03E-03	5.40E-04	5.69E-04	8.8502E-02
551537.33	4173179.94	5849.30969	10557.96601	1394.56794	8579.81558	1267.33498	15264.32149	5918.24848	6411.23991	804.1748	8742.41263	3403.94415	17973.20261	1.55344	1.58396	9.31E-03	1.19E-02	1.57E-03	7.40E-03	1.10E-03	1.33E-02	8.52E-03	6.55E-03	8.21E-04	1.06E-02	2.77E-03	1.46E-02	7.28E-04	7.51E-04	8.9903E-02
551468.16	4172738.88	4594.39284	6331.18009	2226.78208	22703.45291	3502.34033	3554.74035	4570.32938	3594.99083	1220.45987	13759.31273	15437.8918	4613.26535	1.06619	1.107	7.31E-03	7.13E-03	2.51E-03	1.96E-02	3.04E-03	3.09E-03	6.58E-03	3.67E-03	1.25E-03	1.67E-02	1.26E-02	3.75E-03	5.00E-04	5.25E-04	8.8202E-02
551782.09	4172711.34	8684.98841	3210.99339	3157.3612	15802.02183	9789.6449	1875.69267	8577.65461	1844.13948	1628.42283	9020.8852	19981.14643	2531.25638	0.60982	0.61619	1.38E-02	3.62E-03	3.56E-03	1.36E-02	8.50E-03	1.63E-03	1.24E-02	1.88E-03	1.66E-03	1.10E-02	1.63E-02	2.06E-03	2.86E-04	2.92E-04	9.0499E-02
551708.84	4173219.94	9681.00693	7632.47019	1188.9772	5173.96699	967.77495	17808.95379	9953.82575	4352.86406	701.94523	5230.23234	2283.15653	21081.44089	3.56256	3.40112	1.54E-02	8.60E-03	1.34E-03	4.46E-03	8.40E-04	1.55E-02	1.43E-02	4.44E-03	7.17E-04	6.35E-03	1.86E-03	1.72E-02	1.67E-03	1.61E-03	9.4248E-02
551425.2	4172954.34	5012.74194	10240.31965	1789.65755	17912.3072	2011.41794	6264.40422	5014.71798	5831.32166	1015.64634	15000.72376	8050.0463	7898.09796	1.02766	1.05136	7.98E-03	1.15E-02	2.02E-03	1.54E-02	1.75E-03	5.44E-03	7.22E-03	5.95E-03	1.04E-03	1.82E-02	6.55E-03	6.43E-03	4.82E-04	4.98E-04	9.0542E-02
551421.57	4172915.15	4806.08817	9160.41576	1908.83022	19567.44367	2181.57952	5475.13312	4798.32174	5180.23272	1076.63104	15471.77536	9409.21808	6925.75983	1.06127	1.0893	7.65E-03	1.03E-02	2.15E-03	1.69E-02	1.89E-03	4.75E-03	6.91E-03	5.29E-03	1.10E-03	1.88E-02	7.66E-03	5.64E-03	4.97E-04	5.16E-04	9.0027E-02
551951.63	4172762.91	11335.31514	5965.43623	4681.41911	12981.59099	5072.91723	3002.13435	11095.99284	3580.66021	2573.97841	11211.52059	10380.76646	4056.42602	0.32092	0.32042	1.80E-02	6.72E-03	5.27E-03	1.12E-02	4.40E-03	2.61E-03	1.60E-02	3.66E-03	2.63E-03	1.36E-02	8.45E-03	3.30E-03	1.50E-04	1.52E-04	9.6162E-02
551424.71	4172863.54	4556.19918	7987.43781	1994.66528	21284.01488	2509.45998	4705.25507	4541.1346	4510.59251	1112.07905	15123.59101	11554.41895	5980.85441	1.10751	1.14267	7.25E-03	9.00E-03	2.25E-03	1.84E-02	2.18E-03	4.09E-03	6.54E-03	4.60E-03	1.14E-03	1.84E-02	9.40E-03	4.87E-03	5.19E-04	5.42E-04	8.9085E-02
551988.57	4172791.46	13493.64447	6500.57642	3941.48732	11489.07899	3840.69712	3690.65799	13311.61051	3877.99715	2218.71993	10245.6316	8119.73165	5032.40648	0.29469	0.29397	2.15E-02	7.32E-03	4.44E-03	9.91E-03	3.33E-03	3.20E-03	1.92E-02	3.96E-03	2.27E-03	1.24E-02	6.61E-03	4.10E-03	1.38E-04	1.39E-04	9.8495E-02
551512.63	4172694.38	5217.549	5759.79167	2693.6306	21119.04432	4535.05026	3248.99397	5177.85706	3316.26467	1473.84123	13044.22126	15904.36104	4258.21996	0.83664	0.85643	8.30E-03	6.49E-03	3.03E-03	1.82E-02	3.94E-03	2.82E-03	7.46E-03	3.39E-03	1.50E-03	1.58E-02	1.29E-02	3.47E-03	3.92E-04	4.06E-04	8.8186E-02
551442.66	4172783.7	4399.22249	6845.39363	2081.63538	22471.74398	3090.19941	3894.37167	4379.00281	3864.73412	1145.51126	14106.4556	14344.72707	5009.64365	1.14623	1.19469	7.00E-03	7.71E-03	2.34E-03	1.94E-02	2.68E-03	3.38E-03	6.31E-03	3.95E-03	1.17E-03	1.71E-02	1.17E-02	4.08E-03	5.37E-04	5.66E-04	8.7901E-02
551578.97	4173211.03	6234.49847	9564.00965	1304.01042	7259.47076	1156.18395	17008.93152	6323.19527	5766.67151	757.16154	7349.68909	2961.25853	19885.41025	2.25759	2.31873	9.92E-03	1.08E-02	1.47E-03	6.26E-03	1.00E-03	1.48E-02	9.11E-03	5.89E-03	7.73E-04	8.92E-03	2.41E-03	1.62E-02	1.06E-03	1.10E-03	8.9635E-02
551850.22	4172724.47	6488.85934	3631.06208	4615.46497	16079.99581	10053.87554	1742.93904	6379.38691	2055.67722	2246.97827	11100.3998	18793.53642	2341.35345	0.44751	0.44766	1.03E-02	4.09E-03	5.20E-03	1.39E-02	8.73E-03	1.51E-03	9.19E-03	2.10E-03	2.29E-03	1.35E-02	1.53E-02	1.91E-03	2.10E-04	2.12E-04	8.8403E-02
551893.42	4172737.59	7600.448	4539.16145	5439.53644	15525.97568	7935.34792	2007.67883	7406.65769	2645.51156	2773.77008	12010.47563	14820.18705	2713.8486	0.37031	0.37031	1.21E-02	5.11E-03	6.13E-03	1.34E-02	6.89E-03	1.74E-03	1.07E-02	2.70E-03	2.83E-03	1.46E-02	1.21E-02	2.21E-03	1.74E-04	1.75E-04	9.0756E-02
551521.42	4173164.65	5670.11356	10702.05316	1415.358	9207.70178	1319.95036	14246.1952	5732.89769	6470.93795	813.91082	9250.78477	3634.38909	16867.27632	1.36932	1.39393	9.02E-03	1.21E-02	1.59E-03	7.94E-03	1.15E-03	1.24E-02	8.26E-03	6.61E-03	8.31E-04	1.12E-02	2.96E-03	1.37E-02	6.42E-04	6.61E-04	8.9039E-02
551502.88	4173142.23	5486.94255	10929.87609	1449.37007	10122.8733	1395.136	13258.55506	5543.67996	6556.53794	830.66109	9966.04946	3976.62649	15797.05636	1.22331	1.24381	8.73E-03	1.23E-02	1.63E-03	8.73E-03	1.21E-03	1.15E-02	7.98E-03	6.69E-03	8.48E-04	1.21E-02	3.24E-03	1.29E-02	5.73E-04	5.89E-04	8.9008E-02
551977.6	4172778.88	12640.91257	6285.71217	4141.87036	11909.52654	4212.67043	3430.53146	12434.11757	3750.08887	2310.49536	10469.74037	8810.19364	4685.14834	0.30117	0.30056	2.01E-02	7.08E-03	4.66E-03	1.03E-02	3.66E-03	2.98E-03	1.79E-02	3.83E-03	2.36E-03	1.27E-02	7.17E-03	3.81E-03	1.41E-04	1.42E-04	9.6839E-02
551554.98	4173196.77	5987.10321	10035.93846	1345.27818	7872.72383	1205.19488	15852.50789	6063.00175	6086.07461	778.17431	8019.83941	3163.06009	18598.50378	1.76968	1.80853	9.53E-03	1.13E-02	1.52E-03	6.79E-03	1.05E-03	1.38E-02	8.73E-03	6.21E-03	7.94E-04	9.74E-03	2.57E-03	1.51E-02	8.29E-04	8.57E-04	8.8819E-02
551481.13	4173110.7	5320.61598	10942.17637	1482.9251	11349.79567	1495.79331	11886.46041	5370.91983	6609.31785	846.49941	10780.28366	4492.45565	14322.59579	1.09655	1.11431	8.47E-03	1.23E-02	1.67E-03	9.79E-03	1.30E-03	1.03E-02	7.73E-03	6.75E-03	8.64E-04	1.31E-02	3.66E-03	1.17E-02	5.14E-04	5.28E-04	8.8657E-02
551643.28	4172673.99	8566.51657	4432.86005	4664.04764	12231.84984	9285.52435	2703.82864	8445.41655	2672.18945	2432.81469	9177.22156	16583.38364	3659.68194	0.51309	0.52504	1.36E-02	4.99E-03	5.25E-03	1.05E-02	8.06E-03	2.35E-03	1.22E-02	2.73E-03	2.48E-03	1.11E-02	1.35E-02	2.98E-03	2.40E-04	2.49E-04	9.0317E-02
551529.47	4172679.86	5497.21546	5530.00804	2917.65398	19851.02293	5125.29398	3135.26703	5449.2636	3204.73486	1587.3268	12588.00464	15772.02697	4129.01891	0.75267	0.76814	8.75E-03	6.23E-03	3.29E-03	1.71E-02	4.45E-03	2.72E-03	7.85E-03	3.27E-03	1.62E-03	1.53E-02	1.28E-02	3.36E-03	3.53E-04	3.64E-04	8.7490E-02
551438.43	4172791.94	4364.38273	6890.93096	2051.32	22120.77348	2998.81366	3943.1282	4344.79552	3890.01185	1130.31761	14027.10096	13947.77918	5063.42143	1.13348	1.18047	6.94E-03	7.76E-03	2.31E-03	1.91E-02	2.60E-03	3.42E-03	6.26E-03	3.97E-03	1.15E-03	1.70E-02	1.14E-02	4.12E-03	5.31E-04	5.59E-04	8.7096E-02
551421.98	4172945.38	4914.85553	9818.02267	1798.27084	18005.0413	2011.88804	5980.80812	4914.23327	5580.15981	1019.48025	14899.27813	8193.31287	7545.99616	1.01453	1.03858	7.82E-03	1.11E-02	2.03E-03	1.55E-02	1.75E-03	5.19E-03	7.08E-03	5.70E-03	1.04E-03	1.81E-02	6.67E-03	6.14E-03	4.75E-04	4.92E-04	8.9052E-02
551584.57	4172666.68	6730.60923	5056.10033	3770.05404	16022.75492	7315.38245	2942.63439	6654.14671	2992.41504	2019.81213	11281.26403	15786.08965	3930.26558	0.58755	0.59777	1.07E-02	5.69E-03	4.25E-03	1.38E-02	6.35E-03	2.56E-03	9.58E-03	3.06E-03	2.06E-03	1.37E-02	1.28E-02	3.20E-03	2.75E-04	2.83E-04	8.8377E-02
551421.15	4172884.92	4599.43922	8298.04389	1941.75584	20210.22353	2329.34479	4935.0393	4587.1942	4691.57016	1087.61928	15104.79902	10339.28887	6256.85443	1.06011	1.09226	7.32E-03	9.35E-03	2.19E-03	1.74E-02	2.02E-03	4.29E-03	6.61E-03	4.79E-03	1.11E-03	1.83E-02	8.41E-03	5.09E-03	4.97E-04	5.18E-04	8.7954E-02
551669.75	4172677.94	9351.87832	4101.02445	4744.59275	11423.6395	9195.63538	2544.41094	9209.80755	2472.97877	2439.23081	8195.33143	16898.77301	3460.76999	0.52134	0.53546	1.49E-02	4.62E-03	5.34E-03	9.85E-03	7.98E-03	2.21E-03	1.33E-02	2.52E-03	2.49E-03	9.95E-03	1.38E-02	2.82E-03	2.44E-04	2.54E-04	9.0185E-02
551463.9	4173082.37	5218.66755	11036.87416	1504.30118	12272.52322	1571.26344	10557.17275	5262.17211	6673.81429	856.16004	11402.86221	4954.23487	12665.67213	1.02582	1.04277	8.30E-03	1.24E-02	1.69E-03	1.06E-02	1.36E-03	9.17E-03	7.58E-03	6.81E-03	8.74E-04	1.38E-02	4.03E-03	1.03E-02	4.81E-04	4.94E-04	8.7968E-02
551908.23	4172740.76	8106.22748	4781.60682	5336.2094	14917.5691	7071.19922	2119.69162	7894.53308	2810.71875	2768.38061	11865.91395	13424.27869	2871.42655	0.35343	0.35337	1.29E-02	5.39E-03	6.01E-03	1.29E-02	6.14E-03	1.84E-03	1.14E-02	2.87E-03	2.83E-03	1.44E-02	1.09E-02	2.34E-03	1.66E-04	1.67E-04	9.0206E-02
551484.35	4173119.81	5274.11607	10814.28808	1455.07738	10905.96871	1456.02191	11927.16507	5325.01359	6432.81357	831.28467	10398.04468	4318.98745	14330.76448	1.09437	1.11181	8.39E-03	1.22E-02	1.64E-03	9.41E-03	1.26E-03	1.04E-02	7.67E-03	6.57E-03	8.49E-04	1.26E-02	3.51E-03	1.17E-02	5.13E-04	5.27E-04	8.7163E-02
551441.75	4173029.36	5126.11113	11172.96255	1552.43773	14221.80898	1714.96235	8236.23305	5153.71306	6627.69734	880.99937	12505.51908	5998.81554	10257.81178	0.97399	0.99188	8.16E-03	1.26E-02	1.75E-03	1.23E-02	1.49E-03	7.15E-03	7.42E-03	6.77E-03	8.99E-04	1.52E-02	4.88E-03	8.35E-03	4.56E-04	4.70E-04	8.7822E-02
551444.97	4173038.32	5141.01592	11193.2583	1540.26471	13857.91213	1691.88185	8570.43468	5171.66694	6661.10354	873.92927	12274.16002	5810.62649	10643.81843	0.97776	0.99556	8.18E-03	1.26E-02	1.73E-03	1.20E-02	1.47E-03	7.44E-03	7.45E-03	6.80E-03	8.92E-04	1.49E-02	4.73E-03	8.66E-03	4.58E-04	4.72E-04	8.7747E-02
551438.53	4173020.41	5103.68503	11102.03886	1564.95862	14578.6028	1737.09474	7904.98552	5128.21534	6557.41482	888.33745	12725.33755	6186.50079	9869.74876	0.96941	0.9881	8.12E-03	1.25E-02	1.76E-03	1.26E-02	1.51E-03	6.86E-03	7.39E-03	6.69E-03	9.07E-04	1.54E-02	5.03E-03	8.03E-03	4.54E-04	4.68E-04	8.7759E-02
551448.2	4173047.27	5149.75546	11169.67917	1528.49938	13494.18953	1668.21987	8904.11441	5183.24835	6660.27125	867.23823	12037.92309	5623.25479	11023.1874	0.98163	0.99949	8.19E-03	1.26E-02	1.72E-03	1.16E-02	1.45E-03	7.73E-03	7.46E-03	6.80E-03	8.85E-04	1.46E-02	4.58E-03	8.97E-03	4.60E-04	4.74E-04	8.7559E-02
551966.63	4172766.3	11473.28667	5961.16343	4305.63642	12232.44244	4577.40995	3112.88265	11252.85219	3571.61743	2386.56265	10622.96431	9466.85169	4203.65517	0.30692	0.30643	1.83E-02	6.71E-03	4.85E-03	1.05E-02	3.97E-03	2.70E-03	1.62E-02	3.65E-03	2.44E-03	1.29E-02	7.70E-03	3.42E-03	1.44E-04	1.45E-04	9.3647E-02
551418.75	4172936.41	4807.8803	9386.01437	1801.38405	18015.49342	2024.79433	5706.14539	4805.02117	5328.32906	1019.90574	14718.7098	8327.08463	7204.21559	0.99803	1.02221	7.65E-03	1.06E-02	2.03E-03	1.55E-02	1.76E-03	4.95E-03	6.92E-03	5.44E-03	1.04E-03	1.79E-02	6.78E-03	5.86E-03	4.68E-04	4.84E-04	8.7362E-02
551505.97	4173150.82	5426.82478	10567.65207	1416.16497	9687.14813	1355.19319	13083.27701	5483.49692	6348.97606	812.25316	9561.75198	3826.86122	15570.04768	1.22053	1.24096	8.64E-03	1.19E-02	1.59E-03	8.35E-03	1.18E-03	1.14E-02	7.90E-03	6.48E-03	8.29E-04	1.16E-02	3.11E-03	1.27E-02	5.72E-04	5.88E-04	8.6786E-02
551435.3	4173011.46	5074.32218	10981.45803	1578.42822	14927.36054	1758.51688	7581.27428	5095.58539	6452.75389	896.28372	12933.40629	6372.58018	9485.5164	0.96503	0.98372	8.07E-03	1.24E-02	1.78E-03	1.29E-02	1.53E-03	6.58E-03	7.34E-03	6.59E-03	9.15E-04	1.57E-02	5.19E-03	7.72E-03	4.52E-04	4.66E-04	8.7571E-02
551610.42	4173228.47	6541.58927	8618.95568	1231.15416	6386.18513	1074.02206	17317.47766	6649.76308	5140.70576	717.81963	6433.2915	2675.67296	20240.0582	3.60649	3.74061	1.04E-02	9.71E-03	1.39E-03	5.51E-03	9.33E-04	1.50E-02	9.58E-03	5.25E-03	7.33E-04	7.81E-03	2.18E-03	1.65E-02	1.69E-03	1.77E-03	8.8461E-02
551500.73	4172698.4	4950.03556	5713.14541	2496.35339	20764.11187	4100.16043	3232.64024	4915.7979	3279.12271	1368.03027	12770.26626	15185.51106	4224.99694	0.84586	0.86763	7.88E-03	6.43E-03	2.81E-03	1.79E-02	3.56E-03	2.81E-03	7.08E-03	3.35E-03	1.40E-03	1.55E-02	1.24E-02	3.44E-03	3.96E-04	4.11E-04	8.5329E-02
551595.84	4172664.39	6964.71385	4871.59172	3891.6297	14857.73017	7611.11793	2866.90081	6882.33889	2896.10819	2077.9472	10703.74281	15489.43711	3838.19044	0.55045	0.55998	1.11E-02	5.49E-03	4.38E-03	1.28E-02	6.61E-03	2.49E-03	9.91E-03	2.96E-03	2.12E-03	1.30E-02	1.26E-02	3.12E-03	2.58E-04	2.65E-04	8.7102E-02
551458.5	4172745.26	4425.03953	6259.19987	2116.55067	21734.09069	3287.56787	3539.66138	4403.21161	3549.92395	1160.80607	13341.60842	14513.13445	4584.40931	1.0358	1.07631	7.04E-03	7.05E-03	2.38E-03	1.87E-02	2.85E-03	3.07E-03	6.34E-03	3.62E-03	1.19E-03	1.62E-02	1.18E-02	3.73E-03	4.85E-04	5.10E-04	8.5032E-02
551588.33	4173219.84	6218.88424	9044.85995	1260.87795	6867.08051	1116.78933	16591.50775	6311.38712	5432.86476	732.97159	6917.50535	2835.27444	19411.18128	2.47957	2.55482	9.90E-03	1.02E-02	1.42E-03	5.92E-03	9.70E-04	1.44E-02	9.09E-03	5.55E-03	7.48E-04	8.40E-03	2.31E-03	1.58E-02	1.16E-03	1.21E-03	8.7062E-02
551814.31	4172713.25	7005.51462	3168.56196	3430.82838	15566.97602	10118.48237	1716.45626	6922.4717	1794.94488	1701.58163	9638.11583	19367.5393	2304.43644	0.52212	0.52474	1.11E-02	3.57E-03	3.86E-03	1.34E-02	8.79E-03	1.49E-03	9.97E-03	1.83E-03	1.74E-03	1.17E-02	1.58E-02	1.88E-03	2.45E-04	2.49E-04	8.5653E-02
551418.34	4172906.18	4641.3355	8616.45921	1871.53638	19029.62356	2164.66847	5171.72919	4632.59487	4875.86714	1053.60054	14844.8354	9246.03451	6545.68404	1.01919	1.0473	7.39E-03	9.70E-03	2.11E-03	1.64E-02	1.88E-03	4.49E-03	6.67E-03	4.98E-03	1.08E-03	1.80E-02	7.52E-03	5.33E-03	4.78E-04	4.96E-04	8.6553E-02
551432.08	4173002.51	5041.40988	10822.97669	1594.56568	15050.46968	1780.38667	7273.42971	5059.36843	6323.40354	905.75888	13140.68247	6556.07039	9116.38274	0.96142	0.98022	8.02E-03	1.22E-02	1.80E-03	1.30E-02	1.55E-03	6.32E-03	7.29E-03	6.46E-03	9.25E-04	1.60E-02	5.34E-03	7.42E-03	4.51E-04	4.65E-04	8.7139E-02
551524.51	4173173.24	5594.73743	10275.77781	1377.51723	8787.15272	1278.67112	13899.55751	5657.20865	6217.18066	792.7213	8834.00681	3493.45301	16450.1693	1.36604	1.39061	8.90E-03	1.16E-02	1.55E-03	7.58E-03	1.11E-03	1.21E-02	8.15E-03	6.35E-03	8.09E-04	1.07E-02	2.84E-03	1.34E-02	6.40E-04	6.59E-04	8.6344E-02
551923	4172743.88	8650.68205	5003.71061	5139.76543	14130.53679	6232.38611	2257.43073	8429.0382	2967.07539	2710.56014	11612.64049	12262.79618	3058.85865	0.33853	0.33847	1.38E-02	5.64E-03	5.79E-03	1.22E-02	5.41E-03	1.96E-03	1.21E-02	3.03E-03	2.77E-03	1.41E-02	9.98E-03	2.49E-03	1.59E-04	1.60E-04	8.9570E-02
551573.25	4172665.28	6337.52082	5061.26688	3498.02952	16336.92382	6633.06272	2934.90302	6269.5028	2983.06541	1879.9594	11307.43396	15211.9695	3909.06236	0.59075	0.60063	1.01E-02	5.70E-03	3.94E-03	1.41E-02	5.76E-03	2.55E-03	9.03E-03	3.05E-03	1.92E-03	1.37E-02	1.24E-02	3.18E-03	2.77E-04	2.85E-04	8.5966E-02
551457.05	4173072.14	5130.19947	10867.44134	1497.70542	12449.65562	1589.45136	9740.60157	5170.38624	6486.28144	846.06379	11315.2576	5111.93713	11935.99003	0.99058	1.00833	8.16E-03	1.22E-02	1.69E-03	1.07E-02	1.38E-03	8.46E-03	7.45E-03	6.62E-03	8.64E-04	1.37E-02	4.16E-03	9.71E-03	4.64E-04	4.78E-04	8.6150E-02
551421.34	4172842.87	4348.86067	7332.00229	1940.31539	20625.89265	2564.42532	4334.7794	4332.88705	4144.67352	1077.98066	14087.87147	11814.15665	5519.2747	1.06041	1.09652	6.92E-03	8.26E-03	2.19E-03	1.78E-02	2.23E-03	3.76E-03	6.24E-03	4.23E-03	1.10E-03	1.71E-02	9.61E-03	4.49E-03	4.97E-04	5.20E-04	8.4940E-02

551541.83	4173191.25	5736.4338	9917.06305	1339.09007	8058.13983	1214.15247	14604.03601	5804.96299	6014.93307	772.89506	8182.58607	3232.9741	17200.17893	1.54747	1.57811	9.13E-03	1.12E-02	1.51E-03	6.95E-03	1.05E-03	1.27E-02	8.36E-03	6.14E-03	7.89E-04	9.93E-03	2.63E-03	1.40E-02	7.25E-04	7.48E-04	8.5816E-02
551428.85	4172993.56	4988.52114	10585.03829	1606.39171	15300.707	1798.40034	6957.45182	5003.33557	6150.77294	912.66017	13269.96176	6742.90484	8733.43013	0.95412	0.97329	7.94E-03	1.19E-02	1.81E-03	1.32E-02	1.56E-03	6.04E-03	7.21E-03	6.28E-03	9.32E-04	1.61E-02	5.49E-03	7.11E-03	4.47E-04	4.61E-04	8.6498E-02
551487.44	4173128.4	5242.74561	10552.81116	1430.32389	10487.68843	1417.61376	11942.99632	5294.04881	6286.57173	817.7689	10064.59577	4155.63941	14317.99032	1.09666	1.11399	8.34E-03	1.19E-02	1.61E-03	9.04E-03	1.23E-03	1.04E-02	7.62E-03	6.42E-03	8.35E-04	1.22E-02	3.38E-03	1.17E-02	5.14E-04	5.28E-04	8.5657E-02
551471.35	4172725.21	4530.59899	5985.57604	2191.15088	21290.43148	3455.78267	3384.72789	4506.2253	3408.07889	1201.15093	12997.95976	14614.28753	4397.58005	0.96186	0.99512	7.21E-03	6.74E-03	2.47E-03	1.84E-02	3.00E-03	2.94E-03	6.49E-03	3.48E-03	1.23E-03	1.58E-02	1.19E-02	3.58E-03	4.51E-04	4.72E-04	8.4090E-02
551459.14	4173077.88	5121.25966	10770.51396	1486.67947	12212.42723	1568.69948	9912.54617	5162.71572	6426.67968	845.59409	11288.0121	4997.6241	12116.1204	0.99425	1.0095	8.15E-03	1.21E-02	1.67E-03	1.05E-02	1.36E-03	8.61E-03	7.44E-03	6.56E-03	8.63E-04	1.37E-02	4.07E-03	9.86E-03	4.66E-04	4.78E-04	8.5891E-02
551940.61	4172750.27	9534.95296	5341.55342	4841.91367	13279.75728	5457.77343	2566.69918	9306.18857	3237.73251	2609.22785	11257.90203	11052.31997	3394.09294	0.32548	0.3251	1.52E-02	6.02E-03	5.45E-03	1.15E-02	4.74E-03	2.23E-03	1.34E-02	3.31E-03	2.66E-03	1.37E-02	8.99E-03	2.76E-03	1.53E-04	1.54E-04	9.0165E-02
551562.13	4172665.95	6042.47987	5117.61132	3296.81864	16913.56069	6129.46719	2953.59049	5980.84015	3003.98104	1776.3834	11476.15714	15009.87056	3923.15804	0.61035	0.62061	9.62E-03	5.76E-03	3.71E-03	1.46E-02	5.32E-03	2.56E-03	8.61E-03	3.07E-03	1.81E-03	1.39E-02	1.22E-02	3.19E-03	2.86E-04	2.94E-04	8.4980E-02
551992.5	4172782.15	12507.79856	6151.96172	3798.82464	11151.64904	3798.88472	3473.67467	12334.70231	3666.75902	2129.47858	9869.12996	8007.75795	4732.10218	0.28769	0.28708	1.99E-02	6.93E-03	4.28E-03	9.62E-03	3.30E-03	3.02E-03	1.78E-02	3.74E-03	2.17E-03	1.20E-02	6.52E-03	3.85E-03	1.35E-04	1.36E-04	9.3345E-02
551517.79	4172682.65	5182.60775	5461.34677	2680.00947	19490.14209	4561.63604	3107.8034	5141.1866	3154.5294	1463.59488	12267.1473	14936.89166	4079.72014	0.75169	0.76781	8.25E-03	6.15E-03	3.02E-03	1.68E-02	3.96E-03	2.70E-03	7.40E-03	3.22E-03	1.49E-03	1.49E-02	1.22E-02	3.32E-03	3.52E-04	3.64E-04	8.4089E-02
551425.63	4172984.6	4937.53813	10332.71823	1622.71314	15575.96712	1818.79349	6667.57019	4949.23312	5972.36615	922.03577	13410.48767	6921.01832	8380.1879	0.9487	0.96834	7.86E-03	1.16E-02	1.83E-03	1.34E-02	1.58E-03	5.79E-03	7.13E-03	6.10E-03	9.41E-04	1.63E-02	5.63E-03	6.82E-03	4.45E-04	4.59E-04	8.5927E-02
551462.96	4173088.88	5108.09556	10589.82573	1465.22042	11782.49838	1525.8046	10368.17254	5151.50178	6391.86732	834.06768	10941.06303	4771.84342	12424.43039	0.99639	1.01309	8.13E-03	1.19E-02	1.65E-03	1.02E-02	1.32E-03	9.00E-03	7.42E-03	6.53E-03	8.52E-04	1.33E-02	3.88E-03	1.01E-02	4.67E-04	4.80E-04	8.5216E-02
551415.53	4172927.45	4687.44122	8937.70545	1794.6956	17897.00565	2031.18677	5432.97331	4682.75825	5070.77341	1014.49055	14429.00507	8436.28526	6863.85871	0.97747	1.00157	7.46E-03	1.01E-02	2.02E-03	1.54E-02	1.76E-03	4.72E-03	6.74E-03	5.18E-03	1.04E-03	1.75E-02	6.87E-03	5.59E-03	4.58E-04	4.75E-04	8.5321E-02
551491.86	4172702.15	4771.90973	5687.29614	2368.19041	20485.86393	3830.12313	3225.4212	4741.22313	3257.5618	1298.46126	12585.46201	14688.63348	4207.74085	0.85363	0.87706	7.59E-03	6.41E-03	2.67E-03	1.77E-02	3.33E-03	2.80E-03	6.83E-03	3.33E-03	1.33E-03	1.53E-02	1.20E-02	3.42E-03	4.00E-04	4.16E-04	8.3413E-02
551417.93	4172875.96	4442.58582	7811.2428	1888.63776	19505.54948	2307.13936	4672.69251	4430.01562	4419.43418	1055.87743	14338.67291	10245.05913	5929.01767	1.01113	1.04014	7.07E-03	8.80E-03	2.13E-03	1.68E-02	2.00E-03	4.06E-03	6.38E-03	4.51E-03	1.08E-03	1.74E-02	8.34E-03	4.83E-03	4.74E-04	4.93E-04	8.4384E-02
551509.06	4173159.4	5365.62003	10207.26312	1382.61079	9269.35381	1315.8853	12863.11632	5422.1269	6140.86679	793.59368	9168.2071	3683.38956	15296.1963	1.21739	1.23767	8.54E-03	1.15E-02	1.56E-03	7.99E-03	1.14E-03	1.12E-02	7.81E-03	6.27E-03	8.10E-04	1.11E-02	3.00E-03	1.24E-02	5.71E-04	5.87E-04	8.4519E-02
551688.86	4172679.19	9618.77682	3809.80395	4464.23239	11128.66244	8322.73766	2389.4922	9470.06371	2289.26149	2281.76421	7500.46714	16326.40824	3255.40514	0.52814	0.54305	1.53E-02	4.29E-03	5.03E-03	9.60E-03	7.23E-03	2.07E-03	1.36E-02	2.34E-03	2.33E-03	9.11E-03	1.33E-02	2.65E-03	2.48E-04	2.57E-04	8.7376E-02
551422.39	4172975.61	4876.5538	10039.68296	1638.21611	15814.22943	1838.55747	6385.32375	4885.09925	5776.2239	930.71187	13504.32204	7082.89303	8034.2205	0.94194	0.96175	7.76E-03	1.13E-02	1.85E-03	1.36E-02	1.60E-03	5.54E-03	7.04E-03	5.90E-03	9.50E-04	1.64E-02	5.76E-03	6.54E-03	4.41E-04	4.56E-04	8.5169E-02
551607.18	4172661.39	7163.94565	4649.26364	3962.5935	13626.46173	7761.80193	2771.54967	7076.09255	2775.28315	2106.50924	10021.60258	15049.00221	3718.5571	0.51171	0.52059	1.14E-02	5.24E-03	4.46E-03	1.18E-02	6.74E-03	2.41E-03	1.02E-02	2.83E-03	2.15E-03	1.22E-02	1.22E-02	3.03E-03	2.40E-04	2.47E-04	8.5098E-02
551490.53	4173136.98	5214.01701	10296.5766	1405.81414	10062.91577	1378.80734	11923.04538	5265.60839	6146.83856	804.29361	9742.10321	3996.09489	14267.93967	1.10094	1.11827	8.30E-03	1.16E-02	1.58E-03	8.68E-03	1.20E-03	1.04E-02	7.58E-03	6.28E-03	8.21E-04	1.18E-02	3.25E-03	1.16E-02	5.16E-04	5.30E-04	8.4122E-02
551955.66	4172753.71	10060.48135	5547.21391	4472.36424	12452.51453	4925.43173	2752.40995	9840.53828	3323.49449	2442.52532	10732.04643	10073.53827	3723.85468	0.31184	0.31151	1.60E-02	6.25E-03	5.04E-03	1.07E-02	4.28E-03	2.39E-03	1.42E-02	3.39E-03	2.49E-03	1.30E-02	8.20E-03	3.03E-03	1.46E-04	1.48E-04	8.9310E-02
551981.57	4172769.62	11494.91846	5912.8545	3963.09751	11520.3863	4145.624	3201.91739	11295.40837	3533.79653	2208.34676	10046.37372	8657.00016	4320.75231	0.29395	0.29344	1.83E-02	6.66E-03	4.46E-03	9.94E-03	3.60E-03	2.78E-03	1.63E-02	3.61E-03	2.25E-03	1.22E-02	7.05E-03	3.52E-03	1.38E-04	1.39E-04	9.0895E-02
551830.42	4172714.2	6356.74058	3193.36704	3649.50872	15237.56704	9744.46998	1659.27974	6275.37198	1803.88152	1788.36558	9816.25749	18515.0446	2224.72303	0.48433	0.48612	1.01E-02	3.60E-03	4.11E-03	1.31E-02	8.46E-03	1.44E-03	9.04E-03	1.84E-03	1.83E-03	1.19E-02	1.51E-02	1.81E-03	2.27E-04	2.30E-04	8.2824E-02
551654.45	4172671.43	8600.61685	4141.48606	4478.01432	11136.46916	8672.17539	2561.22416	8477.45259	2497.25996	2325.71525	8329.84306	15546.83742	3472.76141	0.47467	0.48594	1.37E-02	4.66E-03	5.04E-03	9.60E-03	7.53E-03	2.22E-03	1.22E-02	2.55E-03	2.37E-03	1.01E-02	1.27E-02	2.83E-03	2.22E-04	2.30E-04	8.5929E-02
551419.16	4172966.64	4808.20232	9721.42216	1652.99958	16017.90264	1858.23627	6115.77832	4813.89262	5571.87346	938.74088	13554.82259	7220.67182	7702.25749	0.93416	0.95429	7.65E-03	1.09E-02	1.86E-03	1.38E-02	1.61E-03	5.31E-03	6.93E-03	5.69E-03	9.58E-04	1.65E-02	5.88E-03	6.27E-03	4.38E-04	4.52E-04	8.4270E-02
551882.85	4172725.46	6421.10133	3918.76554	4802.49993	14917.00804	8241.55241	1782.02737	6277.34303	2255.97629	2404.39517	11024.33731	15471.29796	2398.70867	0.37754	0.3775	1.02E-02	4.41E-03	5.41E-03	1.29E-02	7.16E-03	1.55E-03	9.04E-03	2.30E-03	2.45E-03	1.34E-02	1.26E-02	1.95E-03	1.77E-04	1.79E-04	8.3690E-02
551415.11	4172897.22	4489.52995	8125.77669	1834.51448	18519.54845	2151.75602	4899.73185	4479.97903	4602.25573	1030.61295	14243.32363	9222.63881	6204.6216	0.9771	1.00445	7.14E-03	9.15E-03	2.07E-03	1.60E-02	1.87E-03	4.25E-03	6.45E-03	4.70E-03	1.05E-03	1.73E-02	7.51E-03	5.05E-03	4.58E-04	4.76E-04	8.3440E-02
551722.5	4173222.53	9640.50476	7041.15619	1133.29247	4863.34771	925.13015	15740.62937	9924.53817	4003.35811	669.13568	4887.42311	2177.98241	18702.04524	2.69307	2.58722	1.53E-02	7.93E-03	1.28E-03	4.19E-03	8.03E-04	1.37E-02	1.43E-02	4.09E-03	6.83E-04	5.93E-03	1.77E-03	1.52E-02	1.26E-03	1.23E-03	8.7691E-02
551468.88	4173105.62	5045.22225	10176.33414	1424.84496	11053.75151	1461.78595	10627.81272	5090.73984	6131.61482	812.13007	10347.72087	4461.0837	12863.7987	0.99528	1.01073	8.03E-03	1.15E-02	1.60E-03	9.53E-03	1.27E-03	9.23E-03	7.33E-03	6.26E-03	8.29E-04	1.26E-02	3.63E-03	1.05E-02	4.66E-04	4.79E-04	8.3153E-02
551528.21	4173183.65	5505.24231	9780.19937	1333.22986	8299.81783	1229.19991	13464.11822	5567.45774	5920.89117	767.80308	8361.32514	3328.13872	15926.65072	1.36505	1.38982	8.76E-03	1.10E-02	1.50E-03	7.16E-03	1.07E-03	1.17E-02	8.02E-03	6.04E-03	7.84E-04	1.02E-02	2.71E-03	1.30E-02	6.40E-04	6.59E-04	8.3159E-02
551897.69	4172728.67	6789.9915	4164.23279	4881.65856	14545.41663	7535.14398	1866.13611	6624.24893	2420.48881	2484.69566	11091.47584	14158.20945	2517.23056	0.35505	0.3552	1.08E-02	4.69E-03	5.50E-03	1.25E-02	6.54E-03	1.62E-03	9.54E-03	2.47E-03	2.54E-03	1.35E-02	1.15E-02	2.05E-03	1.66E-04	1.68E-04	8.3619E-02
551508.05	4172685.53	4944.99583	5404.14724	2503.25502	19130.14131	4159.88686	3086.02968	4908.4394	3113.32692	1370.50747	11994.16401	14269.27892	4041.1237	0.75066	0.76763	7.87E-03	6.09E-03	2.82E-03	1.65E-02	3.61E-03	2.68E-03	7.07E-03	3.18E-03	1.40E-03	1.46E-02	1.16E-02	3.29E-03	3.52E-04	3.64E-04	8.1390E-02
551415.94	4172957.68	4726.98141	9370.9347	1663.53582	16146.32171	1860.26865	5850.18218	4730.02833	5355.62682	944.10529	13530.00492	7343.59271	7373.86062	0.9236	0.94381	7.52E-03	1.06E-02	1.87E-03	1.39E-02	1.62E-03	5.08E-03	6.81E-03	5.47E-03	9.64E-04	1.64E-02	5.98E-03	6.00E-03	4.33E-04	4.47E-04	8.3097E-02
551445.3	4172758.48	4222.50933	6200.51874	1984.86041	20429.75739	3015.70925	3549.26612	4203.18576	3511.7242	1090.16247	12817.03118	13280.27597	4581.13466	0.99153	1.03032	6.72E-03	6.98E-03	2.24E-03	1.76E-02	2.62E-03	3.08E-03	6.05E-03	3.59E-03	1.11E-03	1.56E-02	1.08E-02	3.73E-03	4.65E-04	4.88E-04	8.1058E-02
551681.47	4172676.26	9278.81355	3820.04627	4403.46936	10698.77195	8200.7765	2396.67064	9138.3029	2298.35063	2259.26498	7475.57667	15633.29712	3262.61047	0.49579	0.50947	1.48E-02	4.30E-03	4.96E-03	9.23E-03	7.12E-03	2.08E-03	1.32E-02	2.35E-03	2.31E-03	9.08E-03	1.27E-02	2.66E-03	2.32E-04	2.41E-04	8.5197E-02
552052.84	4172923.97	15178.39659	7013.29662	2099.07079	7543.4505	1635.76878	5865.38607	15253.9674	4124.56298	1242.63018	7300.00916	3827.8542	7744.178	0.27197	0.27047	2.42E-02	7.90E-03	2.36E-03	6.51E-03	1.42E-03	5.09E-03	2.20E-02	4.21E-03	1.27E-03	8.86E-03	3.12E-03	6.30E-03	1.27E-04	1.28E-04	9.3418E-02
551461.47	4172731.74	4347.53053	5913.15778	2069.82848	20388.0242	3222.0682	3366.56712	4325.85721	3362.84204	1135.25259	12590.85959	13726.63952	4365.74616	0.93667	0.97018	6.92E-03	6.66E-03	2.33E-03	1.76E-02	2.80E-03	2.92E-03	6.23E-03	3.43E-03	1.16E-03	1.53E-02	1.12E-02	3.55E-03	4.39E-04	4.60E-04	8.0944E-02
551412.3	4172918.48	4545.56248	8459.53431	1772.11573	17573.27849	2024.03517	5150.36276	4539.54601	4797.59952	1000.02163	13985.23528	8382.07662	6512.35825	0.94761	0.97157	7.23E-03	9.53E-03	2.00E-03	1.52E-02	1.76E-03	4.47E-03	6.54E-03	4.90E-03	1.02E-03	1.70E-02	6.82E-03	5.30E-03	4.44E-04	4.60E-04	8.2603E-02
551772.5	4172704.09	8619.12961	3072.12705	2891.42501	14377.72385	8015.89943	1851.98043	8511.93601	1777.17721	1511.42219	8006.91066	17580.64697	2502.12506	0.60006	0.60895	1.37E-02	3.46E-03	3.26E-03	1.24E-02	6.96E-03	1.61E-03	1.23E-02	1.81E-03	1.54E-03	9.72E-03	1.43E-02	2.04E-03	2.81E-04	2.89E-04	8.3651E-02
551512.15	4173167.99	5330.88264	9840.29904	1347.9641	8870.46152	1277.55483	12591.9041	5387.60321	5925.97876	774.30421	8779.36661	3547.20552	14967.93436	1.21197	1.23208	8.48E-03	1.11E-02	1.52E-03	7.65E-03	1.11E-03	1.09E-02	7.76E-03	6.05E-03	7.91E-04	1.07E-02	2.89E-03	1.22E-02	5.68E-04	5.84E-04	8.2255E-02
551493.62	4173145.57	5158.62647	9989.29269	1376.24946	9660.64074	1342.51078	11803.64257	5210.18517	5971.53533	787.98567	9377.78219	3853.90346	14105.26893	1.09685	1.11398	8.21E-03	1.13E-02	1.55E-03	8.33E-03	1.17E-03	1.02E-02	7.50E-03	6.10E-03	8.04E-04	1.14E-02	3.14E-03	1.15E-02	5.14E-04	5.28E-04	8.2203E-02
551846.54	4172715.16	5985.57716	3292.4123	3928.64855	14969.12729	9277.54528	1639.70077	5897.01681	1861.73409	1919.71077	10035.35015	17579.24476	2198.06944	0.44687	0.44774	9.52E-03	3.71E-03	4.42E-03	1.29E-02	8.06E-03	1.42E-03	8.49E-03	1.90E-03	1.96E-03	1.22E-02	1.43E-02	1.79E-03	2.09E-04	2.12E-04	8.1100E-02
551415.38	4172866.69	4315.87456	7425.11985	1849.5721	19015.62433	2305.77386	4460.35346	4302.89865	4203.16571	1032.28559	13734.43895	10244.42093	5663.90861	0.97843	1.00729	6.87E-03	8.36E-03	2.08E-03	1.64E-02	2.00E-03	3.87E-03	6.20E-03	4.29E-03	1.05E-03	1.67E-02	8.34E-03	4.61E-03	4.59E-04	4.77E-04	8.1687E-02
551970.65	4172757.08	10508.594	5599.24864	4092.00936	11765.50162	4458.07638	2919.28991	10305.73695	3353.15189	2258.61132	10146.37904	9204.89579	3936.58052	0.29845	0.29809	1.67E-02	6.31E-03	4.61E-03	1.01E-02	3.87E-03	2.53E-03	1.48E-02	3.42E-03	2.31E-03	1.23E-02	7.49E-03	3.20E-03	1.40E-04	1.41E-04	8.8055E-02
551546.06	4173200.95	5633.1821	9361.73149	1289.23327	7651.09954	1172.47244	13952.21177	5701.50678	5666.13294	744.69093	7711.8758	3101.90539	16454.34522	1.53419	1.56447	8.96E-03	1.05E-02	1.45E-03	6.60E-03	1.02E-03	1.21E-02	8.21E-03	5.78E-03	7.60E-04	9.36E-03	2.52E-03	1.34E-02	7.19E-04	7.41E-04	8.2186E-02
551419.83	4172827.8	4182.24362	6851.72322	1878.67129	19640.38441	2547.93124	4064.38272	4166.2246	3877.53189	1041.79493	13199.91376	11588.53275	5182.35041	0.99985	1.03436	6.66E-03	7.72E-03	2.12E-03	1.69E-02	2.21E-03	3.53E-03	6.00E-03	3.96E-03	1.06E-03	1.60E-02	9.43E-03	4.22E-03	4.69E-04	4.90E-04	8.0823E-02
552007.35	4172785.37	12163.31998	6000.88561	3495.27995	10470.04722	3454.4537	3503.93373	12013.51592	3574.73147	1967.16997	9311.38474	7341.51619	4759.47261	0.27602	0.27542	1.94E-02	6.76E-03	3.94E-03	9.03E-03	3.00E-03	3.04E-03	1.73E-02	3.65E-03	2.01E-03	1.13E-02	5.97E-03	3.87E-03	1.29E-04	1.31E-04	8.9494E-02
551437.56	4172772.52	4158.54823	6290.93184	1938.7494	20062.63509	2888.58949	3627.76809	4140.15545	3559.2966	1066.52611	12756.45246	12801.67027	4669.08911	0.99055	1.02927	6.62E-03	7.09E-03	2.18E-03	1.73E-02	2.51E-03	3.15E-03	5.96E-03	3.63E-03	1.09E-03	1.55E-02	1.04E-02	3.80E-03	4.64E-04	4.88E-04	8.0189E-02
551912.48	4172731.82	7253.81871	4400.67744	4846.59716	14073.40353	6739.60912	1969.21604	7070.43604	2579.44696	2506.98977	11031.77527	12779.06218	2662.28196	0.34023	0.34027	1.15E-02	4.96E-03	5.46E-03	1.21E-02	5.85E-03	1.71E-03	1.02E-02	2.63E-03	2.56E-03	1.34E-02	1.04E-02	2.17E-03	1.59E-04	1.61E-04	8.3313E-02
551582.18	4172657.13	6337.06514	4749.89388	3456.1973	14636.24791	6547.48133	2793.39201	6267.54554	2810.08643	1854.02333	10390.17931	14164.36641	3726.78672	0.52693	0.53512	1.01E-02	5.35E-03	3.89E-03	1.26E-02	5.69E-03	2.43E-03	9.03E-03	2.87E-03	1.89E-03	1.26E-02	1.15E-02	3.03E-03	2.47E-04	2.54E-04	8.1523E-02
551412.71	4172948.71	4639.42526	9010.19669	1671.6409	16228.62538	1873.56675	5596.28468	4640.05654	5138.63222	947.78957	13454.33774	7465.50615	7058.98216	0.9109	0.93119	7.38E-03	1.01E-02	1.88E-03	1.40E-02	1.63E-03	4.86E-03	6.68E-03	5.25E-03	9.68E-04	1.63E-02	6.08E-03	5.74E-03	4.27E-04	4.41E-04	8.1814E-02
551929.59	4172737.63	8034.91564	4735.88274	4771.28204	13445.93617	5940.39769	2149.23738	7833.45987	2802.12183	2514.99088	10969.63428	11603.99617	2911.83513	0.32577	0.32575	1.28E-02	5.33E-03	5.37E-03	1.16E-02	5.16E-03	1.87E-03	1.13E-02	2.86E-03	2.57E-03	1.33E-02	9.44E-03	2.37E-03	1.53E-04	1.54E-04	8.4262E-02
551996.47	4172772.88	11507.93716	5826.37907	3658.80352	10831.70125	3757.65248	3276.03341	11336.31652	3471.51627	2042.95192	9507.57796	7909.60944	4457.779	0.28141	0.28092	1.83E-02	6.56E-03	4.12E-03	9.34E-03	3.26E-03	2.84E-03	1.63E-02	3.54E-03	2.09E-03	1.15E-02	6.44E-03	3.63E-03	1.32E-04	1.33E-04	8.8273E-02
551433.28	4172780.85	4129.58045	6340.20392	1915.75386	19847.14167	2817.27691	3675.12523	4111.65806	3586.54161	1055.0081	12719.69514	12530.35102	4721.78309	0.98762	1.02588	6.57E-03	7.14E-03	2.16E-03	1.71E-02	2.45E-03	3.19E-03	5.92E-03	3.66E-03	1.08E-03	1.54E-02	1.02E-02	3.84E-03	4.63E-04	4.86E-04	7.9715E-02
551527.47	4172670.25	5203.30756	5149.97806	2698.94894	17730.48166	4668.50987	2960.80029	5159.10876	2988.30185	1468.3188	11450.89498	13977.42474	3897.28374	0.66142	0.67379	8.28E-03	5.80E-03	3.04E-03	1.53E-02	4.05E-03	2.57E-03	7.43E-03	3.05E-03	1.50E-03	1.39E-02	1.14E-02	3.17E-03	3.10E-04	3.19E-04	8.0094E-02
551714.4	4173228.07	9166.2884	6961.78	1122.53896	4870.37304	923.62795	15141.97568	9416.36352	3968.7442	662.13079	4877.37773	2180.36077	18051.50952	3.32442	3.17269	1.46E-02	7.84E-03	1.26E-03	4.20E-03	8.02E-04	1.31E-02	1.36E-02	4.05E-03	6.76E-04	5.92E-03	1.77E-03	1.47E-02	1.56E-03	1.50E-03	8.5579E-02
551411.89	4172888.25	4352.98624	7689.51215	1798.77834	18068.0006	2144.86336	4658.13633	4342.74937	4358.31954	1008.4535	13673.47607	9222.87162	5901.98369	0.9397	0.96552	6.93E-03	8.66E-03	2.03E-03	1.56E-02	1.86E-03	4.04E-03	6.25E-03	4.45E-03	1.03E-03	1.66E-02	7.51E-03	4.80E-03	4.40E-04	4.58E-04	8.0643E-02
552055.99	4172932.77	14859.19377	6912.1911	1988.17177	7258.83718	1540.30498	5922.22519	14951.41033	4059.02191	1178.75199	7047.42362	3624.43138	7798.41089	0.27067	0.26913	2.36E-02	7.78E-03	2.24E-03	6.26E-03	1.34E-03	5.14E-03	2.15E-02	4.14E-03	1.20E-03	8.56E-03	2.95E-03	6.35E-03	1.27E-04	1.28E-04	9.1396E-02
551473.08	4172712.51	4429.4629	5633.02616	2130.13808	19674.12352	3354.98909	3215.34496	4405.17814	3215.37428	1168.38755	12152.86755	13575.07887	4180.1381	0.85883	0.88563	7.05E-03	6.34E-03	2.40E-03	1.70E-02	2.91E-03	2.79E-03	6.34E-03	3.28E-03	1.19E-03	1.48E-02	1.10E-02	3.40E-03	4.03E-04	4.20E-04	7.9310E-02
551497.51	4172689.09	4735.57885	5374.23554	2353.18678	18909.62986	3832.75239	3075.89273	4703.29879	3087.89038	1290.33207	11809.19819	13762.87022	4018.37302	0.75981	0.77833	7.54E-03	6.05E-03	2.65E-03	1.63E-02	3.33E-03	2.67E-03	6.77E-03	3.15E-03	1.32E-03	1.43E-02	1.12E-02	3.27E-03	3.56E-04	3.69E-04	7.9322E-02
551474.8	4173122.36	4963.02814	9712.95978	1379.68505	10318.39885	1397.08405	10704.63396	5009.60826	5853.20438	787.50646	9734.92967	4170.76105	12890.13749	0.99003	1.00498	7.90E-03	1.09E-02	1.55E-03	8.90E-03	1.21E-03	9.29E-03	7.21E-03	5.98E-03	8.04E-04	1.18E-02	3.39E-03	1.05E-02	4.64E-04	4.76E-04	8.0435E-02
551496.71	4173154.15	5105.56025	9689.01914	1346.7474	9270.31329	1306.23773	11650.33915	5157.01986	5800.64717	771.66769	9025.72234	3715.45532	13908.53484	1.09359	1.11059	8.12E-03	1.09E-02	1.52E-03	7.99E-03	1.13E-03	1.01E-02	7.43E-03	5.92E-03	7.88E-04	1.10E-02	3.02E-03	1.13E-02	5.13E-04	5.26E-04	8.0275E-02
551592.73	4172655.05	6547.08178	4602.89495	3564.39095	13734.8785	6802.75251	2732.46672	6472.44648	2733.76979	1906.32501	9943.19745	13974.29754	3653.23618	0.49846	0.50615	1.04E-02	5.18E-03	4.01E-03	1.18E-02	5.91E-03	2.37E-03	9.32E-03	2.79E-03	1.95E-03	1.21E-02	1.14E-02	2.97E-03	2.34E-04	2.40E-04	8.0691E-02
551572.67	4172655.45	6059.17928	4769.06914	3276.84057	14976.43229	6121.97047	2793.46798	5995.36705	2811.74339	1761.65383	10471.14057	13888.48007	3718.84905	0.53601	0.54429	9.64E-03	5.37E-03	3.69E-03	1.29E-02	5.32E-03	2.43E-03	8.63E-03	2.87E-03	1.80E-03	1.27E-02	1.13E-02	3.03E-03	2.51E-04	2.58E-04	8.0215E-02
551515.24	4173176.58	5276.00975	9517.60039	1317.58316	8476.23717	1237.87597	12364.59883	5332.6697	5740.85292	757.28761	8436.59028	3407.69316	14687.91548	1.21659	1.23691	8.40E-03	1.07E-02	1.48E-03	7.31E-03	1.07E-03	1.07E-02	7.68E-03	5.86E-03	7.73E-04	1.02E-02	2.77E-03	1.20E-02	5.70E-04	5.86E-04	8.0160E-02
551620.52	4172656.72	7294.98261	4330.16092	3931.91692	12078.46258	7620.26341	2627.12845	7202.57316	2594.99741	2078.12662	9068.79192	14182.67304	3532.7374	0.46014	0.46808	1.16E-02	4.88E-03	4.43E-03	1.04E-02	6.62E-03	2.28E-03	1.04E-02	2.65E-03	2.12E-03	1.10E-02	1.15E-02	2.88E-03	2.16E-04	2.22E-04	8.1237E-02
551944.69	4172741.13	8549.85391	4929.00963	4552.05358	12762.78396	5246.60655	2302.13181	8345.52761	2937.88703	2434.59878	10677.46619	10636.66882	3116.34619	0.3132	0.31308	1.36E-02	5.55E-03	5.13E-03	1.10E-02	4.56E-03	2.00E-03	1.20E-02	3.00E-03	2.49E-03	1.30E-02	8.66E-03	2.54E-03	1.47E-04	1.48E-04	8.3799E-02
551409.48	4172939.75	4547.77624	8649.57068	1677.06282	16269.33864	1887.16108	5356.01393	4546.26469	4925.65726	949.70093	13331.9851	7587.70887	6760.30044	0.89834	0.91865	7.24E-03	9.74E-03	1.89E-03	1.40E-02	1.64E-03	4.65E-03	6.55E-03	5.03E-03	9.70E-04	1.62E-02	6.18E-03	5.50E-03	4.21E-04	4.35E-04	8.0452E-02
551409.07	4172909.52	4405.5282	8006.63139	1745.25627	17200.99832	2015.79183	4888.86067	4398.44469	4542.35657	983.01809	13513.8781	8382.19271	6184.74395	0.91594	0.93948	7.01E-03	9.02E-03	1.97E-03	1.48E-02	1.75E-03	4.25E-03	6.33E-03	4.64E-03	1.00E-03	1.64E-02	6.82E-03	5.03E-03	4.29E-04	4.45E-04	7.9935E-02
551778.65	4172702.03	8131.40982	2987.19588	2775.88894	14049.65371	7870.72558	1790.48432	8034.36863	1723.58318	1448.03073	7901.11986	17049.74679	2415.04666	0.57506	0.58313	1.29E-02	3.36E-03	3.13E-03	1.21E-02	6.83E-03	1.55E-03	1.16E-02	1.76E-03	1.48E-03	9.59E-03	1.39E-02	1.97E-03	2.70E-04	2.76E-04	8.0724E-02
551985.58	4172760.39	10570.44768	5570.2165	3789.04336	11115.53346	4054.21804	3003.09132	10384.59106	3328.92249	2105.05082	9640.0368	8451.09198	4047.82199	0.28622	0.28584	1.68E-02	6.27E-03	4.27E-03	9.59E-03	3.52E-03	2.61E-03	1.50E-02	3.40E-03	2.15E-03	1.17E-02	6.88E-03	3.29E-03	1.34E-04	1.35E-04	8.5724E-02
551532.63	4173194.77	5405.97698	9241.53546	1283.50211	7828.05928	1181.06351	12930.47717	5467.85815	5590.69955	739.8149	7861.04993	3170.62318	15301.87405	1.35705	1.3816	8.60E-03	1.04E-02	1.45E-03	6.75E-03	1.03E-03	1.12E-02	7.87E-03	5.71E-03	7.55E-04	9.54E-03	2.58E-03	1.25E-02	6.36E-04	6.55E-04	7.9666E-02
551421.27	4172811.76	4082.27888	6527.90965	1849.95215	19116.39216	2575.9413	3863.26302	4065.99431	3695.9331	1023.63695	12655.47693	11566.26712	4935.60998	0.96527	0.99972	6.50E-03	7.35E-03	2.08E-03	1.65E-02	2.24E-03	3.35E-03	5.86E-03	3.77E-03	1.05E-03	1.54E-02	9.41E-03	4.02E-03	4.52E-04	4.74E-04	7.8403E-02
551478.17	4173131.73	4932.97989	9627.75557	1355.94296	9942.50395	1359.44685	10710.21971	4979.87806	5720.9708	774.56159	9422.47385	4007.97475	12869.86862	0.99138	1.0061	7.85E-03	1.08E-02	1.53E-03	8.57E-03	1.18E-03	9.30E-03	7.17E-03	5.84E-03	7.91E-04	1.14E-02	3.26E-03	1.05E-02	4.65E-04	4.77E-04	7.9195E-02
551451.59	4172738.26	4179.61096	5827.71539	1963.10671	19438.64424	3019.33849	3343.97399	4160.06184	3311.02372	1077.38013	12162.88351	12861.11602	4327.9688	0.90472	0.93753	6.65E-03	6.56E-03	2.21E-03	1.68E-02	2.62E-03	2.90E-03	5.99E-03	3.38E-03	1.10E-03	1.48E-02	1.05E-02	3.52E-03	4.24E-04	4.44E-04	7.7810E-02
551447.76	4173075.42	4823.16703	9827.31947	1401.12602	11568.20952	1508.44802	8869.58263	4860.57138	5856.95877	795.19618	10413.13163	4856.84454	10871.48506	0.89906	0.91308	7.68E-03	1.11E-02	1.58E-03	9.98E-03	1.31E-03	7.70E-03	7.00E-03	5.98E-03	8.12E-04	1.26E-02	3.95E-03	8.85E-03	4.21E-04	4.33E-04	7.9397E-02
551561.54	4172656.12	5766.41468	4805.71099	3080.81623	15384.58272	5645.1892	2804.59464	5708.79087	2822.71479	1660.51859	10572.4739	13600.86736	3723.87667	0.54889	0.55734	9.18E-03	5.41E-03	3.47E-03	1.33E-02	4.90E-03	2.44E-03	8.22E-03	2.88E-03	1.70E-03	1.28E-02	1.11E-02	3.03E-03	2.57E-04	2.64E-04	7.8918E-02
551412.04	4172846.2	4133.33033	6862.14581	1807.72904	18554.15796	2361.51128	4134.86233	4119.29115	3888.04547	1005.37095	12906.33262	10516.19899	5258.13567	0.94183	0.97151	6.58E-03	7.73E-03	2.04E-03	1.60E-02	2.05E-03	3.59E-03	5.93E-03	3.97E-03	1.03E-03	1.57E-02	8.56E-03	4.28E-03	4.41E-04	4.60E-04	7.8321E-02
551666.48	4172668.65	8573.83237	3845.92397	4216.75562	10189.94629	7887.46409	2409.87495	8450.24556	2316.49542	2182.55575	7525.36315	14402.57638	3272.41653	0.4429	0.45377	1.36E-02	4.33E-03	4.75E-03	8.79E-03	6.85E-03	2.09E-03	1.22E-02	2.36E-03	2.23E-03	9.14E-03	1.17E-02	2.66E-03	2.08E-04	2.15E-04	8.1159E-02
552062.11	4172920.65	14307.84459	6701.82069	2031.50837	7303.16064	1603.7687	5605.26287	14377.39568	3941.61341	1200.0616	7042.65933	3746.50223	7393.71561	0.2643	0.26287	2.28E-02	7.55E-03	2.29E-03	6.30E-03	1.39E-03	4.87E-03	2.07E-02	4.02E-03	1.23E-03	8.55E-03	3.05E-03	6.02E-03	1.24E-04	1.25E-04	8.8982E-02
551959.72	4172744.55	8999.96949	5083.02681	4249.2011	12013.26575	4766.65437	2521.59333	8800.04552	3075.06904	2304.94508	10237.23769	9753.95156	3333.20404	0.30234	0.30215	1.43E-02	5.72E-03	4.79E-03	1.04E-02	4.14E-03	2.19E-03	1.27E-02	3.14E-03	2.35E-03	1.24E-02	7.94E-03	2.71E-03	1.42E-04	1.43E-04	8.3051E-02
551514.96	4172673.24	4926.83371	5117.67805	2499.15227	17616.46974	4203.0288	2948.76513	4888.31118	2958.92298	1365.01506	11264.34432	13413.41709	3868.78487	0.67124	0.68473	7.84E-03	5.76E-03	2.81E-03	1.52E-02	3.65E-03	2.56E-03	7.04E-03	3.02E-03	1.39E-03	1.37E-02	1.09E-02	3.15E-03	3.15E-04	3.25E-04	7.7655E-02
551603.79	4172652.14	6739.60025	4417.38023	3638.89014	12732.73426	6965.5015	2652.20687	6659.85628	2633.512	1938.12768	9390.5375	13667.05988	3553.16422	0.46763	0.47487	1.07E-02	4.98E-03	4.10E-03	1.10E-02	6.05E-03	2.30E-03	9.59E-03	2.69E-03	1.98E-03	1.14E-02	1.11E-02	2.89E-03	2.19E-04	2.25E-04	7.9248E-02
551555.69	4173213.47	5527.81994	8764.1847	1232.99818	7174.37455	1126.5412	13479.28949	5598.07186	5285.56371	713.26284	7152.56845	2949.42544	15915.5942	1.58464	1.61714	8.80E-03	9.87E-03	1.39E-03	6.19E-03	9.78E-04	1.17E-02	8.06E-03	5.40E-03	7.28E-04	8.68E-03	2.40E-03	1.30E-02	7.43E-04	7.66E-04	7.8657E-02
551453.68	4173092.16	4797.01998	9577.95416	1380.91407	10982.52317	1453.49522	9396.7551	4837.2076	5777.68389	785.53332	10110.29827	4558.42463	11261.30821	0.90421	0.91734	7.63E-03	1.08E-02	1.56E-03	9.47E-03	1.26E-03	8.16E-03	6.97E-03	5.90E-03	8.02E-04	1.23E-02	3.71E-03	9.16E-03	4.24E-04	4.35E-04	7.8543E-02
551463.57	4172718.79	4268.70052	5595.03438	2023.50605	19103.10141	3151.35457	3208.67068	4247.04126	3189.45583	1110.18892	11884.05139	12947.65177	4164.61375	0.85023	0.8781	6.79E-03	6.30E-03	2.28E-03	1.65E-02	2.74E-03	2.79E-03	6.12E-03	3.26E-03	1.13E-03	1.44E-02	1.05E-02	3.39E-03	3.98E-04	4.16E-04	7.7045E-02
551499.8	4173162.74	5054.04844	9392.81683	1317.21267	8891.5213	1270.061	11468.07598	5105.33938	5631.70632	755.29398	8684.27537	3580.80906	13682.06513	1.09092	1.10788	8.04E-03	1.06E-02	1.48E-03	7.67E-03	1.10E-03	9.96E-03	7.35E-03	5.75E-03	7.71E-04	1.05E-02	2.91E-03	1.11E-02	5.11E-04	5.25E-04	7.8335E-02
551406.26	4172930.78	4433.41983	8247.89386	1668.80833	16137.11917	1889.3894	5102.66549	4430.21984	4692.92659	943.62575	13067.64948	7669.4555	6445.06172	0.87827	0.8987	7.05E-03	9.29E-03	1.88E-03	1.39E-02	1.64E-03	4.43E-03	6.38E-03	4.79E-03	9.63E-04	1.59E-02	6.24E-03	5.25E-03	4.12E-04	4.26E-04	7.8535E-02
551855.07	4173168.6	10517.50119	6397.41406	926.75561	4009.42103	754.18258	14123.18734	10939.15602	3579.78355	547.56256	4096.27573	1792.08661	16938.9123	0.68066	0.67013	1.67E-02	7.21E-03	1.04E-03	3.46E-03	6.55E-04	1.23E-02	1.58E-02	3.65E-03	5.59E-04	4.97E-03	1.46E-03	1.38E-02	3.19E-04	3.18E-04	8.2183E-02
551810.77	4172703.94	6616.926	2922.92646	2916.65623	14179.73972	8670.14548	1637.28199	6543.34947	1662.06735	1470.51963	8559.12753	17218.54442	2196.35141	0.50599	0.51007	1.05E-02	3.29E-03	3.28E-03	1.22E-02	7.53E-03	1.42E-03	9.42E-03	1.70E-03	1.50E-03	1.04E-02	1.40E-02	1.79E-03	2.37E-04	2.42E-04	7.7577E-02
551702.91	4173235.84	8499.33987	6857.88914	1106.52967	4868.27319	918.15752	14570.39136	8714.74838	3930.87236	651.68234	4871.66812	2175.31074	17378.54858	4.79692	4.51996	1.35E-02	7.72E-03	1.25E-03	4.20E-03	7.97E-04	1.27E-02	1.26E-02	4.01E-03	6.65E-04	5.91E-03	1.77E-03	1.41E-02	2.25E-03	2.14E-03	8.3590E-02
552011.31	4172776.09	11333.21727	5696.55077	3374.9605	10175.3296	3413.426	3306.88588	11189.75893	3390.92622	1892.48025	8986.12361	7236.81276	4488.5299	0.26952	0.26902	1.80E-02	6.42E-03	3.80E-03	8.78E-03	2.96E-03	2.87E-03	1.61E-02	3.46E-03	1.93E-03	1.09E-02	5.89E-03	3.65E-03	1.26E-04	1.27E-04	8.5077E-02
551481.26	4173140.32	4907.51273	9415.32972	1334.07604	9571.49216	1324.45187	10683.42317	4954.59309	5604.46741	762.59937	9143.04097	3861.75557	12816.85639	0.99381	1.00862	7.81E-03	1.06E-02	1.50E-03	8.25E-03	1.15E-03	9.28E-03	7.14E-03	5.72E-03	7.79E-04	1.11E-02	3.14E-03	1.04E-02	4.66E-04	4.78E-04	7.7850E-02
551408.66	4172879.29	4207.81624	7255.20345	1750.96458	17462.43537	2122.76717	4417.91693	4197.20651	4113.44965	979.91443	13015.20156	9127.74571	5602.54737	0.89934	0.92365	6.70E-03	8.17E-03	1.97E-03	1.51E-02	1.84E-03	3.84E-03	6.04E-03	4.20E-03	1.00E-03	1.58E-02	7.43E-03	4.56E-03	4.22E-04	4.38E-04	7.7471E-02
551974.69	4172747.9	9594.82357	5248.60295	3906.5491	11310.55423	4331.43682	2714.92645	9407.67168	3141.09932	2145.71563	9718.40896	8937.58015	3660.45417	0.29018	0.28994	1.53E-02	5.91E-03	4.40E-03	9.75E-03	3.76E-03	2.36E-03	1.35E-02	3.21E-03	2.19E-03	1.18E-02	7.27E-03	2.98E-03	1.36E-04	1.37E-04	8.2723E-02
551444.24	4172744.93	4073.86139	5793.47324	1896.91968	18836.92082	2889.62125	3344.47558	4055.57568	3288.96618	1041.64989	11907.42151	12301.99797	4321.25152	0.88625	0.91854	6.48E-03	6.52E-03	2.14E-03	1.62E-02	2.51E-03	2.90E-03	5.84E-03	3.36E-03	1.06E-03	1.45E-02	1.00E-02	3.52E-03	4.15E-04	4.35E-04	7.5900E-02
552065.26	4172929.45	14019.64148	6608.5717	1927.83076	7035.4693	1512.41377	5656.74905	14104.21154	3881.26717	1140.55156	6806.84278	3552.07992	7442.84203	0.26302	0.26154	2.23E-02	7.44E-03	2.17E-03	6.07E-03	1.31E-03	4.91E-03	2.03E-02	3.96E-03	1.16E-03	8.26E-03	2.89E-03	6.06E-03	1.23E-04	1.24E-04	8.7114E-02
551519.09	4173187.37	5191.20309	9074.02499	1275.13169	8016.58035	1191.14094	11975.69925	5247.5273	5477.20749	733.47534	7990.09986	3249.07031	14223.10361	1.21157	1.2318	8.26E-03	1.02E-02	1.44E-03	6.91E-03	1.03E-03	1.04E-02	7.56E-03	5.59E-03	7.49E-04	9.70E-03	2.64E-03	1.16E-02	5.68E-04	5.84E-04	7.7232E-02
552000.46	4172763.65	10573.30693	5511.81526	3511.19448	10493.22186	3695.3573	3089.7773	10406.82558	3283.92153	1953.37339	9140.53418	7768.50212	4159.50323	0.27462	0.27423	1.68E-02	6.21E-03	3.95E-03	9.05E-03	3.21E-03	2.68E-03	1.50E-02	3.35E-03	1.99E-03	1.11E-02	6.32E-03	3.39E-03	1.29E-04	1.30E-04	8.3326E-02
551405.85	4172900.55	4261.02308	7557.92759	1709.13284	16723.03728	1998.78646	4633.3406	4253.17352	4290.77893	960.80364	12974.70436	8336.10494	5864.53783	0.87669	0.8996	6.78E-03	8.51E-03	1.92E-03	1.44E-02	1.74E-03	4.02E-03	6.13E-03	4.38E-03	9.81E-04	1.58E-02	6.78E-03	4.77E-03	4.11E-04	4.26E-04	7.7031E-02
551459.6	4173108.9	4753.63151	9273.12337	1347.89432	10385.14994	1395.55433	9619.28995	4795.60481	5575.6526	767.70574	9630.65809	4272.67164	11659.08023	0.9049	0.9188	7.56E-03	1.04E-02	1.52E-03	8.96E-03	1.21E-03	8.35E-03	6.91E-03	5.69E-03	7.84E-04	1.17E-02	3.48E-03	9.49E-03	4.24E-04	4.35E-04	7.6947E-02
551564.84	4173222.09	5539.56515	8428.01253	1202.04037	6842.97647	1094.91748	13426.29301	5613.04812	5071.94671	696.2136	6807.9215	2839.5454	15845.887	1.69364	1.73062	8.82E-03	9.49E-03	1.35E-03	5.90E-03	9.51E-04	1.17E-02	8.08E-03	5.18E-03	7.11E-04	8.26E-03	2.31E-03	1.29E-02	7.94E-04	8.20E-04	7.7230E-02
551887.15	4172716.57	5767.63376	3598.6903	4255.23074	13860.50424	7568.91668	1661.45822	5645.19384	2064.28523	2130.91479	10099.15674	14525.6458	2233.35404	0.36718	0.3674	9.18E-03	4.05E-03	4.79E-03	1.20E-02	6.57E-03	1.44E-03	8.13E-03	2.11E-03	2.18E-03	1.23E-02	1.18E-02	1.82E-03	1.72E-04	1.74E-04	7.6651E-02
551826.83	4172704.89	6015.16434	2943.02419	3111.56159	14051.29156	8639.64276	1583.94991	5944.70279	1666.64047	1544.40398	8818.79129	16829.10446	2121.2699	0.47233	0.47523	9.57E-03	3.31E-03	3.50E-03	1.21E-02	7.50E-03	1.38E-03	8.56E-03	1.70E-03	1.58E-03	1.07E-02	1.37E-02	1.73E-03	2.21E-04	2.25E-04	7.5801E-02
551918.58	4172724.99	6697.44615	4143.45601	4462.14188	13313.11225	6410.13223	1869.90123	6532.25531	2426.31238	2309.14158	10363.09144	12188.80053	2524.80644	0.32694	0.32717	1.07E-02	4.67E-03	5.03E-03	1.15E-02	5.57E-03	1.62E-03	9.41E-03	2.48E-03	2.36E-03	1.26E-02	9.92E-03	2.05E-03	1.53E-04	1.55E-04	7.8127E-02
551652.86	4173246.06	6801.57218	7147.01915	1119.20655	5326.08036	963.8603	14937.43879	6935.34664	4235.58615	655.27125	5330.26856	2339.42545	17323.80806	11.72829	12.86	1.08E-02	8.05E-03	1.26E-03	4.59E-03	8.37E-04	1.30E-02	9.99E-03	4.32E-03	6.69E-04	6.47E-03	1.90E-03	1.41E-02	5.50E-03	6.09E-03	8.7580E-02
551542.34	4172657.54	5290.49595	4814.08149	2752.29803	15767.16226	4857.01881	2803.39982	5242.49629	2810.49515	1490.21784	10551.8573	12994.97367	3704.40657	0.56783	0.57685	8.42E-03	5.42E-03	3.10E-03	1.36E-02	4.22E-03	2.43E-03	7.55E-03	2.87E-03	1.52E-03	1.28E-02	1.06E-02	3.01E-03	2.66E-04	2.73E-04	7.6071E-02
551901.96	4172719.75	6084.81876	3820.00579	4374.07274	13600.06068	7035.87057	1734.34525	5942.85541	2213.25809	2223.0536	10225.91908	13414.50398	2335.23412	0.34488	0.34493	9.68E-03	4.30E-03	4.93E-03	1.17E-02	6.11E-03	1.51E-03	8.56E-03	2.26E-03	2.27E-03	1.24E-02	1.09E-02	1.90E-03	1.62E-04	1.63E-04	7.6901E-02
551502.89	4173171.33	5033.20465	9104.09938	1288.21731	8524.23686	1233.94045	11269.93974	5084.8593	5466.69688	739.13859	8357.16558	3449.43962	13439.33687	1.08968	1.1066	8.01E-03	1.03E-02	1.45E-03	7.35E-03	1.07E-03	9.79E-03	7.32E-03	5.58E-03	7.55E-04	1.01E-02	2.81E-03	1.09E-02	5.11E-04	5.24E-04	7.6507E-02
551594.12	4173237.48	5818.43748	7920.64565	1159.01492	6179.93745	1036.73209	14141.01303	5907.17055	4727.37868	673.79558	6166.62096	2618.55443	16635.10318	2.40828	2.48283	9.26E-03	8.92E-03	1.31E-03	5.33E-03	9.00E-04	1.23E-02	8.51E-03	4.83E-03	6.88E-04	7.49E-03	2.13E-03	1.35E-02	1.13E-03	1.18E-03	7.7476E-02
551504.84	4172676.23	4712.45106	5076.6511	2345.41288	17376.22736	3856.77054	2933.75041	4678.30341	2927.69274	1284.53348	11060.63719	12889.13288	3839.35763	0.67433	0.68877	7.50E-03	5.72E-03	2.64E-03	1.50E-02	3.35E-03	2.55E-03	6.74E-03	2.99E-03	1.31E-03	1.34E-02	1.05E-02	3.12E-03	3.16E-04	3.26E-04	7.5462E-02
551484.35	4173148.9	4861.18426	9164.99336	1308.41127	9212.00799	1291.31455	10582.07323	4908.2197	5462.9158	748.4677	8832.18451	3729.72487	12679.80901	0.99063	1.00524	7.74E-03	1.03E-02	1.47E-03	7.94E-03	1.12E-03	9.19E-03	7.07E-03	5.58E-03	7.64E-04	1.07E-02	3.04E-03	1.03E-02	4.64E-04	4.76E-04	7.6214E-02
551537.15	4173205.13	5269.83943	8720.74759	1233.67082	7429.4021	1140.52537	12343.10756	5331.24785	5264.94603	711.7216	7394.65062	3041.60179	14629.12514	1.33956	1.36368	8.39E-03	9.82E-03	1.39E-03	6.41E-03	9.90E-04	1.07E-02	7.68E-03	5.38E-03	7.27E-04	8.98E-03	2.48E-03	1.19E-02	6.28E-04	6.46E-04	7.6124E-02
551933.72	4172728.54	7225.02772	4376.02571	4385.24504	12841.9997	5719.40503	1996.59866	7047.71215	2581.40211	2303.16109	10264.88532	11070.01592	2700.97959	0.31411	0.31424	1.15E-02	4.93E-03	4.94E-03	1.11E-02	4.97E-03	1.73E-03	1.01E-02	2.64E-03	2.35E-03	1.25E-02	9.01E-03	2.20E-03	1.47E-04	1.49E-04	7.8242E-02
551685.6	4172669.9	8811.47403	3575.67429	3992.55969	9807.97758	7183.38555	2264.50335	8681.93674	2147.59694	2054.96397	6878.03987	13883.58309	3080.32569	0.44936	0.46146	1.40E-02	4.03E-03	4.50E-03	8.46E-03	6.24E-03	1.97E-03	1.25E-02	2.19E-03	2.10E-03	8.35E-03	1.13E-02	2.51E-03	2.11E-04	2.19E-04	7.8587E-02
551454.05	4172725.07	4108.58808	5528.17537	1920.97448	18351.06488	2958.94757	3190.74355	4089.19566	3148.19588	1054.40292	11534.28085	12228.88072	4134.32659	0.82867	0.85656	6.54E-03	6.23E-03	2.16E-03	1.58E-02	2.57E-03	2.77E-03	5.89E-03	3.21E-03	1.08E-03	1.40E-02	9.95E-03	3.36E-03	3.88E-04	4.06E-04	7.4388E-02
551403.03	4172921.82	4292.54548	7803.29816	1642.36559	15776.29513	1874.21111	4833.2001	4288.15761	4438.20455	927.31529	12637.12127	7572.37075	6109.6832	0.84762	0.86783	6.83E-03	8.79E-03	1.85E-03	1.36E-02	1.63E-03	4.20E-03	6.18E-03	4.53E-03	9.47E-04	1.53E-02	6.16E-03	4.97E-03	3.97E-04	4.11E-04	7.5838E-02
551989.61	4172751.2	9740.65583	5251.12877	3615.24087	10714.62363	3952.35742	2823.95579	9568.07618	3137.47848	2000.93903	9234.5921	8228.33372	3801.54549	0.2785	0.27823	1.55E-02	5.91E-03	4.07E-03	9.24E-03	3.43E-03	2.45E-03	1.38E-02	3.20E-03	2.04E-03	1.12E-02	6.70E-03	3.09E-03	1.31E-04	1.32E-04	8.0900E-02
551579.79	4172647.57	5987.96452	4478.31803	3186.87164	13467.20147	5912.82414	2658.87933	5924.41746	2648.18879	1711.6015	9625.15502	12821.98468	3543.65679	0.47836	0.48511	9.53E-03	5.04E-03	3.59E-03	1.16E-02	5.13E-03	2.31E-03	8.53E-03	2.70E-03	1.75E-03	1.17E-02	1.04E-02	2.88E-03	2.24E-04	2.30E-04	7.5660E-02
551842.9	4172705.84	5585.98332	3003.37983	3342.13641	13864.90508	8404.66511	1551.28103	5512.55972	1699.01193	1645.37453	9043.66764	16223.67916	2076.05878	0.44058	0.4425	8.89E-03	3.38E-03	3.76E-03	1.20E-02	7.30E-03	1.35E-03	7.94E-03	1.73E-03	1.68E-03	1.10E-02	1.32E-02	1.69E-03	2.06E-04	2.10E-04	7.4280E-02
551437.62	4172752.32	3982.1872	5763.29511	1839.1111	18248.05824	2771.43743	3349.5149	3964.94175	3270.09341	1010.66997	11660.85834	11770.52547	4320.0578	0.86622	0.8976	6.34E-03	6.49E-03	2.07E-03	1.57E-02	2.41E-03	2.91E-03	5.71E-03	3.34E-03	1.03E-03	1.42E-02	9.58E-03	3.52E-03	4.06E-04	4.25E-04	7.4115E-02
551406.05	4172869.85	4086.10937	6896.60929	1714.67678	17013.79568	2117.41689	4217.7587	4075.05481	3912.84167	957.99616	12479.64509	9105.48929	5351.81845	0.86783	0.89227	6.50E-03	7.77E-03	1.93E-03	1.47E-02	1.84E-03	3.66E-03	5.87E-03	3.99E-03	9.78E-04	1.52E-02	7.41E-03	4.36E-03	4.07E-04	4.23E-04	7.4962E-02
552071.38	4172917.34	13507.77083	6409.69079	1965.54877	7070.81948	1570.90694	5361.16528	13571.9169	3769.77059	1158.74496	6796.07998	3663.59612	7065.59136	0.25687	0.25551	2.15E-02	7.22E-03	2.21E-03	6.10E-03	1.36E-03	4.66E-03	1.95E-02	3.85E-03	1.18E-03	8.25E-03	2.98E-03	5.75E-03	1.20E-04	1.21E-04	8.4846E-02
551678.21	4172666.97	8572.13447	3614.7034	3982.04558	9638.3302	7217.72196	2286.28454	8448.08114	2173.01026	2055.51936	6950.20475	13587.85525	3107.63803	0.42984	0.44089	1.36E-02	4.07E-03	4.48E-03	8.31E-03	6.27E-03	1.99E-03	1.22E-02	2.22E-03	2.10E-03	8.44E-03	1.11E-02	2.53E-03	2.01E-04	2.09E-04	7.7680E-02
551589.61	4172645.7	6192.82598	4374.66598	3298.01798	12840.76657	6172.32979	2615.85207	6124.43737	2595.57601	1766.16749	9322.54584	12793.37819	3492.99418	0.45965	0.46615	9.85E-03	4.93E-03	3.71E-03	1.11E-02	5.36E-03	2.27E-03	8.82E-03	2.65E-03	1.80E-03	1.13E-02	1.04E-02	2.84E-03	2.15E-04	2.21E-04	7.5483E-02
551948.79	4172732.01	7694.31337	4559.56195	4232.17201	12206.6836	5129.85655	2125.65149	7512.20333	2706.29594	2252.39849	10054.98872	10209.67289	2876.58416	0.30212	0.30224	1.22E-02	5.14E-03	4.77E-03	1.05E-02	4.45E-03	1.85E-03	1.08E-02	2.76E-03	2.30E-03	1.22E-02	8.31E-03	2.34E-03	1.42E-04	1.43E-04	7.7996E-02
551728.06	4173230.66	9035.71393	6414.65505	1068.49796	4583.59504	883.40264	13344.84929	9291.15062	3646.69646	630.24272	4556.11837	2082.84605	15988.43958	2.55309	2.45287	1.44E-02	7.22E-03	1.20E-03	3.95E-03	7.67E-04	1.16E-02	1.34E-02	3.72E-03	6.43E-04	5.53E-03	1.70E-03	1.30E-02	1.20E-03	1.16E-03	7.9458E-02
551432.52	4172761.22	3942.98097	5812.08883	1812.85889	18056.42208	2703.86674	3393.45112	3926.25248	3295.52014	997.09355	11622.96112	11525.25339	4369.05371	0.86716	0.89864	6.27E-03	6.55E-03	2.04E-03	1.56E-02	2.35E-03	2.95E-03	5.65E-03	3.36E-03	1.02E-03	1.41E-02	9.38E-03	3.56E-03	4.06E-04	4.26E-04	7.3644E-02
551529.92	4172659.57	5014.15419	4803.76314	2559.71125	15859.09778	4400.80259	2799.16801	4971.67873	2794.39833	1390.84132	10466.44219	12575.72623	3686.63844	0.57969	0.58936	7.98E-03	5.41E-03	2.88E-03	1.37E-02	3.82E-03	2.43E-03	7.16E-03	2.85E-03	1.42E-03	1.27E-02	1.02E-02	3.00E-03	2.72E-04	2.79E-04	7.4126E-02
551465.51	4173125.64	4686.79302	8905.71145	1309.24799	9759.00401	1336.99004	9678.41019	4729.60451	5350.20552	746.69598	9116.96486	4006.39053	11677.17891	0.90264	0.91562	7.46E-03	1.00E-02	1.47E-03	8.42E-03	1.16E-03	8.40E-03	6.81E-03	5.46E-03	7.62E-04	1.11E-02	3.26E-03	9.50E-03	4.23E-04	4.34E-04	7.4669E-02
551494.3	4172679.79	4523.16651	5051.92039	2213.1636	17203.88406	3570.5252	2925.56709	4492.8835	2906.09516	1214.2755	10908.36005	12461.97111	3819.89835	0.68266	0.69838	7.20E-03	5.69E-03	2.49E-03	1.48E-02	3.10E-03	2.54E-03	6.47E-03	2.97E-03	1.24E-03	1.32E-02	1.01E-02	3.11E-03	3.20E-04	3.31E-04	7.3679E-02
551466.74	4172705.13	4204.9929	5292.49291	1987.39382	17868.13213	3096.52671	3057.98434	4182.92874	3023.90446	1090.95914	11209.93385	12211.61636	3972.55396	0.77053	0.79346	6.69E-03	5.96E-03	2.24E-03	1.54E-02	2.69E-03	2.66E-03	6.02E-03	3.09E-03	1.11E-03	1.36E-02	9.94E-03	3.23E-03	3.61E-04	3.76E-04	7.3387E-02
551487.44	4173157.49	4818.55909	8921.32379	1282.89339	8859.54247	1257.8492	10457.88857	4865.4961	5326.04505	734.38398	8531.75604	3599.67265	12520.18699	0.9886	1.00307	7.67E-03	1.00E-02	1.44E-03	7.64E-03	1.09E-03	9.08E-03	7.01E-03	5.44E-03	7.50E-04	1.04E-02	2.93E-03	1.02E-02	4.63E-04	4.75E-04	7.4584E-02
551505.98	4173179.91	4981.81535	8823.89747	1259.9705	8168.64894	1198.02659	11065.60705	5033.32241	5306.25122	723.38254	8045.46157	3321.44241	13189.91117	1.09021	1.10718	7.93E-03	9.94E-03	1.42E-03	7.04E-03	1.04E-03	9.61E-03	7.25E-03	5.42E-03	7.39E-04	9.77E-03	2.70E-03	1.07E-02	5.11E-04	5.25E-04	7.4623E-02
552015.3	4172766.85	10541.34491	5410.80619	3255.14673	9887.99686	3368.78761	3125.67781	10401.7563	3219.05771	1819.09432	8669.65976	7131.70067	4238.89927	0.2634	0.263	1.68E-02	6.09E-03	3.67E-03	8.53E-03	2.93E-03	2.71E-03	1.50E-02	3.29E-03	1.86E-03	1.05E-02	5.80E-03	3.45E-03	1.23E-04	1.25E-04	8.0852E-02
551428.2	4172769.62	3914.56247	5856.72081	1792.15576	17886.42896	2644.2017	3435.97127	3898.20722	3319.59622	986.63993	11589.92595	11308.64804	4416.55668	0.86691	0.89827	6.23E-03	6.60E-03	2.02E-03	1.54E-02	2.30E-03	2.98E-03	5.61E-03	3.39E-03	1.01E-03	1.41E-02	9.20E-03	3.59E-03	4.06E-04	4.26E-04	7.3260E-02
551402.62	4172891.59	4127.52261	7148.59253	1671.93268	16265.27338	1983.37599	4401.0531	4119.04036	4060.18677	938.09759	12442.06107	8291.31066	5574.01284	0.84116	0.86321	6.57E-03	8.05E-03	1.88E-03	1.40E-02	1.72E-03	3.82E-03	5.93E-03	4.15E-03	9.58E-04	1.51E-02	6.75E-03	4.54E-03	3.94E-04	4.09E-04	7.4301E-02
551409.97	4172827.9	3933.08271	6314.02909	1733.13451	17427.64394	2328.67009	3823.18943	3918.99014	3582.76202	961.86487	11903.57855	10209.95251	4869.31253	0.87304	0.90088	6.26E-03	7.11E-03	1.95E-03	1.50E-02	2.02E-03	3.32E-03	5.64E-03	3.66E-03	9.82E-04	1.45E-02	8.31E-03	3.96E-03	4.09E-04	4.27E-04	7.3537E-02
551617.49	4172647.36	6848.4123	4109.84735	3600.68424	11264.36356	6815.93343	2511.9219	6764.83902	2460.10932	1907.54095	8490.45074	12820.11096	3372.59348	0.41843	0.42478	1.09E-02	4.63E-03	4.06E-03	9.71E-03	5.92E-03	2.18E-03	9.74E-03	2.51E-03	1.95E-03	1.03E-02	1.04E-02	2.74E-03	1.96E-04	2.01E-04	7.5481E-02
551704.71	4172673.61	9030.26629	3378.17692	3729.19757	10078.12275	6526.08335	2149.87116	8897.06497	2019.57964	1917.47332	6549.27416	13744.37006	2925.47768	0.48011	0.49352	1.44E-02	3.80E-03	4.20E-03	8.69E-03	5.67E-03	1.87E-03	1.28E-02	2.06E-03	1.96E-03	7.95E-03	1.12E-02	2.38E-03	2.25E-04	2.34E-04	7.7409E-02
551545.36	4172652.37	5239.09899	4660.77272	2709.9534	14949.49879	4780.40918	2730.96262	5191.33041	2725.14829	1466.30686	10123.27946	12435.90109	3611.21118	0.53362	0.54164	8.34E-03	5.25E-03	3.05E-03	1.29E-02	4.15E-03	2.37E-03	7.48E-03	2.78E-03	1.50E-03	1.23E-02	1.01E-02	2.94E-03	2.50E-04	2.57E-04	7.3665E-02
551523.44	4173198.3	5095.21051	8596.59308	1227.85581	7598.29248	1148.87843	11490.76276	5151.12271	5184.25198	706.93617	7525.9767	3109.58513	13661.2079	1.19579	1.21556	8.11E-03	9.68E-03	1.38E-03	6.55E-03	9.98E-04	9.98E-03	7.42E-03	5.29E-03	7.22E-04	9.14E-03	2.53E-03	1.11E-02	5.60E-04	5.76E-04	7.4056E-02
552074.53	4172926.14	13250.37629	6325.04798	1869.35063	6821.66489	1484.42569	5409.50718	13328.15549	3715.21443	1103.74218	6577.67589	3480.40156	7112.05311	0.2557	0.25429	2.11E-02	7.12E-03	2.11E-03	5.88E-03	1.29E-03	4.70E-03	1.92E-02	3.79E-03	1.13E-03	7.99E-03	2.83E-03	5.79E-03	1.20E-04	1.21E-04	8.3144E-02
551963.8	4172735.41	8106.75581	4705.74964	4028.3023	11597.51745	4595.30607	2263.36645	7925.83483	2807.36975	2169.88443	9762.62932	9414.82084	3060.20403	0.29118	0.29121	1.29E-02	5.30E-03	4.54E-03	1.00E-02	3.99E-03	1.97E-03	1.14E-02	2.87E-03	2.22E-03	1.19E-02	7.66E-03	2.49E-03	1.36E-04	1.38E-04	7.7469E-02
551566.39	4172645.96	5625.85703	4497.25457	2957.25872	13829.82862	5381.63764	2657.95506	5569.5972	2647.38352	1593.1198	9696.7818	12437.71672	3532.23554	0.48844	0.49529	8.95E-03	5.07E-03	3.33E-03	1.19E-02	4.67E-03	2.31E-03	8.02E-03	2.70E-03	1.63E-03	1.18E-02	1.01E-02	2.87E-03	2.29E-04	2.35E-04	7.3839E-02
551694.62	4172670.33	8821.23308	3439.93509	3810.17142	9688.00901	6708.40249	2188.40126	8691.97682	2061.63292	1960.43898	6594.34312	13466.296	2977.39278	0.45201	0.46445	1.40E-02	3.87E-03	4.29E-03	8.36E-03	5.82E-03	1.90E-03	1.25E-02	2.10E-03	2.00E-03	8.01E-03	1.10E-02	2.42E-03	2.12E-04	2.20E-04	7.6727E-02
551521.02	4172661.7	4841.75841	4804.01654	2440.33026	15932.7639	4121.48282	2800.56662	4802.78906	2787.42539	1329.56983	10420.46453	12327.54663	3679.94162	0.591	0.60144	7.70E-03	5.41E-03	2.75E-03	1.37E-02	3.58E-03	2.43E-03	6.92E-03	2.85E-03	1.36E-03	1.27E-02	1.00E-02	2.99E-03	2.77E-04	2.85E-04	7.2975E-02
551468.9	4173135.07	4654.03269	8824.01985	1287.35903	9424.71353	1303.32129	9665.65538	4697.0696	5232.63184	734.78124	8837.21081	3859.99278	11639.58932	0.90191	0.91469	7.41E-03	9.94E-03	1.45E-03	8.13E-03	1.13E-03	8.39E-03	6.76E-03	5.34E-03	7.50E-04	1.07E-02	3.14E-03	9.47E-03	4.23E-04	4.33E-04	7.3502E-02
551769.11	4172694.79	8088.02253	2885.62654	2619.7452	12737.61455	6494.84925	1775.6588	7990.34158	1676.79348	1378.01493	7079.16705	15009.32584	2397.38579	0.5552	0.56525	1.29E-02	3.25E-03	2.95E-03	1.10E-02	5.64E-03	1.54E-03	1.15E-02	1.71E-03	1.41E-03	8.59E-03	1.22E-02	1.95E-03	2.60E-04	2.68E-04	7.5152E-02
551399.81	4172912.85	4168.53632	7412.83349	1620.75096	15483.90976	1867.97739	4600.2918	4163.07107	4216.53585	913.44801	12259.46046	7575.18458	5818.10774	0.82113	0.8413	6.63E-03	8.35E-03	1.83E-03	1.34E-02	1.62E-03	3.99E-03	6.00E-03	4.30E-03	9.33E-04	1.49E-02	6.16E-03	4.74E-03	3.85E-04	3.99E-04	7.3577E-02
552004.49	4172754.44	9762.68015	5209.1244	3360.35333	10145.38923	3617.18498	2895.30486	9605.64122	3105.45171	1869.03735	8781.05935	7594.76563	3894.647	0.26766	0.26736	1.55E-02	5.87E-03	3.78E-03	8.75E-03	3.14E-03	2.51E-03	1.38E-02	3.17E-03	1.91E-03	1.07E-02	6.18E-03	3.17E-03	1.25E-04	1.27E-04	7.8766E-02
551600.39	4172642.9	6344.40447	4197.26154	3346.0498	11899.96144	6265.88194	2538.25116	6272.02438	2499.39539	1785.5465	8800.67942	12434.13215	3395.65461	0.42911	0.43507	1.01E-02	4.73E-03	3.77E-03	1.03E-02	5.44E-03	2.20E-03	9.03E-03	2.55E-03	1.82E-03	1.07E-02	1.01E-02	2.76E-03	2.01E-04	2.06E-04	7.3881E-02
551719.96	4173236.2	8559.01049	6362.2782	1060.0645	4586.62487	882.35255	13010.85699	8788.07263	3628.70043	624.69542	4556.24808	2085.36313	15609.04838	3.11629	2.97432	1.36E-02	7.17E-03	1.19E-03	3.96E-03	7.66E-04	1.13E-02	1.27E-02	3.70E-03	6.38E-04	5.53E-03	1.70E-03	1.27E-02	1.46E-03	1.41E-03	7.7799E-02
551402.73	4172849.5	3928.48492	6417.98383	1684.98189	16731.3836	2176.67981	3935.56892	3916.22135	3644.05	938.0335	11834.70629	9397.64063	4999.67575	0.8411	0.86571	6.25E-03	7.23E-03	1.90E-03	1.44E-02	1.89E-03	3.42E-03	5.64E-03	3.72E-03	9.58E-04	1.44E-02	7.65E-03	4.07E-03	3.94E-04	4.10E-04	7.2321E-02
551490.53	4173166.07	4775.48848	8677.33206	1257.02528	8517.81601	1224.66805	10308.10074	4822.28776	5188.36284	720.04569	8236.05594	3474.08083	12333.6317	0.98642	1.00083	7.60E-03	9.77E-03	1.42E-03	7.35E-03	1.06E-03	8.95E-03	6.94E-03	5.30E-03	7.35E-04	1.00E-02	2.83E-03	1.00E-02	4.62E-04	4.74E-04	7.2925E-02
551556.37	4172646.4	5382.94826	4515.31878	2798.65742	14086.28285	5009.94896	2662.59507	5331.58567	2649.85026	1510.85837	9740.44384	12182.84239	3530.19911	0.4977	0.50473	8.57E-03	5.09E-03	3.15E-03	1.21E-02	4.35E-03	2.31E-03	7.68E-03	2.71E-03	1.54E-03	1.18E-02	9.91E-03	2.87E-03	2.33E-04	2.39E-04	7.2625E-02
551444.54	4172731.36	3950.85453	5434.65128	1822.97848	17466.98379	2776.62528	3162.28757	3933.37875	3092.73507	1001.17386	11119.10559	11454.38096	4090.07989	0.79719	0.82414	6.29E-03	6.12E-03	2.05E-03	1.51E-02	2.41E-03	2.75E-03	5.66E-03	3.16E-03	1.02E-03	1.35E-02	9.32E-03	3.33E-03	3.74E-04	3.91E-04	7.1440E-02
551978.76	4172738.75	8490.08446	4828.66234	3756.2353	10914.84686	4202.57342	2471.28177	8315.67484	2914.12297	2048.40548	9341.33987	8680.42129	3341.72709	0.28193	0.28191	1.35E-02	5.44E-03	4.23E-03	9.41E-03	3.65E-03	2.15E-03	1.20E-02	2.98E-03	2.09E-03	1.13E-02	7.06E-03	2.72E-03	1.32E-04	1.34E-04	7.6820E-02
551551.38	4173221.59	5216.36522	8109.52096	1172.7133	6845.0956	1085.9298	12052.30625	5281.32503	4880.33541	677.92867	6756.06782	2852.48267	14291.14602	1.42294	1.45016	8.30E-03	9.13E-03	1.32E-03	5.90E-03	9.43E-04	1.05E-02	7.61E-03	4.98E-03	6.92E-04	8.20E-03	2.32E-03	1.16E-02	6.67E-04	6.87E-04	7.2855E-02
551457.04	4172711.54	4055.62137	5256.04366	1891.08055	17368.49056	2916.62483	3050.93335	4035.96809	2999.62051	1038.29797	10969.21786	11670.00573	3957.17758	0.76247	0.7862	6.45E-03	5.92E-03	2.13E-03	1.50E-02	2.53E-03	2.65E-03	5.81E-03	3.06E-03	1.06E-03	1.33E-02	9.50E-03	3.22E-03	3.57E-04	3.73E-04	7.1363E-02
551512.12	4172663.83	4673.64226	4790.26427	2324.14374	15902.48301	3856.58478	2795.91921	4638.05367	2772.79052	1269.63564	10329.95475	12028.33582	3665.65311	0.59929	0.61056	7.44E-03	5.40E-03	2.62E-03	1.37E-02	3.35E-03	2.43E-03	6.68E-03	2.83E-03	1.30E-03	1.25E-02	9.79E-03	2.98E-03	2.81E-04	2.89E-04	7.1631E-02
551471.99	4173143.65	4624.78605	8635.56811	1266.94786	9099.84703	1272.40364	9623.56138	4667.88438	5127.54003	723.63101	8584.6183	3729.86503	11572.75255	0.9016	0.91428	7.36E-03	9.73E-03	1.43E-03	7.85E-03	1.10E-03	8.36E-03	6.72E-03	5.23E-03	7.39E-04	1.04E-02	3.04E-03	9.42E-03	4.23E-04	4.33E-04	7.2249E-02
552077.68	4172934.94	12952.77477	6226.38865	1775.21917	6571.47977	1401.91502	5443.4364	13043.26446	3652.56035	1049.61011	6355.58623	3303.83626	7139.24665	0.25443	0.25297	2.06E-02	7.01E-03	2.00E-03	5.67E-03	1.22E-03	4.73E-03	1.88E-02	3.73E-03	1.07E-03	7.72E-03	2.69E-03	5.81E-03	1.19E-04	1.20E-04	8.1274E-02
552080.65	4172914.02	12774.79162	6137.13781	1902.37835	6850.00916	1538.58629	5133.46853	12834.10341	3609.5035	1119.34772	6562.4823	3583.02481	6759.84372	0.24979	0.24849	2.03E-02	6.91E-03	2.14E-03	5.91E-03	1.34E-03	4.46E-03	1.85E-02	3.69E-03	1.14E-03	7.97E-03	2.92E-03	5.50E-03	1.17E-04	1.18E-04	8.1014E-02
551534.13	4172653.22	4974.598	4632.23946	2528.64671	14947.60682	4357.59053	2717.47854	4931.91115	2700.18583	1372.05554	10002.80667	11995.23901	3582.78646	0.53923	0.5476	7.92E-03	5.22E-03	2.85E-03	1.29E-02	3.78E-03	2.36E-03	7.10E-03	2.76E-03	1.40E-03	1.21E-02	9.76E-03	2.92E-03	2.53E-04	2.60E-04	7.1610E-02
551411.53	4172810.28	3830.45533	6002.98255	1702.56871	16902.15169	2351.63321	3626.16399	3816.08032	3407.4258	942.77498	11373.93555	10151.99002	4627.63726	0.83824	0.86588	6.10E-03	6.76E-03	1.92E-03	1.46E-02	2.04E-03	3.15E-03	5.50E-03	3.48E-03	9.63E-04	1.38E-02	8.26E-03	3.77E-03	3.93E-04	4.10E-04	7.1118E-02
551415.24	4172794.84	3817.10762	5888.84724	1714.74588	17006.14689	2429.81221	3526.81559	3802.18136	3340.43637	947.37844	11286.44136	10422.4301	4511.05323	0.83756	0.86627	6.07E-03	6.63E-03	1.93E-03	1.47E-02	2.11E-03	3.06E-03	5.48E-03	3.41E-03	9.67E-04	1.37E-02	8.48E-03	3.67E-03	3.93E-04	4.11E-04	7.0988E-02
551509.97	4173191.09	4902.12707	8428.55717	1219.6837	7734.74116	1153.68716	10720.43824	4953.28237	5072.84688	700.81756	7626.94665	3168.72427	12778.78559	1.08311	1.0999	7.80E-03	9.49E-03	1.37E-03	6.67E-03	1.00E-03	9.31E-03	7.13E-03	5.18E-03	7.15E-04	9.26E-03	2.58E-03	1.04E-02	5.08E-04	5.21E-04	7.1943E-02
552030.11	4172770.01	10314.36791	5286.99208	3019.47517	9323.51461	3084.12565	3147.66006	10194.88192	3143.34868	1693.61441	8217.79956	6574.9181	4257.94528	0.25312	0.25271	1.64E-02	5.95E-03	3.40E-03	8.04E-03	2.68E-03	2.73E-03	1.47E-02	3.21E-03	1.73E-03	9.98E-03	5.35E-03	3.47E-03	1.19E-04	1.20E-04	7.7872E-02
551993.67	4172742.03	8937.75849	4938.52996	3470.27651	10322.96608	3845.42152	2628.97432	8776.826	2950.13374	1911.88324	8879.33887	8003.35149	3539.60242	0.27103	0.27086	1.42E-02	5.56E-03	3.91E-03	8.90E-03	3.34E-03	2.28E-03	1.26E-02	3.01E-03	1.95E-03	1.08E-02	6.51E-03	2.88E-03	1.27E-04	1.28E-04	7.6251E-02
551399.4	4172882.62	3986.3202	6743.00357	1624.82588	15680.43274	1954.75329	4172.76782	3977.47366	3831.05203	910.26511	11839.01048	8162.88886	5289.31432	0.80475	0.82504	6.34E-03	7.59E-03	1.83E-03	1.35E-02	1.70E-03	3.62E-03	5.73E-03	3.91E-03	9.29E-04	1.44E-02	6.64E-03	4.30E-03	3.77E-04	3.91E-04	7.1269E-02
551907.56	4172712.35	5615.05241	3588.93178	3993.85564	12793.22807	6533.62659	1645.44803	5487.97541	2075.29859	2032.13676	9550.12665	12594.11744	2213.8156	0.33335	0.33365	8.94E-03	4.04E-03	4.50E-03	1.10E-02	5.67E-03	1.43E-03	7.90E-03	2.12E-03	2.07E-03	1.16E-02	1.02E-02	1.80E-03	1.56E-04	1.58E-04	7.1667E-02
551775.23	4172692.73	7658.94631	2805.82607	2505.95874	12503.38132	6414.40487	1718.39615	7570.11083	1626.40628	1317.04633	6997.58104	14631.53751	2316.34384	0.53501	0.54415	1.22E-02	3.16E-03	2.82E-03	1.08E-02	5.57E-03	1.49E-03	1.09E-02	1.66E-03	1.34E-03	8.50E-03	1.19E-02	1.89E-03	2.51E-04	2.58E-04	7.2719E-02
551922.75	4172715.96	6024.29126	3817.11277	4050.57167	12524.96398	6052.81621	1740.24434	5880.73567	2229.14985	2091.38262	9624.79108	11661.32627	2345.35803	0.31492	0.31508	9.59E-03	4.30E-03	4.56E-03	1.08E-02	5.26E-03	1.51E-03	8.47E-03	2.28E-03	2.14E-03	1.17E-02	9.49E-03	1.91E-03	1.48E-04	1.49E-04	7.2277E-02
551527.09	4173206.89	4985.93249	8231.52722	1191.07531	7287.55029	1117.06099	11107.35596	5041.47515	4958.66196	686.21721	7178.23651	3006.44352	13218.58674	1.18421	1.20365	7.93E-03	9.27E-03	1.34E-03	6.28E-03	9.70E-04	9.64E-03	7.26E-03	5.06E-03	7.01E-04	8.71E-03	2.45E-03	1.08E-02	5.55E-04	5.70E-04	7.1514E-02
551560.73	4173230.4	5243.26825	7816.82759	1146.24568	6528.27082	1054.90196	12056.6569	5311.61219	4705.6461	663.41476	6452.36423	2743.13868	14280.33865	1.52504	1.5562	8.34E-03	8.80E-03	1.29E-03	5.63E-03	9.16E-04	1.05E-02	7.65E-03	4.80E-03	6.77E-04	7.83E-03	2.23E-03	1.16E-02	7.15E-04	7.38E-04	7.1724E-02
551503.29	4172666.35	4522.17413	4780.0295	2220.30289	15864.28069	3624.86045	2793.04953	4489.6764	2760.55934	1215.7338	10248.19568	11754.28698	3654.35322	0.60812	0.62035	7.20E-03	5.38E-03	2.50E-03	1.37E-02	3.15E-03	2.43E-03	6.47E-03	2.82E-03	1.24E-03	1.24E-02	9.57E-03	2.97E-03	2.85E-04	2.94E-04	7.0421E-02
551493.62	4173174.66	4726.79765	8423.72775	1229.85171	8188.89173	1192.23344	10123.4251	4773.42053	5043.00314	704.96931	7937.25366	3354.75533	12109.44536	0.9823	0.99662	7.52E-03	9.49E-03	1.39E-03	7.06E-03	1.04E-03	8.79E-03	6.87E-03	5.15E-03	7.20E-04	9.64E-03	2.73E-03	9.86E-03	4.60E-04	4.72E-04	7.1179E-02
551708.42	4173244	8012.83377	6296.77714	1047.69411	4590.14057	877.73053	12686.00751	8213.49424	3609.48482	616.54316	4561.93685	2080.54493	15206.85078	4.42046	4.16012	1.28E-02	7.09E-03	1.18E-03	3.96E-03	7.62E-04	1.10E-02	1.18E-02	3.69E-03	6.29E-04	5.54E-03	1.69E-03	1.24E-02	2.07E-03	1.97E-03	7.6553E-02
551396.58	4172903.89	4040.56522	7023.00857	1590.48824	15103.40107	1853.88994	4371.79639	4034.27939	3996.22696	894.72014	11817.18067	7541.06324	5532.0618	0.78854	0.80825	6.43E-03	7.91E-03	1.79E-03	1.30E-02	1.61E-03	3.80E-03	5.81E-03	4.08E-03	9.13E-04	1.43E-02	6.14E-03	4.50E-03	3.70E-04	3.83E-04	7.1104E-02
551657.23	4173254.38	6550.91389	6645.54016	1069.99022	5042.84908	925.18661	13403.85056	6679.9875	3938.35407	626.28356	5029.82829	2242.10679	15598.02725	12.66016	14.02757	1.04E-02	7.48E-03	1.21E-03	4.35E-03	8.03E-04	1.16E-02	9.62E-03	4.02E-03	6.39E-04	6.11E-03	1.82E-03	1.27E-02	5.93E-03	6.65E-03	8.3393E-02
552019.32	4172757.64	9751.64513	5139.71466	3132.45998	9596.69164	3314.55638	2956.2389	9613.26458	3055.67715	1744.94239	8354.66456	7010.90958	4004.07486	0.25729	0.25698	1.55E-02	5.79E-03	3.53E-03	8.28E-03	2.88E-03	2.57E-03	1.38E-02	3.12E-03	1.78E-03	1.01E-02	5.71E-03	3.26E-03	1.21E-04	1.22E-04	7.6651E-02
551475.08	4173152.24	4593.01034	8441.61313	1245.6415	8777.41697	1241.47017	9550.43766	4636.09312	5020.00392	711.94267	8329.39935	3603.90801	11472.0612	0.90084	0.91344	7.31E-03	9.51E-03	1.40E-03	7.57E-03	1.08E-03	8.29E-03	6.68E-03	5.13E-03	7.27E-04	1.01E-02	2.93E-03	9.34E-03	4.22E-04	4.33E-04	7.0925E-02

551937.87	4172719.48	6452.32314	4021.53515	4014.74131	12158.57428	5548.70836	1842.74569	6297.25017	2365.1592	2101.22347	9575.23274	10695.31951	2488.44876	0.30234	0.30255	1.03E-02	4.53E-03	4.52E-03	1.05E-02	4.82E-03	1.60E-03	9.07E-03	2.41E-03	2.15E-03	1.16E-02	8.70E-03	2.03E-03	1.42E-04	1.43E-04	7.2490E-02
551541.12	4172647.77	5033.58637	4515.68212	2565.45609	14305.85207	4464.42895	2660.68622	4989.06319	2638.66453	1389.48339	9707.76327	11735.89795	3514.27653	0.51005	0.5175	8.01E-03	5.09E-03	2.89E-03	1.23E-02	3.88E-03	2.31E-03	7.19E-03	2.69E-03	1.42E-03	1.18E-02	9.55E-03	2.86E-03	2.39E-04	2.45E-04	7.0488E-02
552083.8	4172922.82	12542.26191	6059.2122	1812.5858	6616.06787	1456.20581	5177.89635	12613.90227	3559.3992	1068.1868	6358.71824	3408.78395	6802.64628	0.24866	0.24732	2.00E-02	6.82E-03	2.04E-03	5.71E-03	1.26E-03	4.50E-03	1.82E-02	3.63E-03	1.09E-03	7.72E-03	2.77E-03	5.54E-03	1.17E-04	1.17E-04	7.9445E-02
552080.83	4172943.74	12620.30368	6115.24826	1683.75218	6322.28991	1323.68805	5463.30163	12722.36834	3582.78933	996.74378	6131.75299	3134.87226	7147.77584	0.25309	0.25158	2.01E-02	6.89E-03	1.90E-03	5.45E-03	1.15E-03	4.74E-03	1.83E-02	3.66E-03	1.02E-03	7.44E-03	2.55E-03	5.82E-03	1.19E-04	1.19E-04	7.9260E-02
551577.41	4172638.02	5688.3364	4245.99878	2964.29015	12520.41834	5406.28919	2541.31918	5629.66876	2509.22068	1593.6273	8993.10274	11757.45491	3383.91888	0.44085	0.44662	9.05E-03	4.78E-03	3.34E-03	1.08E-02	4.69E-03	2.21E-03	8.11E-03	2.56E-03	1.63E-03	1.09E-02	9.57E-03	2.75E-03	2.07E-04	2.12E-04	7.0826E-02
551435.94	4172739.46	3829.22129	5382.76489	1748.71853	16776.35209	2634.42981	3156.56482	3813.14084	3061.0353	960.99142	10810.65731	10843.50477	4074.625	0.7746	0.80077	6.09E-03	6.06E-03	1.97E-03	1.45E-02	2.29E-03	2.74E-03	5.49E-03	3.13E-03	9.81E-04	1.31E-02	8.82E-03	3.32E-03	3.63E-04	3.80E-04	6.9228E-02
551952.92	4172722.92	6941.93216	4223.70761	3921.6718	11714.55519	4970.42121	1971.67626	6779.7073	2499.0061	2079.06842	9451.98477	9777.87803	2666.02277	0.29143	0.29162	1.10E-02	4.76E-03	4.42E-03	1.01E-02	4.32E-03	1.71E-03	9.76E-03	2.55E-03	2.12E-03	1.15E-02	7.96E-03	2.17E-03	1.37E-04	1.38E-04	7.2666E-02
552086.78	4172901.9	12269.85401	5938.92314	1925.28642	6852.21445	1586.76296	4865.55847	12312.88419	3496.70007	1128.83111	6522.69991	3670.84715	6416.04736	0.24386	0.24267	1.95E-02	6.69E-03	2.17E-03	5.91E-03	1.38E-03	4.22E-03	1.77E-02	3.57E-03	1.15E-03	7.92E-03	2.99E-03	5.22E-03	1.14E-04	1.15E-04	7.8706E-02
551586.5	4172636.36	5865.14902	4161.3349	3057.97767	12021.00468	5618.57795	2505.95783	5802.39677	2466.65343	1639.7721	8752.22489	11742.81089	3342.32722	0.42558	0.43114	9.33E-03	4.69E-03	3.44E-03	1.04E-02	4.88E-03	2.18E-03	8.36E-03	2.52E-03	1.67E-03	1.06E-02	9.56E-03	2.72E-03	1.99E-04	2.04E-04	7.0740E-02
551401.07	4172839.32	3806.29225	6096.24146	1638.42912	16073.19484	2146.33696	3753.98118	3794.00189	3464.91172	911.15626	11254.2403	9191.96308	4772.45273	0.80083	0.82425	6.06E-03	6.87E-03	1.85E-03	1.39E-02	1.86E-03	3.26E-03	5.46E-03	3.54E-03	9.30E-04	1.37E-02	7.48E-03	3.88E-03	3.75E-04	3.91E-04	6.9479E-02
551494.81	4172669.19	4383.43102	4766.71966	2125.41578	15779.21754	3418.57216	2789.17616	4353.76908	2747.32419	1165.89065	10155.93916	11473.41179	3642.57268	0.61511	0.62822	6.98E-03	5.37E-03	2.39E-03	1.36E-02	2.97E-03	2.42E-03	6.27E-03	2.80E-03	1.19E-03	1.23E-02	9.34E-03	2.96E-03	2.88E-04	2.98E-04	6.9219E-02
551447.33	4172717.95	3898.33532	5180.38596	1792.29836	16634.783	2734.88086	3027.90361	3880.84121	2954.02141	984.48201	10616.35965	10992.15418	3920.90255	0.73964	0.7631	6.20E-03	5.83E-03	2.02E-03	1.43E-02	2.37E-03	2.63E-03	5.59E-03	3.02E-03	1.01E-03	1.29E-02	8.95E-03	3.19E-03	3.47E-04	3.62E-04	6.8750E-02
551592.28	4173247.93	5475.22783	7284.74974	1098.83013	5837.08117	992.59674	12532.44716	5557.88115	4350.9431	638.32147	5796.38875	2510.65841	14533.91724	2.16984	2.23163	8.71E-03	8.20E-03	1.24E-03	5.03E-03	8.62E-04	1.09E-02	8.00E-03	4.44E-03	6.52E-04	7.04E-03	2.04E-03	1.18E-02	1.02E-03	1.06E-03	7.1014E-02
551640.12	4172644.2	7111.93019	3725.17312	3556.09908	9635.49951	6579.81137	2329.94661	7020.52406	2238.27778	1868.20394	7383.61922	11950.25537	3140.6359	0.37115	0.37725	1.13E-02	4.20E-03	4.01E-03	8.31E-03	5.71E-03	2.02E-03	1.01E-02	2.29E-03	1.91E-03	8.96E-03	9.73E-03	2.56E-03	1.74E-04	1.79E-04	7.1465E-02
551614.45	4172638	6467.49165	3922.0515	3329.70534	10614.55855	6184.69934	2411.69792	6391.0961	2344.86621	1767.38454	8015.35487	11753.74356	3233.41857	0.38727	0.39256	1.03E-02	4.42E-03	3.75E-03	9.15E-03	5.37E-03	2.09E-03	9.20E-03	2.39E-03	1.80E-03	9.73E-03	9.57E-03	2.63E-03	1.82E-04	1.86E-04	7.0776E-02
552008.54	4172745.27	9046.84056	4927.59422	3213.30421	9797.8143	3528.99604	2731.04493	8899.89075	2937.43702	1782.72894	8431.28383	7402.44288	3669.35189	0.26059	0.26038	1.44E-02	5.55E-03	3.62E-03	8.45E-03	3.06E-03	2.37E-03	1.28E-02	3.00E-03	1.82E-03	1.02E-02	6.02E-03	2.99E-03	1.22E-04	1.23E-04	7.4579E-02
551478.17	4173160.82	4555.19083	8237.03927	1222.93682	8462.62518	1211.10479	9441.57636	4598.13712	4905.44771	699.44183	8066.88038	3484.36128	11332.69325	0.89849	0.91094	7.25E-03	9.28E-03	1.38E-03	7.30E-03	1.05E-03	8.20E-03	6.62E-03	5.01E-03	7.14E-04	9.79E-03	2.84E-03	9.22E-03	4.21E-04	4.32E-04	6.9500E-02
551967.91	4172726.3	7364.16906	4380.2384	3771.50663	11120.6687	4472.63601	2102.91767	7200.76872	2605.46176	2023.02738	9236.34015	9060.55369	2841.57264	0.28143	0.28159	1.17E-02	4.93E-03	4.25E-03	9.59E-03	3.88E-03	1.83E-03	1.04E-02	2.66E-03	2.07E-03	1.12E-02	7.37E-03	2.31E-03	1.32E-04	1.33E-04	7.2460E-02
551396.71	4172873	3874.40895	6420.71653	1594.16922	15315.68217	1951.5113	3989.52477	3865.04735	3650.33263	891.49334	11388.72851	8151.94503	5059.44248	0.77612	0.79653	6.17E-03	7.23E-03	1.80E-03	1.32E-02	1.69E-03	3.46E-03	5.57E-03	3.73E-03	9.10E-04	1.38E-02	6.63E-03	4.12E-03	3.64E-04	3.77E-04	6.9082E-02
551496.71	4173183.25	4679.15601	8172.40655	1202.78482	7869.92739	1160.00963	9926.29709	4725.60621	4898.19042	689.8852	7647.62545	3238.82144	11872.38213	0.97855	0.99275	7.45E-03	9.20E-03	1.35E-03	6.79E-03	1.01E-03	8.62E-03	6.81E-03	5.00E-03	7.04E-04	9.28E-03	2.64E-03	9.66E-03	4.59E-04	4.70E-04	6.9440E-02
551682.33	4172660.6	8158.77712	3390.72205	3629.95527	8866.93967	6377.75164	2164.16585	8044.02508	2034.9929	1878.87288	6411.55434	12162.64693	2939.70094	0.39168	0.40145	1.30E-02	3.82E-03	4.09E-03	7.65E-03	5.54E-03	1.88E-03	1.16E-02	2.08E-03	1.92E-03	7.78E-03	9.90E-03	2.39E-03	1.84E-04	1.90E-04	7.1983E-02
552086.95	4172931.62	12273.50214	5968.61485	1724.55519	6381.2084	1377.49307	5209.33889	12356.72608	3501.94647	1017.71676	6151.48949	3240.78226	6828.04657	0.24745	0.24606	1.95E-02	6.72E-03	1.94E-03	5.50E-03	1.20E-03	4.52E-03	1.78E-02	3.58E-03	1.04E-03	7.47E-03	2.64E-03	5.56E-03	1.16E-04	1.17E-04	7.7723E-02
552089.93	4172910.7	12097.15566	5880.52214	1840.88425	6636.38711	1505.73244	4918.93344	12152.03766	3458.40817	1081.19573	6338.3843	3501.62719	6472.33591	0.24292	0.24168	1.93E-02	6.62E-03	2.07E-03	5.72E-03	1.31E-03	4.27E-03	1.75E-02	3.53E-03	1.10E-03	7.69E-03	2.85E-03	5.27E-03	1.14E-04	1.15E-04	7.7424E-02
551460.34	4172697.79	3990.17639	4971.80011	1853.15213	16234.67383	2855.13469	2907.82749	3970.21554	2843.40236	1018.17202	10338.8816	10995.83659	3774.67828	0.69255	0.71219	6.35E-03	5.60E-03	2.09E-03	1.40E-02	2.48E-03	2.52E-03	5.72E-03	2.90E-03	1.04E-03	1.26E-02	8.95E-03	3.07E-03	3.25E-04	3.38E-04	6.7936E-02
551429.94	4172746.15	3755.33655	5357.78656	1704.06655	16337.24194	2545.49933	3160.59383	3740.00552	3045.47916	937.0023	10619.22763	10457.84173	4073.4379	0.76084	0.78643	5.98E-03	6.03E-03	1.92E-03	1.41E-02	2.21E-03	2.74E-03	5.39E-03	3.11E-03	9.57E-04	1.29E-02	8.51E-03	3.32E-03	3.57E-04	3.73E-04	6.7873E-02
551420.4	4173057.28	4313.25001	8378.24711	1270.46424	10710.86745	1409.98431	6941.04048	4341.19628	4981.70058	720.09257	9336.76867	4720.48448	8589.61525	0.74646	0.75829	6.86E-03	9.44E-03	1.43E-03	9.24E-03	1.22E-03	6.03E-03	6.25E-03	5.09E-03	7.35E-04	1.13E-02	3.84E-03	6.99E-03	3.50E-04	3.59E-04	6.9169E-02
551514.24	4173201.82	4783.01787	8012.52414	1175.78371	7362.23962	1116.29277	10296.46975	4833.52454	4818.13454	676.21439	7202.85164	3044.27203	12289.46865	1.06498	1.08119	7.61E-03	9.02E-03	1.32E-03	6.35E-03	9.69E-04	8.94E-03	6.96E-03	4.92E-03	6.90E-04	8.74E-03	2.48E-03	1.00E-02	4.99E-04	5.12E-04	6.9024E-02
551417.18	4173048.33	4295.95222	8372.50118	1273.14179	10906.18636	1423.3064	6707.27232	4321.93204	4975.65701	721.73065	9428.39802	4846.91488	8324.96184	0.74023	0.75191	6.84E-03	9.43E-03	1.43E-03	9.41E-03	1.24E-03	5.82E-03	6.22E-03	5.08E-03	7.37E-04	1.14E-02	3.94E-03	6.78E-03	3.47E-04	3.56E-04	6.9075E-02
551596.99	4172633.65	6005.08238	4007.40348	3103.75458	11220.42224	5708.57537	2438.07588	5938.75435	2383.47585	1658.8531	8309.04521	11451.60017	3257.39273	0.39953	0.40464	9.56E-03	4.51E-03	3.50E-03	9.68E-03	4.96E-03	2.12E-03	8.55E-03	2.43E-03	1.69E-03	1.01E-02	9.32E-03	2.65E-03	1.87E-04	1.92E-04	6.9432E-02
551839.3	4172696.53	5237.10587	2747.68569	2836.26969	12748.49003	7457.99415	1469.90708	5175.28377	1555.69666	1410.87646	8100.49673	14761.43184	1965.04179	0.42929	0.43218	8.33E-03	3.09E-03	3.19E-03	1.10E-02	6.48E-03	1.28E-03	7.45E-03	1.59E-03	1.44E-03	9.83E-03	1.20E-02	1.60E-03	2.01E-04	2.05E-04	6.7704E-02
551537.69	4173220.88	4934.82519	7781.67675	1143.69572	6825.02843	1072.69266	10867.85258	4992.53556	4680.23342	659.94058	6686.89257	2851.91364	12938.70449	1.22389	1.2447	7.85E-03	8.76E-03	1.29E-03	5.89E-03	9.31E-04	9.44E-03	7.19E-03	4.78E-03	6.74E-04	8.12E-03	2.32E-03	1.05E-02	5.74E-04	5.90E-04	6.8934E-02
551413.95	4173039.38	4283.8587	8365.96241	1279.7259	10981.51095	1437.88221	6484.28414	4307.63368	4963.42753	725.6839	9550.76316	4967.21542	8069.81673	0.73622	0.74807	6.82E-03	9.42E-03	1.44E-03	9.47E-03	1.25E-03	5.63E-03	6.20E-03	5.07E-03	7.41E-04	1.16E-02	4.04E-03	6.57E-03	3.45E-04	3.55E-04	6.8946E-02
551422.77	4172759.08	3714.40407	5430.70045	1677.80306	16178.30488	2474.83841	3223.73151	3699.5439	3084.16312	923.57075	10605.53821	10228.7629	4144.68305	0.76669	0.79264	5.91E-03	6.12E-03	1.89E-03	1.40E-02	2.15E-03	2.80E-03	5.33E-03	3.15E-03	9.43E-04	1.29E-02	8.32E-03	3.37E-03	3.59E-04	3.76E-04	6.7545E-02
551644.19	4173256.28	6051.82971	6563.728	1089.84882	5124.79716	931.56945	12643.92657	6163.91212	3925.88212	635.69663	5085.75893	2286.28388	14837.05468	6.80891	7.28786	9.63E-03	7.39E-03	1.23E-03	4.42E-03	8.09E-04	1.10E-02	8.88E-03	4.01E-03	6.49E-04	6.17E-03	1.86E-03	1.21E-02	3.19E-03	3.45E-03	7.4747E-02
551410.73	4173030.42	4269.00691	8336.33056	1287.79377	11168.48671	1452.31839	6263.12082	4290.46565	4932.97765	730.51737	9678.48613	5085.37816	7813.1268	0.73253	0.74424	6.79E-03	9.39E-03	1.45E-03	9.63E-03	1.26E-03	5.44E-03	6.18E-03	5.04E-03	7.46E-04	1.17E-02	4.14E-03	6.36E-03	3.43E-04	3.53E-04	6.8868E-02
552034.12	4172760.8	9658.17111	5034.2078	2915.81819	9064.41398	3038.46572	2981.30896	9543.51171	2991.29886	1630.62943	7938.67107	6468.00378	4030.3668	0.24721	0.24688	1.54E-02	5.67E-03	3.28E-03	7.82E-03	2.64E-03	2.59E-03	1.37E-02	3.05E-03	1.66E-03	9.64E-03	5.26E-03	3.28E-03	1.16E-04	1.17E-04	7.4244E-02
551393.35	4172894.92	3909.15625	6638.46806	1551.49555	14636.54402	1830.24171	4147.89775	3902.30548	3777.2082	871.30367	11312.65821	7453.7928	5253.35324	0.75605	0.77343	6.22E-03	7.48E-03	1.75E-03	1.26E-02	1.59E-03	3.60E-03	5.62E-03	3.86E-03	8.90E-04	1.37E-02	6.07E-03	4.28E-03	3.54E-04	3.67E-04	6.8420E-02
551982.85	4172729.62	7734.65051	4507.64293	3553.56817	10540.37112	4060.14077	2303.57948	7574.93463	2723.33983	1929.8814	8898.73306	8392.29186	3030.26077	0.27293	0.27294	1.23E-02	5.08E-03	4.00E-03	9.09E-03	3.53E-03	2.00E-03	1.09E-02	2.78E-03	1.97E-03	1.08E-02	6.83E-03	2.47E-03	1.28E-04	1.29E-04	7.2019E-02
551721	4172671.33	8580.32588	3087.94634	3197.28458	9779.25881	5477.40489	1978.30761	8459.93433	1836.21278	1657.30178	6060.76186	12407.93625	2686.72573	0.46749	0.48018	1.37E-02	3.48E-03	3.60E-03	8.43E-03	4.76E-03	1.72E-03	1.22E-02	1.87E-03	1.69E-03	7.36E-03	1.01E-02	2.19E-03	2.19E-04	2.28E-04	7.1480E-02
551520.77	4172651.67	4638.59032	4509.81576	2300.42856	14467.77307	3851.48344	2660.10936	4601.77213	2620.88605	1252.51716	9611.07517	11189.48145	3495.08654	0.53005	0.53868	7.38E-03	5.08E-03	2.59E-03	1.25E-02	3.34E-03	2.31E-03	6.63E-03	2.68E-03	1.28E-03	1.17E-02	9.11E-03	2.84E-03	2.48E-04	2.55E-04	6.7887E-02
551407.5	4173021.47	4250.82094	8280.75803	1297.45826	11357.35743	1466.57153	6045.75848	4269.88703	4883.24834	736.28857	9808.98312	5198.68134	7557.66839	0.72869	0.74118	6.76E-03	9.33E-03	1.46E-03	9.79E-03	1.27E-03	5.25E-03	6.15E-03	4.99E-03	7.52E-04	1.19E-02	4.23E-03	6.15E-03	3.42E-04	3.51E-04	6.8739E-02
551404.28	4173012.52	4233.2286	8208.89839	1310.47047	11565.09318	1481.83436	5839.8463	4249.8602	4820.74209	743.91615	9955.14404	5309.38718	7313.49485	0.72608	0.7388	6.74E-03	9.25E-03	1.48E-03	9.97E-03	1.29E-03	5.07E-03	6.12E-03	4.92E-03	7.59E-04	1.21E-02	4.32E-03	5.95E-03	3.40E-04	3.50E-04	6.8640E-02
551565.8	4172636.13	5344.71798	4216.21971	2744.09991	12557.14042	4904.20676	2520.71187	5292.83948	2483.15162	1479.82403	8910.06917	11221.4799	3347.96484	0.43896	0.44453	8.50E-03	4.75E-03	3.09E-03	1.08E-02	4.26E-03	2.19E-03	7.62E-03	2.54E-03	1.51E-03	1.08E-02	9.13E-03	2.72E-03	2.06E-04	2.11E-04	6.8380E-02
551429.19	4173081.98	4293.32995	8170.95014	1247.06449	10062.72977	1360.15475	7448.53397	4325.90629	4857.4346	707.00619	8917.4909	4380.83852	9136.35911	0.75327	0.76463	6.83E-03	9.20E-03	1.40E-03	8.68E-03	1.18E-03	6.47E-03	6.23E-03	4.96E-03	7.22E-04	1.08E-02	3.57E-03	7.44E-03	3.53E-04	3.62E-04	6.8219E-02
551481.26	4173169.41	4516.46565	8030.06336	1199.66294	8155.2677	1180.83579	9310.50441	4559.24257	4789.10533	686.57825	7805.79491	3368.33759	11169.93843	0.8958	0.90813	7.19E-03	9.04E-03	1.35E-03	7.03E-03	1.03E-03	8.08E-03	6.57E-03	4.89E-03	7.01E-04	9.48E-03	2.74E-03	9.09E-03	4.20E-04	4.30E-04	6.8040E-02
551400.14	4172827.72	3704.34617	5825.48581	1602.86132	15560.70252	2137.4658	3595.03476	3691.91893	3313.38098	890.20291	10774.86212	9061.65558	4574.51318	0.76941	0.79227	5.89E-03	6.56E-03	1.81E-03	1.34E-02	1.86E-03	3.12E-03	5.32E-03	3.38E-03	9.09E-04	1.31E-02	7.37E-03	3.72E-03	3.61E-04	3.75E-04	6.7182E-02
552093.08	4172919.5	11886.56714	5808.66503	1757.05146	6416.62091	1427.31374	4959.82062	11952.67706	3412.32232	1033.57546	6148.12985	3336.00555	6511.75929	0.24183	0.24054	1.89E-02	6.54E-03	1.98E-03	5.53E-03	1.24E-03	4.31E-03	1.72E-02	3.48E-03	1.06E-03	7.46E-03	2.71E-03	5.30E-03	1.13E-04	1.14E-04	7.5974E-02
551401.05	4173003.57	4197.75656	8077.8143	1319.33788	11715.78299	1494.14131	5621.63251	4211.96518	4724.43111	749.15163	10044.70074	5399.92136	7051.13335	0.72056	0.73325	6.68E-03	9.10E-03	1.49E-03	1.01E-02	1.30E-03	4.88E-03	6.07E-03	4.82E-03	7.65E-04	1.22E-02	4.39E-03	5.74E-03	3.38E-04	3.48E-04	6.8213E-02
552090.1	4172940.42	11973.20584	5866.53956	1638.84819	6147.23464	1302.7296	5228.10311	12066.98242	3437.99276	968.3434	5942.4781	3079.85863	6836.59815	0.24617	0.24474	1.91E-02	6.61E-03	1.85E-03	5.30E-03	1.13E-03	4.54E-03	1.74E-02	3.51E-03	9.89E-04	7.21E-03	2.51E-03	5.56E-03	1.15E-04	1.16E-04	7.5871E-02
552023.36	4172748.46	9073.70957	4878.64542	3006.54568	9292.60029	3244.72228	2797.03704	8942.69733	2899.47151	1669.95807	8039.18428	6855.69093	3777.15272	0.25076	0.25054	1.44E-02	5.49E-03	3.39E-03	8.01E-03	2.82E-03	2.43E-03	1.29E-02	2.96E-03	1.70E-03	9.76E-03	5.58E-03	3.07E-03	1.18E-04	1.19E-04	7.2773E-02
551659.95	4172647.6	7445.72763	3491.76639	3531.0671	8822.17412	6363.80298	2214.97208	7346.15718	2099.1799	1843.34193	6710.42149	11585.77652	2996.54661	0.35727	0.36421	1.18E-02	3.93E-03	3.98E-03	7.61E-03	5.53E-03	1.92E-03	1.06E-02	2.14E-03	1.88E-03	8.15E-03	9.43E-03	2.44E-03	1.67E-04	1.73E-04	6.9774E-02
551556.05	4172636.55	5139.09298	4244.32913	2618.13021	12840.11454	4619.07078	2530.30313	5091.24049	2492.58874	1414.37106	8989.45516	11071.33045	3353.59858	0.44979	0.45561	8.18E-03	4.78E-03	2.95E-03	1.11E-02	4.01E-03	2.20E-03	7.33E-03	2.54E-03	1.44E-03	1.09E-02	9.01E-03	2.73E-03	2.11E-04	2.16E-04	6.7589E-02
551997.75	4172732.89	8062.36789	4635.84057	3327.64818	9938.7446	3733.03448	2438.20395	7910.89236	2766.9113	1824.32205	8531.55266	7772.9204	3286.15064	0.26356	0.2635	1.28E-02	5.22E-03	3.75E-03	8.57E-03	3.24E-03	2.12E-03	1.14E-02	2.82E-03	1.86E-03	1.04E-02	6.33E-03	2.67E-03	1.24E-04	1.25E-04	7.1415E-02
552096.05	4172898.58	11630.41108	5694.47662	1860.66876	6635.72345	1550.43542	4669.15916	11670.55361	3352.44955	1089.04928	6297.87997	3582.98239	6151.86367	0.23727	0.23613	1.85E-02	6.41E-03	2.10E-03	5.72E-03	1.35E-03	4.05E-03	1.68E-02	3.42E-03	1.11E-03	7.65E-03	2.92E-03	5.01E-03	1.11E-04	1.12E-04	7.5273E-02
551631.15	4173258.18	5759.42178	6585.28031	1081.61011	5208.50098	935.38277	12254.95809	5860.73696	3955.69232	629.45101	5190.96704	2314.62436	14367.6902	4.47657	4.70593	9.16E-03	7.42E-03	1.22E-03	4.49E-03	8.12E-04	1.06E-02	8.44E-03	4.04E-03	6.43E-04	6.30E-03	1.88E-03	1.17E-02	2.10E-03	2.23E-03	7.1073E-02
551435.11	4173098.72	4270.81073	7990.24279	1234.46757	9627.49371	1320.11806	7712.12124	4305.50031	4744.28273	698.22756	8633.47899	4146.549	9405.11023	0.75904	0.76866	6.80E-03	9.00E-03	1.39E-03	8.30E-03	1.15E-03	6.70E-03	6.20E-03	4.84E-03	7.13E-04	1.05E-02	3.37E-03	7.65E-03	3.56E-04	3.64E-04	6.7318E-02
551393.41	4172852.77	3728.24373	5988.16315	1567.97421	15077.21653	2001.89637	3732.38766	3717.64121	3406.82105	873.78161	10833.81581	8397.33435	4738.0138	0.75191	0.77235	5.93E-03	6.74E-03	1.77E-03	1.30E-02	1.74E-03	3.24E-03	5.35E-03	3.48E-03	8.92E-04	1.32E-02	6.83E-03	3.86E-03	3.52E-04	3.66E-04	6.6710E-02
551397.83	4172994.62	4152.63448	7910.52456	1326.87638	11836.29783	1505.16295	5404.32367	4164.46322	4608.1213	753.52739	10103.14879	5474.40084	6787.67708	0.71349	0.72617	6.61E-03	8.91E-03	1.49E-03	1.02E-02	1.31E-03	4.69E-03	6.00E-03	4.70E-03	7.69E-04	1.23E-02	4.46E-03	5.52E-03	3.34E-04	3.44E-04	6.7614E-02
551508.61	4172654.58	4440.24136	4506.70046	2168.55852	14513.60926	3554.55503	2660.45301	4407.33013	2610.74959	1184.77857	9546.97223	10902.07044	3485.33584	0.54338	0.55312	7.07E-03	5.08E-03	2.44E-03	1.25E-02	3.09E-03	2.31E-03	6.35E-03	2.67E-03	1.21E-03	1.16E-02	8.87E-03	2.84E-03	2.55E-04	2.62E-04	6.6535E-02
551450.46	4172704.32	3851.16988	4936.32891	1765.79979	15794.01764	2695.92079	2899.97002	3833.3995	2820.03416	970.28843	10120.9521	10524.08815	3759.0645	0.68489	0.70513	6.13E-03	5.56E-03	1.99E-03	1.36E-02	2.34E-03	2.52E-03	5.52E-03	2.88E-03	9.91E-04	1.23E-02	8.56E-03	3.06E-03	3.21E-04	3.34E-04	6.6113E-02
551547.22	4173229.86	4929.67083	7458.1195	1116.97518	6506.40787	1046.53172	10865.78055	4989.94133	4521.3801	645.31414	6388.83315	2757.03232	12678.2895	1.29408	1.31534	7.84E-03	8.40E-03	1.26E-03	5.61E-03	9.09E-04	9.43E-03	7.19E-03	4.62E-03	6.59E-04	7.76E-03	2.24E-03	1.03E-02	6.07E-04	6.23E-04	6.7466E-02
551400.85	4172818.2	3655.43723	5683.37727	1590.25865	15355.42103	2152.3885	3502.86206	3642.78503	3232.81883	882.16518	10541.18362	9065.02172	4461.46746	0.75566	0.77857	5.82E-03	6.40E-03	1.79E-03	1.32E-02	1.87E-03	3.04E-03	5.25E-03	3.30E-03	9.01E-04	1.28E-02	7.38E-03	3.63E-03	3.54E-04	3.69E-04	6.6138E-02
551701.44	4172664.32	8291.18644	3174.56824	3363.93996	8835.38303	5691.77334	2040.05099	8174.79377	1897.59032	1739.7382	5991.1383	11744.54519	2772.52291	0.41044	0.42159	1.32E-02	3.58E-03	3.79E-03	7.62E-03	4.94E-03	1.77E-03	1.18E-02	1.94E-03	1.78E-03	7.27E-03	9.56E-03	2.26E-03	1.92E-04	2.00E-04	6.9858E-02
551437.62	4172724.36	3739.36632	5073.73135	1695.18453	15753.49556	2557.9854	2992.1243	3723.76838	2891.64453	931.65821	10186.73648	10244.70997	3867.73352	0.70706	0.72943	5.95E-03	5.71E-03	1.91E-03	1.36E-02	2.22E-03	2.60E-03	5.36E-03	2.95E-03	9.51E-04	1.24E-02	8.34E-03	3.15E-03	3.31E-04	3.46E-04	6.5775E-02
551500.85	4173194.8	4603.72739	7817.17374	1164.20792	7463.46398	1118.33457	9611.58331	4649.88032	4689.27458	668.34656	7254.48825	3093.47751	11499.99046	0.96916	0.98311	7.33E-03	8.80E-03	1.31E-03	6.44E-03	9.71E-04	8.35E-03	6.70E-03	4.79E-03	6.82E-04	8.81E-03	2.52E-03	9.36E-03	4.54E-04	4.66E-04	6.6965E-02
551601.42	4173256.54	5404.61906	6864.48888	1061.17458	5516.9059	957.38732	11794.84255	5489.30441	4129.15339	616.88121	5471.29707	2405.07632	13860.67898	2.40007	2.47596	8.60E-03	7.73E-03	1.20E-03	4.76E-03	8.31E-04	1.02E-02	7.91E-03	4.22E-03	6.30E-04	6.64E-03	1.96E-03	1.13E-02	1.12E-03	1.17E-03	6.8286E-02
551394.59	4172985.61	4107.51443	7732.0277	1337.14829	11969.30933	1506.40059	5200.12115	4117.01106	4486.43443	759.32165	10165.4021	5557.67684	6538.9122	0.70715	0.72009	6.54E-03	8.71E-03	1.51E-03	1.03E-02	1.31E-03	4.52E-03	5.93E-03	4.58E-03	7.75E-04	1.23E-02	4.52E-03	5.32E-03	3.31E-04	3.41E-04	6.7039E-02
551410	4172783.92	3619.32279	5452.81643	1608.71791	15428.9307	2291.9154	3301.10801	3605.6366	3098.23987	888.33359	10322.13045	9502.21241	4224.23054	0.74558	0.76985	5.76E-03	6.14E-03	1.81E-03	1.33E-02	1.99E-03	2.87E-03	5.19E-03	3.16E-03	9.07E-04	1.25E-02	7.73E-03	3.44E-03	3.49E-04	3.65E-04	6.5555E-02
551518.17	4173211.07	4701.02135	7675.71779	1139.86012	7053.17636	1084.54416	9959.26662	4751.36182	4611.87715	656.0515	6864.33747	2939.92613	11899.82655	1.05368	1.0696	7.48E-03	8.64E-03	1.28E-03	6.08E-03	9.42E-04	8.65E-03	6.84E-03	4.71E-03	6.70E-04	8.33E-03	2.39E-03	9.68E-03	4.94E-04	5.07E-04	6.6714E-02
552096.23	4172928.3	11643.41442	5725.30157	1674.7379	6196.1139	1352.30122	4988.9971	11720.07554	3359.54488	986.53153	5954.66096	3176.3324	6535.50981	0.24067	0.23934	1.85E-02	6.45E-03	1.89E-03	5.34E-03	1.17E-03	4.33E-03	1.69E-02	3.43E-03	1.01E-03	7.23E-03	2.59E-03	5.32E-03	1.13E-04	1.13E-04	7.4387E-02
551709.18	4172666.4	8339.56061	3107.75032	3256.42485	8999.46683	5466.59722	1998.9409	8223.01393	1853.99989	1685.96937	5910.80335	11724.00596	2716.07948	0.42445	0.43615	1.33E-02	3.50E-03	3.67E-03	7.76E-03	4.75E-03	1.74E-03	1.18E-02	1.89E-03	1.72E-03	7.18E-03	9.54E-03	2.21E-03	1.99E-04	2.07E-04	6.9472E-02
551484.35	4173178	4473.90806	7816.39521	1175.43158	7857.81718	1151.08422	9154.20214	4516.52331	4667.52081	673.13469	7542.65011	3257.45057	10980.17429	0.89186	0.90406	7.12E-03	8.80E-03	1.32E-03	6.78E-03	9.99E-04	7.95E-03	6.50E-03	4.77E-03	6.87E-04	9.16E-03	2.65E-03	8.94E-03	4.18E-04	4.28E-04	6.6519E-02
551926.94	4172706.94	5461.51457	3531.6196	3679.9285	11774.87334	5679.30145	1627.29896	5336.0902	2056.0782	1896.91248	8943.3831	11062.29683	2189.81659	0.30531	0.30561	8.69E-03	3.98E-03	4.14E-03	1.02E-02	4.93E-03	1.41E-03	7.68E-03	2.10E-03	1.94E-03	1.09E-02	9.00E-03	1.78E-03	1.43E-04	1.45E-04	6.6963E-02
551498.4	4172657.61	4297.86496	4514.41252	2074.84656	14576.29666	3347.46741	2665.43777	4267.86605	2608.31749	1136.51521	9521.00759	10714.53613	3484.1523	0.55679	0.56764	6.84E-03	5.08E-03	2.34E-03	1.26E-02	2.91E-03	2.31E-03	6.15E-03	2.66E-03	1.16E-03	1.16E-02	8.72E-03	2.84E-03	2.61E-04	2.69E-04	6.5666E-02
551539.9	4172638.01	4822.42773	4270.50165	2418.18822	13190.01746	4164.55478	2539.82683	4780.59734	2496.9175	1309.96019	9044.65922	10790.68343	3353.57067	0.46763	0.47405	7.67E-03	4.81E-03	2.72E-03	1.14E-02	3.62E-03	2.21E-03	6.88E-03	2.55E-03	1.34E-03	1.10E-02	8.78E-03	2.73E-03	2.19E-04	2.25E-04	6.6111E-02
552099.2	4172907.38	11473.75801	5640.49045	1781.96786	6432.96096	1473.4905	4718.37019	11524.64865	3317.14072	1044.79052	6125.77087	3422.4009	6203.79397	0.23636	0.23517	1.83E-02	6.35E-03	2.01E-03	5.55E-03	1.28E-03	4.10E-03	1.66E-02	3.39E-03	1.07E-03	7.44E-03	2.79E-03	5.05E-03	1.11E-04	1.11E-04	7.4086E-02
551441.03	4173115.46	4237.15362	7780.39721	1209.88197	9182.32002	1273.99672	7978.39243	4273.10793	4664.77611	688.18733	8380.66755	3916.62045	9556.95349	0.75812	0.76783	6.74E-03	8.76E-03	1.36E-03	7.92E-03	1.11E-03	6.93E-03	6.15E-03	4.76E-03	7.03E-04	1.02E-02	3.19E-03	7.78E-03	3.55E-04	3.64E-04	6.6299E-02
551664.88	4173262.23	6400.04341	6174.39717	1023.10186	4753.87904	885.57937	12086.58918	6527.89591	3654.42425	598.87442	4726.56089	2139.07866	14127.89596	16.7204	13.84824	1.02E-02	6.95E-03	1.15E-03	4.10E-03	7.69E-04	1.05E-02	9.40E-03	3.73E-03	6.11E-04	5.74E-03	1.74E-03	1.15E-02	7.84E-03	6.56E-03	8.0774E-02
552012.61	4172736.12	8344.22027	4650.80113	3098.55541	9458.8045	3437.92572	2548.1113	8205.78825	2773.24956	1711.76344	8135.23052	7210.9772	3424.60684	0.25383	0.25372	1.33E-02	5.24E-03	3.49E-03	8.16E-03	2.99E-03	2.21E-03	1.18E-02	2.83E-03	1.75E-03	9.88E-03	5.87E-03	2.79E-03	1.19E-04	1.20E-04	7.0529E-02
551390.13	4172885.96	3786.92167	6294.10858	1515.1459	14201.04284	1811.11419	3950.29664	3779.58422	3582.85709	849.52085	10840.91655	7371.40938	5005.72034	0.72617	0.74413	6.03E-03	7.09E-03	1.71E-03	1.22E-02	1.57E-03	3.43E-03	5.44E-03	3.66E-03	8.67E-04	1.32E-02	6.00E-03	4.07E-03	3.40E-04	3.53E-04	6.5967E-02
551911.78	4172703.37	5074.06233	3308.34928	3582.56552	11942.76982	6049.07704	1537.53088	4964.39102	1908.88122	1821.81911	8806.24879	11899.50507	2064.83114	0.32364	0.32409	8.07E-03	3.73E-03	4.03E-03	1.03E-02	5.25E-03	1.34E-03	7.15E-03	1.95E-03	1.86E-03	1.07E-02	9.68E-03	1.68E-03	1.52E-04	1.54E-04	6.6042E-02
551578.63	4172628.6	5478.4574	4009.04143	2799.03347	11510.19735	5034.92148	2423.45645	5422.80889	2370.63588	1505.16076	8351.38858	10818.38761	3226.15612	0.40267	0.40755	8.72E-03	4.52E-03	3.15E-03	9.93E-03	4.37E-03	2.10E-03	7.81E-03	2.42E-03	1.54E-03	1.01E-02	8.80E-03	2.63E-03	1.89E-04	1.93E-04	6.6505E-02
551401.79	4172808.81	3612.22655	5557.90695	1578.5657	15152.22645	2166.20568	3418.79346	3599.42879	3161.09916	874.67177	10330.93079	9056.68607	4359.05862	0.74176	0.76462	5.75E-03	6.26E-03	1.78E-03	1.31E-02	1.88E-03	2.97E-03	5.18E-03	3.23E-03	8.93E-04	1.25E-02	7.37E-03	3.55E-03	3.48E-04	3.62E-04	6.5177E-02
551391.36	4172976.65	4052.84652	7524.67195	1345.17698	12063.74101	1514.09339	4998.35122	4060.16497	4351.2163	763.73329	10186.21478	5632.96795	6291.71589	0.69853	0.71157	6.45E-03	8.47E-03	1.52E-03	1.04E-02	1.31E-03	4.34E-03	5.85E-03	4.44E-03	7.80E-04	1.24E-02	4.58E-03	5.12E-03	3.27E-04	3.37E-04	6.6303E-02
551646.43	4172638.95	6947.726	3510.59525	3359.70943	8862.7283	6077.20246	2219.01869	6859.01436	2109.23085	1764.05055	6820.31849	11046.06135	2992.58336	0.34172	0.34721	1.11E-02	3.95E-03	3.78E-03	7.64E-03	5.28E-03	1.93E-03	9.88E-03	2.15E-03	1.80E-03	8.28E-03	8.99E-03	2.44E-03	1.60E-04	1.65E-04	6.7503E-02
551737.74	4172672.32	8202.65783	2897.88879	2812.14357	10026.72919	5006.22406	1854.34409	8093.7813	1713.23769	1470.12732	5920.85253	11986.92765	2512.11878	0.47404	0.48602	1.31E-02	3.26E-03	3.17E-03	8.65E-03	4.35E-03	1.61E-03	1.17E-02	1.75E-03	1.50E-03	7.19E-03	9.76E-03	2.04E-03	2.22E-04	2.30E-04	6.8435E-02
552038.16	4172751.61	9032.32807	4793.64739	2810.45261	8802.82394	2985.41827	2825.64099	8920.79374	2846.60003	1567.21164	7661.87384	6348.54418	3817.41948	0.24132	0.24107	1.44E-02	5.40E-03	3.17E-03	7.59E-03	2.59E-03	2.45E-03	1.28E-02	2.91E-03	1.60E-03	9.30E-03	5.17E-03	3.11E-03	1.13E-04	1.14E-04	7.0731E-02
551405.75	4172792.19	3584.09081	5430.57722	1581.12132	15095.92645	2222.25487	3314.45954	3570.89521	3087.51411	874.18891	10179.57486	9204.65641	4235.08091	0.73208	0.75534	5.70E-03	6.12E-03	1.78E-03	1.30E-02	1.93E-03	2.88E-03	5.14E-03	3.15E-03	8.92E-04	1.24E-02	7.49E-03	3.45E-03	3.43E-04	3.58E-04	6.4611E-02
551611.42	4172628.63	6114.26151	3744.20812	3084.51078	10008.62365	5627.28266	2316.22092	6044.35204	2236.01236	1640.28119	7570.73807	10801.70242	3101.18547	0.3598	0.36425	9.73E-03	4.22E-03	3.47E-03	8.63E-03	4.89E-03	2.01E-03	8.70E-03	2.28E-03	1.67E-03	9.19E-03	8.79E-03	2.52E-03	1.69E-04	1.73E-04	6.6459E-02
551972.03	4172717.21	6698.7788	4080.2904	3522.25945	10639.46179	4341.38392	1957.90859	6551.34656	2419.90581	1882.42048	8725.98607	8704.24847	2644.53771	0.27181	0.27203	1.07E-02	4.60E-03	3.97E-03	9.18E-03	3.77E-03	1.70E-03	9.43E-03	2.47E-03	1.92E-03	1.06E-02	7.08E-03	2.15E-03	1.27E-04	1.29E-04	6.7781E-02
551388.14	4172967.68	3995.0013	7307.0206	1353.31812	12146.85047	1522.82508	4806.47229	4000.23328	4212.92604	768.00121	10188.09937	5710.65192	6055.70803	0.69073	0.70382	6.36E-03	8.23E-03	1.52E-03	1.05E-02	1.32E-03	4.17E-03	5.76E-03	4.30E-03	7.84E-04	1.24E-02	4.65E-03	4.93E-03	3.24E-04	3.34E-04	6.5530E-02
552102.35	4172916.18	11284.2031	5574.82074	1703.992	6227.66449	1399.25524	4756.83567	11345.34784	3275.16394	1000.61578	5948.87466	3266.16445	6241.11598	0.23536	0.23413	1.80E-02	6.28E-03	1.92E-03	5.37E-03	1.21E-03	4.13E-03	1.63E-02	3.34E-03	1.02E-03	7.22E-03	2.66E-03	5.08E-03	1.10E-04	1.11E-04	7.2756E-02
551652.44	4173264.04	6022.94153	6174.24193	1049.54447	4845.25317	894.37692	11737.68029	6136.75394	3679.36926	613.02294	4794.22684	2178.88313	13851.48481	8.41785	9.16379	9.58E-03	6.97E-03	1.18E-03	4.18E-03	7.77E-04	1.02E-02	8.84E-03	3.76E-03	6.26E-04	5.82E-03	1.77E-03	1.13E-02	3.95E-03	4.34E-03	7.3261E-02
552099.37	4172937.1	11373.04516	5632.04696	1594.65578	5977.16591	1281.15663	5007.30825	11459.40957	3301.22922	940.55226	5760.04917	3023.81122	6544.75843	0.2395	0.23812	1.81E-02	6.34E-03	1.80E-03	5.15E-03	1.11E-03	4.35E-03	1.65E-02	3.37E-03	9.60E-04	6.99E-03	2.46E-03	5.33E-03	1.12E-04	1.13E-04	7.2691E-02
551487.86	4172661.17	4136.88519	4490.564	1967.16611	14428.92441	3117.31065	2657.41887	4110.11359	2588.72311	1080.02961	9394.25025	10369.57317	3466.01689	0.56188	0.57355	6.58E-03	5.06E-03	2.22E-03	1.24E-02	2.71E-03	2.31E-03	5.92E-03	2.64E-03	1.10E-03	1.14E-02	8.44E-03	2.82E-03	2.63E-04	2.72E-04	6.4179E-02
551391.76	4172842.66	3618.25691	5703.78291	1528.06559	14548.98676	1978.35703	3570.06856	3607.53851	3248.10465	850.62545	10342.4673	8238.9515	4534.73585	0.71894	0.73855	5.76E-03	6.42E-03	1.72E-03	1.25E-02	1.72E-03	3.10E-03	5.20E-03	3.32E-03	8.68E-04	1.26E-02	6.71E-03	3.69E-03	3.37E-04	3.50E-04	6.4286E-02
551487.44	4173186.58	4422.61088	7588.84472	1149.39497	7573.43017	1122.44549	8963.18286	4464.97341	4535.44625	658.6881	7271.69264	3153.77843	10753.16648	0.88498	0.89695	7.04E-03	8.55E-03	1.29E-03	6.53E-03	9.75E-04	7.78E-03	6.43E-03	4.63E-03	6.72E-04	8.83E-03	2.57E-03	8.75E-03	4.15E-04	4.25E-04	6.4887E-02
551446.94	4173132.2	4186.52811	7529.70056	1180.66921	8711.74692	1226.58869	8004.05847	4222.9873	4507.4576	672.39263	8006.76147	3697.56815	9690.34131	0.7562	0.76607	6.66E-03	8.48E-03	1.33E-03	7.51E-03	1.07E-03	6.95E-03	6.08E-03	4.60E-03	6.86E-04	9.72E-03	3.01E-03	7.89E-03	3.54E-04	3.63E-04	6.4704E-02
552105.32	4172895.26	11040.85945	5465.46479	1798.90701	6429.65792	1514.93156	4485.02298	11078.34943	3217.3718	1051.19837	6084.61993	3497.75491	5904.45311	0.23097	0.22988	1.76E-02	6.16E-03	2.03E-03	5.55E-03	1.32E-03	3.89E-03	1.60E-02	3.28E-03	1.07E-03	7.39E-03	2.85E-03	4.81E-03	1.08E-04	1.09E-04	7.2074E-02
551523.8	4173219.98	4647.67009	7332.97197	1109.80248	6761.19696	1057.47209	9762.17777	4698.75054	4445.23051	639.28432	6568.84991	2847.54584	11669.8979	1.06014	1.07625	7.40E-03	8.26E-03	1.25E-03	5.83E-03	9.18E-04	8.48E-03	6.77E-03	4.54E-03	6.53E-04	7.97E-03	2.32E-03	9.50E-03	4.97E-04	5.10E-04	6.4885E-02
551428.29	4172733.26	3617.2212	5019.34541	1623.02426	15101.13025	2423.383	2984.94597	3602.93291	2858.75324	892.5088	9885.29645	9681.00529	3850.43061	0.68644	0.7081	5.76E-03	5.65E-03	1.83E-03	1.30E-02	2.10E-03	2.59E-03	5.19E-03	2.92E-03	9.11E-04	1.20E-02	7.88E-03	3.13E-03	3.22E-04	3.36E-04	6.3646E-02
551986.96	4172720.52	7085.51443	4219.42054	3372.80478	10136.65534	3912.3723	2098.77165	6939.5688	2514.78545	1822.30136	8501.57225	8095.70948	2829.03307	0.26354	0.26367	1.13E-02	4.75E-03	3.80E-03	8.74E-03	3.40E-03	1.82E-03	9.99E-03	2.57E-03	1.86E-03	1.03E-02	6.59E-03	2.30E-03	1.24E-04	1.25E-04	6.7670E-02
552027.43	4172739.3	8449.93237	4631.07453	2881.55279	8989.98242	3168.30353	2648.59999	8326.1442	2751.96238	1596.40971	7730.19042	6689.76017	3566.87745	0.24429	0.24414	1.34E-02	5.22E-03	3.25E-03	7.75E-03	2.75E-03	2.30E-03	1.20E-02	2.81E-03	1.63E-03	9.38E-03	5.44E-03	2.90E-03	1.14E-04	1.16E-04	6.9104E-02
551440.58	4172710.84	3693.71872	4848.30372	1668.51966	15052.64969	2520.13114	2870.16347	3678.06936	2767.95571	917.25578	9752.6791	9864.89505	3714.57952	0.65996	0.67966	5.88E-03	5.46E-03	1.88E-03	1.30E-02	2.19E-03	2.49E-03	5.30E-03	2.83E-03	9.36E-04	1.18E-02	8.03E-03	3.02E-03	3.09E-04	3.22E-04	6.3462E-02
551505.04	4173205.34	4522.48668	7482.04547	1126.86081	7122.81458	1083.57498	9290.57378	4568.4166	4487.33732	647.45731	6892.04786	2975.48064	11127.19476	0.95677	0.9703	7.20E-03	8.43E-03	1.27E-03	6.14E-03	9.41E-04	8.07E-03	6.58E-03	4.58E-03	6.61E-04	8.37E-03	2.42E-03	9.06E-03	4.48E-04	4.60E-04	6.4617E-02
551566.3	4173247.83	4947.53929	6952.67112	1064.63053	5916.13212	986.59036	10749.80586	5014.02119	4187.82515	616.35679	5823.14374	2549.62065	12486.13113	1.48566	1.51401	7.87E-03	7.83E-03	1.20E-03	5.10E-03	8.57E-04	9.33E-03	7.22E-03	4.28E-03	6.29E-04	7.07E-03	2.07E-03	1.02E-02	6.96E-04	7.18E-04	6.5041E-02
551387.38	4172876.15	3683.98078	6003.20132	1488.96619	13905.25749	1809.7511	3781.746	3676.07569	3419.10109	833.318	10459.16496	7371.3413	4794.10657	0.70182	0.71919	5.86E-03	6.76E-03	1.68E-03	1.20E-02	1.57E-03	3.28E-03	5.29E-03	3.49E-03	8.51E-04	1.27E-02	6.00E-03	3.90E-03	3.29E-04	3.41E-04	6.4051E-02
551384.91	4172958.72	3926.3204	7066.09847	1357.17383	12174.1994	1528.66247	4614.71183	3929.65753	4064.4513	769.68066	10135.32194	5778.12932	5819.02562	0.68061	0.694	6.25E-03	7.96E-03	1.53E-03	1.05E-02	1.33E-03	4.01E-03	5.66E-03	4.15E-03	7.86E-04	1.23E-02	4.70E-03	4.74E-03	3.19E-04	3.29E-04	6.4554E-02
551411.14	4173060.62	4069.81191	7654.91855	1195.37584	9947.73842	1334.91014	6410.16205	4096.2119	4549.5187	677.32952	8603.86867	4462.83768	7932.45443	0.6849	0.69538	6.48E-03	8.62E-03	1.35E-03	8.58E-03	1.16E-03	5.57E-03	5.90E-03	4.64E-03	6.92E-04	1.04E-02	3.63E-03	6.46E-03	3.21E-04	3.30E-04	6.4167E-02
551591.71	4172624.36	5614.96407	3815.37332	2835.90188	10530.41888	5102.81759	2336.21789	5555.78253	2265.49252	1519.68858	7807.11847	10405.82517	3116.29643	0.36945	0.37371	8.94E-03	4.30E-03	3.19E-03	9.08E-03	4.43E-03	2.03E-03	8.00E-03	2.31E-03	1.55E-03	9.48E-03	8.47E-03	2.54E-03	1.73E-04	1.77E-04	6.4666E-02
552105.5	4172924.98	11064.14798	5498.20011	1627.05246	6020.73205	1327.90007	4784.21185	11134.93082	3226.75835	956.79907	5768.28665	3114.62133	6263.64363	0.23427	0.23299	1.76E-02	6.19E-03	1.83E-03	5.19E-03	1.15E-03	4.15E-03	1.60E-02	3.29E-03	9.77E-04	7.00E-03	2.53E-03	5.10E-03	1.10E-04	1.10E-04	7.1293E-02
551452.4	4172691.47	3772.79888	4676.12888	1720.74078	14768.12259	2618.96076	2768.1483	3755.02996	2676.47342	946.19259	9542.80205	9899.73786	3589.96557	0.62601	0.6431	6.00E-03	5.27E-03	1.94E-03	1.27E-02	2.27E-03	2.40E-03	5.41E-03	2.73E-03	9.66E-04	1.16E-02	8.06E-03	2.92E-03	2.93E-04	3.05E-04	6.2890E-02
551450.37	4173141.74	4163.98618	7403.72233	1163.98908	8459.65669	1198.66764	7989.17119	4200.53952	4426.44313	663.36812	7800.92888	3573.48635	9657.94234	0.75652	0.76631	6.63E-03	8.34E-03	1.31E-03	7.30E-03	1.04E-03	6.94E-03	6.05E-03	4.52E-03	6.77E-04	9.47E-03	2.91E-03	7.86E-03	3.55E-04	3.63E-04	6.3751E-02
551656.68	4172638.3	7022.51922	3360.43049	3287.85688	8372.22043	5848.24643	2141.27859	6931.51512	2018.6141	1721.88749	6420.0779	10663.94355	2892.20955	0.33031	0.33603	1.12E-02	3.78E-03	3.70E-03	7.22E-03	5.08E-03	1.86E-03	9.98E-03	2.06E-03	1.76E-03	7.79E-03	8.68E-03	2.35E-03	1.55E-04	1.59E-04	6.5762E-02
551640.01	4173265.85	5678.97766	6174.08392	1042.94521	4923.14008	898.56595	11380.76831	5780.99891	3696.54625	607.50949	4878.96383	2212.16785	13391.70778	5.31372	5.64386	9.04E-03	6.95E-03	1.17E-03	4.25E-03	7.80E-04	9.88E-03	8.33E-03	3.77E-03	6.20E-04	5.92E-03	1.80E-03	1.09E-02	2.49E-03	2.67E-03	6.8580E-02
551771.82	4172683.44	7182.71091	2632.02811	2272.35488	11015.85509	5211.83375	1643.51406	7102.11023	1531.79165	1201.20061	6187.97469	12470.58174	2214.02385	0.48956	0.49931	1.14E-02	2.96E-03	2.56E-03	9.50E-03	4.53E-03	1.43E-03	1.02E-02	1.56E-03	1.23E-03	7.51E-03	1.01E-02	1.80E-03	2.29E-04	2.37E-04	6.5354E-02
552001.85	4172723.77	7364.96957	4306.22298	3172.88301	9611.56142	3614.60672	2269.67535	7224.63143	2593.78952	1731.83623	8168.7462	7533.24202	3060.09351	0.25576	0.25579	1.17E-02	4.85E-03	3.57E-03	8.29E-03	3.14E-03	1.97E-03	1.04E-02	2.65E-03	1.77E-03	9.92E-03	6.13E-03	2.49E-03	1.20E-04	1.21E-04	6.7142E-02
551404.69	4173042.71	4042.62637	7647.27734	1202.35434	10147.76945	1359.03823	6010.42842	4065.28477	4537.86078	681.66055	8775.6357	4676.15157	7478.5256	0.67534	0.68533	6.43E-03	8.61E-03	1.35E-03	8.75E-03	1.18E-03	5.22E-03	5.85E-03	4.63E-03	6.96E-04	1.07E-02	3.81E-03	6.09E-03	3.17E-04	3.25E-04	6.3921E-02
551407.91	4173051.67	4048.39587	7637.75383	1195.14441	9979.1527	1345.47348	6198.22075	4073.03374	4539.07631	677.30817	8657.96378	4573.31249	7692.08026	0.6778	0.68836	6.44E-03	8.60E-03	1.35E-03	8.61E-03	1.17E-03	5.38E-03	5.87E-03	4.63E-03	6.91E-04	1.05E-02	3.72E-03	6.26E-03	3.18E-04	3.26E-04	6.3875E-02
552108.47	4172904.06	10898.95643	5415.71281	1725.64589	6239.46601	1441.98976	4530.71233	10946.28937	3184.93816	1010.09726	5924.06874	3345.75463	5952.73472	0.23011	0.22897	1.73E-02	6.10E-03	1.94E-03	5.38E-03	1.25E-03	3.93E-03	1.58E-02	3.25E-03	1.03E-03	7.19E-03	2.72E-03	4.84E-03	1.08E-04	1.09E-04	7.0977E-02
551401.46	4173033.76	4030.21839	7626.79752	1209.5589	10305.33558	1371.58046	5816.81083	4050.78665	4515.5665	686.00552	8884.92204	4774.09796	7254.54641	0.67149	0.6824	6.41E-03	8.59E-03	1.36E-03	8.89E-03	1.19E-03	5.05E-03	5.83E-03	4.61E-03	7.00E-04	1.08E-02	3.89E-03	5.90E-03	3.15E-04	3.23E-04	6.3853E-02
551422.26	4172739.98	3551.29167	4998.35219	1585.03792	14743.30718	2349.45699	2989.42539	3537.627	2845.66276	872.03904	9724.70578	9372.8283	3850.28256	0.67632	0.69761	5.65E-03	5.63E-03	1.79E-03	1.27E-02	2.04E-03	2.60E-03	5.09E-03	2.91E-03	8.90E-04	1.18E-02	7.63E-03	3.13E-03	3.17E-04	3.31E-04	6.2522E-02
551398.24	4173024.81	4013.94249	7582.5245	1217.89819	10461.86344	1383.89848	5624.44688	4032.34826	4475.85503	691.00217	8994.61635	4861.06801	7029.12163	0.66809	0.67869	6.39E-03	8.54E-03	1.37E-03	9.02E-03	1.20E-03	4.88E-03	5.81E-03	4.57E-03	7.05E-04	1.09E-02	3.96E-03	5.72E-03	3.13E-04	3.22E-04	6.3720E-02
551533.5	4173229.12	4646.55226	7096.72497	1086.89263	6464.83466	1034.66105	9808.56336	4699.96618	4323.97391	626.84603	6301.64519	2760.42354	11476.27033	1.11531	1.13165	7.39E-03	7.99E-03	1.22E-03	5.58E-03	8.98E-04	8.52E-03	6.77E-03	4.41E-03	6.40E-04	7.65E-03	2.25E-03	9.34E-03	5.23E-04	5.36E-04	6.3720E-02
551395.01	4173015.86	3997.38024	7522.17145	1228.98661	10632.14143	1396.7704	5439.78905	4013.5762	4423.75662	697.51119	9116.35081	4946.14198	6810.74685	0.66509	0.67613	6.36E-03	8.47E-03	1.38E-03	9.17E-03	1.21E-03	4.72E-03	5.78E-03	4.52E-03	7.12E-04	1.11E-02	4.03E-03	5.54E-03	3.12E-04	3.20E-04	6.3599E-02
551381.68	4172949.75	3852.95969	6819.67344	1358.90792	12170.97803	1534.34483	4430.38473	3854.57855	3914.95687	769.95569	10049.66567	5845.31952	5591.17625	0.66949	0.68296	6.13E-03	7.68E-03	1.53E-03	1.05E-02	1.33E-03	3.85E-03	5.55E-03	4.00E-03	7.86E-04	1.22E-02	4.76E-03	4.55E-03	3.14E-04	3.24E-04	6.3498E-02
552052.92	4172754.73	8860.25967	4693.58352	2628.28414	8342.99633	2756.21639	2843.58957	8763.65777	2785.85391	1470.6393	7298.4119	5898.72423	3832.82878	0.23263	0.23237	1.41E-02	5.29E-03	2.96E-03	7.20E-03	2.39E-03	2.47E-03	1.26E-02	2.84E-03	1.50E-03	8.86E-03	4.80E-03	3.12E-03	1.09E-04	1.10E-04	6.8369E-02
551419.9	4173085.26	4043.26334	7452.41447	1173.86187	9380.09173	1289.63555	6831.65764	4073.7738	4427.51887	665.0979	8234.98919	4168.74163	8382.11014	0.68989	0.69955	6.43E-03	8.39E-03	1.32E-03	8.09E-03	1.12E-03	5.93E-03	5.87E-03	4.52E-03	6.79E-04	1.00E-02	3.39E-03	6.82E-03	3.23E-04	3.32E-04	6.3224E-02
551391.79	4173006.9	3973.79841	7431.2123	1240.07908	10790.28561	1409.23481	5255.65978	3987.73213	4353.04329	704.0243	9223.50372	5027.80569	6590.64098	0.6616	0.67266	6.32E-03	8.37E-03	1.40E-03	9.31E-03	1.22E-03	4.56E-03	5.74E-03	4.44E-03	7.19E-04	1.12E-02	4.09E-03	5.36E-03	3.10E-04	3.19E-04	6.3370E-02
551422.86	4173093.63	4043.31208	7401.03191	1170.25255	9208.54284	1275.89257	6967.07363	4074.82556	4393.32879	663.34594	8145.84597	4061.58096	8524.9002	0.6942	0.70412	6.43E-03	8.34E-03	1.32E-03	7.94E-03	1.11E-03	6.05E-03	5.87E-03	4.49E-03	6.77E-04	9.89E-03	3.31E-03	6.94E-03	3.25E-04	3.34E-04	6.3009E-02
551610.57	4173265.16	5251.88818	6376.02744	1040.84551	5198.45653	920.49697	10952.28114	5336.7635	3840.13307	603.70914	5198.96873	2305.83444	12875.33039	2.65361	2.75383	8.36E-03	7.18E-03	1.17E-03	4.48E-03	7.99E-04	9.51E-03	7.69E-03	3.92E-03	6.16E-04	6.31E-03	1.88E-03	1.05E-02	1.24E-03	1.31E-03	6.4941E-02
551453.46	4173150.32	4141.26875	7355.70098	1148.03912	8218.49678	1173.36553	7950.46275	4177.79738	4352.03855	654.7158	7611.24682	3465.02255	9600.93641	0.75568	0.76526	6.59E-03	8.28E-03	1.29E-03	7.09E-03	1.02E-03	6.90E-03	6.02E-03	4.44E-03	6.68E-04	9.24E-03	2.82E-03	7.81E-03	3.54E-04	3.63E-04	6.2896E-02
551601.52	4172621.5	5734.35957	3684.93333	2868.19445	9921.96371	5161.93747	2276.55548	5671.96371	2194.27931	1531.57645	7451.60177	10193.7015	3041.15142	0.35061	0.35462	9.13E-03	4.15E-03	3.23E-03	8.56E-03	4.48E-03	1.98E-03	8.17E-03	2.24E-03	1.56E-03	9.05E-03	8.30E-03	2.48E-03	1.64E-04	1.68E-04	6.3644E-02
552042.22	4172742.44	8446.89171	4564.90935	2704.55895	8538.78213	2925.07035	2679.73183	8339.50237	2708.87916	1504.19757	7388.02874	6215.79761	3617.89911	0.2354	0.23523	1.34E-02	5.14E-03	3.05E-03	7.36E-03	2.54E-03	2.33E-03	1.20E-02	2.77E-03	1.54E-03	8.97E-03	5.06E-03	2.94E-03	1.10E-04	1.11E-04	6.7365E-02
552016.7	4172726.99	7615.09833	4390.63804	2971.16039	9123.25162	3340.60497	2386.65757	7483.61439	2617.24219	1635.15939	7822.20852	7008.73073	3207.74817	0.24698	0.24696	1.21E-02	4.95E-03	3.35E-03	7.87E-03	2.90E-03	2.07E-03	1.08E-02	2.67E-03	1.67E-03	9.50E-03	5.70E-03	2.61E-03	1.16E-04	1.17E-04	6.6413E-02
551505.73	4172645.18	4234.68875	4250.2656	2034.27553	13311.45012	3301.32065	2535.68881	4204.00407	2464.21553	1111.28629	8859.00549	9948.03519	3320.05777	0.49534	0.5038	6.74E-03	4.79E-03	2.29E-03	1.15E-02	2.87E-03	2.20E-03	6.05E-03	2.52E-03	1.13E-03	1.08E-02	8.10E-03	2.70E-03	2.32E-04	2.39E-04	6.2094E-02
552111.62	4172912.86	10726.7822	5355.07226	1652.76975	6046.46461	1371.41499	4566.38115	10783.47535	3146.23329	968.94537	5758.68822	3197.42021	5987.43251	0.22915	0.22797	1.71E-02	6.03E-03	1.86E-03	5.21E-03	1.19E-03	3.97E-03	1.55E-02	3.21E-03	9.89E-04	6.99E-03	2.60E-03	4.87E-03	1.07E-04	1.08E-04	6.9745E-02
551627.58	4173267.66	5419.68481	6177.21816	1033.96318	4993.09248	901.19653	11015.86452	5512.63063	3712.33158	600.97876	4964.67499	2236.87855	12953.27606	3.7515	3.92255	8.62E-03	6.96E-03	1.16E-03	4.31E-03	7.83E-04	9.57E-03	7.94E-03	3.79E-03	6.14E-04	6.03E-03	1.82E-03	1.05E-02	1.76E-03	1.86E-03	6.5749E-02
551390.28	4172827.82	3504.4632	5407.99577	1491.31489	14049.55952	1976.213	3393.61804	3493.45856	3081.76855	828.77959	9841.55534	8140.4143	4314.88058	0.68815	0.70736	5.58E-03	6.09E-03	1.68E-03	1.21E-02	1.72E-03	2.95E-03	5.03E-03	3.15E-03	8.46E-04	1.19E-02	6.62E-03	3.51E-03	3.23E-04	3.35E-04	6.1892E-02
551409.14	4172764.49	3476.8153	5085.20311	1538.25438	14371.72835	2225.22925	3085.18208	3463.89487	2892.82831	848.11457	9626.25717	8952.44592	3955.609	0.67857	0.69991	5.53E-03	5.73E-03	1.73E-03	1.24E-02	1.93E-03	2.68E-03	4.99E-03	2.95E-03	8.66E-04	1.17E-02	7.29E-03	3.22E-03	3.18E-04	3.32E-04	6.1647E-02
551388.56	4172997.95	3935.83982	7295.05204	1247.89223	10902.1053	1410.70367	5064.12813	3947.56276	4257.24445	708.55104	9284.92008	5095.6026	6359.11216	0.65524	0.66672	6.26E-03	8.22E-03	1.41E-03	9.40E-03	1.22E-03	4.40E-03	5.69E-03	4.35E-03	7.23E-04	1.13E-02	4.15E-03	5.18E-03	3.07E-04	3.16E-04	6.2881E-02
551384.09	4172856.02	3553.60144	5621.64092	1468.75194	13746.86057	1858.51327	3552.38821	3544.40764	3203.52577	819.14144	10004.73166	7605.27512	4506.95168	0.68224	0.69969	5.65E-03	6.33E-03	1.65E-03	1.19E-02	1.61E-03	3.08E-03	5.10E-03	3.27E-03	8.36E-04	1.21E-02	6.19E-03	3.67E-03	3.20E-04	3.32E-04	6.2060E-02
552108.65	4172933.78	10816.51275	5411.28147	1551.55876	5813.18853	1259.48944	4800.45728	10896.19796	3172.39354	913.56673	5585.01602	2968.08375	6271.47483	0.23309	0.23177	1.72E-02	6.09E-03	1.75E-03	5.01E-03	1.09E-03	4.17E-03	1.57E-02	3.24E-03	9.33E-04	6.78E-03	2.42E-03	5.10E-03	1.09E-04	1.10E-04	6.9712E-02
551491.73	4173198.52	4349.68915	7270.82783	1112.74674	7191.72356	1083.09717	8679.57767	4391.69841	4349.19986	638.23592	6904.22894	3015.00233	10418.88625	0.87466	0.88634	6.92E-03	8.19E-03	1.25E-03	6.20E-03	9.40E-04	7.54E-03	6.32E-03	4.44E-03	6.52E-04	8.38E-03	2.45E-03	8.48E-03	4.10E-04	4.20E-04	6.2604E-02
552004.89	4173097.63	10297.12437	5722.61531	875.94405	4042.9137	680.88835	7746.1173	10629.56328	3258.94457	521.92451	4119.00285	1683.04071	9711.24297	0.33383	0.33025	1.64E-02	6.45E-03	9.87E-04	3.49E-03	5.91E-04	6.73E-03	1.53E-02	3.33E-03	5.33E-04	5.00E-03	1.37E-03	7.90E-03	1.56E-04	1.57E-04	6.8376E-02
551575.84	4173256.81	4918.34135	6641.9941	1034.38802	5619.99802	955.3275	10320.41123	4987.41922	4006.99657	603.81592	5532.44604	2448.28007	12183.06753	1.60488	1.64108	7.83E-03	7.48E-03	1.16E-03	4.85E-03	8.30E-04	8.96E-03	7.18E-03	4.09E-03	6.16E-04	6.72E-03	1.99E-03	9.92E-03	7.52E-04	7.78E-04	6.3154E-02
551428.78	4173110.37	4023.30959	7248.66564	1158.8812	8837.19187	1239.15957	7155.04209	4056.27367	4297.7912	656.08286	7983.18072	3852.15394	8711.80555	0.69923	0.70798	6.40E-03	8.16E-03	1.31E-03	7.62E-03	1.08E-03	6.21E-03	5.84E-03	4.39E-03	6.70E-04	9.69E-03	3.14E-03	7.09E-03	3.28E-04	3.36E-04	6.2261E-02
551509.26	4173215.25	4437.80386	7164.83837	1091.29309	6809.83215	1052.40503	8983.60145	4483.57351	4295.58077	627.50091	6559.89671	2872.14645	10772.43889	0.94452	0.95773	7.06E-03	8.07E-03	1.23E-03	5.87E-03	9.14E-04	7.80E-03	6.46E-03	4.39E-03	6.41E-04	7.96E-03	2.34E-03	8.77E-03	4.43E-04	4.54E-04	6.2396E-02
551598.15	4173265.64	5105.02238	6414.78033	1014.57417	5277.96142	923.07671	10618.50095	5183.60076	3859.52512	598.89453	5291.71168	2324.4973	12511.49173	2.1247	2.18537	8.12E-03	7.22E-03	1.14E-03	4.55E-03	8.02E-04	9.22E-03	7.47E-03	3.94E-03	6.11E-04	6.42E-03	1.89E-03	1.02E-02	9.96E-04	1.04E-03	6.3611E-02
551497.06	4172647.66	4122.0837	4254.14621	1962.20644	13348.04079	3143.42595	2538.83102	4093.62916	2461.28455	1074.35345	8834.52591	9798.59421	3317.9569	0.50461	0.51384	6.56E-03	4.79E-03	2.21E-03	1.15E-02	2.73E-03	2.20E-03	5.90E-03	2.51E-03	1.10E-03	1.07E-02	7.97E-03	2.70E-03	2.37E-04	2.44E-04	6.1391E-02
551442.82	4172697.8	3640.78143	4628.25007	1639.38892	14308.67161	2473.60701	2753.62002	3625.00815	2646.8262	901.61629	9309.42156	9445.17769	3566.47037	0.61456	0.63182	5.79E-03	5.21E-03	1.85E-03	1.23E-02	2.15E-03	2.39E-03	5.22E-03	2.70E-03	9.20E-04	1.13E-02	7.69E-03	2.90E-03	2.88E-04	2.99E-04	6.1053E-02
551378.46	4172940.79	3766.00176	6551.24424	1352.80813	12078.42244	1533.84261	4242.84877	3766.22908	3755.69206	765.62993	9889.40098	5817.81924	5358.43041	0.6548	0.66825	5.99E-03	7.38E-03	1.52E-03	1.04E-02	1.33E-03	3.68E-03	5.42E-03	3.83E-03	7.82E-04	1.20E-02	4.73E-03	4.36E-03	3.07E-04	3.17E-04	6.2093E-02
551456.55	4173158.91	4116.33033	7217.6743	1131.20817	7965.70218	1147.94	7890.13399	4152.75947	4275.55902	645.53023	7417.37692	3359.38032	9519.80495	0.75424	0.76377	6.55E-03	8.13E-03	1.27E-03	6.87E-03	9.97E-04	6.85E-03	5.98E-03	4.37E-03	6.59E-04	9.00E-03	2.73E-03	7.75E-03	3.54E-04	3.62E-04	6.1877E-02
551385.32	4172988.95	3883.35269	7116.41156	1251.73181	10961.19595	1413.93549	4865.57029	3893.02889	4138.7184	710.76126	9295.00601	5150.3176	6117.12505	0.64599	0.65727	6.18E-03	8.01E-03	1.41E-03	9.45E-03	1.23E-03	4.22E-03	5.61E-03	4.23E-03	7.26E-04	1.13E-02	4.19E-03	4.98E-03	3.03E-04	3.11E-04	6.2136E-02
551430.7	4172717.37	3541.85002	4743.53963	1578.09097	14251.93407	2358.86594	2833.56772	3527.95214	2706.87016	867.99498	9351.15535	9200.05624	3660.93381	0.63073	0.64946	5.64E-03	5.34E-03	1.78E-03	1.23E-02	2.05E-03	2.46E-03	5.08E-03	2.76E-03	8.86E-04	1.14E-02	7.49E-03	2.98E-03	2.96E-04	3.08E-04	6.0709E-02
551390.96	4172818.7	3457.98438	5282.51944	1478.53987	13847.88878	1984.90649	3312.63422	3446.77412	3010.23866	820.84913	9628.62594	8126.23251	4215.57267	0.67492	0.69409	5.50E-03	5.95E-03	1.67E-03	1.19E-02	1.72E-03	2.88E-03	4.96E-03	3.07E-03	8.38E-04	1.17E-02	6.61E-03	3.43E-03	3.16E-04	3.29E-04	6.0914E-02
551431.74	4173118.74	4001.02426	7142.45085	1147.00945	8630.8287	1218.64668	7199.69369	4034.42376	4234.52946	652.01278	7826.07414	3752.42626	8746.93085	0.69822	0.70696	6.37E-03	8.04E-03	1.29E-03	7.44E-03	1.06E-03	6.25E-03	5.81E-03	4.32E-03	6.66E-04	9.50E-03	3.05E-03	7.12E-03	3.27E-04	3.35E-04	6.1591E-02
552031.51	4172730.16	7867.30174	4395.59028	2758.60445	8691.88312	3087.91328	2510.19524	7750.30536	2612.82631	1524.48743	7429.40259	6518.48829	3364.38518	0.2379	0.23784	1.25E-02	4.95E-03	3.11E-03	7.50E-03	2.68E-03	2.18E-03	1.12E-02	2.67E-03	1.56E-03	9.02E-03	5.31E-03	2.74E-03	1.12E-04	1.13E-04	6.5606E-02
551552.9	4173247.39	4701.65179	6732.34636	1044.02236	5928.53604	980.07311	9712.94356	4761.141	4072.2282	603.4194	5802.63871	2561.3036	11516.3555	1.2672	1.28906	7.48E-03	7.58E-03	1.18E-03	5.11E-03	8.51E-04	8.43E-03	6.86E-03	4.16E-03	6.16E-04	7.04E-03	2.08E-03	9.37E-03	5.94E-04	6.11E-04	6.1974E-02
552114.77	4172921.66	10526.85718	5284.38401	1580.75439	5851.79029	1303.45311	4591.94722	10592.38494	3101.64397	928.04007	5589.76264	3053.31588	6008.61124	0.22811	0.22689	1.68E-02	5.95E-03	1.78E-03	5.05E-03	1.13E-03	3.99E-03	1.53E-02	3.17E-03	9.47E-04	6.79E-03	2.48E-03	4.89E-03	1.07E-04	1.08E-04	6.8393E-02
551998.09	4173105.85	9982.81252	5635.3206	847.80188	3926.55145	664.35101	7853.484	10319.75361	3203.75281	504.46187	4003.29119	1639.20149	9814.74731	0.34241	0.33862	1.59E-02	6.35E-03	9.55E-04	3.39E-03	5.77E-04	6.82E-03	1.49E-02	3.27E-03	5.15E-04	4.86E-03	1.33E-03	7.99E-03	1.60E-04	1.60E-04	6.7120E-02
551404.85	4172772.83	3430.12136	5051.32058	1506.82952	13986.43916	2152.4508	3091.20278	3417.69194	2875.2809	831.72315	9445.53996	8638.73986	3957.01229	0.66345	0.68385	5.46E-03	5.69E-03	1.70E-03	1.21E-02	1.87E-03	2.68E-03	4.92E-03	2.94E-03	8.49E-04	1.15E-02	7.03E-03	3.22E-03	3.11E-04	3.24E-04	6.0519E-02
551717.7	4172662.03	7880.24546	2895.27477	2894.15696	8484.89255	4747.37935	1874.78305	7774.97324	1722.29499	1507.40034	5492.32012	10558.02837	2543.42834	0.40057	0.41147	1.25E-02	3.26E-03	3.26E-03	7.32E-03	4.12E-03	1.63E-03	1.12E-02	1.76E-03	1.54E-03	6.67E-03	8.59E-03	2.07E-03	1.88E-04	1.95E-04	6.4335E-02
551675.8	4172642.02	7229.08395	3144.94852	3165.09994	7814.72094	5438.34423	2026.55748	7133.5962	1886.0349	1650.52661	5861.05422	10190.38624	2744.41068	0.32536	0.3321	1.15E-02	3.54E-03	3.56E-03	6.74E-03	4.72E-03	1.76E-03	1.03E-02	1.93E-03	1.69E-03	7.12E-03	8.29E-03	2.23E-03	1.52E-04	1.57E-04	6.3668E-02
551488.37	4172650.57	4011.36421	4252.0333	1890.75906	13333.48199	2989.74366	2539.65261	3985.16145	2455.30509	1037.38842	8789.93341	9619.48815	3313.18578	0.51215	0.52208	6.38E-03	4.79E-03	2.13E-03	1.15E-02	2.60E-03	2.21E-03	5.74E-03	2.51E-03	1.06E-03	1.07E-02	7.83E-03	2.70E-03	2.40E-04	2.47E-04	6.0591E-02
551862.74	4173191.13	8176.45784	5031.51337	811.21138	3474.86747	674.93099	10510.27635	8452.18997	2873.32045	477.70799	3501.69718	1602.62135	12625.38932	0.65844	0.64708	1.30E-02	5.67E-03	9.14E-04	3.00E-03	5.86E-04	9.13E-03	1.22E-02	2.93E-03	4.88E-04	4.25E-03	1.30E-03	1.03E-02	3.09E-04	3.07E-04	6.4340E-02
551382.1	4172979.98	3831.63899	6933.32808	1257.71143	11028.17882	1419.0682	4680.76481	3839.34786	4019.04528	714.03044	9305.67702	5211.57712	5891.14935	0.63832	0.64972	6.10E-03	7.81E-03	1.42E-03	9.51E-03	1.23E-03	4.06E-03	5.53E-03	4.10E-03	7.29E-04	1.13E-02	4.24E-03	4.79E-03	2.99E-04	3.08E-04	6.1432E-02
551698.18	4172655.03	7670.9103	3005.61937	3067.79405	7894.28362	5069.03262	1947.87972	7568.01515	1795.82578	1594.55053	5551.5063	10256.6144	2644.19276	0.35578	0.3649	1.22E-02	3.39E-03	3.46E-03	6.81E-03	4.40E-03	1.69E-03	1.09E-02	1.83E-03	1.63E-03	6.74E-03	8.35E-03	2.15E-03	1.67E-04	1.73E-04	6.3887E-02
551991.09	4172711.43	6490.177	3947.43137	3172.59418	9737.28127	3791.57174	1959.22969	6357.00478	2347.3794	1708.22631	8070.22721	7798.27367	2639.45572	0.25485	0.25504	1.03E-02	4.45E-03	3.57E-03	8.40E-03	3.29E-03	1.70E-03	9.16E-03	2.40E-03	1.74E-03	9.80E-03	6.35E-03	2.15E-03	1.19E-04	1.21E-04	6.3566E-02
551656.69	4173272.39	5816.70987	5793.38834	1005.95532	4602.73441	859.20202	10680.29741	5926.46005	3436.9173	587.51096	4532.76865	2090.54691	12649.6886	8.89717	9.78506	9.26E-03	6.52E-03	1.13E-03	3.97E-03	7.46E-04	9.27E-03	8.54E-03	3.51E-03	6.00E-04	5.50E-03	1.70E-03	1.03E-02	4.17E-03	4.64E-03	6.9853E-02
551643.76	4172629.47	6497.88151	3329.87095	3071.34252	8245.00081	5435.51444	2120.82258	6418.21245	1999.07687	1617.99017	6388.86719	9943.43838	2855.7076	0.3098	0.3141	1.03E-02	3.75E-03	3.46E-03	7.11E-03	4.72E-03	1.84E-03	9.24E-03	2.04E-03	1.65E-03	7.76E-03	8.09E-03	2.32E-03	1.45E-04	1.49E-04	6.2624E-02
551559.19	4172616.79	4862.78945	3840.0381	2416.28517	11124.25475	4206.68103	2325.09739	4817.96908	2258.61576	1305.1258	7940.39232	9711.69604	3082.66452	0.38727	0.39179	7.74E-03	4.32E-03	2.72E-03	9.59E-03	3.65E-03	2.02E-03	6.94E-03	2.31E-03	1.33E-03	9.64E-03	7.90E-03	2.51E-03	1.82E-04	1.86E-04	6.1046E-02
551459.64	4173167.49	4088.46205	7074.14422	1113.47293	7713.67575	1122.63502	7809.20623	4124.75658	4195.87626	635.80701	7219.03487	3257.47233	9416.49151	0.75213	0.76154	6.51E-03	7.97E-03	1.25E-03	6.65E-03	9.75E-04	6.78E-03	5.94E-03	4.28E-03	6.49E-04	8.76E-03	2.65E-03	7.66E-03	3.53E-04	3.61E-04	6.0800E-02
551382.45	4172845.96	3462.39068	5386.51509	1439.09199	13382.10256	1848.18463	3415.48449	3452.94393	3071.74713	801.69189	9627.00946	7526.28188	4335.45365	0.65859	0.67559	5.51E-03	6.07E-03	1.62E-03	1.15E-02	1.60E-03	2.97E-03	4.97E-03	3.14E-03	8.18E-04	1.17E-02	6.13E-03	3.53E-03	3.09E-04	3.20E-04	6.0206E-02
552056.98	4172745.56	8332.11663	4479.9341	2537.70624	8110.36781	2707.1877	2700.80403	8239.30025	2657.5276	1416.27011	7054.88653	5788.62717	3638.47737	0.2271	0.22691	1.33E-02	5.05E-03	2.86E-03	6.99E-03	2.35E-03	2.35E-03	1.19E-02	2.71E-03	1.45E-03	8.56E-03	4.71E-03	2.96E-03	1.06E-04	1.08E-04	6.5329E-02
551375.23	4172931.82	3677.07845	6285.43597	1344.04068	11955.19171	1532.60753	4063.94522	3676.07368	3600.31345	759.6377	9703.1799	5833.28965	5135.28469	0.63929	0.65255	5.85E-03	7.08E-03	1.51E-03	1.03E-02	1.33E-03	3.53E-03	5.29E-03	3.68E-03	7.76E-04	1.18E-02	4.75E-03	4.18E-03	3.00E-04	3.09E-04	6.0675E-02
551514.43	4173223.34	4394.84228	6863.08182	1067.04566	6549.61305	1029.88049	8848.96087	4441.12444	4170.49568	614.05225	6320.78977	2793.83126	10454.75785	0.95167	0.96522	6.99E-03	7.73E-03	1.20E-03	5.65E-03	8.94E-04	7.68E-03	6.40E-03	4.26E-03	6.27E-04	7.67E-03	2.27E-03	8.51E-03	4.46E-04	4.57E-04	6.0791E-02
551643.97	4173274.24	5557.2823	5849.34312	1005.2188	4690.73664	865.53704	10571.19444	5657.33052	3488.14742	585.87228	4641.73457	2121.56094	12493.04776	5.4606	5.8157	8.84E-03	6.59E-03	1.13E-03	4.05E-03	7.52E-04	9.18E-03	8.15E-03	3.56E-03	5.98E-04	5.64E-03	1.73E-03	1.02E-02	2.56E-03	2.76E-03	6.5691E-02
551495.84	4173208.86	4280.0915	6992.42445	1080.09312	6881.9766	1051.34438	8422.98784	4321.92768	4183.76403	620.01045	6588.7065	2905.64617	10120.47825	0.86456	0.87593	6.81E-03	7.88E-03	1.22E-03	5.94E-03	9.13E-04	7.31E-03	6.22E-03	4.27E-03	6.33E-04	8.00E-03	2.36E-03	8.24E-03	4.05E-04	4.15E-04	6.0613E-02
551378.87	4172971.02	3776.69	6740.10918	1263.67886	11083.87213	1424.96295	4504.19993	3782.46877	3895.69135	717.12946	9299.44902	5274.10641	5674.45984	0.63039	0.64212	6.01E-03	7.59E-03	1.42E-03	9.56E-03	1.24E-03	3.91E-03	5.45E-03	3.98E-03	7.32E-04	1.13E-02	4.29E-03	4.62E-03	2.95E-04	3.04E-04	6.0688E-02
551400.56	4172781.18	3391.99851	5022.4335	1479.81561	13663.50875	2087.23832	3099.59194	3380.00477	2860.68955	817.75545	9295.24775	8367.8939	3961.76972	0.65109	0.67068	5.40E-03	5.66E-03	1.67E-03	1.18E-02	1.81E-03	2.69E-03	4.87E-03	2.92E-03	8.35E-04	1.13E-02	6.81E-03	3.22E-03	3.05E-04	3.18E-04	5.9573E-02
551392.06	4172807.34	3399.83235	5130.98608	1460.35859	13543.29535	1988.71022	3214.57887	3388.52386	2924.64775	809.75178	9360.35278	8063.44766	4094.87957	0.6555	0.67437	5.41E-03	5.78E-03	1.64E-03	1.17E-02	1.73E-03	2.79E-03	4.88E-03	2.99E-03	8.27E-04	1.14E-02	6.56E-03	3.33E-03	3.07E-04	3.20E-04	5.9610E-02

551478.34	4172654.76	3888.33111	4247.79467	1810.76895	13278.69314	2821.6086	2540.482	3864.69451	2447.89283	995.39227	8727.8532	9394.25928	3308.09429	0.51987	0.53057	6.19E-03	4.78E-03	2.04E-03	1.15E-02	2.45E-03	2.21E-03	5.57E-03	2.50E-03	1.02E-03	1.06E-02	7.65E-03	2.69E-03	2.44E-04	2.51E-04	5.9628E-02
551437.66	4173135.48	3957.2783	6935.76861	1121.77164	8222.48123	1176.04333	7312.80787	3991.0455	4150.52269	638.42347	7507.7334	3554.03876	8752.46995	0.6943	0.70261	6.30E-03	7.81E-03	1.26E-03	7.09E-03	1.02E-03	6.35E-03	5.75E-03	4.24E-03	6.52E-04	9.11E-03	2.89E-03	7.12E-03	3.25E-04	3.33E-04	6.0260E-02
552005.96	4172714.68	6772.41412	4043.06311	3008.70945	9278.46895	3491.5331	2129.29844	6642.89064	2437.75464	1637.00046	7798.15126	7284.08831	2793.2954	0.24785	0.24798	1.08E-02	4.55E-03	3.39E-03	8.00E-03	3.03E-03	1.85E-03	9.57E-03	2.49E-03	1.67E-03	9.47E-03	5.93E-03	2.27E-03	1.16E-04	1.18E-04	6.3231E-02
551547.92	4172617.54	4662.68206	3867.33362	2299.88028	11379.22908	3953.72691	2335.45102	4621.62024	2268.22085	1244.43905	8013.44505	9577.36268	3089.43427	0.39826	0.40308	7.42E-03	4.36E-03	2.59E-03	9.81E-03	3.43E-03	2.03E-03	6.66E-03	2.32E-03	1.27E-03	9.73E-03	7.79E-03	2.51E-03	1.87E-04	1.91E-04	6.0297E-02
552117.92	4172930.46	10300.83534	5203.77359	1509.75886	5655.7423	1237.9309	4606.86582	10374.54236	3051.25509	887.48763	5417.61382	2913.19204	6015.83066	0.22696	0.2257	1.64E-02	5.86E-03	1.70E-03	4.88E-03	1.07E-03	4.00E-03	1.49E-02	3.12E-03	9.06E-04	6.58E-03	2.37E-03	4.90E-03	1.06E-04	1.07E-04	6.6925E-02
551763.58	4172677.42	7153.66003	2580.22803	2225.40118	10082.68524	4545.8558	1637.04186	7072.37918	1508.78694	1179.29144	5714.50487	11266.59381	2207.31724	0.4632	0.47365	1.14E-02	2.91E-03	2.51E-03	8.70E-03	3.95E-03	1.42E-03	1.02E-02	1.54E-03	1.20E-03	6.94E-03	9.17E-03	1.80E-03	2.17E-04	2.24E-04	6.2134E-02
552046.29	4172733.3	7901.87149	4347.92385	2599.1094	8275.74905	2859.62651	2543.30482	7798.87857	2578.39529	1442.17214	7119.60993	6074.15782	3431.42238	0.22952	0.22942	1.26E-02	4.90E-03	2.93E-03	7.14E-03	2.48E-03	2.21E-03	1.12E-02	2.63E-03	1.47E-03	8.64E-03	4.94E-03	2.79E-03	1.08E-04	1.09E-04	6.4159E-02
551562.6	4173256.53	4680.22974	6461.90232	1021.44267	5646.1255	951.26188	9552.14155	4742.27359	3901.326	589.1452	5616.36346	2464.77274	11309.75283	1.36032	1.38569	7.45E-03	7.28E-03	1.15E-03	4.87E-03	8.26E-04	8.29E-03	6.83E-03	3.98E-03	6.01E-04	6.82E-03	2.01E-03	9.20E-03	6.38E-04	6.57E-04	6.0602E-02
551396.27	4172789.52	3368.92083	5013.76518	1460.92282	13462.86944	2036.39944	3116.55417	3357.25684	2857.06388	808.24511	9212.41454	8175.03445	3978.09769	0.64485	0.66393	5.36E-03	5.65E-03	1.65E-03	1.16E-02	1.77E-03	2.71E-03	4.83E-03	2.92E-03	8.25E-04	1.12E-02	6.65E-03	3.24E-03	3.02E-04	3.15E-04	5.9007E-02
551420.64	4172727.06	3425.62264	4696.60015	1511.94209	13687.41386	2238.9072	2829.13768	3412.889	2678.12461	831.98139	9084.38522	8714.49285	3647.3537	0.61456	0.63281	5.45E-03	5.29E-03	1.70E-03	1.18E-02	1.94E-03	2.46E-03	4.92E-03	2.73E-03	8.49E-04	1.10E-02	7.09E-03	2.97E-03	2.88E-04	3.00E-04	5.8824E-02
551401.87	4173063.96	3852.48193	7035.60903	1128.80912	9271.96655	1266.7663	5944.83766	3877.43563	4178.9147	639.43346	7972.20267	4219.86672	7356.82567	0.63204	0.64079	6.13E-03	7.92E-03	1.27E-03	8.00E-03	1.10E-03	5.16E-03	5.58E-03	4.27E-03	6.53E-04	9.68E-03	3.43E-03	5.99E-03	2.96E-04	3.04E-04	5.9787E-02
551375.64	4172962.05	3719.80581	6543.00489	1269.73031	11132.63989	1432.41496	4337.141	3723.78312	3772.13704	720.13591	9278.70201	5340.22042	5468.8937	0.62238	0.63397	5.92E-03	7.37E-03	1.43E-03	9.60E-03	1.24E-03	3.77E-03	5.36E-03	3.85E-03	7.35E-04	1.13E-02	4.35E-03	4.45E-03	2.92E-04	3.00E-04	5.9932E-02
551441.1	4173145.07	3945.2115	6848.99358	1108.04226	8014.63701	1150.1822	7306.13988	3979.0254	4088.83015	631.04962	7338.71712	3437.18617	8847.55735	0.69632	0.70492	6.28E-03	7.71E-03	1.25E-03	6.91E-03	9.99E-04	6.34E-03	5.73E-03	4.17E-03	6.44E-04	8.91E-03	2.80E-03	7.20E-03	3.26E-04	3.34E-04	5.9611E-02
551523.78	4173232.15	4408.65486	6697.6764	1049.38954	6302.33594	1009.86377	8787.00577	4457.27507	4047.2494	604.5324	6103.443	2714.27431	10481.72761	1.00434	1.01648	7.02E-03	7.54E-03	1.18E-03	5.44E-03	8.77E-04	7.63E-03	6.42E-03	4.13E-03	6.17E-04	7.41E-03	2.21E-03	8.53E-03	4.71E-04	4.82E-04	5.9952E-02
552020.8	4172717.88	7075.38635	4157.50356	2827.11782	8792.12947	3237.19217	2259.6992	6953.2308	2476.88258	1552.06484	7487.65733	6793.77565	3033.46387	0.24006	0.24012	1.13E-02	4.68E-03	3.18E-03	7.58E-03	2.81E-03	1.96E-03	1.00E-02	2.53E-03	1.58E-03	9.09E-03	5.53E-03	2.47E-03	1.13E-04	1.14E-04	6.2922E-02
551462.73	4173176.08	4054.95015	6920.64302	1094.3276	7467.18069	1097.73388	7703.52287	4091.01332	4109.62473	625.272	7012.26282	3160.25646	9286.46582	0.74852	0.75777	6.45E-03	7.79E-03	1.23E-03	6.44E-03	9.53E-04	6.69E-03	5.89E-03	4.20E-03	6.38E-04	8.51E-03	2.57E-03	7.56E-03	3.51E-04	3.59E-04	5.9640E-02
551445.95	4172684.17	3594.80645	4414.41073	1615.72534	13566.96218	2434.84139	2640.96963	3578.62393	2528.96235	889.09113	8874.08361	9032.82182	3422.76665	0.57092	0.58587	5.72E-03	4.97E-03	1.82E-03	1.17E-02	2.11E-03	2.29E-03	5.15E-03	2.58E-03	9.08E-04	1.08E-02	7.35E-03	2.79E-03	2.68E-04	2.78E-04	5.8718E-02
551536.7	4172618.56	4468.94241	3877.97989	2182.96521	11544.09991	3698.81999	2339.58028	4431.38998	2268.48603	1183.0875	8030.96737	9397.6443	3087.41699	0.40769	0.41287	7.11E-03	4.37E-03	2.46E-03	9.96E-03	3.21E-03	2.03E-03	6.38E-03	2.32E-03	1.21E-03	9.75E-03	7.65E-03	2.51E-03	1.91E-04	1.96E-04	5.9340E-02
551395.42	4173046.05	3828.86807	7034.26572	1134.68157	9428.71855	1287.85256	5595.37949	3850.43345	4173.38559	643.16948	8116.12631	4402.8826	6960.96305	0.62284	0.63239	6.09E-03	7.92E-03	1.28E-03	8.13E-03	1.12E-03	4.86E-03	5.55E-03	4.26E-03	6.57E-04	9.85E-03	3.58E-03	5.67E-03	2.92E-04	3.00E-04	5.9557E-02
551631.25	4173276.08	5282.03994	5846.50909	997.66092	4761.23469	868.74943	10253.92589	5372.81197	3504.08763	580.0968	4724.18911	2148.88749	12098.75118	3.80224	3.98862	8.41E-03	6.58E-03	1.12E-03	4.11E-03	7.54E-04	8.90E-03	7.74E-03	3.58E-03	5.92E-04	5.74E-03	1.75E-03	9.85E-03	1.78E-03	1.89E-03	6.2788E-02
551398.65	4173055	3830.35067	7015.68588	1127.17229	9275.69092	1275.49325	5755.6564	3853.70395	4168.09931	638.65657	8005.81812	4316.64406	7142.09907	0.62538	0.63397	6.10E-03	7.90E-03	1.27E-03	8.00E-03	1.11E-03	5.00E-03	5.55E-03	4.26E-03	6.52E-04	9.72E-03	3.51E-03	5.81E-03	2.93E-04	3.00E-04	5.9467E-02
551653.41	4172629.01	6567.43734	3202.33788	3018.35349	7821.7037	5264.84614	2054.2745	6485.73211	1922.36509	1586.6497	6052.97139	9637.7267	2770.2816	0.29985	0.30434	1.05E-02	3.61E-03	3.40E-03	6.75E-03	4.57E-03	1.78E-03	9.34E-03	1.96E-03	1.62E-03	7.35E-03	7.84E-03	2.25E-03	1.41E-04	1.44E-04	6.1212E-02
551433.24	4172704.13	3485.73295	4525.01588	1545.28658	13553.61361	2305.77866	2715.48853	3471.9745	2586.83482	850.29573	8923.27242	8804.89574	3511.78027	0.58706	0.60353	5.55E-03	5.10E-03	1.74E-03	1.17E-02	2.00E-03	2.36E-03	5.00E-03	2.64E-03	8.68E-04	1.08E-02	7.17E-03	2.86E-03	2.75E-04	2.86E-04	5.8360E-02
551392.2	4173037.1	3812.45596	7007.04444	1138.89599	9542.30101	1297.72704	5417.216	3832.16002	4150.16968	645.78486	8190.29222	4475.95448	6754.64525	0.61853	0.628	6.07E-03	7.89E-03	1.28E-03	8.23E-03	1.13E-03	4.70E-03	5.52E-03	4.24E-03	6.59E-04	9.94E-03	3.64E-03	5.50E-03	2.90E-04	2.98E-04	5.9387E-02
551631.73	4172621.44	6096.94461	3325.93926	2904.71358	8307.95751	5132.58739	2111.76213	6025.58346	1993.59514	1537.02064	6432.76876	9512.0026	2835.34774	0.30276	0.30635	9.70E-03	3.75E-03	3.27E-03	7.17E-03	4.46E-03	1.83E-03	8.68E-03	2.04E-03	1.57E-03	7.81E-03	7.74E-03	2.31E-03	1.42E-04	1.45E-04	6.0602E-02
551567	4172610.17	4893.72964	3695.5128	2416.90262	10452.81922	4212.40766	2254.23921	4847.59387	2178.39071	1303.71634	7564.17423	9369.98094	2992.40535	0.36288	0.36691	7.79E-03	4.16E-03	2.72E-03	9.01E-03	3.66E-03	1.96E-03	6.98E-03	2.22E-03	1.33E-03	9.18E-03	7.63E-03	2.44E-03	1.70E-04	1.74E-04	5.9426E-02
551388.97	4173028.15	3798.08424	6971.8963	1146.18788	9673.54156	1308.27689	5246.46958	3815.82295	4118.43394	650.18342	8284.0026	4544.88781	6555.16545	0.6152	0.62458	6.04E-03	7.85E-03	1.29E-03	8.34E-03	1.14E-03	4.56E-03	5.50E-03	4.20E-03	6.64E-04	1.01E-02	3.70E-03	5.33E-03	2.88E-04	2.96E-04	5.9260E-02
551607.5	4173274.45	4983.72418	5996.52793	996.84396	4981.88261	887.22567	9951.90465	5062.78137	3609.26483	577.68134	4970.75509	2226.73698	11734.47614	2.32104	2.40616	7.93E-03	6.75E-03	1.12E-03	4.30E-03	7.70E-04	8.64E-03	7.29E-03	3.68E-03	5.90E-04	6.03E-03	1.81E-03	9.55E-03	1.09E-03	1.14E-03	6.0706E-02
551444.19	4173153.66	3926.07796	6815.1555	1094.02951	7811.8297	1127.18889	7270.73567	3959.83589	4026.41916	623.47315	7174.85545	3337.70666	8796.70449	0.69544	0.7039	6.25E-03	7.68E-03	1.23E-03	6.74E-03	9.79E-04	6.31E-03	5.70E-03	4.11E-03	6.37E-04	8.71E-03	2.72E-03	7.16E-03	3.26E-04	3.34E-04	5.8880E-02
551372.01	4172922.86	3576.78205	6001.67289	1325.69812	11731.76173	1522.12989	3879.98712	3574.82402	3436.35959	748.16656	9442.55905	5809.65456	4905.57892	0.61898	0.63186	5.69E-03	6.76E-03	1.49E-03	1.01E-02	1.32E-03	3.37E-03	5.15E-03	3.51E-03	7.64E-04	1.15E-02	4.73E-03	3.99E-03	2.90E-04	2.99E-04	5.8947E-02
551410.62	4173088.55	3814.79305	6826.17833	1106.63432	8765.29851	1224.86902	6287.33751	3843.41117	4053.27188	626.69666	7626.52796	3966.47737	7716.91284	0.63408	0.64299	6.07E-03	7.69E-03	1.25E-03	7.56E-03	1.06E-03	5.46E-03	5.54E-03	4.14E-03	6.40E-04	9.26E-03	3.23E-03	6.28E-03	2.97E-04	3.05E-04	5.8769E-02
551385.75	4173019.19	3776.52958	6907.75421	1153.20687	9790.79789	1311.65801	5073.11561	3792.28478	4067.84308	654.37134	8364.97189	4609.55791	6349.99906	0.61051	0.62029	6.01E-03	7.78E-03	1.30E-03	8.44E-03	1.14E-03	4.41E-03	5.46E-03	4.15E-03	6.68E-04	1.02E-02	3.75E-03	5.17E-03	2.86E-04	2.94E-04	5.9013E-02
552035.61	4172721.04	7347.0543	4175.68594	2637.97196	8396.11296	3002.10471	2381.10229	7237.26325	2481.69322	1454.57209	7136.38564	6337.5178	3188.70829	0.23155	0.23155	1.17E-02	4.70E-03	2.97E-03	7.24E-03	2.61E-03	2.07E-03	1.04E-02	2.53E-03	1.49E-03	8.66E-03	5.16E-03	2.60E-03	1.09E-04	1.10E-04	6.2357E-02
551414.59	4172733.81	3364.49749	4674.6148	1477.89101	13373.04704	2174.54184	2832.00285	3352.29036	2664.75482	813.55245	8937.76465	8449.61794	3645.52256	0.606	0.62394	5.35E-03	5.26E-03	1.66E-03	1.15E-02	1.89E-03	2.46E-03	4.83E-03	2.72E-03	8.31E-04	1.09E-02	6.88E-03	2.97E-03	2.84E-04	2.96E-04	5.7816E-02
551499.44	4173217.32	4216.71373	6684.36404	1052.8682	6621.99116	1026.52915	8210.33895	4258.44778	4046.01779	604.79836	6334.40915	2822.02794	9872.24947	0.85575	0.86685	6.71E-03	7.53E-03	1.19E-03	5.71E-03	8.91E-04	7.13E-03	6.13E-03	4.13E-03	6.17E-04	7.69E-03	2.30E-03	8.03E-03	4.01E-04	4.11E-04	5.8870E-02
551372.42	4172953.09	3649.15996	6320.09872	1269.34566	11106.79545	1434.83206	4165.72813	3651.57844	3636.39372	719.35246	9191.5427	5334.02691	5257.31165	0.61153	0.62309	5.81E-03	7.12E-03	1.43E-03	9.58E-03	1.25E-03	3.62E-03	5.26E-03	3.71E-03	7.34E-04	1.12E-02	4.34E-03	4.28E-03	2.87E-04	2.95E-04	5.8862E-02
551577.15	4172608.33	5033.07668	3613.93717	2480.22166	10004.32	4344.65141	2218.57043	4983.9225	2136.38938	1334.81328	7338.95226	9290.30559	2949.78406	0.34722	0.35096	8.01E-03	4.07E-03	2.79E-03	8.63E-03	3.77E-03	1.93E-03	7.18E-03	2.18E-03	1.36E-03	8.91E-03	7.56E-03	2.40E-03	1.63E-04	1.66E-04	5.9121E-02
551734.37	4172663.02	7544.58245	2709.76404	2549.97232	8634.04176	4253.13478	1755.47271	7449.10925	1603.74117	1338.52204	5300.54464	10134.16734	2376.06435	0.40998	0.42083	1.20E-02	3.05E-03	2.87E-03	7.45E-03	3.69E-03	1.52E-03	1.07E-02	1.64E-03	1.37E-03	6.43E-03	8.25E-03	1.93E-03	1.92E-04	1.99E-04	6.1333E-02
551382.52	4173010.24	3752.2573	6824.96368	1161.66052	9909.95903	1319.33969	4904.3734	3765.93964	4004.87234	659.38843	8446.20216	4675.03134	6148.57758	0.60619	0.61576	5.97E-03	7.69E-03	1.31E-03	8.55E-03	1.15E-03	4.26E-03	5.42E-03	4.09E-03	6.73E-04	1.03E-02	3.80E-03	5.00E-03	2.84E-04	2.92E-04	5.8740E-02
551524.41	4172620.54	4271.64686	3881.5877	2061.13116	11654.58897	3432.3796	2342.36462	4237.64179	2264.36372	1119.16807	8013.49873	9177.45281	3082.35254	0.41727	0.42297	6.80E-03	4.37E-03	2.32E-03	1.01E-02	2.98E-03	2.03E-03	6.10E-03	2.31E-03	1.14E-03	9.73E-03	7.47E-03	2.51E-03	1.96E-04	2.00E-04	5.8215E-02
551374.77	4172859.26	3393.91815	5293.13054	1380.27875	12607.78288	1733.38023	3385.02376	3385.96388	3020.65155	770.35093	9278.72258	6937.6702	4292.90007	0.62389	0.639	5.40E-03	5.96E-03	1.55E-03	1.09E-02	1.51E-03	2.94E-03	4.88E-03	3.08E-03	7.86E-04	1.13E-02	5.65E-03	3.49E-03	2.92E-04	3.03E-04	5.7981E-02
551416.54	4173105.29	3813.11431	6733.68994	1101.04527	8465.05361	1199.69467	6500.62387	3843.32044	3991.68873	624.05395	7478.40163	3777.29735	7939.02232	0.64203	0.65072	6.07E-03	7.58E-03	1.24E-03	7.30E-03	1.04E-03	5.64E-03	5.53E-03	4.08E-03	6.37E-04	9.08E-03	3.07E-03	6.46E-03	3.01E-04	3.08E-04	5.8349E-02
551465.82	4173184.67	4019.13336	6762.52953	1074.42564	7226.1274	1073.02904	7582.03759	4054.97885	4020.08996	614.27998	6803.17597	3066.3491	9139.78956	0.7441	0.75319	6.40E-03	7.62E-03	1.21E-03	6.23E-03	9.32E-04	6.58E-03	5.84E-03	4.10E-03	6.27E-04	8.26E-03	2.50E-03	7.44E-03	3.49E-04	3.57E-04	5.8439E-02
551379.3	4173001.29	3721.12129	6716.12024	1169.64745	10014.00478	1326.19615	4736.39392	3732.76814	3926.85774	664.03288	8510.21673	4737.03893	5946.25876	0.60034	0.61018	5.92E-03	7.56E-03	1.32E-03	8.64E-03	1.15E-03	4.11E-03	5.38E-03	4.01E-03	6.78E-04	1.03E-02	3.86E-03	4.84E-03	2.81E-04	2.89E-04	5.8363E-02
551380.43	4172827.9	3327.47785	5046.84619	1395.1452	12807.20961	1839.4882	3212.87921	3317.66477	2880.24147	775.7447	9058.52506	7394.41496	4082.64593	0.6231	0.63959	5.29E-03	5.68E-03	1.57E-03	1.10E-02	1.60E-03	2.79E-03	4.78E-03	2.94E-03	7.92E-04	1.10E-02	6.02E-03	3.32E-03	2.92E-04	3.03E-04	5.7426E-02
551572.3	4173265.66	4639.67844	6170.76411	994.80322	5367.53453	920.48975	9300.77975	4703.94573	3724.44667	574.06738	5341.04951	2368.43683	11001.93146	1.45684	1.48581	7.38E-03	6.95E-03	1.12E-03	4.63E-03	7.99E-04	8.08E-03	6.77E-03	3.80E-03	5.86E-04	6.48E-03	1.93E-03	8.95E-03	6.83E-04	7.04E-04	5.8873E-02
551447.28	4173162.24	3903.50882	6697.47032	1079.02124	7587.24341	1104.20008	7215.26677	3937.14521	3961.04827	615.32373	7005.00286	3241.53183	8723.10273	0.69382	0.70216	6.21E-03	7.54E-03	1.22E-03	6.54E-03	9.59E-04	6.27E-03	5.67E-03	4.04E-03	6.28E-04	8.50E-03	2.64E-03	7.10E-03	3.25E-04	3.33E-04	5.7979E-02
551404.08	4172753.23	3304.0589	4728.16599	1443.05434	13092.13435	2088.07415	2897.57642	3292.36517	2694.20595	795.49619	8850.87612	8155.11151	3716.46988	0.60713	0.62511	5.26E-03	5.33E-03	1.63E-03	1.13E-02	1.81E-03	2.52E-03	4.74E-03	2.75E-03	8.12E-04	1.07E-02	6.64E-03	3.02E-03	2.85E-04	2.96E-04	5.7120E-02
551618.54	4173277.93	5025.68377	5808.6877	985.01653	4815.82519	869.34965	9819.84685	5108.19437	3493.83098	571.43623	4785.45536	2170.42122	11582.25339	2.7989	2.91863	8.00E-03	6.54E-03	1.11E-03	4.15E-03	7.55E-04	8.53E-03	7.36E-03	3.57E-03	5.83E-04	5.81E-03	1.77E-03	9.43E-03	1.31E-03	1.38E-03	6.0288E-02
551585.86	4172605.56	5118.09261	3510.26485	2504.15782	9506.13764	4390.12896	2170.9783	5066.79376	2080.21121	1344.54822	7058.96135	9098.82059	2890.04437	0.33037	0.33381	8.14E-03	3.95E-03	2.82E-03	8.20E-03	3.81E-03	1.89E-03	7.30E-03	2.12E-03	1.37E-03	8.57E-03	7.40E-03	2.35E-03	1.55E-04	1.58E-04	5.8247E-02
551995.23	4172702.36	5951.2846	3695.26659	2978.50949	9336.56848	3678.49172	1831.54145	5829.87566	2191.99794	1598.8129	7652.03297	7501.60146	2466.56261	0.24625	0.24654	9.47E-03	4.16E-03	3.35E-03	8.05E-03	3.19E-03	1.59E-03	8.40E-03	2.24E-03	1.63E-03	9.29E-03	6.11E-03	2.01E-03	1.15E-04	1.17E-04	5.9724E-02
551672.53	4172632.73	6796.90108	3020.55307	2945.23687	7342.92498	4995.33127	1956.61946	6710.13945	1810.66071	1541.43789	5584.93908	9322.58866	2645.80561	0.29709	0.30257	1.08E-02	3.40E-03	3.32E-03	6.33E-03	4.34E-03	1.70E-03	9.66E-03	1.85E-03	1.57E-03	6.78E-03	7.59E-03	2.15E-03	1.39E-04	1.43E-04	5.9793E-02
551436.21	4172690.6	3457.17705	4347.92732	1531.78552	13044.56365	2286.01848	2617.34257	3443.03347	2489.37906	843.11636	8601.99694	8548.40024	3387.76102	0.55492	0.56973	5.50E-03	4.90E-03	1.73E-03	1.13E-02	1.98E-03	2.27E-03	4.96E-03	2.54E-03	8.61E-04	1.04E-02	6.96E-03	2.76E-03	2.60E-04	2.70E-04	5.6679E-02
551376.05	4172992.28	3675.37025	6566.15192	1173.60439	10067.84008	1328.94833	4559.69024	3685.14328	3826.42495	666.33574	8525.5529	4786.61526	5731.48934	0.59298	0.60291	5.85E-03	7.40E-03	1.32E-03	8.68E-03	1.15E-03	3.96E-03	5.31E-03	3.91E-03	6.80E-04	1.04E-02	3.90E-03	4.66E-03	2.78E-04	2.86E-04	5.7729E-02
551369.19	4172944.12	3568.71744	6081.48964	1263.42943	11017.53205	1432.87162	3993.97927	3569.82517	3494.55694	715.26679	9052.13787	5345.87531	5043.79541	0.59756	0.60956	5.68E-03	6.85E-03	1.42E-03	9.50E-03	1.24E-03	3.47E-03	5.14E-03	3.57E-03	7.30E-04	1.10E-02	4.35E-03	4.10E-03	2.80E-04	2.89E-04	5.7618E-02
551511.9	4172623.53	4091.63591	3883.88789	1948.60158	11721.21638	3185.66775	2345.98286	4060.88589	2259.36148	1060.62322	7978.42723	8953.3381	3078.06206	0.4269	0.43328	6.51E-03	4.37E-03	2.19E-03	1.01E-02	2.77E-03	2.04E-03	5.85E-03	2.31E-03	1.08E-03	9.69E-03	7.29E-03	2.51E-03	2.00E-04	2.05E-04	5.7112E-02
551422.45	4173122.03	3782.19802	6574.65242	1085.55944	8120.93439	1166.03881	6603.30036	3813.28269	3894.90774	616.00419	7250.23618	3594.75627	8030.37141	0.64392	0.65233	6.02E-03	7.40E-03	1.22E-03	7.00E-03	1.01E-03	5.73E-03	5.49E-03	3.98E-03	6.29E-04	8.80E-03	2.93E-03	6.54E-03	3.02E-04	3.09E-04	5.7367E-02
551457.36	4172663.43	3617.25864	4175.79638	1637.49721	12791.20791	2482.96584	2512.87796	3598.82167	2399.36257	901.71381	8423.66551	8714.42384	3261.67339	0.51947	0.53137	5.76E-03	4.70E-03	1.84E-03	1.10E-02	2.16E-03	2.18E-03	5.18E-03	2.45E-03	9.21E-04	1.02E-02	7.09E-03	2.65E-03	2.43E-04	2.52E-04	5.6694E-02
551771.22	4172674.3	6661.6584	2469.04999	2066.60839	9792.79373	4381.18246	1562.6034	6590.09408	1440.1202	1096.51456	5561.96594	10789.64669	2102.743	0.44345	0.45301	1.06E-02	2.78E-03	2.33E-03	8.45E-03	3.80E-03	1.36E-03	9.49E-03	1.47E-03	1.12E-03	6.75E-03	8.78E-03	1.71E-03	2.08E-04	2.15E-04	5.9063E-02
551368.78	4172913.89	3482.49907	5734.59469	1306.22851	11513.44359	1512.74763	3709.4371	3479.72039	3281.88789	735.97889	9176.61565	5788.32002	4692.80575	0.59977	0.61255	5.54E-03	6.46E-03	1.47E-03	9.93E-03	1.31E-03	3.22E-03	5.01E-03	3.35E-03	7.51E-04	1.11E-02	4.71E-03	3.82E-03	2.81E-04	2.90E-04	5.7291E-02
551661.08	4173280.71	5616.27426	5425.16077	964.14904	4375.44212	825.68325	9739.39565	5721.92005	3213.35366	563.03154	4287.93709	2006.64873	11575.69503	9.49217	10.56209	8.94E-03	6.11E-03	1.09E-03	3.77E-03	7.17E-04	8.46E-03	8.24E-03	3.28E-03	5.75E-04	5.21E-03	1.63E-03	9.42E-03	4.45E-03	5.01E-03	6.6890E-02
551555.07	4172607.02	4610.16679	3654.27455	2249.55754	10421.23068	3856.12354	2228.36892	4569.10831	2147.96363	1216.47338	7464.39622	8964.57434	2951.2943	0.36207	0.36609	7.34E-03	4.12E-03	2.53E-03	8.99E-03	3.35E-03	1.93E-03	6.58E-03	2.19E-03	1.24E-03	9.06E-03	7.30E-03	2.40E-03	1.70E-04	1.73E-04	5.7374E-02
551481.42	4172642.56	3802.6685	4027.52815	1761.94421	12322.5093	2751.73574	2428.88735	3778.81501	2325.5669	967.45044	8197.30901	8800.6479	3165.16263	0.47395	0.48296	6.05E-03	4.54E-03	1.98E-03	1.06E-02	2.39E-03	2.11E-03	5.44E-03	2.37E-03	9.88E-04	9.95E-03	7.16E-03	2.58E-03	2.22E-04	2.29E-04	5.6642E-02
552005.11	4173111.94	9122.22683	5263.71584	802.1407	3714.14146	634.46698	7364.78811	9424.55122	2995.70347	476.57166	3775.9384	1565.01039	9190.67155	0.33322	0.32944	1.45E-02	5.93E-03	9.03E-04	3.20E-03	5.51E-04	6.39E-03	1.36E-02	3.06E-03	4.87E-04	4.58E-03	1.27E-03	7.48E-03	1.56E-04	1.56E-04	6.2264E-02
551399.76	4172761.64	3266.65212	4711.70811	1419.13111	12821.13622	2032.42826	2909.54289	3255.3061	2685.87591	783.03854	8724.30314	7930.70664	3725.97409	0.59851	0.61599	5.20E-03	5.31E-03	1.60E-03	1.11E-02	1.76E-03	2.53E-03	4.69E-03	2.74E-03	7.99E-04	1.06E-02	6.45E-03	3.03E-03	2.81E-04	2.92E-04	5.6332E-02
552010.1	4172705.6	6267.72496	3810.28721	2845.44827	8919.53304	3365.43361	1958.37903	6148.41282	2269.20665	1544.40814	7435.16671	7028.83066	2631.53009	0.24017	0.24023	9.97E-03	4.29E-03	3.20E-03	7.69E-03	2.92E-03	1.70E-03	8.85E-03	2.32E-03	1.58E-03	9.03E-03	5.72E-03	2.14E-03	1.13E-04	1.14E-04	5.9648E-02
551468.91	4173193.25	3979.44426	6598.00377	1053.52406	6991.94371	1048.78571	7444.29046	4015.0787	3925.91033	602.7278	6590.84566	2976.50921	8976.00168	0.73851	0.7474	6.33E-03	7.43E-03	1.19E-03	6.03E-03	9.11E-04	6.46E-03	5.78E-03	4.01E-03	6.15E-04	8.00E-03	2.42E-03	7.31E-03	3.46E-04	3.54E-04	5.7190E-02
551648.11	4173282.59	5387.4581	5503.16469	966.24005	4466.28085	833.0301	9727.93614	5484.35027	3275.05417	563.20143	4402.51976	2037.87076	11536.26683	5.63995	6.04368	8.57E-03	6.20E-03	1.09E-03	3.85E-03	7.23E-04	8.45E-03	7.90E-03	3.34E-03	5.75E-04	5.34E-03	1.66E-03	9.39E-03	2.64E-03	2.86E-03	6.2598E-02
551641.09	4172619.99	6115.86563	3176.40569	2835.77563	7755.07564	4933.51617	2035.84444	6043.51904	1905.31549	1497.9971	6035.11062	9082.85486	2737.32128	0.28591	0.28939	9.73E-03	3.58E-03	3.19E-03	6.69E-03	4.28E-03	1.77E-03	8.70E-03	1.95E-03	1.53E-03	7.33E-03	7.39E-03	2.23E-03	1.34E-04	1.37E-04	5.8639E-02
551373.14	4172849.24	3317.10203	5095.27826	1358.04438	12353.99859	1731.69888	3267.88337	3308.79169	2909.32114	757.04347	8983.8337	6909.00085	4146.04112	0.6065	0.62137	5.28E-03	5.74E-03	1.53E-03	1.07E-02	1.50E-03	2.84E-03	4.77E-03	2.97E-03	7.73E-04	1.09E-02	5.62E-03	3.37E-03	2.84E-04	2.94E-04	5.6533E-02
551449.33	4172670.38	3542.91472	4200.25361	1589.5626	12782.877	2392.64823	2529.43065	3526.20308	2410.56816	875.27868	8420.17741	8587.60477	3279.87015	0.52731	0.54007	5.64E-03	4.73E-03	1.79E-03	1.10E-02	2.08E-03	2.20E-03	5.08E-03	2.46E-03	8.94E-04	1.02E-02	6.99E-03	2.67E-03	2.47E-04	2.56E-04	5.6273E-02
551450.37	4173170.83	3876.21925	6571.49252	1062.75938	7364.2573	1081.36957	7138.43063	3909.67064	3890.7823	606.42532	6827.14943	3149.03865	8626.05932	0.69108	0.6993	6.17E-03	7.40E-03	1.20E-03	6.35E-03	9.39E-04	6.20E-03	5.63E-03	3.97E-03	6.19E-04	8.29E-03	2.56E-03	7.02E-03	3.24E-04	3.31E-04	5.7003E-02
551551.85	4173258.58	4446.26296	6184.45938	989.41764	5580.49171	937.20441	8776.93091	4502.50321	3734.42717	569.86949	5509.27044	2450.42181	10421.23743	1.1921	1.21279	7.08E-03	6.97E-03	1.11E-03	4.81E-03	8.14E-04	7.62E-03	6.48E-03	3.81E-03	5.82E-04	6.69E-03	1.99E-03	8.48E-03	5.59E-04	5.75E-04	5.7578E-02
551423.66	4172710.46	3355.39992	4439.05494	1470.40142	12924.15064	2175.82425	2685.18382	3343.05754	2536.48668	809.38715	8599.93199	8287.05894	3467.1823	0.56531	0.58111	5.34E-03	5.00E-03	1.66E-03	1.11E-02	1.89E-03	2.33E-03	4.81E-03	2.59E-03	8.26E-04	1.04E-02	6.74E-03	2.82E-03	2.65E-04	2.75E-04	5.6139E-02
551381.08	4172819.11	3275.47975	4917.42688	1377.99468	12546.38565	1835.90442	3133.22044	3265.55645	2807.08886	765.60317	8826.12591	7327.97345	3984.10007	0.6069	0.62311	5.21E-03	5.54E-03	1.55E-03	1.08E-02	1.59E-03	2.72E-03	4.70E-03	2.87E-03	7.82E-04	1.07E-02	5.96E-03	3.24E-03	2.84E-04	2.95E-04	5.6289E-02
551372.83	4172983.32	3630.61489	6413.06105	1179.76286	10131.71397	1333.91756	4395.54186	3638.57937	3725.13871	669.73426	8544.16961	4841.67128	5531.34852	0.58634	0.5967	5.78E-03	7.22E-03	1.33E-03	8.74E-03	1.16E-03	3.82E-03	5.24E-03	3.80E-03	6.84E-04	1.04E-02	3.94E-03	4.50E-03	2.75E-04	2.83E-04	5.7141E-02
551425.41	4173130.4	3763.69272	6489.75897	1077.89061	7943.96684	1147.29763	6623.16554	3794.96872	3844.87046	611.09261	7185.15248	3504.66089	8040.78017	0.64374	0.65114	5.99E-03	7.31E-03	1.21E-03	6.85E-03	9.96E-04	5.75E-03	5.47E-03	3.93E-03	6.24E-04	8.72E-03	2.85E-03	6.54E-03	3.02E-04	3.09E-04	5.6854E-02
551510.06	4173231.4	4172.84994	6363.21822	1018.61141	6222.9965	992.84791	7989.6534	4216.09861	3840.08296	585.9191	5978.68173	2698.70085	9564.96937	0.88656	0.90041	6.64E-03	7.17E-03	1.15E-03	5.37E-03	8.62E-04	6.94E-03	6.07E-03	3.92E-03	5.98E-04	7.26E-03	2.20E-03	7.78E-03	4.16E-04	4.27E-04	5.6792E-02
551714.4	4172652.74	7345.10014	2756.00026	2680.44839	7594.04168	4294.48038	1798.5808	7250.71269	1639.44273	1400.74163	5104.00912	9318.93505	2437.90712	0.35147	0.36074	1.17E-02	3.10E-03	3.02E-03	6.55E-03	3.73E-03	1.56E-03	1.04E-02	1.67E-03	1.43E-03	6.20E-03	7.58E-03	1.98E-03	1.65E-04	1.71E-04	5.9297E-02
551499.38	4172626.52	3929.93287	3880.24844	1848.27304	11737.47533	2967.90905	2346.51765	3902.11848	2250.95936	1008.9189	7925.82892	8731.05997	3070.25181	0.43564	0.44279	6.25E-03	4.37E-03	2.08E-03	1.01E-02	2.58E-03	2.04E-03	5.62E-03	2.30E-03	1.03E-03	9.62E-03	7.11E-03	2.50E-03	2.04E-04	2.10E-04	5.6031E-02
551594.72	4172603.01	5192.73988	3398.78638	2514.70027	8995.20469	4402.58508	2119.38784	5139.39538	2019.08646	1346.63757	6759.2223	8873.25989	2824.70629	0.31348	0.31666	8.26E-03	3.83E-03	2.83E-03	7.76E-03	3.82E-03	1.84E-03	7.40E-03	2.06E-03	1.37E-03	8.21E-03	7.22E-03	2.30E-03	1.47E-04	1.50E-04	5.7205E-02
551428.75	4173139.82	3744.94785	6400.10587	1065.60217	7748.21233	1125.35272	6705.96815	3776.30013	3828.13116	606.10859	7033.99773	3403.00509	8035.1195	0.64054	0.64762	5.96E-03	7.21E-03	1.20E-03	6.68E-03	9.77E-04	5.82E-03	5.44E-03	3.91E-03	6.19E-04	8.54E-03	2.77E-03	6.54E-03	3.00E-04	3.07E-04	5.6271E-02
551365.97	4172935.16	3490.53884	5852.42183	1257.0514	10925.27256	1432.65909	3833.93949	3490.45133	3359.57543	710.72385	8904.89626	5361.94772	4844.48742	0.58487	0.59648	5.55E-03	6.59E-03	1.42E-03	9.42E-03	1.24E-03	3.33E-03	5.03E-03	3.43E-03	7.26E-04	1.08E-02	4.36E-03	3.94E-03	2.74E-04	2.83E-04	5.6413E-02
551635.15	4173284.48	5136.04246	5524.07118	961.67863	4540.27788	837.32745	9522.35661	5224.34537	3303.47919	559.30014	4491.79046	2065.53913	11272.19419	3.86465	4.06572	8.17E-03	6.22E-03	1.08E-03	3.92E-03	7.27E-04	8.27E-03	7.52E-03	3.37E-03	5.71E-04	5.45E-03	1.68E-03	9.17E-03	1.81E-03	1.93E-03	5.9902E-02
551395.43	4172770.04	3229.31057	4684.58639	1394.474	12535.03418	1974.72319	2916.92958	3218.33804	2671.9967	770.23213	8585.34395	7697.91837	3729.74453	0.58846	0.60533	5.14E-03	5.28E-03	1.57E-03	1.08E-02	1.71E-03	2.53E-03	4.63E-03	2.73E-03	7.86E-04	1.04E-02	6.26E-03	3.04E-03	2.76E-04	2.87E-04	5.5478E-02
551582	4173274.8	4611.92745	5906.24328	970.72879	5102.02302	889.30001	9051.96314	4678.3599	3560.12729	560.66191	5080.51532	2270.20793	10708.54366	1.56686	1.60204	7.34E-03	6.65E-03	1.09E-03	4.40E-03	7.72E-04	7.86E-03	6.74E-03	3.63E-03	5.72E-04	6.17E-03	1.85E-03	8.72E-03	7.34E-04	7.59E-04	5.7285E-02
551369.6	4172974.35	3575.47675	6235.27778	1182.59075	10152.60539	1336.16557	4229.60529	3581.70749	3611.44029	671.10101	8520.83239	4889.1926	5328.24052	0.5777	0.58813	5.69E-03	7.02E-03	1.33E-03	8.76E-03	1.16E-03	3.67E-03	5.16E-03	3.69E-03	6.85E-04	1.03E-02	3.98E-03	4.34E-03	2.71E-04	2.79E-04	5.6372E-02
551630.69	4172612.69	5821.57714	3186.21341	2724.62773	7873.28042	4748.84819	2034.21493	5755.02835	1908.34269	1443.83634	6108.63254	8850.2658	2728.62275	0.28434	0.28745	9.26E-03	3.59E-03	3.07E-03	6.79E-03	4.12E-03	1.77E-03	8.29E-03	1.95E-03	1.47E-03	7.42E-03	7.20E-03	2.22E-03	1.33E-04	1.36E-04	5.7420E-02
551453.46	4173179.41	3847.19974	6441.87657	1045.7807	7143.45517	1058.59561	7047.25562	3880.42875	3818.26874	597.09932	6646.3555	3059.32567	8513.99924	0.68777	0.69585	6.12E-03	7.26E-03	1.18E-03	6.16E-03	9.19E-04	6.12E-03	5.59E-03	3.90E-03	6.10E-04	8.07E-03	2.49E-03	6.93E-03	3.22E-04	3.30E-04	5.5990E-02
551535.45	4172608.8	4280.44099	3674.734	2057.26426	10690.95376	3446.64028	2236.4362	4245.37268	2150.58007	1115.69522	7504.77656	8667.2284	2950.23506	0.37612	0.38062	6.81E-03	4.14E-03	2.32E-03	9.22E-03	2.99E-03	1.94E-03	6.11E-03	2.20E-03	1.14E-03	9.11E-03	7.05E-03	2.40E-03	1.76E-04	1.80E-04	5.5793E-02
551519.56	4173240.35	4185.04351	6214.02827	991.9494	5998.53141	973.05295	8023.76792	4230.48077	3754.24867	570.02125	5803.02586	2621.97926	9586.59076	0.93899	0.95153	6.66E-03	7.00E-03	1.12E-03	5.17E-03	8.45E-04	6.97E-03	6.09E-03	3.83E-03	5.82E-04	7.04E-03	2.13E-03	7.80E-03	4.40E-04	4.51E-04	5.6140E-02
551569.28	4172600.57	4740.89522	3498.82513	2301.48095	9652.68465	3966.51553	2154.13116	4696.70441	2064.24655	1241.44987	7057.06933	8692.87067	2859.35511	0.33379	0.33723	7.54E-03	3.94E-03	2.59E-03	8.32E-03	3.44E-03	1.87E-03	6.76E-03	2.11E-03	1.27E-03	8.57E-03	7.07E-03	2.33E-03	1.56E-04	1.60E-04	5.6140E-02
551431.84	4173148.41	3731.35023	6326.14845	1054.21632	7575.6996	1104.84014	6690.94671	3762.68037	3777.95244	600.00706	6897.63414	3310.26798	8020.0149	0.64023	0.64797	5.94E-03	7.12E-03	1.19E-03	6.53E-03	9.59E-04	5.81E-03	5.42E-03	3.86E-03	6.13E-04	8.37E-03	2.69E-03	6.53E-03	3.00E-04	3.07E-04	5.5643E-02
551439.45	4172676.9	3423.85909	4166.11174	1516.36112	12467.63095	2262.06308	2518.86667	3409.18236	2388.93077	835.0263	8251.34493	8244.18854	3262.38448	0.52118	0.53427	5.45E-03	4.69E-03	1.71E-03	1.08E-02	1.96E-03	2.19E-03	4.91E-03	2.44E-03	8.52E-04	1.00E-02	6.71E-03	2.66E-03	2.44E-04	2.53E-04	5.4832E-02
551365.55	4172904.93	3383.62877	5469.28789	1280.72365	11235.85553	1497.33989	3543.01205	3380.21282	3128.14416	720.56108	8869.36031	5733.91927	4485.8896	0.58017	0.59193	5.38E-03	6.16E-03	1.44E-03	9.69E-03	1.30E-03	3.08E-03	4.87E-03	3.19E-03	7.36E-04	1.08E-02	4.67E-03	3.65E-03	2.72E-04	2.81E-04	5.5488E-02
551561.2	4173267.39	4422.92322	5955.66763	967.52848	5333.51414	909.09812	8623.56461	4481.42941	3595.23797	557.52068	5274.28566	2362.06396	10227.93213	1.25888	1.28141	7.04E-03	6.71E-03	1.09E-03	4.60E-03	7.89E-04	7.49E-03	6.45E-03	3.67E-03	5.69E-04	6.40E-03	1.92E-03	8.32E-03	5.90E-04	6.07E-04	5.6253E-02
551392.6	4173067.29	3639.50285	6460.01131	1063.25421	8546.21851	1201.45022	5508.81712	3663.13617	3836.81242	602.14113	7369.16793	3997.02807	6817.44696	0.58222	0.59051	5.79E-03	7.28E-03	1.20E-03	7.37E-03	1.04E-03	4.78E-03	5.28E-03	3.92E-03	6.15E-04	8.95E-03	3.25E-03	5.55E-03	2.73E-04	2.80E-04	5.5569E-02
551604.45	4173283.76	4757.47242	5672.55079	957.37402	4782.28692	856.3694	9139.76005	4831.56789	3409.18242	554.48909	4765.13056	2150.09674	10810.45692	2.07007	2.13456	7.57E-03	6.39E-03	1.08E-03	4.12E-03	7.44E-04	7.94E-03	6.96E-03	3.48E-03	5.66E-04	5.78E-03	1.75E-03	8.80E-03	9.70E-04	1.01E-03	5.7161E-02
551382.3	4172805.94	3208.64226	4753.79028	1356.6241	12203.10693	1834.39625	3028.78939	3198.61279	2715.01108	752.68672	8534.39054	7241.92724	3854.87394	0.58553	0.60138	5.11E-03	5.35E-03	1.53E-03	1.05E-02	1.59E-03	2.63E-03	4.61E-03	2.77E-03	7.68E-04	1.04E-02	5.89E-03	3.14E-03	2.74E-04	2.85E-04	5.4833E-02
551366.38	4172965.39	3522.69694	6061.85726	1187.41838	10186.68621	1341.73339	4077.06173	3527.2635	3502.1123	673.53618	8500.9375	4896.81673	5140.92494	0.57001	0.58052	5.61E-03	6.83E-03	1.34E-03	8.79E-03	1.17E-03	3.54E-03	5.08E-03	3.58E-03	6.88E-04	1.03E-02	3.99E-03	4.18E-03	2.67E-04	2.75E-04	5.5635E-02
551650.15	4172619.72	6158.51825	3056.70171	2781.47649	7343.37485	4768.40046	1973.50807	6084.86827	1833.72021	1467.00014	5721.27587	8768.29243	2657.25201	0.2749	0.27846	9.80E-03	3.44E-03	3.13E-03	6.33E-03	4.14E-03	1.71E-03	8.76E-03	1.87E-03	1.50E-03	6.95E-03	7.14E-03	2.16E-03	1.29E-04	1.32E-04	5.7200E-02
551389.38	4173058.34	3629.16249	6465.70128	1064.7595	8641.17095	1210.63625	5356.70602	3651.3456	3840.19671	603.16921	7423.28691	4075.78931	6646.53112	0.57805	0.58646	5.78E-03	7.28E-03	1.20E-03	7.45E-03	1.05E-03	4.65E-03	5.26E-03	3.92E-03	6.16E-04	9.01E-03	3.32E-03	5.41E-03	2.71E-04	2.78E-04	5.5493E-02
551391.11	4172778.45	3195.61621	4654.68921	1371.12032	12267.05827	1918.85281	2922.77152	3184.8983	2656.70978	758.1645	8454.75517	7476.62021	3731.8674	0.57875	0.59503	5.08E-03	5.24E-03	1.54E-03	1.06E-02	1.67E-03	2.54E-03	4.59E-03	2.71E-03	7.74E-04	1.03E-02	6.08E-03	3.04E-03	2.71E-04	2.82E-04	5.4667E-02
551384.34	4172796.44	3197.01277	4710.19376	1359.86027	12210.79762	1861.71738	2988.29589	3186.73694	2689.57162	753.5818	8488.17162	7323.19596	3806.89121	0.58323	0.59931	5.09E-03	5.30E-03	1.53E-03	1.05E-02	1.62E-03	2.59E-03	4.59E-03	2.75E-03	7.69E-04	1.03E-02	5.96E-03	3.10E-03	2.73E-04	2.84E-04	5.4691E-02
551684.5	4172633.81	6804.74954	2873.30442	2802.41587	7023.73486	4632.06787	1873.62384	6718.17419	1719.06001	1465.2625	5245.82787	8882.56699	2535.71396	0.29369	0.2997	1.08E-02	3.24E-03	3.16E-03	6.06E-03	4.02E-03	1.63E-03	9.68E-03	1.76E-03	1.50E-03	6.37E-03	7.23E-03	2.06E-03	1.38E-04	1.42E-04	5.7794E-02
551386.16	4173049.39	3622.41385	6471.51151	1069.21886	8752.32931	1220.40812	5208.19839	3642.9829	3840.17542	605.93734	7498.78526	4140.92879	6478.19626	0.57497	0.58328	5.76E-03	7.29E-03	1.20E-03	7.55E-03	1.06E-03	4.52E-03	5.25E-03	3.92E-03	6.19E-04	9.10E-03	3.37E-03	5.27E-03	2.69E-04	2.76E-04	5.5465E-02
551371.5	4172839.22	3233.05852	4888.71847	1329.08292	11997.02597	1717.87892	3146.74278	3224.56502	2793.09644	740.19956	8642.62432	6801.82812	3994.22774	0.58437	0.59882	5.14E-03	5.51E-03	1.50E-03	1.03E-02	1.49E-03	2.73E-03	4.64E-03	2.85E-03	7.56E-04	1.05E-02	5.54E-03	3.25E-03	2.74E-04	2.84E-04	5.4805E-02
551412.98	4172720.87	3244.26833	4396.33238	1409.10398	12422.51544	2068.13974	2682.06719	3232.97046	2510.12239	775.92269	8356.78234	7860.88767	3455.5586	0.55197	0.56741	5.16E-03	4.95E-03	1.59E-03	1.07E-02	1.80E-03	2.33E-03	4.66E-03	2.56E-03	7.92E-04	1.01E-02	6.40E-03	2.81E-03	2.59E-04	2.69E-04	5.4433E-02
551382.93	4173040.44	3609.2659	6453.44997	1073.29373	8850.70692	1229.08467	5052.41093	3628.13649	3823.6715	608.46692	7565.59222	4197.30944	6298.46587	0.571	0.57913	5.74E-03	7.27E-03	1.21E-03	7.63E-03	1.07E-03	4.39E-03	5.23E-03	3.90E-03	6.21E-04	9.18E-03	3.42E-03	5.13E-03	2.68E-04	2.74E-04	5.5326E-02
551434.93	4173156.99	3725.14408	6267.23847	1043.21762	7417.68668	1083.35399	6671.91089	3756.39803	3733.90022	594.12679	6768.04923	3215.21979	8086.35569	0.64183	0.64933	5.93E-03	7.06E-03	1.17E-03	6.40E-03	9.41E-04	5.79E-03	5.41E-03	3.81E-03	6.07E-04	8.22E-03	2.62E-03	6.58E-03	3.01E-04	3.08E-04	5.5144E-02
551473.49	4173205.95	3911.13242	6340.32954	1020.65082	6655.61151	1013.85435	7212.08281	3946.35417	3776.57935	584.46735	6270.33604	2851.27903	8703.79495	0.72757	0.73611	6.22E-03	7.14E-03	1.15E-03	5.74E-03	8.80E-04	6.26E-03	5.68E-03	3.86E-03	5.97E-04	7.61E-03	2.32E-03	7.08E-03	3.41E-04	3.49E-04	5.5239E-02
551622.18	4173286.37	4887.55608	5500.91496	951.34172	4598.19517	838.83642	9175.22315	4967.94132	3302.75546	552.02673	4557.82902	2088.43631	10851.68674	2.81718	2.94141	7.78E-03	6.20E-03	1.07E-03	3.97E-03	7.28E-04	7.97E-03	7.15E-03	3.37E-03	5.64E-04	5.53E-03	1.70E-03	8.83E-03	1.32E-03	1.39E-03	5.7574E-02
551379.71	4173031.48	3594.15052	6420.50605	1078.72886	8951.99332	1231.92064	4897.70986	3611.27072	3795.63455	611.76528	7637.81244	4254.48265	6117.92046	0.56657	0.57551	5.72E-03	7.23E-03	1.21E-03	7.72E-03	1.07E-03	4.25E-03	5.20E-03	3.88E-03	6.25E-04	9.27E-03	3.46E-03	4.98E-03	2.66E-04	2.73E-04	5.5161E-02
551401.33	4173091.83	3611.96451	6291.68173	1046.86309	8216.88699	1166.0438	5813.6777	3638.84975	3733.68989	592.61314	7099.96861	3772.71669	7138.7467	0.58652	0.59378	5.75E-03	7.09E-03	1.18E-03	7.09E-03	1.01E-03	5.05E-03	5.24E-03	3.81E-03	6.05E-04	8.62E-03	3.07E-03	5.81E-03	2.75E-04	2.81E-04	5.4873E-02
551376.48	4173022.53	3578.95246	6375.99653	1086.44465	9064.52352	1239.154	4747.96537	3594.20332	3758.24784	616.37628	7721.08495	4314.19562	5941.62766	0.56296	0.57183	5.70E-03	7.18E-03	1.22E-03	7.82E-03	1.08E-03	4.12E-03	5.18E-03	3.84E-03	6.29E-04	9.37E-03	3.51E-03	4.84E-03	2.64E-04	2.71E-04	5.5013E-02
551362.74	4172926.19	3399.85156	5600.42485	1240.61891	10732.92842	1422.35725	3665.76409	3398.82514	3212.95362	700.46404	8680.18334	5337.82821	4634.8155	0.56658	0.57815	5.41E-03	6.31E-03	1.40E-03	9.26E-03	1.24E-03	3.18E-03	4.89E-03	3.28E-03	7.15E-04	1.05E-02	4.34E-03	3.77E-03	2.66E-04	2.74E-04	5.4873E-02
551518.38	4172611.9	4040.70442	3691.03273	1913.89011	10874.73378	3140.65046	2245.98121	4009.80583	2152.14873	1040.2998	7513.94992	8444.02931	2951.76215	0.39028	0.39552	6.43E-03	4.16E-03	2.16E-03	9.38E-03	2.73E-03	1.95E-03	5.77E-03	2.20E-03	1.06E-03	9.12E-03	6.87E-03	2.40E-03	1.83E-04	1.87E-04	5.4599E-02
551456.55	4173188	3810.03033	6299.62792	1027.0553	6927.06589	1036.44425	6931.16743	3842.95008	3737.48648	586.77785	6454.18929	2974.88782	8375.22789	0.68244	0.69032	6.06E-03	7.10E-03	1.16E-03	5.97E-03	9.00E-04	6.02E-03	5.53E-03	3.82E-03	5.99E-04	7.84E-03	2.42E-03	6.82E-03	3.20E-04	3.27E-04	5.4876E-02
551578.79	4172597.4	4829.08514	3396.77442	2329.02733	9161.87786	4020.62981	2106.79417	4782.74786	2009.19211	1253.51723	6785.39977	8511.58147	2800.18738	0.31663	0.31977	7.68E-03	3.83E-03	2.62E-03	7.90E-03	3.49E-03	1.83E-03	6.89E-03	2.05E-03	1.28E-03	8.24E-03	6.93E-03	2.28E-03	1.48E-04	1.52E-04	5.5318E-02
551386.79	4172786.86	3170.01833	4633.51604	1351.90756	12060.04864	1870.01855	2931.60208	3159.72187	2646.07524	748.38442	8359.48645	7292.87748	3738.33933	0.57178	0.58758	5.04E-03	5.22E-03	1.52E-03	1.04E-02	1.62E-03	2.55E-03	4.55E-03	2.70E-03	7.64E-04	1.01E-02	5.94E-03	3.04E-03	2.68E-04	2.78E-04	5.4044E-02
551426.47	4172697.04	3301.37042	4235.05821	1438.79124	12296.52408	2122.82125	2573.48085	3289.19352	2424.37327	792.36709	8207.85096	7928.21166	3326.03603	0.52688	0.54082	5.25E-03	4.77E-03	1.62E-03	1.06E-02	1.84E-03	2.23E-03	4.74E-03	2.48E-03	8.09E-04	9.96E-03	6.45E-03	2.71E-03	2.47E-04	2.56E-04	5.3974E-02
551751.03	4172664.01	6936.4808	2499.54893	2178.97658	8580.53135	3821.48256	1617.30714	6856.43826	1470.85281	1154.24781	5077.01727	9538.65191	2182.48115	0.40443	0.41466	1.10E-02	2.82E-03	2.45E-03	7.40E-03	3.32E-03	1.40E-03	9.87E-03	1.50E-03	1.18E-03	6.16E-03	7.76E-03	1.78E-03	1.90E-04	1.97E-04	5.7073E-02
551404.29	4173100.2	3605.14113	6237.13477	1043.3934	8078.20323	1153.85451	5901.88863	3632.81212	3698.51821	590.74849	7024.89596	3691.94523	7228.53787	0.5886	0.59645	5.74E-03	7.02E-03	1.18E-03	6.97E-03	1.00E-03	5.12E-03	5.23E-03	3.78E-03	6.03E-04	8.53E-03	3.00E-03	5.88E-03	2.76E-04	2.83E-04	5.4615E-02
551365.45	4172862.48	3242.93788	4988.18001	1298.54133	11591.75632	1619.11519	3224.47039	3236.09926	2850.42887	725.22448	8618.517	6349.10943	4088.28638	0.57257	0.58574	5.16E-03	5.62E-03	1.46E-03	1.00E-02	1.41E-03	2.80E-03	4.66E-03	2.91E-03	7.40E-04	1.05E-02	5.17E-03	3.33E-03	2.68E-04	2.78E-04	5.4258E-02
551373.26	4173013.58	3554.60623	6300.87952	1092.79197	9154.54822	1244.5079	4593.62484	3567.9666	3702.26043	620.18919	7782.64755	4367.66541	5757.60145	0.55801	0.56659	5.66E-03	7.10E-03	1.23E-03	7.90E-03	1.08E-03	3.99E-03	5.14E-03	3.78E-03	6.33E-04	9.45E-03	3.55E-03	4.69E-03	2.62E-04	2.69E-04	5.4718E-02
551538.56	4173258.25	4229.35989	5953.01831	962.3658	5563.2067	927.3276	8092.23668	4279.78021	3594.07491	553.56189	5439.63328	2453.51474	9639.05391	1.03796	1.05352	6.73E-03	6.70E-03	1.08E-03	4.80E-03	8.05E-04	7.03E-03	6.16E-03	3.67E-03	5.65E-04	6.60E-03	2.00E-03	7.84E-03	4.86E-04	4.99E-04	5.4977E-02
551438.02	4173165.58	3706.02026	6228.93099	1029.96544	7227.83098	1062.38189	6622.65294	3737.15069	3678.82209	586.93904	6620.39755	3126.76188	8021.76489	0.64033	0.64766	5.90E-03	7.02E-03	1.16E-03	6.23E-03	9.22E-04	5.75E-03	5.38E-03	3.76E-03	5.99E-04	8.04E-03	2.54E-03	6.53E-03	3.00E-04	3.07E-04	5.4434E-02
551999.39	4172693.31	5483.2519	3468.78223	2793.0406	8937.07306	3543.81478	1722.34038	5372.51189	2053.90194	1495.71879	7252.7389	7205.75306	2317.52145	0.23803	0.23846	8.73E-03	3.91E-03	3.15E-03	7.71E-03	3.08E-03	1.50E-03	7.74E-03	2.10E-03	1.53E-03	8.80E-03	5.86E-03	1.89E-03	1.12E-04	1.13E-04	5.6199E-02
551363.15	4172956.42	3452.13157	5854.06494	1184.08206	10128.63103	1339.65123	3914.63044	3455.28531	3376.03457	671.19041	8404.49239	4907.17412	4939.83628	0.55844	0.5686	5.49E-03	6.59E-03	1.33E-03	8.74E-03	1.16E-03	3.40E-03	4.98E-03	3.45E-03	6.85E-04	1.02E-02	3.99E-03	4.02E-03	2.62E-04	2.69E-04	5.4574E-02
552014.24	4172696.53	5805.89245	3591.39616	2703.43742	8571.64325	3239.17733	1847.16796	5696.05064	2136.21772	1461.41122	7111.473	6775.30988	2479.5772	0.23243	0.23273	9.24E-03	4.04E-03	3.04E-03	7.39E-03	2.81E-03	1.60E-03	8.20E-03	2.18E-03	1.49E-03	8.63E-03	5.51E-03	2.02E-03	1.09E-04	1.10E-04	5.6398E-02
551370.03	4173004.63	3521.60396	6197.74211	1097.72576	9221.58019	1248.07468	4436.58811	3533.15421	3629.85745	623.09533	7821.375	4415.37925	5568.57193	0.55246	0.56115	5.60E-03	6.98E-03	1.24E-03	7.95E-03	1.08E-03	3.85E-03	5.09E-03	3.71E-03	6.36E-04	9.50E-03	3.59E-03	4.53E-03	2.59E-04	2.66E-04	5.4285E-02
551410.21	4173116.94	3589.4827	6126.43976	1035.34142	7795.67979	1128.39168	6034.45013	3618.20833	3628.40461	586.68991	6868.64575	3527.02738	7358.55351	0.59402	0.60056	5.71E-03	6.90E-03	1.17E-03	6.72E-03	9.80E-04	5.24E-03	5.21E-03	3.70E-03	5.99E-04	8.34E-03	2.87E-03	5.99E-03	2.78E-04	2.85E-04	5.3996E-02
551362.33	4172895.96	3294.39009	5232.69559	1259.21286	11002.46469	1488.43289	3397.22375	3290.39547	2992.85306	707.30746	8596.05111	5701.63123	4303.00983	0.5617	0.57368	5.24E-03	5.89E-03	1.42E-03	9.49E-03	1.29E-03	2.95E-03	4.74E-03	3.06E-03	7.22E-04	1.04E-02	4.64E-03	3.50E-03	2.63E-04	2.72E-04	5.3914E-02
551570.55	4173276.2	4392.99107	5723.73391	945.78328	5091.17899	880.90558	8426.55171	4453.45833	3453.41203	545.3098	5040.85263	2273.22794	9989.12086	1.33436	1.35959	6.99E-03	6.45E-03	1.07E-03	4.39E-03	7.65E-04	7.32E-03	6.41E-03	3.53E-03	5.57E-04	6.12E-03	1.85E-03	8.13E-03	6.25E-04	6.44E-04	5.4840E-02
551665.6	4173289.01	5447.22639	5101.03399	924.83758	4164.29923	794.02407	8937.90449	5549.50743	3014.30045	540.09382	4065.14929	1925.69729	10663.05961	10.23691	11.53143	8.67E-03	5.75E-03	1.04E-03	3.59E-03	6.89E-04	7.76E-03	7.99E-03	3.08E-03	5.51E-04	4.94E-03	1.57E-03	8.68E-03	4.80E-03	5.47E-03	6.4561E-02
551370.59	4172827.76	3159.62228	4710.24177	1305.88235	11693.6755	1713.57753	3038.60375	3150.89032	2691.77082	726.49206	8345.15354	6733.60712	3859.56292	0.56569	0.5799	5.03E-03	5.30E-03	1.47E-03	1.01E-02	1.49E-03	2.64E-03	4.54E-03	2.75E-03	7.42E-04	1.01E-02	5.48E-03	3.14E-03	2.65E-04	2.75E-04	5.3335E-02
551398.65	4172742.7	3144.629	4412.27667	1355.07223	11971.35222	1957.67199	2730.40211	3134.08238	2517.47383	747.03812	8166.1056	7448.74474	3503.20549	0.54682	0.56214	5.00E-03	4.97E-03	1.53E-03	1.03E-02	1.70E-03	2.37E-03	4.51E-03	2.57E-03	7.63E-04	9.91E-03	6.06E-03	2.85E-03	2.56E-04	2.66E-04	5.3091E-02
551452.84	4172654.71	3464.37838	3951.04634	1548.14697	11818.70799	2328.15397	2400.74556	3447.16933	2272.09662	853.09304	7865.14397	8017.93785	3114.52638	0.47715	0.4876	5.51E-03	4.45E-03	1.74E-03	1.02E-02	2.02E-03	2.08E-03	4.96E-03	2.32E-03	8.71E-04	9.55E-03	6.53E-03	2.53E-03	2.24E-04	2.31E-04	5.3223E-02
551652.41	4173290.93	5217.15942	5176.07612	928.46149	4254.11263	801.81056	8953.88291	5310.7603	3075.0682	541.18042	4175.70772	1958.26381	10653.0926	5.86557	6.32681	8.30E-03	5.83E-03	1.05E-03	3.67E-03	6.96E-04	7.77E-03	7.65E-03	3.14E-03	5.53E-04	5.07E-03	1.59E-03	8.67E-03	2.75E-03	3.00E-03	5.9738E-02
551505.24	4172615.04	3866.30578	3686.84212	1807.17366	10894.50089	2911.79307	2246.99689	3838.45034	2143.9287	984.65461	7461.05803	8213.00809	2944.25147	0.39793	0.40383	6.15E-03	4.15E-03	2.04E-03	9.40E-03	2.53E-03	1.95E-03	5.53E-03	2.19E-03	1.01E-03	9.06E-03	6.68E-03	2.40E-03	1.87E-04	1.91E-04	5.3453E-02
551558.02	4172597.13	4462.61686	3446.01162	2140.15332	9547.23196	3626.7015	2122.99607	4423.44172	2027.98403	1157.62461	6925.77104	8262.05187	2812.06055	0.32978	0.33311	7.10E-03	3.88E-03	2.41E-03	8.23E-03	3.15E-03	1.84E-03	6.37E-03	2.07E-03	1.18E-03	8.41E-03	6.72E-03	2.29E-03	1.55E-04	1.58E-04	5.3975E-02
551459.64	4173196.59	3777.0996	6161.69143	1008.63322	6713.50272	1013.90475	6816.88749	3809.83128	3659.26376	576.59529	6268.93423	2890.31224	8239.03466	0.67778	0.68549	6.01E-03	6.94E-03	1.14E-03	5.79E-03	8.80E-04	5.92E-03	5.49E-03	3.74E-03	5.89E-04	7.61E-03	2.35E-03	6.71E-03	3.18E-04	3.25E-04	5.3797E-02
551609.91	4172598.09	5258.34357	3178.18907	2478.96119	8066.71912	4297.77821	2013.52128	5202.61454	1894.94946	1322.02303	6176.00642	8339.73485	2688.82736	0.28318	0.2859	8.37E-03	3.58E-03	2.79E-03	6.96E-03	3.73E-03	1.75E-03	7.49E-03	1.93E-03	1.35E-03	7.50E-03	6.79E-03	2.19E-03	1.33E-04	1.35E-04	5.4694E-02
551366.79	4172995.62	3484.33735	6077.74857	1102.93093	9281.66607	1251.64185	4282.48718	3494.14033	3547.89861	626.15576	7850.27875	4462.86325	5381.9941	0.54653	0.5557	5.54E-03	6.85E-03	1.24E-03	8.00E-03	1.09E-03	3.72E-03	5.03E-03	3.62E-03	6.39E-04	9.53E-03	3.63E-03	4.38E-03	2.56E-04	2.63E-04	5.3797E-02
551441.11	4173174.16	3683.03941	6123.18237	1015.67636	7028.79805	1041.52019	6556.6183	3713.97118	3620.03697	579.15051	6466.0982	3041.53865	7938.43403	0.63791	0.64514	5.86E-03	6.90E-03	1.14E-03	6.06E-03	9.04E-04	5.69E-03	5.35E-03	3.70E-03	5.91E-04	7.85E-03	2.48E-03	6.46E-03	2.99E-04	3.06E-04	5.3587E-02
551731	4172653.72	7037.90345	2571.61589	2364.9787	7637.54488	3792.31585	1681.44293	6952.17101	1523.03438	1244.62829	4869.68766	8854.05524	2274.15457	0.35976	0.36929	1.12E-02	2.90E-03	2.66E-03	6.59E-03	3.29E-03	1.46E-03	1.00E-02	1.55E-03	1.27E-03	5.91E-03	7.21E-03	1.85E-03	1.69E-04	1.75E-04	5.6249E-02
551591.33	4172593.77	4943.4449	3262.73872	2356.21879	8552.93505	4069.62792	2044.50393	4894.1604	1936.27745	1263.57075	6432.39779	8280.62796	2721.90185	0.2965	0.29933	7.87E-03	3.67E-03	2.65E-03	7.38E-03	3.53E-03	1.78E-03	7.05E-03	1.98E-03	1.29E-03	7.81E-03	6.74E-03	2.22E-03	1.39E-04	1.42E-04	5.4239E-02
551669.26	4172623.44	6343.31515	2875.82379	2706.01847	6817.49213	4505.09642	1876.18512	6265.69897	1723.2283	1421.97914	5255.9086	8399.04359	2533.33006	0.26748	0.27175	1.01E-02	3.24E-03	3.05E-03	5.88E-03	3.91E-03	1.63E-03	9.02E-03	1.76E-03	1.45E-03	6.38E-03	6.84E-03	2.06E-03	1.25E-04	1.29E-04	5.5568E-02
551477.45	4173215.91	3853.69087	6070.13821	994.44458	6389.89007	988.0059	7030.4384	3888.70873	3658.43404	569.89416	6022.43561	2760.66138	8491.18667	0.71878	0.72706	6.13E-03	6.84E-03	1.12E-03	5.51E-03	8.58E-04	6.10E-03	5.60E-03	3.73E-03	5.82E-04	7.31E-03	2.25E-03	6.91E-03	3.37E-04	3.45E-04	5.3629E-02
551363.82	4172852.5	3174.70095	4813.45713	1280.22593	11395.45212	1620.61261	3119.86854	3167.48181	2751.78682	714.1342	8372.83915	6339.04911	3956.99593	0.55837	0.57137	5.05E-03	5.42E-03	1.44E-03	9.83E-03	1.41E-03	2.71E-03	4.56E-03	2.81E-03	7.29E-04	1.02E-02	5.16E-03	3.22E-03	2.62E-04	2.71E-04	5.3036E-02
551600.5	4172594.79	5078.56521	3208.34179	2405.67635	8267.21806	4161.45004	2022.4422	5026.40956	1908.48053	1286.582	6276.84908	8260.04037	2696.33068	0.28799	0.29072	8.08E-03	3.61E-03	2.71E-03	7.13E-03	3.61E-03	1.76E-03	7.24E-03	1.95E-03	1.31E-03	7.62E-03	6.72E-03	2.19E-03	1.35E-04	1.38E-04	5.4214E-02
551639.22	4173292.85	4984.17869	5213.59242	926.40146	4330.66242	807.06203	8830.64485	5069.74898	3112.34037	538.85461	4269.23247	1986.65166	10485.07092	3.93951	4.15835	7.93E-03	5.87E-03	1.04E-03	3.73E-03	7.01E-04	7.67E-03	7.30E-03	3.18E-03	5.50E-04	5.18E-03	1.62E-03	8.53E-03	1.85E-03	1.97E-03	5.7129E-02
551548.07	4173267.2	4215.58197	5759.40508	942.5822	5332.0526	901.33603	8001.2218	4268.32512	3476.90849	542.3746	5227.35743	2369.66894	9517.19509	1.0895	1.10601	6.71E-03	6.49E-03	1.06E-03	4.60E-03	7.83E-04	6.95E-03	6.15E-03	3.55E-03	5.54E-04	6.35E-03	1.93E-03	7.75E-03	5.11E-04	5.24E-04	5.3890E-02
551394.38	4172751	3114.37517	4407.28005	1336.95214	11781.29543	1915.72333	2745.54286	3104.07268	2515.22538	737.60172	8078.5729	7288.92391	3517.31579	0.54235	0.55741	4.96E-03	4.96E-03	1.51E-03	1.02E-02	1.66E-03	2.38E-03	4.47E-03	2.57E-03	7.53E-04	9.81E-03	5.93E-03	2.86E-03	2.54E-04	2.64E-04	5.2545E-02
551359.92	4172947.46	3375.90426	5637.78479	1177.02042	10029.15486	1334.64152	3754.53572	3377.85249	3247.04677	666.56788	8273.5226	4903.67694	4741.10274	0.54575	0.55595	5.37E-03	6.35E-03	1.33E-03	8.65E-03	1.16E-03	3.26E-03	4.86E-03	3.31E-03	6.81E-04	1.00E-02	3.99E-03	3.86E-03	2.56E-04	2.63E-04	5.3389E-02
551416.13	4173133.68	3565.75989	6003.21029	1022.67546	7500.11176	1099.24474	6093.83253	3594.90396	3553.98697	580.28717	6682.58081	3361.80566	7406.72444	0.5967	0.60338	5.67E-03	6.76E-03	1.15E-03	6.47E-03	9.54E-04	5.29E-03	5.18E-03	3.63E-03	5.92E-04	8.11E-03	2.74E-03	6.03E-03	2.80E-04	2.86E-04	5.3141E-02
551429.57	4172683.43	3275.77987	4074.55067	1426.54898	11856.11689	2104.30787	2482.96942	3263.2348	2335.81282	785.88699	7923.76962	7707.77417	3211.68774	0.49975	0.51237	5.21E-03	4.59E-03	1.61E-03	1.02E-02	1.83E-03	2.16E-03	4.70E-03	2.38E-03	8.02E-04	9.62E-03	6.27E-03	2.61E-03	2.34E-04	2.43E-04	5.2486E-02
551759.53	4172664.38	6602.68142	2409.83769	2029.43799	8595.55193	3721.05211	1554.6978	6530.32769	1413.8302	1078.4177	5017.69152	9376.57627	2094.47933	0.40156	0.41134	1.05E-02	2.71E-03	2.29E-03	7.41E-03	3.23E-03	1.35E-03	9.40E-03	1.44E-03	1.10E-03	6.09E-03	7.63E-03	1.70E-03	1.88E-04	1.95E-04	5.5260E-02
551359.51	4172917.23	3303.86515	5344.35624	1217.33943	10477.86923	1404.9098	3498.25461	3302.13716	3063.16692	686.39491	8406.8318	5279.6373	4427.08241	0.54805	0.55816	5.26E-03	6.02E-03	1.37E-03	9.04E-03	1.22E-03	3.04E-03	4.76E-03	3.13E-03	7.01E-04	1.02E-02	4.30E-03	3.60E-03	2.57E-04	2.65E-04	5.3152E-02
551441.29	4172664.13	3358.61122	3966.58161	1481.74775	11740.92032	2205.08102	2414.41984	3343.72386	2277.94342	816.50635	7823.64643	7812.08517	3128.0098	0.48326	0.49461	5.34E-03	4.47E-03	1.67E-03	1.01E-02	1.91E-03	2.10E-03	4.82E-03	2.33E-03	8.34E-04	9.50E-03	6.36E-03	2.55E-03	2.26E-04	2.34E-04	5.2455E-02
551496.48	4172617.13	3762.61641	3682.91676	1744.46599	10893.07676	2777.97019	2246.769	3736.57731	2137.75349	952.25856	7423.57728	8069.95973	2938.40572	0.40291	0.40928	5.99E-03	4.15E-03	1.96E-03	9.39E-03	2.41E-03	1.95E-03	5.38E-03	2.18E-03	9.72E-04	9.01E-03	6.57E-03	2.39E-03	1.89E-04	1.94E-04	5.2748E-02
551363.56	4172986.65	3444.55192	5947.3377	1108.78961	9338.51041	1256.06306	4134.85484	3452.6705	3460.69281	629.38792	7871.21037	4511.30351	5202.52851	0.54048	0.54938	5.48E-03	6.70E-03	1.25E-03	8.05E-03	1.09E-03	3.59E-03	4.97E-03	3.53E-03	6.43E-04	9.56E-03	3.67E-03	4.23E-03	2.53E-04	2.60E-04	5.3286E-02
551505.81	4173239.58	3968.18147	5914.97472	961.60886	5921.13295	956.41311	7331.72946	4008.70299	3569.58212	552.06435	5660.70268	2605.80208	8789.8971	0.83328	0.84327	6.31E-03	6.66E-03	1.08E-03	5.11E-03	8.30E-04	6.37E-03	5.77E-03	3.64E-03	5.64E-04	6.87E-03	2.12E-03	7.15E-03	3.91E-04	4.00E-04	5.3280E-02
551546.53	4172597.92	4264.65967	3454.96165	2028.84062	9677.1697	3395.2866	2125.77186	4229.12316	2028.16932	1099.63605	6944.10825	8072.81538	2809.77108	0.33565	0.33913	6.79E-03	3.89E-03	2.29E-03	8.35E-03	2.95E-03	1.85E-03	6.09E-03	2.07E-03	1.12E-03	8.43E-03	6.57E-03	2.29E-03	1.57E-04	1.61E-04	5.2991E-02
551416.74	4172703.47	3185.15414	4163.97478	1374.31103	11786.2839	2014.08962	2548.45274	3174.1775	2382.33974	757.04873	7940.8024	7510.47204	3288.86405	0.51043	0.52391	5.07E-03	4.69E-03	1.55E-03	1.02E-02	1.75E-03	2.21E-03	4.57E-03	2.43E-03	7.73E-04	9.64E-03	6.11E-03	2.68E-03	2.39E-04	2.48E-04	5.2126E-02
551371.29	4172818.38	3107.17209	4584.50823	1288.92475	11438.771	1708.2368	2962.0259	3098.31498	2621.06017	716.47839	8123.35507	6665.70577	3764.20387	0.55004	0.56399	4.94E-03	5.16E-03	1.45E-03	9.87E-03	1.48E-03	2.57E-03	4.46E-03	2.68E-03	7.31E-04	9.86E-03	5.42E-03	3.06E-03	2.58E-04	2.67E-04	5.2224E-02
551390.11	4172759.3	3087.9481	4399.80918	1320.59727	11608.04442	1875.46925	2759.94605	3077.85987	2511.95799	729.17762	7997.11173	7141.71277	3530.5683	0.53825	0.55306	4.91E-03	4.96E-03	1.49E-03	1.00E-02	1.63E-03	2.40E-03	4.43E-03	2.56E-03	7.44E-04	9.71E-03	5.81E-03	2.87E-03	2.52E-04	2.62E-04	5.2043E-02
551419.48	4173143.16	3555.01669	5941.07704	1015.11654	7336.0453	1079.42251	6104.99251	3584.20132	3517.164	577.05479	6620.8156	3266.94313	7411.24232	0.59551	0.6019	5.66E-03	6.69E-03	1.14E-03	6.33E-03	9.37E-04	5.30E-03	5.16E-03	3.59E-03	5.89E-04	8.04E-03	2.66E-03	6.03E-03	2.79E-04	2.85E-04	5.2691E-02
551444.2	4173182.75	3655.60619	6009.89689	1000.19663	6831.00129	1020.82398	6473.47067	3686.29375	3556.60745	570.68426	6304.34019	2959.55584	7836.69289	0.63443	0.64152	5.82E-03	6.77E-03	1.13E-03	5.89E-03	8.86E-04	5.62E-03	5.31E-03	3.63E-03	5.83E-04	7.65E-03	2.41E-03	6.38E-03	2.97E-04	3.04E-04	5.2675E-02
551767.7	4172665	6329.84853	2353.53636	1936.32448	8743.49968	3761.5866	1509.8299	6263.30754	1376.7647	1030.03322	5051.8796	9451.09296	2030.83784	0.40279	0.4121	1.01E-02	2.65E-03	2.18E-03	7.54E-03	3.27E-03	1.31E-03	9.02E-03	1.41E-03	1.05E-03	6.13E-03	7.69E-03	1.65E-03	1.89E-04	1.95E-04	5.4361E-02
551646.88	4172610.43	5831.40831	2944.75872	2601.99972	7012.28349	4411.06724	1909.30883	5763.81158	1765.14163	1375.74585	5480.99531	8152.46002	2567.15484	0.25834	0.26131	9.28E-03	3.32E-03	2.93E-03	6.05E-03	3.83E-03	1.66E-03	8.30E-03	1.80E-03	1.40E-03	6.65E-03	6.63E-03	2.09E-03	1.21E-04	1.24E-04	5.4193E-02
551359.34	4172885.37	3203.49357	4993.45693	1237.45344	10779.31877	1482.94696	3250.50139	3198.88792	2856.59625	693.78099	8314.60096	5684.85704	4118.73229	0.5424	0.55396	5.10E-03	5.62E-03	1.39E-03	9.30E-03	1.29E-03	2.82E-03	4.61E-03	2.92E-03	7.08E-04	1.01E-02	4.63E-03	3.35E-03	2.54E-04	2.63E-04	5.2343E-02
551626.04	4173294.77	4752.15333	5210.07381	918.71766	4392.20767	809.60422	8574.20873	4830.32457	3122.84049	533.19341	4341.52905	2010.38989	10168.3715	2.84666	2.97297	7.56E-03	5.87E-03	1.03E-03	3.79E-03	7.03E-04	7.45E-03	6.96E-03	3.19E-03	5.44E-04	5.27E-03	1.64E-03	8.28E-03	1.33E-03	1.41E-03	5.5015E-02
551360.34	4172977.69	3393.37624	5790.8279	1110.73216	9349.10244	1257.16259	3983.77145	3399.91993	3360.13588	630.30885	7848.63238	4511.11244	5017.97718	0.53232	0.54165	5.40E-03	6.52E-03	1.25E-03	8.06E-03	1.09E-03	3.46E-03	4.90E-03	3.43E-03	6.43E-04	9.53E-03	3.67E-03	4.08E-03	2.49E-04	2.57E-04	5.2546E-02
551422.57	4173151.74	3549.3867	5893.09747	1005.94203	7194.58767	1060.5875	6169.1172	3578.51924	3513.45499	572.20552	6510.29085	3180.46613	7409.74206	0.59382	0.6007	5.65E-03	6.64E-03	1.13E-03	6.20E-03	9.21E-04	5.36E-03	5.15E-03	3.59E-03	5.84E-04	7.90E-03	2.59E-03	6.03E-03	2.78E-04	2.85E-04	5.2311E-02
551579.91	4173285.01	4354.74228	5486.21916	923.56363	4853.5251	852.58962	8185.59655	4416.87318	3307.70833	532.8575	4808.03253	2184.83693	9704.25206	1.41679	1.4498	6.93E-03	6.18E-03	1.04E-03	4.19E-03	7.40E-04	7.11E-03	6.36E-03	3.38E-03	5.44E-04	5.84E-03	1.78E-03	7.90E-03	6.64E-04	6.87E-04	5.3329E-02
551356.7	4172938.49	3301.04783	5425.77021	1168.55229	9920.42078	1329.81018	3602.57257	3301.89802	3121.56216	661.02532	8128.12165	4900.04103	4552.24461	0.53207	0.54244	5.25E-03	6.11E-03	1.32E-03	8.56E-03	1.15E-03	3.13E-03	4.76E-03	3.19E-03	6.75E-04	9.87E-03	3.99E-03	3.70E-03	2.49E-04	2.57E-04	5.2202E-02
551525.09	4173257.74	4025.00277	5714.67346	935.47179	5528.38168	915.49911	7460.60351	4070.1621	3448.34903	537.54586	5348.20987	2450.10434	8915.83856	0.91324	0.92562	6.40E-03	6.44E-03	1.05E-03	4.77E-03	7.95E-04	6.48E-03	5.86E-03	3.52E-03	5.49E-04	6.49E-03	1.99E-03	7.26E-03	4.28E-04	4.39E-04	5.2476E-02
551362.19	4172842.52	3099.17601	4629.25812	1255.48798	11105.04505	1610.53912	3010.77374	3091.71014	2647.8239	699.67852	8082.17941	6259.43959	3820.15375	0.53988	0.55258	4.93E-03	5.21E-03	1.41E-03	9.58E-03	1.40E-03	2.61E-03	4.45E-03	2.70E-03	7.14E-04	9.81E-03	5.09E-03	3.11E-03	2.53E-04	2.62E-04	5.1549E-02
551557.57	4173276.15	4194.22476	5560.42573	922.98974	5103.07068	875.14136	7867.22774	4249.00836	3355.83494	531.33764	5014.69521	2284.62855	9349.17618	1.14433	1.16483	6.67E-03	6.26E-03	1.04E-03	4.40E-03	7.60E-04	6.83E-03	6.12E-03	3.43E-03	5.42E-04	6.09E-03	1.86E-03	7.61E-03	5.36E-04	5.52E-04	5.2700E-02
551534.19	4172599.04	4070.46368	3458.61914	1917.12578	9785.10868	3165.11275	2127.2906	4038.32058	2025.23755	1040.82552	6942.22211	7881.72164	2804.90504	0.34253	0.34629	6.48E-03	3.90E-03	2.16E-03	8.44E-03	2.75E-03	1.85E-03	5.82E-03	2.07E-03	1.06E-03	8.43E-03	6.41E-03	2.28E-03	1.61E-04	1.64E-04	5.1962E-02
551464.37	4173209.67	3720.38538	5940.88056	979.01371	6396.44887	980.3069	6624.10903	3752.80881	3532.63834	560.18987	5982.15045	2767.98931	8011.80881	0.66894	0.67633	5.92E-03	6.69E-03	1.10E-03	5.52E-03	8.51E-04	5.75E-03	5.40E-03	3.61E-03	5.72E-04	7.26E-03	2.25E-03	6.52E-03	3.14E-04	3.21E-04	5.2086E-02

551356.29	4172908.26	3225.65447	5133.26021	1202.79201	10322.81112	1401.61149	3361.78786	3223.18209	2940.80131	677.13561	8200.57786	5274.02749	4256.4237	0.53456	0.54545	5.13E-03	5.78E-03	1.35E-03	8.90E-03	1.22E-03	2.92E-03	4.64E-03	3.00E-03	6.91E-04	9.96E-03	4.29E-03	3.46E-03	2.51E-04	2.59E-04	5.1864E-02
551383.34	4173070.63	3448.2149	5961.87915	1004.75453	7976.67807	1141.86367	5124.14472	3470.60689	3540.17318	568.88896	6844.38993	3786.13784	6341.64758	0.53945	0.54689	5.49E-03	6.71E-03	1.13E-03	6.88E-03	9.91E-04	4.45E-03	5.00E-03	3.61E-03	5.81E-04	8.31E-03	3.08E-03	5.16E-03	2.53E-04	2.59E-04	5.1910E-02
551425.66	4173160.33	3542.11001	5839.45311	995.99716	7051.00371	1041.21716	6147.88473	3571.14361	3474.20526	566.86228	6394.78603	3094.69493	7463.41692	0.59466	0.60133	5.64E-03	6.58E-03	1.12E-03	6.08E-03	9.04E-04	5.34E-03	5.14E-03	3.55E-03	5.79E-04	7.76E-03	2.52E-03	6.07E-03	2.79E-04	2.85E-04	5.1847E-02
551376.89	4173052.73	3440.12154	5990.15071	1012.16222	8169.38596	1159.352	4868.41876	3459.72792	3553.79073	573.50187	6973.47064	3901.71101	6054.98462	0.53335	0.54102	5.47E-03	6.75E-03	1.14E-03	7.05E-03	1.01E-03	4.23E-03	4.98E-03	3.63E-03	5.86E-04	8.47E-03	3.18E-03	4.93E-03	2.50E-04	2.56E-04	5.1912E-02
551380.11	4173061.68	3440.92556	5972.27725	1006.48987	8060.39496	1150.12045	4992.9869	3462.00966	3546.45192	570.03965	6894.10551	3844.27282	6194.89836	0.53589	0.54321	5.48E-03	6.73E-03	1.13E-03	6.95E-03	9.99E-04	4.34E-03	4.99E-03	3.62E-03	5.82E-04	8.37E-03	3.13E-03	5.04E-03	2.51E-04	2.57E-04	5.1858E-02
551385.84	4172767.6	3048.32926	4358.90322	1295.13737	11312.64444	1819.23576	2758.96283	3038.60494	2490.33811	715.86195	7843.3165	6913.94637	3524.20696	0.5272	0.54141	4.85E-03	4.91E-03	1.46E-03	9.76E-03	1.58E-03	2.40E-03	4.38E-03	2.54E-03	7.31E-04	9.52E-03	5.63E-03	2.87E-03	2.47E-04	2.57E-04	5.1120E-02
551481.5	4173225.42	3783.42425	5828.80594	967.97817	6119.29479	964.5688	6844.28964	3818.29296	3537.82165	555.12472	5781.0505	2681.37156	8154.25343	0.71237	0.72071	6.02E-03	6.56E-03	1.09E-03	5.28E-03	8.38E-04	5.94E-03	5.50E-03	3.61E-03	5.67E-04	7.02E-03	2.18E-03	6.64E-03	3.34E-04	3.42E-04	5.1923E-02
551373.67	4173043.77	3427.40951	5974.16185	1015.28889	8248.72195	1162.45077	4728.81257	3445.45857	3539.97456	575.47346	7027.10982	3949.88237	5894.18913	0.52944	0.53702	5.45E-03	6.73E-03	1.14E-03	7.11E-03	1.01E-03	4.11E-03	4.96E-03	3.61E-03	5.88E-04	8.53E-03	3.21E-03	4.80E-03	2.48E-04	2.55E-04	5.1764E-02
551447.29	4173191.34	3624.86618	5890.89189	983.77101	6635.28831	1000.30855	6376.88387	3655.29142	3489.52289	561.64396	6137.53238	2880.50068	7720.85576	0.63005	0.63697	5.77E-03	6.63E-03	1.11E-03	5.72E-03	8.69E-04	5.54E-03	5.26E-03	3.56E-03	5.73E-04	7.45E-03	2.34E-03	6.28E-03	2.95E-04	3.02E-04	5.1715E-02
551357.11	4172968.72	3334.79213	5618.55038	1110.18901	9325.86505	1256.15697	3833.79921	3339.875	3252.80023	629.79679	7795.18454	4524.91379	4833.24901	0.5231	0.532	5.31E-03	6.33E-03	1.25E-03	8.04E-03	1.09E-03	3.33E-03	4.81E-03	3.32E-03	6.43E-04	9.46E-03	3.68E-03	3.93E-03	2.45E-04	2.52E-04	5.1698E-02
551370.44	4173034.82	3414.68976	5948.97072	1020.36828	8336.5732	1167.88197	4591.72873	3431.14183	3518.0177	578.56324	7091.7298	3999.93278	5734.66926	0.52553	0.53328	5.43E-03	6.70E-03	1.15E-03	7.19E-03	1.01E-03	3.99E-03	4.94E-03	3.59E-03	5.91E-04	8.61E-03	3.26E-03	4.67E-03	2.46E-04	2.53E-04	5.1628E-02
551570.92	4172589.64	4511.67308	3261.62557	2135.90571	8707.64643	3613.00106	2033.46098	4470.83185	1926.12173	1152.90561	6446.33679	7827.76394	2697.85095	0.29905	0.30179	7.18E-03	3.67E-03	2.41E-03	7.51E-03	3.14E-03	1.77E-03	6.44E-03	1.97E-03	1.18E-03	7.83E-03	6.37E-03	2.20E-03	1.40E-04	1.43E-04	5.1928E-02
551612.85	4173296.68	4564.0853	5202.84898	908.8276	4443.84405	810.46209	8293.35357	4636.13228	3123.56723	526.50255	4404.83591	2027.39153	9837.08422	2.15158	2.22874	7.26E-03	5.86E-03	1.02E-03	3.83E-03	7.04E-04	7.20E-03	6.68E-03	3.19E-03	5.38E-04	5.35E-03	1.65E-03	8.01E-03	1.01E-03	1.06E-03	5.3355E-02
551372.57	4172804.46	3041.67475	4430.43777	1268.3578	11121.71644	1705.47535	2863.98569	3032.7032	2534.37388	704.05564	7850.90642	6582.80895	3642.54522	0.53029	0.5439	4.84E-03	4.99E-03	1.43E-03	9.59E-03	1.48E-03	2.49E-03	4.37E-03	2.59E-03	7.19E-04	9.53E-03	5.36E-03	2.96E-03	2.49E-04	2.58E-04	5.0851E-02
551431.66	4172670.48	3237.36047	3912.67204	1408.13997	11355.49833	2075.57135	2394.03729	3224.44733	2245.74988	776.09	7613.30166	7437.56656	3098.22703	0.47215	0.4835	5.15E-03	4.41E-03	1.59E-03	9.79E-03	1.80E-03	2.08E-03	4.64E-03	2.29E-03	7.92E-04	9.24E-03	6.05E-03	2.52E-03	2.21E-04	2.29E-04	5.0815E-02
551392.05	4173095.11	3423.09044	5813.58298	991.0414	7643.26003	1110.99812	5387.8323	3448.38384	3448.61329	560.83733	6619.64458	3590.58845	6618.71795	0.54323	0.55033	5.45E-03	6.55E-03	1.12E-03	6.59E-03	9.65E-04	4.68E-03	4.97E-03	3.52E-03	5.73E-04	8.04E-03	2.92E-03	5.39E-03	2.55E-04	2.61E-04	5.1266E-02
551381.57	4172775.9	3026.13566	4342.9303	1279.74363	11152.94581	1779.35803	2768.73851	3016.63928	2482.59747	708.02609	7766.92731	6772.94634	3532.08994	0.52277	0.53668	4.82E-03	4.89E-03	1.44E-03	9.62E-03	1.55E-03	2.40E-03	4.34E-03	2.53E-03	7.23E-04	9.43E-03	5.51E-03	2.87E-03	2.45E-04	2.54E-04	5.0633E-02
551367.22	4173025.87	3397.69947	5905.02468	1025.83094	8419.57439	1172.7336	4453.51036	3412.43975	3483.25391	581.89549	7152.73286	4048.18342	5571.94926	0.52104	0.52858	5.41E-03	6.65E-03	1.16E-03	7.26E-03	1.02E-03	3.87E-03	4.91E-03	3.56E-03	5.94E-04	8.68E-03	3.29E-03	4.53E-03	2.44E-04	2.51E-04	5.1431E-02
551419.69	4172689.95	3150.43594	4000.03954	1354.82114	11345.15029	1982.87599	2454.80721	3139.42299	2292.05288	746.59629	7650.99515	7275.3473	3171.19586	0.48272	0.49493	5.01E-03	4.51E-03	1.53E-03	9.78E-03	1.72E-03	2.13E-03	4.52E-03	2.34E-03	7.62E-04	9.29E-03	5.92E-03	2.58E-03	2.26E-04	2.35E-04	5.0556E-02
551688.38	4172627.16	6437.25883	2695.02333	2552.50578	6467.97535	4108.30129	1772.323	6358.36393	1610.1404	1338.74763	4848.75905	7970.73321	2396.6879	0.26869	0.27397	1.02E-02	3.04E-03	2.87E-03	5.58E-03	3.57E-03	1.54E-03	9.16E-03	1.64E-03	1.37E-03	5.89E-03	6.49E-03	1.95E-03	1.26E-04	1.30E-04	5.3585E-02
551428.75	4173168.91	3523.77818	5807.50178	984.03666	6887.33709	1022.31047	6101.30451	3552.66352	3425.86422	560.40472	6263.80275	3014.74017	7403.15149	0.5929	0.59942	5.61E-03	6.54E-03	1.11E-03	5.94E-03	8.88E-04	5.30E-03	5.12E-03	3.50E-03	5.72E-04	7.60E-03	2.45E-03	6.02E-03	2.78E-04	2.84E-04	5.1213E-02
551374.62	4172794.89	3025.56579	4383.10432	1268.14295	11084.8035	1724.53225	2824.39442	3016.40385	2507.14735	703.1562	7785.39899	6624.80491	3595.0667	0.52587	0.53956	4.81E-03	4.94E-03	1.43E-03	9.56E-03	1.50E-03	2.45E-03	4.34E-03	2.56E-03	7.18E-04	9.45E-03	5.39E-03	2.93E-03	2.46E-04	2.56E-04	5.0582E-02
551517.54	4172602.01	3857.48827	3478.03083	1794.75414	9967.61203	2911.44087	2138.54923	3828.89647	2029.90494	976.18041	6967.07389	7712.22144	2809.82216	0.35567	0.3601	6.14E-03	3.92E-03	2.02E-03	8.60E-03	2.53E-03	1.86E-03	5.51E-03	2.07E-03	9.97E-04	8.46E-03	6.28E-03	2.29E-03	1.67E-04	1.71E-04	5.1000E-02
551534.72	4173266.82	4021.27973	5554.73095	917.68189	5315.31677	891.88212	7421.90704	4068.79134	3351.98513	527.45342	5159.84626	2371.3049	8855.1621	0.95398	0.96664	6.40E-03	6.26E-03	1.03E-03	4.58E-03	7.74E-04	6.44E-03	5.86E-03	3.42E-03	5.38E-04	6.26E-03	1.93E-03	7.21E-03	4.47E-04	4.58E-04	5.1618E-02
551355.89	4172864.24	3091.27313	4682.24376	1220.86388	10662.46144	1515.36564	3057.40585	3085.39734	2679.09734	682.14446	7987.97108	5829.52463	3876.16002	0.52548	0.537	4.92E-03	5.27E-03	1.38E-03	9.20E-03	1.32E-03	2.65E-03	4.44E-03	2.74E-03	6.96E-04	9.70E-03	4.74E-03	3.15E-03	2.46E-04	2.54E-04	5.0706E-02
551363.99	4173016.92	3375.11881	5839.9732	1031.17188	8492.93639	1176.85558	4313.99582	3388.12918	3434.98636	585.09478	7204.51232	4093.47932	5405.94323	0.51686	0.52448	5.37E-03	6.58E-03	1.16E-03	7.32E-03	1.02E-03	3.75E-03	4.88E-03	3.51E-03	5.97E-04	8.75E-03	3.33E-03	4.40E-03	2.42E-04	2.49E-04	5.1154E-02
551580.01	4172587.43	4610.06313	3189.91431	2171.68973	8367.79445	3684.45667	2000.33457	4566.97606	1888.0351	1169.47137	6259.70284	7746.87615	2657.22786	0.28754	0.29011	7.34E-03	3.59E-03	2.45E-03	7.22E-03	3.20E-03	1.74E-03	6.58E-03	1.93E-03	1.19E-03	7.60E-03	6.30E-03	2.16E-03	1.35E-04	1.37E-04	5.1565E-02
551397.97	4173111.85	3411.61111	5721.76403	986.15629	7474.03553	1089.21158	5528.17803	3438.13703	3388.67597	558.25588	6498.9813	3446.24517	6760.02828	0.54831	0.55424	5.43E-03	6.44E-03	1.11E-03	6.45E-03	9.46E-04	4.80E-03	4.95E-03	3.46E-03	5.70E-04	7.89E-03	2.80E-03	5.50E-03	2.57E-04	2.63E-04	5.0872E-02
551353.47	4172929.53	3226.1473	5217.79368	1157.67964	9795.32549	1324.34719	3457.34216	3226.04695	2998.6133	653.99172	7963.11262	4891.42772	4371.8754	0.51867	0.52871	5.13E-03	5.88E-03	1.30E-03	8.45E-03	1.15E-03	3.00E-03	4.65E-03	3.06E-03	6.68E-04	9.67E-03	3.98E-03	3.56E-03	2.43E-04	2.51E-04	5.0989E-02
551747.6	4172654.71	6592.46359	2405.04112	2075.25013	7746.35136	3466.37289	1569.66223	6517.91621	1417.54983	1100.14435	4722.98627	8547.67844	2117.0472	0.36511	0.37447	1.05E-02	2.71E-03	2.34E-03	6.68E-03	3.01E-03	1.36E-03	9.39E-03	1.45E-03	1.12E-03	5.73E-03	6.96E-03	1.72E-03	1.71E-04	1.77E-04	5.3309E-02
551377.3	4172784.21	3009.80786	4332.8872	1266.94525	11032.15672	1743.63483	2780.1739	3000.52151	2478.06734	701.64744	7715.01764	6653.94195	3542.51556	0.51993	0.5336	4.79E-03	4.88E-03	1.43E-03	9.51E-03	1.51E-03	2.41E-03	4.32E-03	2.53E-03	7.16E-04	9.37E-03	5.42E-03	2.88E-03	2.44E-04	2.53E-04	5.0267E-02
551673.23	4173296.86	5334.39798	4779.68189	885.13555	3944.6983	761.63493	8193.52619	5435.48944	2814.26339	517.10815	3831.21529	1840.5286	9817.93377	13.26704	15.28695	8.49E-03	5.38E-03	9.97E-04	3.40E-03	6.61E-04	7.11E-03	7.83E-03	2.87E-03	5.28E-04	4.65E-03	1.50E-03	7.99E-03	6.22E-03	7.24E-03	6.4878E-02
551607.23	4172588.61	5002.18346	3046.34748	2319.62039	7653.97788	3967.80372	1940.02717	4950.70795	1814.63875	1238.93219	5868.0228	7762.19825	2587.85766	0.26696	0.26935	7.96E-03	3.43E-03	2.61E-03	6.60E-03	3.45E-03	1.68E-03	7.13E-03	1.85E-03	1.26E-03	7.12E-03	6.32E-03	2.11E-03	1.25E-04	1.28E-04	5.1781E-02
551660.52	4173298.71	5105.31983	4847.6338	890.87032	4030.25867	769.77587	8239.32882	5197.66304	2871.82238	519.49343	3931.72772	1873.99498	9840.15717	7.06568	7.75297	8.12E-03	5.46E-03	1.00E-03	3.48E-03	6.68E-04	7.15E-03	7.49E-03	2.93E-03	5.30E-04	4.77E-03	1.53E-03	8.01E-03	3.31E-03	3.67E-03	5.8126E-02
551447.97	4172646.12	3324.7853	3752.87599	1468.74955	10994.16483	2192.92987	2300.00838	3308.65839	2159.50994	809.80291	7383.07256	7432.50852	2982.42133	0.4422	0.45155	5.29E-03	4.23E-03	1.65E-03	9.48E-03	1.90E-03	2.00E-03	4.76E-03	2.20E-03	8.27E-04	8.96E-03	6.05E-03	2.43E-03	2.07E-04	2.14E-04	5.0211E-02
551353.88	4172959.76	3277.42233	5449.05618	1110.36413	9306.37021	1257.24046	3693.1855	3281.1379	3148.71494	629.47244	7738.88311	4543.18224	4659.67762	0.51449	0.52373	5.22E-03	6.14E-03	1.25E-03	8.03E-03	1.09E-03	3.21E-03	4.73E-03	3.21E-03	6.43E-04	9.40E-03	3.70E-03	3.79E-03	2.41E-04	2.48E-04	5.0884E-02
551400.92	4173120.22	3406.67423	5679.58135	983.50656	7352.94913	1077.99278	5580.63303	3433.5671	3361.53289	557.00199	6438.66613	3371.60265	6811.30049	0.55069	0.55721	5.42E-03	6.40E-03	1.11E-03	6.34E-03	9.36E-04	4.85E-03	4.94E-03	3.43E-03	5.69E-04	7.82E-03	2.74E-03	5.54E-03	2.58E-04	2.64E-04	5.0620E-02
551567.07	4173285.1	4170.33496	5363.09874	904.05156	4878.23165	848.9829	7706.1649	4227.01548	3234.88614	520.76063	4804.86556	2199.01503	9154.44222	1.20991	1.23151	6.64E-03	6.04E-03	1.02E-03	4.21E-03	7.37E-04	6.69E-03	6.09E-03	3.30E-03	5.32E-04	5.83E-03	1.79E-03	7.45E-03	5.67E-04	5.84E-04	5.1476E-02
551450.38	4173199.92	3593.84712	5770.12618	966.89823	6442.40761	979.81011	6274.71973	3624.03877	3421.24278	552.34828	5970.70512	2803.14923	7599.45397	0.62537	0.63211	5.72E-03	6.50E-03	1.09E-03	5.56E-03	8.51E-04	5.45E-03	5.22E-03	3.49E-03	5.64E-04	7.25E-03	2.28E-03	6.18E-03	2.93E-04	3.00E-04	5.0745E-02
551647.8	4173300.56	4904.86646	4908.3868	892.76387	4108.50831	776.27044	8224.59973	4990.00562	2921.14037	519.66423	4028.90831	1902.48769	9800.48711	4.5673	4.86787	7.81E-03	5.53E-03	1.01E-03	3.54E-03	6.74E-04	7.14E-03	7.19E-03	2.98E-03	5.31E-04	4.89E-03	1.55E-03	7.98E-03	2.14E-03	2.31E-03	5.5260E-02
551486.84	4173233.89	3759.98565	5684.70536	950.57166	5923.31924	945.83169	6691.79982	3795.39273	3420.90865	539.86877	5595.25824	2612.74534	8057.52155	0.72486	0.73358	5.98E-03	6.40E-03	1.07E-03	5.11E-03	8.21E-04	5.81E-03	5.47E-03	3.49E-03	5.51E-04	6.79E-03	2.13E-03	6.56E-03	3.40E-04	3.48E-04	5.0870E-02
551589.26	4173293.82	4310.98202	5246.60744	900.82909	4621.85378	824.23353	7910.97021	4374.29092	3159.94956	520.16262	4577.74694	2097.34675	9385.4392	1.51709	1.55214	6.86E-03	5.91E-03	1.01E-03	3.99E-03	7.16E-04	6.87E-03	6.30E-03	3.23E-03	5.31E-04	5.56E-03	1.71E-03	7.64E-03	7.11E-04	7.36E-04	5.1760E-02
551360.77	4173007.96	3342.26851	5745.63188	1034.24393	8536.9976	1178.42444	4169.20696	3353.68047	3369.48952	586.98452	7228.74986	4131.97407	5231.85984	0.51109	0.51881	5.32E-03	6.47E-03	1.16E-03	7.36E-03	1.02E-03	3.62E-03	4.83E-03	3.44E-03	5.99E-04	8.78E-03	3.36E-03	4.26E-03	2.40E-04	2.46E-04	5.0711E-02
551468.25	4173219.43	3660.30782	5686.65223	954.47738	6142.35066	957.4986	6456.70867	3692.44945	3427.13536	546.57937	5754.29838	2688.45237	7814.88321	0.66018	0.66744	5.82E-03	6.40E-03	1.07E-03	5.30E-03	8.31E-04	5.61E-03	5.32E-03	3.50E-03	5.58E-04	6.99E-03	2.19E-03	6.36E-03	3.09E-04	3.16E-04	5.0573E-02
552131.21	4173000.54	8427.11118	4534.42088	1054.79842	4323.97229	841.56887	4604.2919	8546.07687	2639.7412	624.43172	4219.92509	2043.58731	5919.83162	0.22212	0.22046	1.34E-02	5.11E-03	1.19E-03	3.73E-03	7.31E-04	4.00E-03	1.23E-02	2.69E-03	6.37E-04	5.12E-03	1.66E-03	4.82E-03	1.04E-04	1.04E-04	5.5615E-02
551505.3	4172604.93	3713.25205	3483.1064	1710.11394	10029.27911	2733.86575	2143.6567	3687.06803	2027.9874	931.77172	6949.61101	7558.51333	2808.91938	0.36366	0.36868	5.91E-03	3.92E-03	1.93E-03	8.65E-03	2.37E-03	1.86E-03	5.31E-03	2.07E-03	9.51E-04	8.44E-03	6.15E-03	2.29E-03	1.70E-04	1.75E-04	5.0194E-02
551353.06	4172899.3	3137.87821	4909.21217	1180.77624	10084.3101	1387.98295	3221.08298	3134.85916	2812.42121	663.69783	7941.7447	5221.87563	4079.94101	0.51521	0.52566	4.99E-03	5.53E-03	1.33E-03	8.70E-03	1.21E-03	2.80E-03	4.51E-03	2.87E-03	6.78E-04	9.64E-03	4.25E-03	3.32E-03	2.41E-04	2.49E-04	5.0317E-02
551431.84	4173177.5	3500.35197	5712.77938	970.82451	6708.96665	1003.52238	6037.54522	3529.01058	3372.91499	553.25136	6124.12038	2937.86138	7323.65645	0.59008	0.59644	5.57E-03	6.43E-03	1.09E-03	5.79E-03	8.71E-04	5.24E-03	5.08E-03	3.44E-03	5.65E-04	7.43E-03	2.39E-03	5.96E-03	2.77E-04	2.83E-04	5.0433E-02
551697.23	4172629.13	6466.76993	2623.0454	2472.9901	6413.35075	3928.57859	1728.78598	6387.83524	1564.49269	1297.05416	4711.58026	7830.15288	2338.22967	0.27406	0.27991	1.03E-02	2.95E-03	2.79E-03	5.53E-03	3.41E-03	1.50E-03	9.20E-03	1.60E-03	1.32E-03	5.72E-03	6.37E-03	1.90E-03	1.28E-04	1.33E-04	5.2851E-02
551393.6	4172731.4	2997.37494	4124.37311	1274.94589	10982.33405	1836.60897	2575.09072	2987.86887	2356.3955	702.98314	7557.24338	6829.59899	3305.11546	0.49451	0.50763	4.77E-03	4.65E-03	1.44E-03	9.47E-03	1.59E-03	2.24E-03	4.30E-03	2.41E-03	7.18E-04	9.17E-03	5.56E-03	2.69E-03	2.32E-04	2.41E-04	4.9474E-02
551357.52	4172998.95	3309.98645	5645.34746	1039.5366	8593.07998	1181.86434	4031.68962	3319.75363	3300.10506	590.08594	7260.25286	4174.46648	5065.89347	0.50584	0.51368	5.27E-03	6.36E-03	1.17E-03	7.41E-03	1.03E-03	3.50E-03	4.78E-03	3.37E-03	6.02E-04	8.81E-03	3.40E-03	4.12E-03	2.37E-04	2.43E-04	5.0301E-02
551635.08	4173302.41	4702.84968	4936.90364	889.79951	4175.08914	780.5162	8099.40276	4781.28828	2949.86169	516.91067	4110.43302	1927.17199	9635.71342	3.24512	3.41044	7.48E-03	5.56E-03	1.00E-03	3.60E-03	6.78E-04	7.03E-03	6.89E-03	3.01E-03	5.28E-04	4.99E-03	1.57E-03	7.84E-03	1.52E-03	1.62E-03	5.3320E-02
551544.36	4173275.89	4008.47852	5385.45829	899.84908	5101.55527	867.82231	7340.42977	4058.10418	3249.36026	517.3694	4968.38278	2290.96146	8747.10777	0.99766	1.01233	6.38E-03	6.07E-03	1.01E-03	4.40E-03	7.54E-04	6.37E-03	5.84E-03	3.32E-03	5.28E-04	6.03E-03	1.86E-03	7.12E-03	4.68E-04	4.80E-04	5.0637E-02
551360.74	4172827.84	2999.02031	4394.94168	1221.71867	10675.2484	1594.2081	2871.07507	2991.30382	2515.05079	680.06079	7688.45079	6131.06745	3645.39868	0.51386	0.52611	4.77E-03	4.95E-03	1.38E-03	9.21E-03	1.38E-03	2.49E-03	4.31E-03	2.57E-03	6.94E-04	9.33E-03	4.99E-03	2.97E-03	2.41E-04	2.49E-04	4.9532E-02
551406.84	4173136.96	3385.33769	5574.0897	973.25256	7093.03234	1052.99717	5628.07931	3412.55259	3297.56535	551.88423	6281.63182	3223.53099	6848.51055	0.55368	0.55929	5.39E-03	6.28E-03	1.10E-03	6.12E-03	9.14E-04	4.89E-03	4.91E-03	3.37E-03	5.63E-04	7.63E-03	2.62E-03	5.57E-03	2.60E-04	2.65E-04	4.9872E-02
551354.17	4172853.67	3024.98897	4514.88726	1203.43256	10482.62985	1517.10383	2956.31044	3018.69198	2584.31447	671.58116	7759.85857	5819.32681	3749.14778	0.51215	0.52353	4.81E-03	5.08E-03	1.36E-03	9.04E-03	1.32E-03	2.57E-03	4.35E-03	2.64E-03	6.86E-04	9.42E-03	4.74E-03	3.05E-03	2.40E-04	2.48E-04	4.9546E-02
551666	4172614.15	5936.33589	2742.62142	2494.747	6366.98694	4086.82395	1801.63128	5866.65803	1642.64629	1315.74492	4959.30233	7618.47719	2429.22378	0.24335	0.24669	9.45E-03	3.09E-03	2.81E-03	5.49E-03	3.55E-03	1.56E-03	8.45E-03	1.68E-03	1.34E-03	6.02E-03	6.20E-03	1.98E-03	1.14E-04	1.17E-04	5.1847E-02
551350.66	4172950.79	3213.52791	5268.25699	1106.72409	9247.51745	1255.42934	3552.8124	3216.04669	3039.78309	626.86302	7646.79846	4549.69906	4485.87021	0.50397	0.51313	5.11E-03	5.93E-03	1.25E-03	7.98E-03	1.09E-03	3.08E-03	4.63E-03	3.10E-03	6.40E-04	9.28E-03	3.70E-03	3.65E-03	2.36E-04	2.43E-04	4.9935E-02
551389.31	4172739.76	2973.8321	4131.1397	1261.86507	10861.4845	1806.67216	2594.12502	2964.48112	2360.39822	696.15585	7504.69976	6722.26709	3324.66611	0.49345	0.5065	4.73E-03	4.65E-03	1.42E-03	9.37E-03	1.57E-03	2.25E-03	4.27E-03	2.41E-03	7.11E-04	9.11E-03	5.47E-03	2.71E-03	2.31E-04	2.40E-04	4.9143E-02
551434.88	4172656.79	3205.28206	3755.10892	1394.314	10853.29448	2055.95776	2307.82031	3191.72781	2157.94596	768.86479	7305.68789	7176.59358	2988.17312	0.44502	0.45511	5.10E-03	4.23E-03	1.57E-03	9.36E-03	1.79E-03	2.00E-03	4.60E-03	2.20E-03	7.85E-04	8.87E-03	5.84E-03	2.43E-03	2.09E-04	2.16E-04	4.9200E-02
551350.25	4172920.56	3150.956	5016.78046	1144.75895	9654.80598	1318.77889	3320.31812	3150.01524	2880.01959	645.80054	7782.91028	4877.92748	4201.95176	0.50668	0.51597	5.01E-03	5.65E-03	1.29E-03	8.33E-03	1.15E-03	2.88E-03	4.54E-03	2.94E-03	6.59E-04	9.45E-03	3.97E-03	3.42E-03	2.37E-04	2.45E-04	4.9765E-02
551557.43	4172587.3	4230.82826	3232.79624	1981.93374	8699.81573	3298.52499	2014.31521	4195.11173	1903.34915	1073.42762	6376.21744	7467.944	2666.2419	0.29872	0.30142	6.73E-03	3.64E-03	2.23E-03	7.50E-03	2.86E-03	1.75E-03	6.04E-03	1.94E-03	1.10E-03	7.74E-03	6.08E-03	2.17E-03	1.40E-04	1.43E-04	5.0074E-02
551410.21	4173146.49	3386.04901	5544.20384	968.8258	6962.81417	1035.53736	5651.92317	3413.26588	3278.67808	550.44755	6248.43832	3133.67258	6871.23427	0.55405	0.55976	5.39E-03	6.24E-03	1.09E-03	6.00E-03	8.99E-04	4.91E-03	4.92E-03	3.35E-03	5.62E-04	7.59E-03	2.55E-03	5.59E-03	2.60E-04	2.65E-04	4.9613E-02
551354.29	4172989.99	3270.1638	5525.18843	1043.08621	8624.77358	1183.85058	3894.12853	3278.39396	3220.03869	592.04666	7266.87003	4211.6734	4899.00129	0.49948	0.50733	5.20E-03	6.22E-03	1.17E-03	7.44E-03	1.03E-03	3.38E-03	4.72E-03	3.29E-03	6.04E-04	8.82E-03	3.43E-03	3.99E-03	2.34E-04	2.40E-04	4.9773E-02
551434.93	4173186.08	3469.30455	5607.40385	956.11068	6526.97333	985.16039	5953.55207	3497.66439	3313.64924	545.16978	5973.46626	2865.48341	7222.00594	0.58568	0.59192	5.52E-03	6.32E-03	1.08E-03	5.63E-03	8.55E-04	5.17E-03	5.04E-03	3.38E-03	5.57E-04	7.25E-03	2.33E-03	5.88E-03	2.75E-04	2.81E-04	4.9560E-02
551493.06	4172607.86	3573.18872	3472.53602	1627.19714	10000.62224	2560.38157	2141.31151	3549.34672	2017.15094	888.6321	6887.29011	7358.51439	2798.40478	0.36857	0.37412	5.69E-03	3.91E-03	1.83E-03	8.62E-03	2.22E-03	1.86E-03	5.11E-03	2.06E-03	9.07E-04	8.36E-03	5.99E-03	2.28E-03	1.73E-04	1.77E-04	4.9193E-02
551409.81	4172696.48	3037.73814	3928.56356	1293.36761	10864.86204	1880.76062	2428.62086	3027.84511	2249.95985	712.89986	7394.29487	6888.29362	3132.84123	0.46711	0.47888	4.83E-03	4.42E-03	1.46E-03	9.37E-03	1.63E-03	2.11E-03	4.36E-03	2.30E-03	7.28E-04	8.98E-03	5.61E-03	2.55E-03	2.19E-04	2.27E-04	4.8791E-02
551422.04	4172676.84	3104.94241	3829.70136	1329.78462	10829.74919	1941.05453	2360.61916	3093.86734	2197.51853	733.17861	7325.71899	6985.47894	3051.5482	0.45371	0.46463	4.94E-03	4.31E-03	1.50E-03	9.34E-03	1.69E-03	2.05E-03	4.46E-03	2.24E-03	7.49E-04	8.89E-03	5.69E-03	2.48E-03	2.13E-04	2.20E-04	4.8769E-02
551593.47	4172582.73	4696.18233	3039.52047	2176.59833	7730.21776	3686.18236	1928.16825	4650.62651	1804.92954	1167.79981	5874.73667	7455.80043	2565.58654	0.26645	0.26871	7.47E-03	3.42E-03	2.45E-03	6.67E-03	3.20E-03	1.67E-03	6.70E-03	1.84E-03	1.19E-03	7.13E-03	6.07E-03	2.09E-03	1.25E-04	1.27E-04	5.0162E-02
551622.37	4173304.26	4503.50833	4931.98669	882.17951	4228.68198	782.48182	7874.62279	4575.79894	2956.41855	511.47193	4173.52324	1947.69316	9360.10935	2.4148	2.51666	7.17E-03	5.55E-03	9.94E-04	3.65E-03	6.79E-04	6.84E-03	6.59E-03	3.02E-03	5.22E-04	5.07E-03	1.59E-03	7.62E-03	1.13E-03	1.19E-03	5.1603E-02
551385.01	4172748.11	2946.02149	4121.67304	1245.66637	10692.09897	1769.85536	2606.16152	2936.86909	2355.75744	687.72047	7421.15923	6584.88496	3335.18124	0.48951	0.50235	4.69E-03	4.64E-03	1.40E-03	9.22E-03	1.54E-03	2.26E-03	4.23E-03	2.41E-03	7.02E-04	9.01E-03	5.36E-03	2.71E-03	2.29E-04	2.38E-04	4.8641E-02
551413.3	4173155.08	3380.03962	5501.34057	960.643	6835.95041	1018.52345	5705.31993	3407.18848	3275.23892	546.13	6151.02391	3055.60075	6865.85172	0.55215	0.55829	5.38E-03	6.20E-03	1.08E-03	5.90E-03	8.84E-04	4.95E-03	4.91E-03	3.34E-03	5.58E-04	7.47E-03	2.49E-03	5.59E-03	2.59E-04	2.65E-04	4.9264E-02
551361.41	4172818.78	2957.72937	4296.77522	1210.24886	10502.34178	1594.32675	2810.59339	2949.83713	2459.79107	673.12198	7525.74971	6099.86769	3569.91188	0.50297	0.5151	4.71E-03	4.84E-03	1.36E-03	9.06E-03	1.38E-03	2.44E-03	4.25E-03	2.51E-03	6.87E-04	9.14E-03	4.96E-03	2.91E-03	2.36E-04	2.44E-04	4.8724E-02
551727.64	4172644.43	6576.07834	2445.64004	2196.52868	6800.33367	3418.37982	1612.78837	6499.02625	1448.77037	1159.06257	4502.52822	7797.49111	2179.81562	0.31557	0.32373	1.05E-02	2.75E-03	2.47E-03	5.86E-03	2.97E-03	1.40E-03	9.36E-03	1.48E-03	1.18E-03	5.47E-03	6.35E-03	1.77E-03	1.48E-04	1.53E-04	5.1836E-02
551545.83	4172588.11	4052.25764	3247.0608	1886.74671	8840.67131	3106.88454	2019.84016	4019.78139	1907.2447	1023.9275	6410.62788	7327.9036	2668.2077	0.30514	0.308	6.45E-03	3.66E-03	2.12E-03	7.62E-03	2.70E-03	1.75E-03	5.79E-03	1.95E-03	1.05E-03	7.78E-03	5.96E-03	2.17E-03	1.43E-04	1.46E-04	4.9295E-02
551350	4172888.53	3052.4397	4688.83581	1161.18711	9893.59243	1382.50594	3082.98365	3048.79927	2686.35399	651.46324	7693.09081	5205.21697	3906.5266	0.49771	0.50783	4.86E-03	5.28E-03	1.31E-03	8.53E-03	1.20E-03	2.68E-03	4.39E-03	2.74E-03	6.65E-04	9.34E-03	4.24E-03	3.18E-03	2.33E-04	2.41E-04	4.8883E-02
551576.57	4173294.05	4122.53972	5137.98128	882.35396	4652.84481	821.85756	7468.6826	4180.52014	3098.24538	508.52667	4584.22484	2114.84309	8873.14586	1.27779	1.30192	6.56E-03	5.79E-03	9.94E-04	4.01E-03	7.14E-04	6.49E-03	6.02E-03	3.16E-03	5.19E-04	5.57E-03	1.72E-03	7.22E-03	5.99E-04	6.17E-04	4.9979E-02
551351.07	4172981.02	3225.0659	5391.30903	1045.52828	8638.62781	1185.13524	3758.89299	3231.83739	3133.57523	593.31233	7254.47069	4203.40481	4733.67384	0.49229	0.50063	5.13E-03	6.07E-03	1.18E-03	7.45E-03	1.03E-03	3.26E-03	4.65E-03	3.20E-03	6.06E-04	8.81E-03	3.42E-03	3.85E-03	2.31E-04	2.37E-04	4.9132E-02
551455.25	4173213.39	3532.5753	5509.9013	938.05902	6133.40352	948.54099	6088.10992	3562.40013	3302.97524	536.38395	5696.46218	2689.52121	7379.80037	0.61522	0.62166	5.62E-03	6.21E-03	1.06E-03	5.29E-03	8.24E-04	5.29E-03	5.13E-03	3.37E-03	5.48E-04	6.92E-03	2.19E-03	6.01E-03	2.88E-04	2.95E-04	4.9026E-02
551554	4173284.97	3985.98492	5207.27605	881.80749	4887.67685	843.25634	7215.74031	4037.50907	3141.20893	507.18721	4773.64941	2209.65196	8591.89562	1.04531	1.0621	6.34E-03	5.86E-03	9.93E-04	4.22E-03	7.32E-04	6.27E-03	5.81E-03	3.21E-03	5.18E-04	5.80E-03	1.80E-03	6.99E-03	4.90E-04	5.03E-04	4.9532E-02
551380.71	4172756.47	2923.06092	4112.38426	1231.76433	10549.45768	1735.83901	2618.39823	2914.07165	2351.40241	680.58119	7349.92019	6465.05512	3346.18661	0.48649	0.49914	4.65E-03	4.63E-03	1.39E-03	9.10E-03	1.51E-03	2.27E-03	4.20E-03	2.40E-03	6.95E-04	8.92E-03	5.26E-03	2.72E-03	2.28E-04	2.37E-04	4.8214E-02
551416.39	4173163.66	3368.3412	5445.04554	951.15352	6699.22746	1001.40111	5678.18015	3395.35912	3237.36212	541.03397	6043.89218	2980.15953	6903.6366	0.55179	0.55784	5.36E-03	6.13E-03	1.07E-03	5.78E-03	8.70E-04	4.93E-03	4.89E-03	3.31E-03	5.52E-04	7.34E-03	2.43E-03	5.62E-03	2.59E-04	2.64E-04	4.8793E-02
551347.43	4172941.83	3141.86679	5072.47262	1096.997	9131.42031	1247.76902	3409.27622	3143.3737	2923.38193	620.72844	7505.41022	4533.41454	4307.82847	0.49133	0.49958	5.00E-03	5.71E-03	1.24E-03	7.88E-03	1.08E-03	2.96E-03	4.53E-03	2.98E-03	6.34E-04	9.11E-03	3.69E-03	3.51E-03	2.30E-04	2.37E-04	4.8786E-02
551715.34	4173290.52	5920.28423	4360.48993	829.39601	3608.26265	720.10182	7403.99671	6051.19859	2527.73565	485.76218	3537.50822	1713.9551	8964.84254	5.77216	5.25235	9.42E-03	4.91E-03	9.34E-04	3.11E-03	6.25E-04	6.43E-03	8.71E-03	2.58E-03	4.96E-04	4.29E-03	1.39E-03	7.30E-03	2.71E-03	2.49E-03	5.5403E-02
551438.02	4173194.67	3445.48853	5509.70025	941.83639	6354.26952	966.06251	5874.79392	3473.61553	3259.03193	537.36411	5830.33558	2790.90777	7127.31781	0.58223	0.58832	5.48E-03	6.21E-03	1.06E-03	5.48E-03	8.39E-04	5.10E-03	5.00E-03	3.33E-03	5.49E-04	7.08E-03	2.27E-03	5.80E-03	2.73E-04	2.79E-04	4.8749E-02
551374.07	4173073.97	3274.87475	5525.9493	952.02715	7469.3681	1087.01603	4781.17935	3296.11553	3280.16072	538.93596	6382.34871	3585.93767	5917.67695	0.50177	0.50795	5.21E-03	6.22E-03	1.07E-03	6.44E-03	9.44E-04	4.15E-03	4.75E-03	3.35E-03	5.50E-04	7.75E-03	2.92E-03	4.82E-03	2.35E-04	2.41E-04	4.8649E-02
551347.02	4172911.6	3079.50667	4828.57561	1132.53249	9524.16659	1315.98637	3195.27101	3077.83586	2770.57795	637.92083	7608.394	4873.31725	4045.54886	0.49388	0.50352	4.90E-03	5.44E-03	1.28E-03	8.21E-03	1.14E-03	2.77E-03	4.43E-03	2.83E-03	6.51E-04	9.24E-03	3.97E-03	3.29E-03	2.31E-04	2.39E-04	4.8623E-02
551352.44	4172843.11	2955.36204	4347.17378	1182.0131	10240.54138	1510.99789	2855.64238	2948.76787	2489.16083	658.98514	7505.98522	5762.91953	3622.81972	0.49644	0.50761	4.70E-03	4.90E-03	1.33E-03	8.83E-03	1.31E-03	2.48E-03	4.25E-03	2.54E-03	6.73E-04	9.11E-03	4.69E-03	2.95E-03	2.33E-04	2.41E-04	4.8238E-02
551764.2	4172655.69	6041.0297	2257.65968	1835.25385	7867.1054	3320.81903	1464.51491	5978.66526	1323.7702	977.80798	4648.66222	8391.07803	1969.11652	0.36582	0.37464	9.61E-03	2.54E-03	2.07E-03	6.78E-03	2.88E-03	1.27E-03	8.61E-03	1.35E-03	9.98E-04	5.64E-03	6.83E-03	1.60E-03	1.71E-04	1.78E-04	5.0547E-02
551524.25	4173269.13	3826.68327	5282.88596	885.89914	5216.72424	873.21335	6850.36104	3869.92383	3186.69317	508.72884	5009.50319	2344.61237	8193.78888	0.85284	0.8638	6.09E-03	5.95E-03	9.98E-04	4.50E-03	7.58E-04	5.95E-03	5.57E-03	3.25E-03	5.19E-04	6.08E-03	1.91E-03	6.67E-03	4.00E-04	4.09E-04	4.9056E-02
551370.85	4173065.02	3270.61544	5540.77325	954.15012	7545.3142	1094.5016	4668.50102	3290.64419	3289.12718	540.30035	6429.72892	3631.37574	5792.2987	0.49831	0.50512	5.20E-03	6.24E-03	1.07E-03	6.51E-03	9.50E-04	4.05E-03	4.74E-03	3.36E-03	5.52E-04	7.81E-03	2.96E-03	4.71E-03	2.34E-04	2.39E-04	4.8627E-02
552091.09	4173065.79	7941.13463	4482.52808	839.53667	3715.28541	659.29151	5233.45091	8114.88168	2587.22108	499.14774	3700.76028	1631.72894	6635.32671	0.24915	0.24679	1.26E-02	5.05E-03	9.46E-04	3.20E-03	5.72E-04	4.54E-03	1.17E-02	2.64E-03	5.10E-04	4.49E-03	1.33E-03	5.40E-03	1.17E-04	1.17E-04	5.3244E-02
551367.62	4173056.06	3266.18684	5549.73783	957.69441	7625.86957	1101.81434	4553.0501	3284.87965	3292.46032	542.545	6486.03536	3677.95501	5662.23967	0.49545	0.50235	5.20E-03	6.25E-03	1.08E-03	6.58E-03	9.57E-04	3.95E-03	4.73E-03	3.36E-03	5.54E-04	7.87E-03	2.99E-03	4.61E-03	2.32E-04	2.38E-04	4.8605E-02
551472.7	4173229.89	3582.74766	5437.55839	918.67087	5865.96774	933.49017	6189.48315	3614.62333	3267.13393	526.24272	5476.73228	2608.13853	7471.63651	0.66463	0.67098	5.70E-03	6.12E-03	1.03E-03	5.06E-03	8.11E-04	5.37E-03	5.21E-03	3.34E-03	5.37E-04	6.65E-03	2.12E-03	6.08E-03	3.12E-04	3.18E-04	4.8664E-02
551364.4	4173047.11	3255.67359	5539.06905	960.64548	7694.11905	1102.92358	4429.98061	3272.95003	3282.63075	544.39928	6533.92372	3720.60752	5520.9347	0.49145	0.49833	5.18E-03	6.24E-03	1.08E-03	6.64E-03	9.58E-04	3.85E-03	4.71E-03	3.35E-03	5.56E-04	7.93E-03	3.03E-03	4.49E-03	2.30E-04	2.36E-04	4.8482E-02
551376.42	4172764.83	2899.2418	4094.00903	1216.55882	10390.39959	1698.7497	2626.06069	2890.4464	2342.09689	672.76413	7268.16788	6332.99121	3351.57451	0.48215	0.49454	4.61E-03	4.61E-03	1.37E-03	8.96E-03	1.48E-03	2.28E-03	4.16E-03	2.39E-03	6.87E-04	8.82E-03	5.15E-03	2.73E-03	2.26E-04	2.34E-04	4.7717E-02
551347.84	4172972.06	3176.10807	5248.22132	1047.12651	8637.70039	1186.19419	3626.9966	3181.4756	3043.48253	593.99875	7225.63918	4221.10629	4571.62903	0.48452	0.49298	5.05E-03	5.91E-03	1.18E-03	7.45E-03	1.03E-03	3.15E-03	4.58E-03	3.11E-03	6.06E-04	8.77E-03	3.44E-03	3.72E-03	2.27E-04	2.34E-04	4.8457E-02
551419.48	4173172.25	3352.51239	5378.67847	940.58507	6554.301	984.14906	5636.27343	3379.36291	3196.00936	535.33275	5929.35716	2906.837	6850.00046	0.55024	0.55606	5.33E-03	6.06E-03	1.06E-03	5.65E-03	8.55E-04	4.89E-03	4.87E-03	3.26E-03	5.47E-04	7.20E-03	2.37E-03	5.57E-03	2.58E-04	2.64E-04	4.8190E-02
551361.18	4173038.16	3239.30254	5508.2665	963.08652	7750.4181	1105.54694	4301.46447	3255.12262	3259.26527	546.01061	6573.35488	3759.64907	5371.12015	0.48649	0.49358	5.15E-03	6.20E-03	1.08E-03	6.68E-03	9.60E-04	3.73E-03	4.69E-03	3.33E-03	5.57E-04	7.98E-03	3.06E-03	4.37E-03	2.28E-04	2.34E-04	4.8268E-02
551382.76	4173098.39	3249.64435	5390.08065	939.75888	7180.61126	1059.77741	5007.17611	3273.48133	3196.22722	531.65993	6187.70416	3418.5452	6153.75666	0.50555	0.5111	5.17E-03	6.07E-03	1.06E-03	6.19E-03	9.20E-04	4.35E-03	4.71E-03	3.26E-03	5.43E-04	7.51E-03	2.78E-03	5.01E-03	2.37E-04	2.42E-04	4.8063E-02
551622.67	4172584.25	5026.16072	2841.78877	2256.02908	6878.23508	3800.59359	1837.03515	4973.18777	1697.07012	1201.6277	5347.49759	7250.10588	2455.39417	0.24259	0.24472	8.00E-03	3.20E-03	2.54E-03	5.93E-03	3.30E-03	1.60E-03	7.16E-03	1.73E-03	1.23E-03	6.49E-03	5.90E-03	2.00E-03	1.14E-04	1.16E-04	4.9309E-02
551425.13	4172663.24	3082.365	3690.86648	1320.59382	10442.04401	1927.43886	2282.01992	3070.76083	2120.32739	728.41588	7077.38163	6795.85791	2951.64259	0.43186	0.4418	4.90E-03	4.16E-03	1.49E-03	9.01E-03	1.67E-03	1.98E-03	4.42E-03	2.16E-03	7.44E-04	8.59E-03	5.53E-03	2.40E-03	2.02E-04	2.09E-04	4.7477E-02
551357.95	4173029.21	3226.04667	5475.7921	968.69473	7826.76601	1110.04362	4179.97041	3240.28981	3232.43588	549.37582	6632.79906	3802.86256	5228.63597	0.48347	0.4902	5.13E-03	6.17E-03	1.09E-03	6.75E-03	9.64E-04	3.63E-03	4.67E-03	3.30E-03	5.61E-04	8.05E-03	3.09E-03	4.26E-03	2.27E-04	2.32E-04	4.8124E-02
551344.21	4172932.86	3086.84112	4914.92764	1095.3792	9104.92043	1253.31941	3292.07574	3087.30426	2828.92652	618.93289	7419.93576	4564.74384	4162.51086	0.48257	0.49157	4.91E-03	5.54E-03	1.23E-03	7.85E-03	1.09E-03	2.86E-03	4.45E-03	2.89E-03	6.32E-04	9.01E-03	3.71E-03	3.39E-03	2.26E-04	2.33E-04	4.8016E-02
551412.41	4172683.2	3002.86377	3778.54652	1273.86077	10466.61457	1849.1735	2341.82711	2992.97604	2166.87475	702.43788	7130.07944	6674.01677	3023.85017	0.44286	0.45358	4.78E-03	4.26E-03	1.43E-03	9.03E-03	1.61E-03	2.03E-03	4.31E-03	2.21E-03	7.17E-04	8.66E-03	5.43E-03	2.46E-03	2.08E-04	2.15E-04	4.7345E-02
551372.12	4172773.18	2880.76889	4079.37009	1203.75076	10266.01382	1665.19606	2634.45735	2872.1517	2334.79962	666.27463	7206.95553	6220.24863	3358.33233	0.47914	0.49133	4.58E-03	4.59E-03	1.36E-03	8.85E-03	1.45E-03	2.29E-03	4.14E-03	2.38E-03	6.80E-04	8.75E-03	5.06E-03	2.73E-03	2.25E-04	2.33E-04	4.7324E-02
551664.92	4173307.03	4934.72686	4560.62695	855.28173	3843.12562	741.11973	7589.75287	5023.53608	2698.28034	498.66504	3731.76642	1802.18413	9091.51795	7.45162	8.23843	7.85E-03	5.14E-03	9.63E-04	3.31E-03	6.44E-04	6.59E-03	7.23E-03	2.75E-03	5.09E-04	4.53E-03	1.47E-03	7.40E-03	3.49E-03	3.90E-03	5.5792E-02
551362.83	4172802.99	2890.91211	4143.6158	1190.20642	10202.4095	1592.67866	2713.3048	2882.84976	2373.49289	660.96148	7260.10019	6025.18507	3448.90321	0.48415	0.496	4.60E-03	4.67E-03	1.34E-03	8.80E-03	1.38E-03	2.36E-03	4.15E-03	2.42E-03	6.75E-04	8.81E-03	4.90E-03	2.81E-03	2.27E-04	2.35E-04	4.7381E-02
551652	4173308.91	4749.17947	4629.69775	858.97612	3922.02576	748.18757	7616.45235	4831.22797	2751.5398	499.96583	3829.86041	1831.07508	9101.69475	4.68764	5.01878	7.56E-03	5.21E-03	9.67E-04	3.38E-03	6.50E-04	6.61E-03	6.96E-03	2.81E-03	5.10E-04	4.65E-03	1.49E-03	7.41E-03	2.20E-03	2.38E-03	5.2784E-02
551388.68	4173115.13	3245.25182	5323.36705	938.02314	7054.4802	1041.29331	5135.67745	3270.14304	3150.82255	530.81124	6103.37279	3289.41312	6285.11625	0.51035	0.51661	5.16E-03	6.00E-03	1.06E-03	6.08E-03	9.04E-04	4.46E-03	4.71E-03	3.22E-03	5.42E-04	7.41E-03	2.68E-03	5.12E-03	2.39E-04	2.45E-04	4.7817E-02
551677.84	4173305.16	5153.43482	4490.47842	848.1155	3758.19762	732.51696	7521.20759	5250.703	2640.26478	495.37327	3633.65726	1768.1807	9040.81285	14.6212	12.81838	8.20E-03	5.06E-03	9.55E-04	3.24E-03	6.36E-04	6.53E-03	7.56E-03	2.70E-03	5.06E-04	4.41E-03	1.44E-03	7.36E-03	6.85E-03	6.07E-03	6.1520E-02
551346.58	4172867.53	2957.41575	4422.95507	1151.26175	9851.1523	1419.6929	2913.99623	2952.47478	2533.73002	643.65371	7445.18828	5365.35251	3694.19837	0.48534	0.4955	4.71E-03	4.98E-03	1.30E-03	8.50E-03	1.23E-03	2.53E-03	4.25E-03	2.59E-03	6.57E-04	9.04E-03	4.37E-03	3.01E-03	2.27E-04	2.35E-04	4.7613E-02
551533.6	4173277.94	3827.84482	5158.33149	871.90884	5030.54272	852.67745	6821.58064	3873.14617	3110.63856	500.83781	4853.87919	2271.20926	8149.47773	0.88931	0.90116	6.09E-03	5.81E-03	9.82E-04	4.34E-03	7.40E-04	5.92E-03	5.58E-03	3.18E-03	5.11E-04	5.89E-03	1.85E-03	6.63E-03	4.17E-04	4.27E-04	4.8367E-02
551354.73	4173020.25	3207.00996	5423.49099	973.93572	7893.16841	1113.80056	4056.16225	3219.67818	3192.9457	552.51446	6682.75785	3843.25917	5081.81356	0.47978	0.48664	5.10E-03	6.11E-03	1.10E-03	6.81E-03	9.67E-04	3.52E-03	4.64E-03	3.26E-03	5.64E-04	8.11E-03	3.13E-03	4.14E-03	2.25E-04	2.31E-04	4.7898E-02
551662.73	4172604.86	5655.85206	2663.04416	2365.99989	6143.04018	3855.49822	1754.13632	5591.09435	1594.19076	1250.52075	4804.51218	7194.52031	2362.08014	0.23126	0.2341	9.00E-03	3.00E-03	2.66E-03	5.30E-03	3.35E-03	1.52E-03	8.05E-03	1.63E-03	1.28E-03	5.83E-03	5.86E-03	1.92E-03	1.08E-04	1.11E-04	4.9619E-02
551441.11	4173203.26	3414.55465	5356.03797	926.20046	6171.45457	947.40775	5780.46496	3442.41992	3198.25965	528.74834	5678.20744	2720.43042	7015.33026	0.57732	0.58325	5.43E-03	6.03E-03	1.04E-03	5.32E-03	8.23E-04	5.02E-03	4.96E-03	3.27E-03	5.40E-04	6.89E-03	2.21E-03	5.71E-03	2.71E-04	2.76E-04	4.7800E-02
551482.44	4173241.93	3586.5276	5310.15862	898.09357	5641.25225	910.47359	6191.29215	3619.74916	3196.73261	514.8469	5284.54322	2522.9015	7464.14269	0.68325	0.69087	5.71E-03	5.98E-03	1.01E-03	4.87E-03	7.91E-04	5.38E-03	5.21E-03	3.26E-03	5.26E-04	6.42E-03	2.05E-03	6.07E-03	3.20E-04	3.27E-04	4.7924E-02
551364.9	4172793.36	2874.48825	4099.20463	1189.00484	10155.66962	1607.86444	2677.58783	2866.25621	2348.00975	659.60198	7193.91117	6052.43498	3405.86772	0.47951	0.49139	4.57E-03	4.62E-03	1.34E-03	8.76E-03	1.40E-03	2.32E-03	4.13E-03	2.40E-03	6.73E-04	8.73E-03	4.93E-03	2.77E-03	2.25E-04	2.33E-04	4.7097E-02
551563.64	4173294.05	3962.71042	5032.88307	864.67421	4677.38055	818.67469	7072.7151	4015.93946	3034.67449	497.6374	4582.24036	2127.67891	8419.33881	1.10125	1.11927	6.31E-03	5.67E-03	9.74E-04	4.03E-03	7.11E-04	6.14E-03	5.78E-03	3.10E-03	5.08E-04	5.56E-03	1.73E-03	6.85E-03	5.16E-04	5.30E-04	4.8417E-02
551367.82	4172781.54	2867.90802	4071.09484	1193.47332	10177.74604	1635.45476	2644.51671	2859.45341	2331.09518	661.19184	7169.82545	6127.04221	3367.50806	0.47762	0.48964	4.56E-03	4.59E-03	1.34E-03	8.78E-03	1.42E-03	2.30E-03	4.12E-03	2.38E-03	6.75E-04	8.70E-03	4.99E-03	2.74E-03	2.24E-04	2.32E-04	4.7047E-02
551344.62	4172963.09	3124.88682	5100.60863	1047.87226	8626.34243	1187.57006	3499.64993	3128.97128	2952.23446	594.04448	7182.3305	4238.148	4414.7282	0.47736	0.48542	4.97E-03	5.74E-03	1.18E-03	7.44E-03	1.03E-03	3.04E-03	4.51E-03	3.01E-03	6.06E-04	8.72E-03	3.45E-03	3.59E-03	2.24E-04	2.30E-04	4.7749E-02
551639.08	4173310.79	4562.44288	4670.77347	858.04782	3990.35178	753.19989	7546.97984	4638.2629	2786.94318	498.49967	3914.61331	1856.30918	9002.55047	3.28155	3.45246	7.26E-03	5.26E-03	9.66E-04	3.44E-03	6.54E-04	6.55E-03	6.68E-03	2.85E-03	5.09E-04	4.75E-03	1.51E-03	7.33E-03	1.54E-03	1.64E-03	5.0934E-02
551459.06	4173222.95	3484.12498	5342.83703	917.05504	5907.34661	927.54491	5955.93225	3513.72785	3217.50627	524.74781	5502.27352	2615.17373	7145.58914	0.60897	0.61532	5.54E-03	6.02E-03	1.03E-03	5.09E-03	8.05E-04	5.17E-03	5.06E-03	3.28E-03	5.36E-04	6.68E-03	2.13E-03	5.82E-03	2.85E-04	2.92E-04	4.7748E-02
551422.57	4173180.83	3331.82294	5342.40877	928.85953	6400.10959	967.02709	5579.76817	3358.45244	3150.69852	528.97981	5806.8323	2836.46948	6779.83888	0.54761	0.55331	5.30E-03	6.02E-03	1.05E-03	5.52E-03	8.40E-04	4.84E-03	4.84E-03	3.22E-03	5.40E-04	7.05E-03	2.31E-03	5.52E-03	2.57E-04	2.62E-04	4.7557E-02
551685.11	4172617.87	5999.33089	2561.90749	2348.15199	5957.04124	3713.07035	1697.87828	5928.99076	1530.33594	1236.3909	4547.27314	7154.9625	2293.06438	0.23984	0.24396	9.55E-03	2.89E-03	2.64E-03	5.14E-03	3.22E-03	1.47E-03	8.54E-03	1.56E-03	1.26E-03	5.52E-03	5.82E-03	1.87E-03	1.12E-04	1.16E-04	4.9713E-02
551728.06	4173288.67	6002.40513	4190.18108	812.7545	3495.41735	704.31561	7045.817	6140.57607	2423.772	476.25042	3421.8858	1672.28942	8549.03128	3.73694	3.46695	9.55E-03	4.72E-03	9.15E-04	3.01E-03	6.12E-04	6.12E-03	8.84E-03	2.47E-03	4.86E-04	4.15E-03	1.36E-03	6.96E-03	1.75E-03	1.64E-03	5.2602E-02
551351.5	4173011.3	3181.12958	5350.06457	978.27116	7944.25155	1116.3911	3930.01875	3192.33092	3140.64938	555.13675	6717.44125	3879.97136	4930.78749	0.4752	0.48211	5.06E-03	6.03E-03	1.10E-03	6.85E-03	9.69E-04	3.41E-03	4.60E-03	3.21E-03	5.67E-04	8.16E-03	3.16E-03	4.01E-03	2.23E-04	2.28E-04	4.7570E-02
551394.6	4173131.87	3235.41657	5250.1053	933.31953	6840.66533	1020.85121	5211.43471	3260.80457	3103.97168	528.64119	5997.73328	3155.65289	6357.24941	0.51539	0.52054	5.15E-03	5.91E-03	1.05E-03	5.90E-03	8.86E-04	4.53E-03	4.70E-03	3.17E-03	5.40E-04	7.28E-03	2.57E-03	5.17E-03	2.42E-04	2.47E-04	4.7340E-02
551343.79	4172902.63	3001.13576	4631.78758	1114.48262	9334.65929	1305.91599	3068.32748	2998.90183	2657.27385	626.75582	7394.03093	4836.79113	3886.38192	0.4776	0.4869	4.78E-03	5.22E-03	1.26E-03	8.05E-03	1.13E-03	2.66E-03	4.32E-03	2.71E-03	6.40E-04	8.98E-03	3.94E-03	3.16E-03	2.24E-04	2.31E-04	4.7298E-02
551586.08	4173303	4069.13845	4911.46909	860.33105	4432.78181	794.7067	7205.36813	4127.98684	2960.20115	496.15343	4365.71407	2031.36252	8565.79187	1.35243	1.38304	6.48E-03	5.53E-03	9.69E-04	3.82E-03	6.90E-04	6.26E-03	5.94E-03	3.02E-03	5.07E-04	5.30E-03	1.65E-03	6.97E-03	6.34E-04	6.55E-04	4.8433E-02
551491.92	4173250.86	3608.7497	5233.2075	885.11097	5486.59853	894.09409	6253.82029	3643.68375	3154.38518	507.62855	5155.76126	2464.11455	7526.5009	0.7071	0.71423	5.74E-03	5.89E-03	9.97E-04	4.73E-03	7.76E-04	5.43E-03	5.25E-03	3.22E-03	5.18E-04	6.26E-03	2.01E-03	6.13E-03	3.31E-04	3.38E-04	4.7618E-02
551744.18	4172645.41	6234.88059	2304.36393	1960.09165	6958.56651	3142.74351	1516.58952	6166.25345	1359.46689	1040.46781	4384.37728	7615.30943	2044.53556	0.32646	0.33484	9.92E-03	2.60E-03	2.21E-03	6.00E-03	2.73E-03	1.32E-03	8.88E-03	1.39E-03	1.06E-03	5.32E-03	6.20E-03	1.66E-03	1.53E-04	1.59E-04	4.9598E-02
551391.55	4172715.31	2879.55901	3863.01379	1211.20835	10194.46714	1741.68452	2424.56641	2870.89615	2210.16674	667.90955	7053.18748	6349.54226	3115.6341	0.4504	0.46172	4.58E-03	4.35E-03	1.36E-03	8.79E-03	1.51E-03	2.11E-03	4.13E-03	2.26E-03	6.82E-04	8.56E-03	5.17E-03	2.54E-03	2.11E-04	2.19E-04	4.6475E-02
551348.25	4173002.29	3149.43064	5258.75916	981.98388	7982.32155	1118.25515	3802.97621	3159.12197	3077.75561	557.33903	6738.07585	3914.27718	4777.74976	0.46944	0.47685	5.01E-03	5.92E-03	1.11E-03	6.88E-03	9.71E-04	3.30E-03	4.55E-03	3.14E-03	5.69E-04	8.18E-03	3.19E-03	3.89E-03	2.20E-04	2.26E-04	4.7158E-02
551626.17	4173312.67	4370.60008	4675.73107	852.20284	4045.96073	755.86575	7373.28125	4440.55095	2799.6516	494.11012	3980.53132	1877.80417	8784.8423	2.41348	2.5217	6.95E-03	5.27E-03	9.60E-04	3.49E-03	6.56E-04	6.40E-03	6.40E-03	2.86E-03	5.04E-04	4.83E-03	1.53E-03	7.15E-03	1.13E-03	1.20E-03	4.9323E-02
551542.96	4173286.75	3815.66915	5016.32352	856.74987	4840.4788	831.15724	6745.46374	3862.8731	3024.42717	492.27231	4688.80769	2197.13836	8051.18938	0.92744	0.94018	6.07E-03	5.65E-03	9.65E-04	4.17E-03	7.22E-04	5.86E-03	5.56E-03	3.09E-03	5.03E-04	5.69E-03	1.79E-03	6.55E-03	4.35E-04	4.46E-04	4.7506E-02
551340.98	4172923.9	3016.98446	4733.71827	1083.62471	8979.05135	1247.87938	3165.22301	3016.65644	2721.52465	611.48672	7260.63622	4551.12228	4005.37478	0.47181	0.48012	4.80E-03	5.33E-03	1.22E-03	7.74E-03	1.08E-03	2.75E-03	4.34E-03	2.78E-03	6.24E-04	8.81E-03	3.70E-03	3.26E-03	2.21E-04	2.28E-04	4.6902E-02
551341.39	4172954.13	3070.19129	4946.97193	1046.5557	8594.52365	1188.07574	3375.00481	3073.10016	2858.83625	592.80142	7116.65124	4251.25185	4260.73192	0.46852	0.47698	4.89E-03	5.57E-03	1.18E-03	7.41E-03	1.03E-03	2.93E-03	4.43E-03	2.92E-03	6.05E-04	8.64E-03	3.46E-03	3.47E-03	2.20E-04	2.26E-04	4.6972E-02
551344.87	4172857.03	2894.22333	4265.51456	1134.38437	9683.08866	1419.43911	2818.0312	2888.86776	2444.27263	633.4661	7235.48024	5347.4684	3573.58525	0.47258	0.48259	4.61E-03	4.80E-03	1.28E-03	8.35E-03	1.23E-03	2.45E-03	4.16E-03	2.50E-03	6.47E-04	8.78E-03	4.35E-03	2.91E-03	2.21E-04	2.29E-04	4.6515E-02
551425.66	4173189.42	3308.19705	5256.47645	916.19378	6240.3579	949.89887	5512.00553	3334.57196	3102.71273	522.08925	5678.62649	2767.98596	6697.49111	0.54428	0.54983	5.26E-03	5.92E-03	1.03E-03	5.38E-03	8.25E-04	4.79E-03	4.80E-03	3.17E-03	5.33E-04	6.89E-03	2.25E-03	5.45E-03	2.55E-04	2.61E-04	4.6825E-02
551400.52	4173148.61	3222.70463	5175.52567	925.54351	6619.02864	996.48166	5236.39433	3248.15588	3058.48966	524.52741	5868.61376	3019.05735	6374.55144	0.51664	0.52213	5.13E-03	5.83E-03	1.04E-03	5.71E-03	8.65E-04	4.55E-03	4.68E-03	3.12E-03	5.36E-04	7.12E-03	2.46E-03	5.19E-03	2.42E-04	2.47E-04	4.6715E-02
551428.44	4172649.49	3059.02489	3555.55247	1312.32006	10039.98511	1917.17524	2206.2002	3046.71688	2044.82182	724.16448	6825.40876	6600.24117	2854.90972	0.41033	0.4193	4.87E-03	4.00E-03	1.48E-03	8.66E-03	1.66E-03	1.92E-03	4.39E-03	2.09E-03	7.39E-04	8.29E-03	5.37E-03	2.32E-03	1.92E-04	1.99E-04	4.6176E-02
551384.28	4172728.44	2842.81162	3879.3893	1192.49049	10042.12861	1703.21328	2454.46999	2834.34891	2219.11413	657.93733	6989.88877	6213.31841	3146.88337	0.45064	0.462	4.52E-03	4.37E-03	1.34E-03	8.66E-03	1.48E-03	2.13E-03	4.08E-03	2.27E-03	6.72E-04	8.49E-03	5.06E-03	2.56E-03	2.11E-04	2.19E-04	4.6060E-02
551612.28	4172576.95	4757.49448	2813.52161	2134.2187	6847.23188	3573.02532	1816.26195	4709.54499	1677.05867	1140.24909	5303.49175	6945.07764	2422.38958	0.23825	0.24018	7.57E-03	3.17E-03	2.40E-03	5.91E-03	3.10E-03	1.58E-03	6.78E-03	1.71E-03	1.16E-03	6.44E-03	5.65E-03	1.97E-03	1.12E-04	1.14E-04	4.7674E-02
551676.03	4172610.16	5763.00143	2561.61918	2307.79648	5873.56957	3675.72871	1698.08412	5696.66638	1531.52332	1217.814	4552.88405	6964.19437	2290.43643	0.22844	0.23175	9.17E-03	2.89E-03	2.60E-03	5.07E-03	3.19E-03	1.47E-03	8.20E-03	1.56E-03	1.24E-03	5.53E-03	5.67E-03	1.86E-03	1.07E-04	1.10E-04	4.8673E-02
551404.04	4173158.41	3219.77082	5141.02851	917.81205	6495.19387	978.81266	5288.70255	3245.136	3058.22884	521.50557	5815.28697	2937.18713	6374.30107	0.51428	0.51951	5.12E-03	5.79E-03	1.03E-03	5.60E-03	8.50E-04	4.59E-03	4.67E-03	3.12E-03	5.32E-04	7.06E-03	2.39E-03	5.19E-03	2.41E-04	2.46E-04	4.6444E-02
551345.03	4172993.32	3106.20233	5140.72862	982.07652	7978.89813	1116.5222	3671.25205	3114.51314	3000.36592	557.39538	6721.58835	3903.63744	4617.48893	0.46252	0.47	4.94E-03	5.79E-03	1.11E-03	6.88E-03	9.69E-04	3.19E-03	4.49E-03	3.06E-03	5.69E-04	8.16E-03	3.18E-03	3.76E-03	2.17E-04	2.23E-04	4.6529E-02
551602.26	4172574.89	4603.12416	2845.64728	2077.70484	7005.37334	3470.54714	1829.18585	4558.37146	1693.13051	1113.09007	5393.76003	6882.39279	2435.42723	0.24159	0.24348	7.32E-03	3.20E-03	2.34E-03	6.04E-03	3.01E-03	1.59E-03	6.56E-03	1.73E-03	1.14E-03	6.55E-03	5.60E-03	1.98E-03	1.13E-04	1.15E-04	4.7303E-02
551711.13	4172625.92	6144.347	2411.70347	2180.90175	6011.04158	3362.85411	1601.59785	6072.84601	1433.62247	1149.01942	4305.42652	7033.67048	2163.50746	0.2638	0.26972	9.78E-03	2.72E-03	2.46E-03	5.18E-03	2.92E-03	1.39E-03	8.75E-03	1.46E-03	1.17E-03	5.23E-03	5.72E-03	1.76E-03	1.24E-04	1.28E-04	4.8791E-02
551402.78	4172689.56	2898.56238	3710.32066	1217.97839	10034.84884	1757.73271	2315.99358	2889.67626	2126.81383	671.76457	6894.80066	6331.17654	2986.41648	0.42878	0.43911	4.61E-03	4.18E-03	1.37E-03	8.65E-03	1.53E-03	2.01E-03	4.16E-03	2.17E-03	6.86E-04	8.37E-03	5.15E-03	2.43E-03	2.01E-04	2.08E-04	4.5736E-02
551573.27	4173303.13	3929.93694	4848.14238	846.55554	4468.87517	793.59425	6893.05284	3984.45002	2921.68003	487.53343	4387.09108	2046.28245	8206.96982	1.161	1.1813	6.25E-03	5.46E-03	9.53E-04	3.85E-03	6.89E-04	5.99E-03	5.74E-03	2.98E-03	4.98E-04	5.33E-03	1.67E-03	6.68E-03	5.44E-04	5.60E-04	4.7189E-02
551415.37	4172669.68	2963.79554	3621.53973	1252.49195	10011.20317	1812.64586	2253.85678	2953.81213	2079.89203	691.03033	6838.72349	6424.2352	2912.16357	0.41731	0.42694	4.72E-03	4.08E-03	1.41E-03	8.63E-03	1.57E-03	1.96E-03	4.25E-03	2.12E-03	7.05E-04	8.30E-03	5.23E-03	2.37E-03	1.96E-04	2.02E-04	4.5752E-02
551379.95	4172736.84	2816.22451	3872.85282	1177.8482	9894.83973	1671.78999	2466.55783	2807.92897	2215.91867	650.24046	6916.6454	6096.11451	3157.73615	0.44775	0.45897	4.48E-03	4.36E-03	1.33E-03	8.53E-03	1.45E-03	2.14E-03	4.04E-03	2.26E-03	6.64E-04	8.40E-03	4.96E-03	2.57E-03	2.10E-04	2.18E-04	4.5622E-02
551446.13	4173217.1	3360.44808	5166.07925	899.8002	5877.86359	917.58992	5619.48318	3387.94961	3095.88265	514.15894	5430.0459	2610.97704	6824.36264	0.56898	0.57439	5.35E-03	5.82E-03	1.01E-03	5.07E-03	7.97E-04	4.88E-03	4.88E-03	3.16E-03	5.25E-04	6.59E-03	2.12E-03	5.55E-03	2.67E-04	2.72E-04	4.6299E-02
551407.13	4173167	3212.0177	5098.44535	909.7311	6378.05396	963.08203	5266.72487	3237.24089	3027.51989	517.18943	5724.40546	2867.37354	6412.60566	0.51418	0.51936	5.11E-03	5.74E-03	1.02E-03	5.50E-03	8.36E-04	4.57E-03	4.66E-03	3.09E-03	5.28E-04	6.95E-03	2.33E-03	5.22E-03	2.41E-04	2.46E-04	4.6058E-02
551428.75	4173198.01	3286.33123	5171.32188	903.31485	6083.92379	932.45611	5441.85824	3312.47835	3055.1876	515.0445	5550.84992	2699.59511	6613.20112	0.54095	0.54637	5.23E-03	5.82E-03	1.02E-03	5.25E-03	8.10E-04	4.73E-03	4.77E-03	3.12E-03	5.26E-04	6.74E-03	2.20E-03	5.38E-03	2.54E-04	2.59E-04	4.6099E-02
551552.31	4173295.57	3808.2475	4885.52292	843.50808	4653.5497	809.71514	6665.69515	3857.28933	2944.12523	484.93143	4530.30288	2121.62252	7952.28506	0.9715	0.98546	6.06E-03	5.50E-03	9.50E-04	4.01E-03	7.03E-04	5.79E-03	5.56E-03	3.01E-03	4.95E-04	5.50E-03	1.73E-03	6.47E-03	4.55E-04	4.67E-04	4.6693E-02
551595.58	4173311.95	4050.63049	4724.88193	841.70139	4225.81908	768.72299	7001.20844	4110.44305	2841.46509	486.00043	4168.50191	1947.41102	8334.96383	1.45462	1.49095	6.45E-03	5.32E-03	9.48E-04	3.64E-03	6.67E-04	6.08E-03	5.92E-03	2.90E-03	4.96E-04	5.06E-03	1.58E-03	6.78E-03	6.82E-04	7.07E-04	4.7240E-02
551341.8	4172984.36	3071.07836	5034.50862	986.97205	8015.3342	1120.20566	3554.3648	3077.99792	2930.58016	560.04302	6732.96314	3929.7058	4475.06289	0.45719	0.46427	4.89E-03	5.67E-03	1.11E-03	6.91E-03	9.73E-04	3.09E-03	4.43E-03	2.99E-03	5.72E-04	8.17E-03	3.20E-03	3.64E-03	2.14E-04	2.20E-04	4.6085E-02
551340.67	4172891.68	2913.53377	4414.41547	1092.74417	9124.01639	1293.91943	2929.89016	2910.72166	2532.65369	613.43007	7144.49798	4791.60545	3712.63176	0.45917	0.4681	4.64E-03	4.97E-03	1.23E-03	7.87E-03	1.12E-03	2.54E-03	4.19E-03	2.59E-03	6.26E-04	8.67E-03	3.90E-03	3.02E-03	2.15E-04	2.22E-04	4.5811E-02
551463.74	4173233.96	3415.87028	5123.12889	883.49072	5647.88838	903.76902	5721.73149	3445.26506	3074.50155	505.76364	5234.648	2534.69687	6921.05302	0.61512	0.62072	5.44E-03	5.77E-03	9.95E-04	4.87E-03	7.85E-04	4.97E-03	4.96E-03	3.14E-03	5.16E-04	6.35E-03	2.06E-03	5.63E-03	2.88E-04	2.94E-04	4.6074E-02
551338.16	4172945.16	3003.09439	4769.6916	1037.13726	8485.88253	1180.16555	3241.77273	3005.06996	2752.96293	586.91879	6988.1208	4232.77768	4095.74874	0.45702	0.4652	4.78E-03	5.37E-03	1.17E-03	7.32E-03	1.02E-03	2.81E-03	4.33E-03	2.81E-03	5.99E-04	8.48E-03	3.44E-03	3.33E-03	2.14E-04	2.20E-04	4.5911E-02
551343.15	4172846.54	2835.12686	4122.96898	1118.15356	9509.61658	1419.16815	2731.15745	2829.41633	2362.97298	623.77443	7034.32217	5324.83615	3464.52998	0.46072	0.47061	4.51E-03	4.64E-03	1.26E-03	8.20E-03	1.23E-03	2.37E-03	4.07E-03	2.41E-03	6.37E-04	8.54E-03	4.33E-03	2.82E-03	2.16E-04	2.23E-04	4.5475E-02
551520.35	4173277.65	3643.26914	4939.26535	845.03274	4989.66142	840.6692	6320.69133	3684.00936	2977.775	484.93552	4750.21728	2266.962	7571.16677	0.78807	0.79794	5.80E-03	5.56E-03	9.52E-04	4.30E-03	7.30E-04	5.49E-03	5.31E-03	3.04E-03	4.95E-04	5.77E-03	1.84E-03	6.16E-03	3.69E-04	3.78E-04	4.6195E-02
551337.75	4172914.93	2945.22042	4553.46502	1069.61262	8829.28376	1240.26646	3043.23862	2944.23074	2616.52181	602.7328	7086.14737	4526.54414	3852.94032	0.45861	0.46721	4.69E-03	5.13E-03	1.20E-03	7.61E-03	1.08E-03	2.64E-03	4.24E-03	2.67E-03	6.15E-04	8.60E-03	3.68E-03	3.14E-03	2.15E-04	2.21E-04	4.5739E-02

551478.15	4173250.08	3425.68181	4971.75622	857.50152	5380.05309	874.87326	5748.47492	3456.9973	2993.88098	491.42461	4996.78617	2435.90383	6938.2529	0.63811	0.64498	5.45E-03	5.60E-03	9.66E-04	4.64E-03	7.60E-04	4.99E-03	4.98E-03	3.06E-03	5.02E-04	6.07E-03	1.98E-03	5.65E-03	2.99E-04	3.06E-04	4.5244E-02
551405.61	4172676.13	2867.3231	3573.00607	1200.62411	9682.27738	1728.87014	2235.45658	2858.42589	2050.81671	662.48783	6658.29519	6144.45006	2885.31792	0.40749	0.41693	4.56E-03	4.02E-03	1.35E-03	8.35E-03	1.50E-03	1.94E-03	4.12E-03	2.09E-03	6.76E-04	8.08E-03	5.00E-03	2.35E-03	1.91E-04	1.98E-04	4.4439E-02
551334.94	4172936.2	2941.79967	4609.22822	1029.65919	8401.0201	1176.76287	3121.783	2942.88459	2656.41913	582.04026	6871.57566	4227.88427	3947.73639	0.44691	0.45491	4.68E-03	5.19E-03	1.16E-03	7.25E-03	1.02E-03	2.71E-03	4.24E-03	2.71E-03	5.94E-04	8.34E-03	3.44E-03	3.21E-03	2.09E-04	2.16E-04	4.4975E-02
551362.67	4172770.46	2746.81456	3839.37614	1135.00548	9487.52576	1562.46559	2509.4611	2738.97657	2199.94074	628.47619	6709.36413	5737.95009	3196.81568	0.44135	0.45211	4.37E-03	4.32E-03	1.28E-03	8.18E-03	1.36E-03	2.18E-03	3.94E-03	2.25E-03	6.42E-04	8.15E-03	4.67E-03	2.60E-03	2.07E-04	2.14E-04	4.4361E-02
551413.31	4173184.17	3174.52469	4965.5774	889.25992	6102.9488	932.13028	5171.71469	3199.3207	2949.0024	506.11424	5510.16196	2738.17561	6293.82911	0.50954	0.51461	5.05E-03	5.59E-03	1.00E-03	5.26E-03	8.09E-04	4.49E-03	4.61E-03	3.01E-03	5.17E-04	6.69E-03	2.23E-03	5.12E-03	2.39E-04	2.44E-04	4.4867E-02
551337.26	4172870.81	2823.1568	4166.63386	1082.50741	9074.03796	1324.92511	2769.51667	2819.09949	2389.80388	605.63191	6917.8848	4918.33433	3511.2514	0.44666	0.45557	4.49E-03	4.69E-03	1.22E-03	7.83E-03	1.15E-03	2.40E-03	4.06E-03	2.44E-03	6.18E-04	8.40E-03	4.00E-03	2.86E-03	2.09E-04	2.16E-04	4.4587E-02
551418.56	4172656.01	2931.40511	3477.59384	1236.81041	9591.07829	1786.42004	2173.39209	2921.06794	1999.83742	682.75762	6571.58706	6203.01196	2809.45371	0.3948	0.40348	4.66E-03	3.92E-03	1.39E-03	8.27E-03	1.55E-03	1.89E-03	4.21E-03	2.04E-03	6.97E-04	7.98E-03	5.05E-03	2.29E-03	1.85E-04	1.91E-04	4.4319E-02
551582.91	4173312.2	3883.81464	4648.83509	826.73288	4262.55931	768.02158	6670.76526	3939.09443	2800.01146	476.45138	4186.83444	1966.18972	7947.26395	1.22659	1.24979	6.18E-03	5.24E-03	9.31E-04	3.68E-03	6.67E-04	5.79E-03	5.67E-03	2.86E-03	4.86E-04	5.08E-03	1.60E-03	6.47E-03	5.75E-04	5.92E-04	4.5818E-02
551561.67	4173304.38	3769.60104	4713.12809	825.90042	4460.56752	786.70117	6502.68318	3819.88047	2840.37768	474.9973	4350.00078	2047.57469	7755.78988	1.01388	1.02874	6.00E-03	5.31E-03	9.30E-04	3.85E-03	6.83E-04	5.65E-03	5.50E-03	2.90E-03	4.85E-04	5.28E-03	1.67E-03	6.31E-03	4.75E-04	4.88E-04	4.5521E-02
551385.31	4173135.16	3086.66081	4911.83769	890.96262	6485.25496	978.6624	4853.31424	3110.48752	2901.94317	504.45473	5663.53324	3020.13907	5926.89287	0.48177	0.4864	4.91E-03	5.53E-03	1.00E-03	5.59E-03	8.50E-04	4.21E-03	4.48E-03	2.96E-03	5.15E-04	6.88E-03	2.46E-03	4.82E-03	2.26E-04	2.31E-04	4.4675E-02
551630.12	4173321.06	4240.88605	4433.50149	823.15776	3872.6544	730.27351	6905.97379	4308.46564	2651.84968	477.29213	3797.00063	1810.99629	8247.09149	2.41271	2.52364	6.75E-03	4.99E-03	9.27E-04	3.34E-03	6.34E-04	6.00E-03	6.20E-03	2.71E-03	4.87E-04	4.61E-03	1.47E-03	6.71E-03	1.13E-03	1.20E-03	4.7161E-02
551335.35	4172966.43	2977.57907	4773.64505	988.01322	7993.29303	1120.56585	3315.18697	2982.02054	2767.2898	560.13421	6665.02788	3952.74066	4181.24667	0.44318	0.45086	4.74E-03	5.38E-03	1.11E-03	6.89E-03	9.73E-04	2.88E-03	4.29E-03	2.83E-03	5.72E-04	8.09E-03	3.22E-03	3.40E-03	2.08E-04	2.14E-04	4.4797E-02
551353.09	4172801.52	2748.32908	3876.39883	1117.19951	9369.32951	1487.77108	2569.35898	2741.10622	2223.16726	620.68792	6718.70207	5521.36403	3264.37743	0.44284	0.45318	4.37E-03	4.37E-03	1.26E-03	8.08E-03	1.29E-03	2.23E-03	3.95E-03	2.27E-03	6.34E-04	8.16E-03	4.49E-03	2.66E-03	2.08E-04	2.15E-04	4.4181E-02
551334.53	4172905.97	2870.63514	4371.82477	1052.32166	8651.39125	1228.84161	2923.45638	2869.10431	2511.63275	592.11637	6890.60807	4485.37827	3702.83511	0.4434	0.45169	4.57E-03	4.92E-03	1.19E-03	7.46E-03	1.07E-03	2.54E-03	4.13E-03	2.56E-03	6.05E-04	8.37E-03	3.65E-03	3.01E-03	2.08E-04	2.14E-04	4.4495E-02
551733.47	4173296.85	5709.00162	3906.49889	774.81666	3320.69196	674.73853	6396.26514	5839.02774	2261.24957	453.71399	3241.32893	1602.02532	7778.48731	3.41271	3.16285	9.08E-03	4.40E-03	8.73E-04	2.86E-03	5.86E-04	5.55E-03	8.41E-03	2.31E-03	4.63E-04	3.94E-03	1.30E-03	6.33E-03	1.60E-03	1.50E-03	4.9209E-02
551693.03	4172613.45	5754.90755	2402.55449	2150.5943	5556.69146	3316.75699	1604.10587	5689.63483	1432.34964	1134.90122	4214.87415	6524.25993	2165.25635	0.22655	0.23053	9.16E-03	2.71E-03	2.42E-03	4.79E-03	2.88E-03	1.39E-03	8.19E-03	1.46E-03	1.16E-03	5.12E-03	5.31E-03	1.76E-03	1.06E-04	1.09E-04	4.6570E-02
551539.31	4173295.5	3633.7219	4707.43443	819.11259	4727.61125	801.56939	6227.17742	3678.26973	2836.68359	470.29818	4464.05702	2125.93715	7444.90182	0.8537	0.86472	5.78E-03	5.30E-03	9.23E-04	4.08E-03	6.96E-04	5.41E-03	5.30E-03	2.90E-03	4.80E-04	5.42E-03	1.73E-03	6.06E-03	4.00E-04	4.10E-04	4.4879E-02
551355.17	4172791.83	2728.89465	3829.79224	1113.63678	9295.7263	1497.21914	2534.75935	2721.54523	2196.27499	618.10908	6640.48119	5525.65473	3222.41661	0.4371	0.4474	4.34E-03	4.31E-03	1.25E-03	8.02E-03	1.30E-03	2.20E-03	3.92E-03	2.24E-03	6.31E-04	8.06E-03	4.50E-03	2.62E-03	2.05E-04	2.12E-04	4.3819E-02
551720.95	4172625.84	5958.90447	2297.89019	2015.56967	5872.08707	3070.83605	1530.59103	5891.985	1362.84438	1065.68832	4111.5748	6670.30479	2065.47393	0.26259	0.26871	9.48E-03	2.59E-03	2.27E-03	5.06E-03	2.67E-03	1.33E-03	8.49E-03	1.39E-03	1.09E-03	4.99E-03	5.43E-03	1.68E-03	1.23E-04	1.27E-04	4.6716E-02
551358.34	4172778.87	2719.85803	3801.02849	1116.74482	9298.76103	1521.63462	2502.86809	2712.30665	2179.15351	618.99013	6608.10137	5586.27725	3185.17558	0.43439	0.44478	4.33E-03	4.28E-03	1.26E-03	8.02E-03	1.32E-03	2.17E-03	3.91E-03	2.22E-03	6.32E-04	8.02E-03	4.55E-03	2.59E-03	2.04E-04	2.11E-04	4.3719E-02
551391.23	4173151.9	3078.00083	4853.51839	884.96573	6293.54668	956.81946	4876.70273	3101.84492	2865.65963	501.45308	5590.51542	2895.95804	5944.58897	0.48308	0.48746	4.90E-03	5.47E-03	9.97E-04	5.43E-03	8.31E-04	4.23E-03	4.47E-03	2.93E-03	5.12E-04	6.79E-03	2.36E-03	4.84E-03	2.26E-04	2.31E-04	4.4198E-02
551416.4	4173192.75	3152.23388	4890.60491	877.81577	5958.29394	916.55766	5110.12559	3176.77359	2906.88387	499.92142	5395.68806	2675.8433	6219.0648	0.50629	0.51123	5.02E-03	5.51E-03	9.89E-04	5.14E-03	7.96E-04	4.44E-03	4.58E-03	2.97E-03	5.10E-04	6.55E-03	2.18E-03	5.06E-03	2.37E-04	2.42E-04	4.4207E-02
551331.71	4172927.23	2886.22648	4463.27432	1024.49739	8342.57453	1178.62837	3014.98594	2886.47287	2569.68633	578.33198	6769.01831	4241.36582	3815.02744	0.43908	0.44653	4.59E-03	5.03E-03	1.15E-03	7.19E-03	1.02E-03	2.62E-03	4.16E-03	2.62E-03	5.90E-04	8.22E-03	3.45E-03	3.10E-03	2.06E-04	2.12E-04	4.4172E-02
551617.02	4173322.96	4086.53159	4439.8996	816.59813	3921.4543	732.05876	6745.02133	4149.45998	2660.64499	472.67273	3857.24019	1828.27476	8051.23448	1.85084	1.91341	6.50E-03	5.00E-03	9.20E-04	3.38E-03	6.36E-04	5.86E-03	5.98E-03	2.72E-03	4.83E-04	4.68E-03	1.49E-03	6.55E-03	8.67E-04	9.07E-04	4.5970E-02
551332.12	4172957.46	2928.08569	4637.14901	986.8704	7966.45642	1120.73506	3200.83219	2931.40299	2683.86949	559.06527	6608.76399	3962.97527	4040.2482	0.43524	0.44277	4.66E-03	5.22E-03	1.11E-03	6.87E-03	9.73E-04	2.78E-03	4.22E-03	2.74E-03	5.71E-04	8.02E-03	3.23E-03	3.29E-03	2.04E-04	2.10E-04	4.4099E-02
551335.56	4172860.37	2769.08314	4031.34292	1069.63388	8954.80391	1328.75193	2685.43173	2764.59021	2312.39712	597.69292	6750.17219	4920.91342	3405.5863	0.43673	0.44554	4.41E-03	4.54E-03	1.20E-03	7.72E-03	1.15E-03	2.33E-03	3.98E-03	2.36E-03	6.10E-04	8.19E-03	4.00E-03	2.77E-03	2.05E-04	2.11E-04	4.3699E-02
551383.87	4172709.15	2737.9689	3632.60672	1135.84332	9360.00943	1621.31117	2305.1998	2730.27959	2080.65216	626.70715	6540.91946	5802.9473	2960.62074	0.41105	0.42088	4.36E-03	4.09E-03	1.28E-03	8.07E-03	1.41E-03	2.00E-03	3.93E-03	2.12E-03	6.40E-04	7.94E-03	4.72E-03	2.41E-03	1.93E-04	1.99E-04	4.3370E-02
551394.77	4173161.75	3069.67266	4812.37503	877.44138	6174.51769	941.07871	4914.54562	3093.40026	2861.09606	498.31605	5502.91058	2823.72626	5931.56278	0.47998	0.48469	4.88E-03	5.42E-03	9.88E-04	5.33E-03	8.17E-04	4.27E-03	4.45E-03	2.92E-03	5.09E-04	6.68E-03	2.30E-03	4.83E-03	2.25E-04	2.30E-04	4.3848E-02
551656.2	4172586.28	5139.0615	2507.29219	2125.64769	5717.55165	3422.54761	1661.19841	5083.17325	1499.31797	1128.09567	4497.91119	6420.88494	2231.2913	0.21005	0.21215	8.18E-03	2.82E-03	2.39E-03	4.93E-03	2.97E-03	1.44E-03	7.32E-03	1.53E-03	1.15E-03	5.46E-03	5.23E-03	1.82E-03	9.84E-05	1.01E-04	4.5445E-02
551627.72	4172572.6	4733.50487	2610.56508	2046.65767	6119.523	3359.69644	1710.96112	4685.13268	1559.00052	1091.73739	4799.71795	6405.34506	2286.47231	0.21524	0.21693	7.53E-03	2.94E-03	2.31E-03	5.28E-03	2.92E-03	1.49E-03	6.75E-03	1.59E-03	1.11E-03	5.83E-03	5.21E-03	1.86E-03	1.01E-04	1.03E-04	4.5016E-02
551378.8	4172717.99	2715.21981	3644.45347	1125.16756	9278.47605	1600.39626	2324.66999	2707.61483	2087.12401	620.96601	6507.57858	5731.08525	2981.06259	0.41191	0.42179	4.32E-03	4.10E-03	1.27E-03	8.00E-03	1.39E-03	2.02E-03	3.90E-03	2.13E-03	6.34E-04	7.90E-03	4.66E-03	2.43E-03	1.93E-04	2.00E-04	4.3150E-02
551571.02	4173313.19	3737.47687	4552.83437	809.82032	4361.47958	763.92355	6345.03249	3788.79721	2742.70279	466.02537	4177.13878	1973.16672	7569.40985	1.06189	1.07839	5.95E-03	5.13E-03	9.12E-04	3.76E-03	6.63E-04	5.51E-03	5.46E-03	2.80E-03	4.76E-04	5.07E-03	1.61E-03	6.16E-03	4.98E-04	5.11E-04	4.4500E-02
551341.04	4172827.78	2719.63866	3863.98017	1080.1722	9050.61528	1396.91788	2576.6604	2713.58041	2216.32946	601.79847	6618.27535	5180.61914	3270.1139	0.43293	0.44236	4.33E-03	4.35E-03	1.22E-03	7.81E-03	1.21E-03	2.24E-03	3.91E-03	2.26E-03	6.14E-04	8.03E-03	4.22E-03	2.66E-03	2.03E-04	2.10E-04	4.3262E-02
551437.01	4173220.82	3198.2119	4848.0615	863.38539	5631.31972	887.69524	5200.31301	3223.63794	2905.49312	493.04708	5176.85661	2533.96509	6262.12044	0.52735	0.53251	5.09E-03	5.46E-03	9.72E-04	4.86E-03	7.71E-04	4.52E-03	4.64E-03	2.97E-03	5.03E-04	6.28E-03	2.06E-03	5.10E-03	2.47E-04	2.52E-04	4.3720E-02
551740.78	4172636.11	5859.78388	2195.34817	1831.76542	6205.81474	2832.42831	1457.66631	5797.5336	1295.97355	974.38177	4052.52495	6726.99147	1963.95001	0.28826	0.29554	9.32E-03	2.47E-03	2.06E-03	5.35E-03	2.46E-03	1.27E-03	8.35E-03	1.32E-03	9.95E-04	4.92E-03	5.47E-03	1.60E-03	1.35E-04	1.40E-04	4.5873E-02
551408.68	4172662.54	2834.65604	3433.46179	1183.37899	9299.23009	1699.13043	2155.82652	2825.61667	1973.4447	653.29097	6408.49491	5940.06813	2784.27919	0.38607	0.39464	4.51E-03	3.87E-03	1.33E-03	8.02E-03	1.48E-03	1.87E-03	4.07E-03	2.01E-03	6.67E-04	7.78E-03	4.83E-03	2.27E-03	1.81E-04	1.87E-04	4.3077E-02
551548.79	4173304.43	3626.54615	4593.21271	807.35232	4556.39168	781.45232	6155.92151	3672.77861	2766.8166	463.79081	4321.40857	2053.89391	7356.84143	0.89151	0.90271	5.77E-03	5.17E-03	9.09E-04	3.93E-03	6.79E-04	5.35E-03	5.29E-03	2.82E-03	4.73E-04	5.25E-03	1.67E-03	5.99E-03	4.18E-04	4.28E-04	4.4145E-02
551419.49	4173201.34	3129.07213	4812.43262	865.75362	5812.10519	900.83044	5042.96931	3153.34574	2863.5736	493.32944	5278.36794	2614.32215	6138.49033	0.50273	0.50746	4.98E-03	5.42E-03	9.75E-04	5.01E-03	7.82E-04	4.38E-03	4.54E-03	2.92E-03	5.04E-04	6.41E-03	2.13E-03	5.00E-03	2.36E-04	2.40E-04	4.3524E-02
551454.78	4173238.04	3256.04311	4825.59873	849.29485	5433.32709	874.62993	5296.89479	3283.19206	2893.37096	485.89803	4998.18424	2462.99555	6418.93805	0.56882	0.57378	5.18E-03	5.43E-03	9.57E-04	4.69E-03	7.59E-04	4.60E-03	4.73E-03	2.95E-03	4.96E-04	6.07E-03	2.00E-03	5.22E-03	2.67E-04	2.72E-04	4.3630E-02
551397.86	4173170.33	3058.01633	4766.89904	869.74656	6062.45045	927.14925	4888.10038	3081.57392	2831.06577	494.21219	5418.31748	2762.44095	5902.23372	0.47897	0.48377	4.87E-03	5.37E-03	9.80E-04	5.23E-03	8.05E-04	4.24E-03	4.44E-03	2.89E-03	5.05E-04	6.58E-03	2.25E-03	4.80E-03	2.24E-04	2.29E-04	4.3408E-02
551374.52	4172726.31	2691.11049	3641.52537	1112.59085	9157.76045	1574.70039	2337.07166	2683.63826	2085.80338	614.29265	6447.67438	5636.06378	2992.66306	0.4101	0.4199	4.28E-03	4.10E-03	1.25E-03	7.90E-03	1.37E-03	2.03E-03	3.86E-03	2.13E-03	6.27E-04	7.83E-03	4.59E-03	2.44E-03	1.92E-04	1.99E-04	4.2794E-02
551331.34	4172894.83	2791.84159	4178.55885	1034.49603	8486.76997	1221.20444	2796.91555	2789.70359	2400.23389	581.02363	6682.14672	4457.63652	3544.13682	0.4278	0.43581	4.44E-03	4.71E-03	1.17E-03	7.32E-03	1.06E-03	2.43E-03	4.02E-03	2.45E-03	5.93E-04	8.11E-03	3.63E-03	2.88E-03	2.01E-04	2.07E-04	4.3215E-02
551592.55	4173321.28	3836.39452	4449.16675	806.38955	4061.54149	742.4119	6432.70581	3892.05512	2677.09653	465.11103	3988.87998	1887.12867	7672.36305	1.2988	1.32504	6.10E-03	5.01E-03	9.08E-04	3.50E-03	6.45E-04	5.59E-03	5.61E-03	2.73E-03	4.75E-04	4.84E-03	1.54E-03	6.24E-03	6.09E-04	6.28E-04	4.4429E-02
551328.49	4172918.27	2824.03419	4308.61634	1014.3372	8235.15217	1175.05624	2906.7272	2823.60231	2479.10651	571.76735	6632.14142	4232.491	3679.87688	0.4285	0.43625	4.49E-03	4.85E-03	1.14E-03	7.10E-03	1.02E-03	2.52E-03	4.07E-03	2.53E-03	5.84E-04	8.05E-03	3.44E-03	2.99E-03	2.01E-04	2.07E-04	4.3215E-02
551328.9	4172948.5	2871.74013	4489.329	981.2252	7898.31115	1116.91714	3084.48166	2874.12139	2594.62102	555.3489	6516.20435	3957.75433	3896.5635	0.4262	0.43355	4.57E-03	5.06E-03	1.11E-03	6.81E-03	9.70E-04	2.68E-03	4.14E-03	2.65E-03	5.67E-04	7.91E-03	3.22E-03	3.17E-03	2.00E-04	2.05E-04	4.3254E-02
551333.86	4172849.93	2714.85414	3901.80193	1055.34032	8808.07681	1329.31944	2605.67611	2709.99451	2238.23472	589.12298	6574.48595	4907.06247	3305.47113	0.42633	0.43505	4.32E-03	4.39E-03	1.19E-03	7.60E-03	1.15E-03	2.26E-03	3.90E-03	2.29E-03	6.01E-04	7.98E-03	3.99E-03	2.69E-03	2.00E-04	2.06E-04	4.2777E-02
551651.63	4173326.89	4347.87666	4171.67036	797.48819	3629.48757	700.06605	6575.4674	4420.32274	2479.43835	463.59681	3528.18566	1715.94882	7889.18459	3.77048	4.00475	6.92E-03	4.70E-03	8.98E-04	3.13E-03	6.08E-04	5.71E-03	6.37E-03	2.53E-03	4.73E-04	4.28E-03	1.40E-03	6.42E-03	1.77E-03	1.90E-03	4.7099E-02
551341.74	4172818.5	2685.58154	3785.23923	1071.74975	8929.44966	1398.11438	2528.67382	2679.31298	2171.89864	596.63918	6495.78396	5162.8923	3209.83984	0.42495	0.43432	4.27E-03	4.26E-03	1.21E-03	7.70E-03	1.21E-03	2.20E-03	3.86E-03	2.22E-03	6.09E-04	7.89E-03	4.20E-03	2.61E-03	1.99E-04	2.06E-04	4.2645E-02
551664.34	4173325.04	4501.9692	4109.4091	793.78242	3559.73771	693.61232	6545.70888	4579.853	2432.85151	462.16718	3441.028	1689.89304	7870.42728	5.66204	6.15601	7.16E-03	4.63E-03	8.94E-04	3.07E-03	6.02E-04	5.68E-03	6.60E-03	2.48E-03	4.72E-04	4.18E-03	1.38E-03	6.41E-03	2.65E-03	2.92E-03	4.9123E-02
551400.95	4173178.92	3046.66055	4720.91581	861.54728	5949.20416	912.82539	4855.06733	3070.03046	2801.08318	489.80293	5330.99668	2700.9652	5917.66152	0.47781	0.4824	4.85E-03	5.32E-03	9.70E-04	5.13E-03	7.93E-04	4.22E-03	4.42E-03	2.86E-03	5.00E-04	6.47E-03	2.20E-03	4.82E-03	2.24E-04	2.29E-04	4.2994E-02
551370.24	4172734.63	2667.68246	3632.22801	1100.06433	9030.92043	1547.87521	2346.77768	2660.33073	2081.15366	607.7203	6380.93564	5538.78925	3000.87244	0.40769	0.41738	4.25E-03	4.09E-03	1.24E-03	7.79E-03	1.34E-03	2.04E-03	3.83E-03	2.12E-03	6.20E-04	7.75E-03	4.51E-03	2.44E-03	1.91E-04	1.98E-04	4.2407E-02
551677.06	4173323.19	4661.62923	4033.63236	786.58045	3483.24159	685.55219	6461.36206	4745.65907	2376.982	458.64157	3348.38676	1660.43631	7790.18959	9.84762	11.17722	7.42E-03	4.54E-03	8.86E-04	3.00E-03	5.95E-04	5.61E-03	6.83E-03	2.43E-03	4.68E-04	4.06E-03	1.35E-03	6.34E-03	4.62E-03	5.30E-03	5.3455E-02
551464.26	4173249.18	3258.30101	4729.73197	832.04562	5264.14198	855.27624	5303.0361	3286.47889	2843.72848	476.42397	4843.5272	2400.71016	6418.25944	0.58044	0.58631	5.18E-03	5.33E-03	9.37E-04	4.54E-03	7.43E-04	4.60E-03	4.73E-03	2.90E-03	4.86E-04	5.88E-03	1.95E-03	5.22E-03	2.72E-04	2.78E-04	4.3066E-02
551638.91	4173328.74	4181.56475	4203.53233	796.69285	3689.29497	704.57859	6518.55502	4248.73456	2508.09097	462.29601	3600.99544	1739.19393	7806.62093	2.70928	2.83919	6.65E-03	4.73E-03	8.97E-04	3.18E-03	6.12E-04	5.66E-03	6.12E-03	2.56E-03	4.72E-04	4.37E-03	1.42E-03	6.35E-03	1.27E-03	1.35E-03	4.5646E-02
551725.8	4173306.93	5398.36419	3805.08962	756.03319	3262.88711	662.37812	6137.70114	5515.78298	2206.96607	443.38512	3180.7651	1575.73782	7467.5044	4.72441	4.30421	8.59E-03	4.29E-03	8.51E-04	2.81E-03	5.75E-04	5.33E-03	7.94E-03	2.25E-03	4.53E-04	3.86E-03	1.28E-03	6.08E-03	2.21E-03	2.04E-03	4.8571E-02
551365.96	4172742.95	2651.06473	3627.63528	1091.07887	8943.29603	1525.89876	2358.71039	2643.77713	2079.18028	603.12188	6335.05486	5467.61769	3012.24858	0.40692	0.41656	4.22E-03	4.09E-03	1.23E-03	7.71E-03	1.32E-03	2.05E-03	3.81E-03	2.12E-03	6.16E-04	7.69E-03	4.45E-03	2.45E-03	1.91E-04	1.97E-04	4.2145E-02
551473.96	4173258.32	3282.26478	4677.07096	820.92853	5141.2227	842.29196	5366.71657	3311.95147	2816.02621	470.31786	4740.17058	2351.3266	6485.14681	0.59848	0.60379	5.22E-03	5.27E-03	9.25E-04	4.43E-03	7.31E-04	4.66E-03	4.77E-03	2.87E-03	4.80E-04	5.75E-03	1.91E-03	5.28E-03	2.80E-04	2.86E-04	4.2878E-02
551422.58	4173209.93	3099.33262	4720.44994	852.49936	5657.05604	885.32594	4963.99418	3123.29596	2815.47802	486.06716	5153.1475	2555.78953	5989.21112	0.49842	0.5029	4.93E-03	5.32E-03	9.60E-04	4.88E-03	7.69E-04	4.31E-03	4.50E-03	2.87E-03	4.96E-04	6.26E-03	2.08E-03	4.87E-03	2.34E-04	2.38E-04	4.2717E-02
551361.69	4172751.27	2644.74153	3634.92739	1087.40674	8921.00125	1511.96654	2375.88514	2637.43702	2083.76787	601.45898	6326.65283	5436.84298	3030.78422	0.40907	0.41877	4.21E-03	4.09E-03	1.22E-03	7.69E-03	1.31E-03	2.06E-03	3.80E-03	2.13E-03	6.14E-04	7.68E-03	4.42E-03	2.47E-03	1.92E-04	1.98E-04	4.2099E-02
551526.12	4173295.26	3467.07834	4521.52479	794.34884	4687.71189	791.91609	5812.59352	3507.41873	2724.25247	455.64571	4377.87355	2125.55738	6964.107	0.75734	0.76641	5.52E-03	5.09E-03	8.95E-04	4.04E-03	6.88E-04	5.05E-03	5.05E-03	2.78E-03	4.65E-04	5.31E-03	1.73E-03	5.67E-03	3.55E-04	3.63E-04	4.3010E-02
551440.66	4173229.99	3159.51719	4723.47831	846.83124	5453.57694	870.37769	5053.24246	3184.74679	2821.42698	481.61067	5026.72415	2471.96876	6135.39603	0.52815	0.53275	5.03E-03	5.32E-03	9.54E-04	4.70E-03	7.56E-04	4.39E-03	4.59E-03	2.88E-03	4.92E-04	6.10E-03	2.01E-03	4.99E-03	2.48E-04	2.52E-04	4.2714E-02
551558.27	4173313.36	3602.27105	4456.29149	793.26107	4378.64346	760.2993	6037.54135	3649.75331	2683.81637	455.93281	4165.43851	1982.33935	7214.30479	0.92914	0.94279	5.73E-03	5.02E-03	8.93E-04	3.78E-03	6.60E-04	5.24E-03	5.26E-03	2.74E-03	4.65E-04	5.06E-03	1.61E-03	5.87E-03	4.35E-04	4.47E-04	4.3209E-02
551342.43	4172809.22	2653.07689	3712.51125	1063.17605	8805.74583	1398.81973	2483.49655	2646.64431	2130.7794	591.37461	6377.26272	5138.65663	3153.24365	0.41707	0.42636	4.22E-03	4.18E-03	1.20E-03	7.59E-03	1.21E-03	2.16E-03	3.81E-03	2.18E-03	6.04E-04	7.74E-03	4.18E-03	2.57E-03	1.95E-04	2.02E-04	4.2044E-02
551404.04	4173187.5	3030.08529	4663.71078	852.22445	5826.20408	898.57351	4809.72482	3053.23366	2767.17125	484.76539	5235.63653	2641.98727	5861.71541	0.47555	0.4801	4.82E-03	5.25E-03	9.60E-04	5.02E-03	7.80E-04	4.18E-03	4.40E-03	2.83E-03	4.95E-04	6.36E-03	2.15E-03	4.77E-03	2.23E-04	2.28E-04	4.2460E-02
551626.2	4173330.59	4031.98678	4222.28508	792.85915	3740.97081	707.51393	6414.59372	4094.64232	2525.7717	459.29042	3664.99366	1758.33843	7674.35342	2.03144	2.11044	6.42E-03	4.76E-03	8.93E-04	3.23E-03	6.14E-04	5.57E-03	5.90E-03	2.58E-03	4.69E-04	4.45E-03	1.43E-03	6.25E-03	9.52E-04	1.00E-03	4.4498E-02
551580.37	4173322	3701.04745	4387.40573	793.03386	4171.73546	740.88192	6167.97103	3752.99869	2641.30904	456.71819	4002.8456	1899.47689	7362.91518	1.11403	1.13248	5.89E-03	4.94E-03	8.93E-04	3.60E-03	6.43E-04	5.36E-03	5.40E-03	2.70E-03	4.66E-04	4.86E-03	1.55E-03	5.99E-03	5.22E-04	5.37E-04	4.3345E-02
551325.67	4172939.53	2814.66838	4344.77683	974.34117	7820.92069	1113.37278	2973.51016	2816.20972	2507.29195	550.90657	6412.57839	3951.10826	3759.91269	0.41747	0.42427	4.48E-03	4.89E-03	1.10E-03	6.74E-03	9.67E-04	2.58E-03	4.06E-03	2.56E-03	5.62E-04	7.78E-03	3.22E-03	3.06E-03	1.96E-04	2.01E-04	4.2398E-02
551357.41	4172759.58	2626.68963	3616.65202	1076.18902	8811.76163	1484.70696	2379.92698	2619.51074	2074.16288	595.71198	6266.606	5346.4566	3032.56407	0.40648	0.41603	4.18E-03	4.07E-03	1.21E-03	7.60E-03	1.29E-03	2.07E-03	3.77E-03	2.12E-03	6.08E-04	7.61E-03	4.35E-03	2.47E-03	1.91E-04	1.97E-04	4.1733E-02
551398.8	4172669.06	2739.36655	3381.5318	1132.69042	8973.91586	1618.02159	2135.18114	2731.39082	1942.6129	625.40284	6226.76089	5669.32324	2754.74733	0.37595	0.3843	4.36E-03	3.81E-03	1.28E-03	7.74E-03	1.40E-03	1.85E-03	3.93E-03	1.98E-03	6.38E-04	7.56E-03	4.61E-03	2.24E-03	1.76E-04	1.82E-04	4.1771E-02
551327.95	4172874.06	2704.41996	3944.98497	1023.33614	8423.71694	1245.43427	2642.81762	2701.11754	2265.08069	572.84583	6469.40116	4552.25722	3350.80414	0.4149	0.42284	4.30E-03	4.44E-03	1.15E-03	7.26E-03	1.08E-03	2.29E-03	3.89E-03	2.31E-03	5.85E-04	7.85E-03	3.70E-03	2.73E-03	1.94E-04	2.00E-04	4.2008E-02
551493.36	4173276.59	3332.77719	4566.55643	800.85446	4881.13945	815.12087	5487.80371	3365.92752	2749.81194	459.08298	4546.77466	2239.56106	6611.13134	0.63953	0.64626	5.30E-03	5.14E-03	9.02E-04	4.21E-03	7.08E-04	4.77E-03	4.85E-03	2.81E-03	4.69E-04	5.52E-03	1.82E-03	5.38E-03	3.00E-04	3.06E-04	4.2483E-02
551325.26	4172909.3	2753.36485	4141.50436	997.98375	8069.5555	1163.24296	2794.02129	2752.41267	2382.28995	561.77348	6454.41388	4190.58395	3538.75852	0.41444	0.42191	4.38E-03	4.66E-03	1.12E-03	6.96E-03	1.01E-03	2.43E-03	3.96E-03	2.43E-03	5.74E-04	7.84E-03	3.41E-03	2.88E-03	1.94E-04	2.00E-04	4.2055E-02
551332.16	4172839.5	2656.61241	3770.02869	1037.8829	8611.00692	1322.67908	2525.91353	2651.47574	2163.40743	578.92682	6378.98094	4859.01348	3204.90145	0.414	0.42256	4.23E-03	4.25E-03	1.17E-03	7.43E-03	1.15E-03	2.19E-03	3.82E-03	2.21E-03	5.91E-04	7.74E-03	3.95E-03	2.61E-03	1.94E-04	2.00E-04	4.1730E-02
551652.93	4172576.99	4901.59274	2431.66421	2014.42	5514.86915	3222.49007	1616.00793	4849.67003	1453.25569	1071.13332	4347.76515	6069.04357	2167.97403	0.20064	0.20246	7.80E-03	2.74E-03	2.27E-03	4.76E-03	2.80E-03	1.40E-03	6.98E-03	1.48E-03	1.09E-03	5.28E-03	4.94E-03	1.76E-03	9.40E-05	9.60E-05	4.3498E-02
551382.34	4172696.12	2655.60987	3452.953	1091.46329	8840.86782	1552.85974	2199.90937	2648.49613	1979.72417	602.47008	6201.2359	5484.62399	2828.16975	0.38294	0.39171	4.23E-03	3.89E-03	1.23E-03	7.62E-03	1.35E-03	1.91E-03	3.81E-03	2.02E-03	6.15E-04	7.53E-03	4.46E-03	2.30E-03	1.79E-04	1.86E-04	4.1336E-02
551407.13	4173196.09	3009.54644	4597.81768	841.89078	5695.66871	884.33957	4754.21636	3032.44036	2730.21438	479.16217	5133.63471	2584.88739	5794.36655	0.47252	0.47697	4.79E-03	5.18E-03	9.48E-04	4.91E-03	7.68E-04	4.13E-03	4.37E-03	2.79E-03	4.89E-04	6.23E-03	2.10E-03	4.72E-03	2.21E-04	2.26E-04	4.1867E-02
551535.71	4173304.3	3459.35789	4417.97708	782.92814	4530.60702	773.32396	5756.87562	3501.40673	2661.47777	449.21899	4248.75716	2057.66401	6892.46611	0.78687	0.79617	5.50E-03	4.98E-03	8.82E-04	3.91E-03	6.71E-04	5.00E-03	5.04E-03	2.72E-03	4.59E-04	5.16E-03	1.67E-03	5.61E-03	3.69E-04	3.77E-04	4.2346E-02
551503.06	4173285.73	3333.43668	4469.14893	787.2109	4788.65816	798.88495	5487.0663	3368.41218	2691.17028	451.25538	4423.31047	2180.63537	6599.55049	0.65989	0.6669	5.30E-03	5.03E-03	8.87E-04	4.13E-03	6.94E-04	4.76E-03	4.85E-03	2.75E-03	4.61E-04	5.37E-03	1.77E-03	5.37E-03	3.09E-04	3.16E-04	4.2013E-02
551639.79	4172569.24	4695.42858	2461.30062	1967.07353	5633.31378	3171.49904	1629.73396	4647.16853	1470.43454	1048.56024	4442.42627	6005.74667	2181.24721	0.2006	0.20219	7.47E-03	2.77E-03	2.22E-03	4.86E-03	2.75E-03	1.42E-03	6.69E-03	1.50E-03	1.07E-03	5.39E-03	4.89E-03	1.78E-03	9.40E-05	9.58E-05	4.2997E-02
551414.06	4172635.86	2802.18547	3222.00696	1173.803	8753.08706	1688.26443	2031.78025	2791.98153	1854.95394	648.40795	6047.37952	5692.78543	2626.44791	0.35679	0.36417	4.46E-03	3.63E-03	1.32E-03	7.55E-03	1.47E-03	1.76E-03	4.02E-03	1.89E-03	6.62E-04	7.34E-03	4.63E-03	2.14E-03	1.67E-04	1.73E-04	4.1218E-02
551322.45	4172930.57	2760.02633	4207.83761	968.13138	7750.5054	1112.10636	2871.43284	2760.79884	2425.94161	546.72281	6311.64613	3951.64694	3633.10399	0.40962	0.41628	4.39E-03	4.74E-03	1.09E-03	6.68E-03	9.66E-04	2.49E-03	3.98E-03	2.48E-03	5.58E-04	7.66E-03	3.22E-03	2.96E-03	1.92E-04	1.97E-04	4.1600E-02
551353.13	4172767.9	2596.24207	3572.13041	1057.16595	8611.6083	1444.28224	2369.83977	2589.33733	2049.90407	585.73334	6153.12093	5195.7034	3016.42214	0.39899	0.40817	4.13E-03	4.02E-03	1.19E-03	7.43E-03	1.25E-03	2.06E-03	3.73E-03	2.09E-03	5.98E-04	7.47E-03	4.23E-03	2.45E-03	1.87E-04	1.93E-04	4.1037E-02
551697.94	4172606.28	5467.76607	2266.74999	1976.98406	5207.4721	2997.05277	1522.51649	5407.90369	1349.38303	1045.97276	3944.65305	5972.22277	2053.09363	0.21287	0.21654	8.70E-03	2.55E-03	2.23E-03	4.49E-03	2.60E-03	1.32E-03	7.79E-03	1.38E-03	1.07E-03	4.79E-03	4.86E-03	1.67E-03	9.98E-05	1.03E-04	4.3652E-02
551567.75	4173322.28	3566.09698	4305.36031	777.70697	4198.32961	738.50744	5886.06131	3614.40409	2592.56361	447.231	4002.25119	1911.41312	7034.4777	0.96902	0.9828	5.67E-03	4.85E-03	8.76E-04	3.62E-03	6.41E-04	5.11E-03	5.21E-03	2.65E-03	4.57E-04	4.86E-03	1.56E-03	5.72E-03	4.54E-04	4.66E-04	4.2140E-02
551326.25	4172863.68	2645.66955	3804.60328	1006.94111	8268.56289	1241.26945	2554.9224	2642.0001	2184.32292	563.04292	6286.24329	4521.61854	3240.64932	0.40284	0.41058	4.21E-03	4.28E-03	1.13E-03	7.13E-03	1.08E-03	2.22E-03	3.80E-03	2.23E-03	5.75E-04	7.63E-03	3.68E-03	2.64E-03	1.89E-04	1.95E-04	4.0998E-02
551410.22	4173204.68	2987.0715	4527.12329	830.86255	5561.7873	870.01718	4692.55923	3009.69328	2691.62523	473.16341	5027.71263	2528.89402	5720.36843	0.46915	0.47335	4.75E-03	5.10E-03	9.36E-04	4.80E-03	7.55E-04	4.07E-03	4.33E-03	2.75E-03	4.83E-04	6.10E-03	2.06E-03	4.66E-03	2.20E-04	2.24E-04	4.1241E-02
551427.89	4173224.54	3041.78519	4547.48177	828.43314	5390.94475	858.96824	4773.19255	3065.29948	2709.7512	471.49931	4933.52715	2459.58904	5803.52809	0.49518	0.49937	4.84E-03	5.12E-03	9.33E-04	4.65E-03	7.46E-04	4.14E-03	4.41E-03	2.77E-03	4.81E-04	5.99E-03	2.00E-03	4.72E-03	2.32E-04	2.37E-04	4.1280E-02
551798.68	4173274.84	5814.54795	3518.29376	706.65833	2953.28666	611.13485	5673.52072	5966.25657	2023.05089	414.09722	2853.44698	1442.79484	6903.285	1.11071	1.07428	9.25E-03	3.96E-03	7.96E-04	2.55E-03	5.31E-04	4.93E-03	8.59E-03	2.07E-03	4.23E-04	3.46E-03	1.17E-03	5.62E-03	5.21E-04	5.09E-04	4.4382E-02
551717.62	4172616.54	5581.408	2189.46038	1875.82234	5337.11393	2804.29117	1469.57104	5521.2006	1298.73158	994.44304	3846.56314	5979.17815	1981.37923	0.23275	0.23776	8.88E-03	2.47E-03	2.11E-03	4.60E-03	2.43E-03	1.28E-03	7.95E-03	1.33E-03	1.02E-03	4.67E-03	4.87E-03	1.61E-03	1.09E-04	1.13E-04	4.3437E-02
551445.82	4173242.11	3101.78225	4542.3296	815.93094	5222.68752	844.86195	4907.89318	3126.88679	2722.18158	466.55757	4766.25674	2393.37179	5957.26541	0.52691	0.53192	4.94E-03	5.12E-03	9.19E-04	4.50E-03	7.34E-04	4.26E-03	4.50E-03	2.78E-03	4.76E-04	5.79E-03	1.95E-03	4.85E-03	2.47E-04	2.52E-04	4.1310E-02
551545.31	4173313.33	3454.05702	4321.14354	772.8454	4374.0861	754.53221	5696.5089	3497.65049	2602.24944	443.65445	4122.50793	1988.93587	6818.16767	0.81909	0.82884	5.50E-03	4.87E-03	8.70E-04	3.77E-03	6.55E-04	4.95E-03	5.04E-03	2.66E-03	4.53E-04	5.00E-03	1.62E-03	5.55E-03	3.84E-04	3.93E-04	4.1703E-02
551376.19	4172702.98	2607.13348	3422.87781	1067.30105	8624.75465	1512.84155	2194.76832	2600.30563	1962.36439	589.23355	6082.64505	5325.60547	2817.45829	0.37696	0.38555	4.15E-03	3.86E-03	1.20E-03	7.44E-03	1.31E-03	1.91E-03	3.74E-03	2.00E-03	6.02E-04	7.38E-03	4.33E-03	2.29E-03	1.77E-04	1.83E-04	4.0584E-02
551401.22	4172655.9	2709.85517	3260.15387	1117.93149	8657.49198	1593.18968	2064.43516	2701.71901	1875.06358	617.50255	6015.87396	5502.98406	2665.03068	0.3585	0.36618	4.31E-03	3.67E-03	1.26E-03	7.47E-03	1.38E-03	1.79E-03	3.89E-03	1.91E-03	6.30E-04	7.30E-03	4.48E-03	2.17E-03	1.68E-04	1.74E-04	4.0613E-02
551348.86	4172776.22	2575.52078	3542.19134	1043.05261	8475.48712	1412.07021	2364.73908	2568.82461	2033.54149	578.44415	6079.24616	5082.82819	3007.32146	0.39441	0.40335	4.10E-03	3.99E-03	1.17E-03	7.31E-03	1.23E-03	2.05E-03	3.70E-03	2.08E-03	5.91E-04	7.38E-03	4.14E-03	2.45E-03	1.85E-04	1.91E-04	4.0558E-02
551589.73	4173330.81	3651.55236	4207.00051	774.22606	3981.8051	717.37152	5953.88073	3703.61153	2531.13262	446.20533	3822.91018	1827.21773	7114.33232	1.16662	1.18999	5.81E-03	4.74E-03	8.72E-04	3.43E-03	6.23E-04	5.17E-03	5.33E-03	2.58E-03	4.56E-04	4.64E-03	1.49E-03	5.79E-03	5.47E-04	5.64E-04	4.2050E-02
551790.59	4173280.38	5754.15682	3528.82828	708.51767	2965.82458	613.9967	5617.7028	5901.84962	2026.76081	415.19613	2864.0048	1450.02455	6859.58856	1.21407	1.17099	9.16E-03	3.97E-03	7.98E-04	2.56E-03	5.33E-04	4.88E-03	8.50E-03	2.07E-03	4.24E-04	3.48E-03	1.18E-03	5.58E-03	5.69E-04	5.55E-04	4.4254E-02
551655.87	4173335.24	4217.09583	3950.63445	768.41136	3473.75718	675.80365	6133.81786	4286.96886	2345.0893	446.67403	3363.51318	1654.09354	7377.85086	3.82467	4.06821	6.71E-03	4.45E-03	8.65E-04	3.00E-03	5.87E-04	5.33E-03	6.17E-03	2.39E-03	4.56E-04	4.08E-03	1.35E-03	6.00E-03	1.79E-03	1.93E-03	4.5113E-02
551600.76	4173334.29	3718.58703	4163.39799	773.16998	3808.88496	707.27155	6000.59653	3772.76831	2500.68916	446.25649	3735.45002	1786.40656	7174.7462	1.31493	1.34222	5.92E-03	4.69E-03	8.71E-04	3.28E-03	6.14E-04	5.21E-03	5.43E-03	2.55E-03	4.56E-04	4.53E-03	1.45E-03	5.84E-03	6.16E-04	6.36E-04	4.2109E-02
551331.19	4172827.85	2590.96981	3626.83023	1016.42754	8351.69955	1308.39516	2440.77313	2585.64022	2082.53073	566.53071	6150.17918	4771.92221	3097.32554	0.39846	0.40676	4.12E-03	4.08E-03	1.14E-03	7.20E-03	1.14E-03	2.12E-03	3.72E-03	2.13E-03	5.78E-04	7.47E-03	3.88E-03	2.52E-03	1.87E-04	1.93E-04	4.0489E-02
551668.76	4173333.36	4359.7619	3883.24989	763.33021	3403.98626	668.90685	6080.52513	4434.8147	2296.14182	444.36645	3276.25559	1627.76407	7330.22477	5.88175	6.42001	6.94E-03	4.37E-03	8.60E-04	2.94E-03	5.81E-04	5.28E-03	6.39E-03	2.34E-03	4.54E-04	3.98E-03	1.32E-03	5.97E-03	2.76E-03	3.04E-03	4.7219E-02
551642.99	4173337.11	4064.58164	3992.51117	769.40078	3534.78988	680.93075	6113.67923	4129.51651	2378.89656	446.48933	3438.85111	1677.66145	7339.44974	2.71326	2.84376	6.47E-03	4.50E-03	8.67E-04	3.05E-03	5.91E-04	5.31E-03	5.95E-03	2.43E-03	4.56E-04	4.17E-03	1.37E-03	5.97E-03	1.27E-03	1.35E-03	4.3744E-02
551322	4172897.97	2670.26174	3946.62693	976.99091	7874.39102	1148.40492	2664.68547	2668.78039	2269.83331	549.01222	6235.33976	4131.67823	3376.65852	0.39737	0.40452	4.25E-03	4.44E-03	1.10E-03	6.79E-03	9.97E-04	2.31E-03	3.84E-03	2.32E-03	5.61E-04	7.57E-03	3.36E-03	2.75E-03	1.86E-04	1.92E-04	4.0676E-02
551454.83	4173252.47	3109.69284	4474.24642	802.10455	5087.0668	829.41469	4926.39614	3135.58905	2688.24353	459.01636	4642.35299	2341.0768	5973.22089	0.537	0.54207	4.95E-03	5.04E-03	9.03E-04	4.39E-03	7.20E-04	4.28E-03	4.52E-03	2.74E-03	4.69E-04	5.64E-03	1.91E-03	4.86E-03	2.52E-04	2.57E-04	4.0916E-02
551369.48	4172715.01	2575.92524	3429.04403	1052.6081	8501.84027	1485.12595	2215.59442	2569.21899	1965.85724	581.29658	6025.0404	5225.63466	2838.31861	0.3768	0.3854	4.10E-03	3.86E-03	1.19E-03	7.33E-03	1.29E-03	1.92E-03	3.70E-03	2.01E-03	5.93E-04	7.31E-03	4.25E-03	2.31E-03	1.77E-04	1.83E-04	4.0229E-02
551346.28	4173083.98	2837.16774	4491.02393	820.06021	6226.86025	945.17343	3943.36201	2855.37195	2662.27566	464.01597	5270.84799	3060.16698	4883.04152	0.41069	0.41507	4.51E-03	5.06E-03	9.24E-04	5.37E-03	8.21E-04	3.42E-03	4.11E-03	2.72E-03	4.74E-04	6.40E-03	2.49E-03	3.97E-03	1.92E-04	1.97E-04	4.0668E-02
551681.64	4173331.49	4515.24807	3810.05221	755.27927	3328.91966	660.62202	5990.88979	4596.39737	2241.99285	440.30964	3187.70203	1597.89203	7243.09522	10.64538	12.17056	7.19E-03	4.29E-03	8.51E-04	2.87E-03	5.74E-04	5.20E-03	6.62E-03	2.29E-03	4.50E-04	3.87E-03	1.30E-03	5.89E-03	4.99E-03	5.77E-03	5.2154E-02
551343.05	4173075.03	2831.02086	4496.53863	820.1129	6262.8648	946.51986	3860.55813	2848.30789	2666.54354	464.1896	5290.29009	3088.4114	4790.75448	0.40693	0.4116	4.50E-03	5.06E-03	9.24E-04	5.40E-03	8.22E-04	3.35E-03	4.10E-03	2.72E-03	4.74E-04	6.42E-03	2.51E-03	3.90E-03	1.91E-04	1.95E-04	4.0587E-02
551319.22	4172921.6	2696.20656	4057.14449	955.8641	7620.49563	1103.23648	2764.54432	2696.36873	2337.73942	539.09698	6170.03163	3921.8897	3499.69244	0.39746	0.40437	4.29E-03	4.57E-03	1.08E-03	6.57E-03	9.58E-04	2.40E-03	3.88E-03	2.39E-03	5.50E-04	7.49E-03	3.19E-03	2.85E-03	1.86E-04	1.92E-04	4.0596E-02
551339.83	4173066.08	2829.46957	4507.94644	822.91034	6315.16522	949.85729	3780.72278	2845.74271	2672.49269	465.92202	5329.57734	3120.28234	4701.642	0.40318	0.40833	4.50E-03	5.08E-03	9.27E-04	5.45E-03	8.25E-04	3.28E-03	4.10E-03	2.73E-03	4.76E-04	6.47E-03	2.54E-03	3.83E-03	1.89E-04	1.94E-04	4.0581E-02
551630.1	4173338.98	3919.75852	4017.2308	766.97152	3587.74232	684.42563	6039.27421	3980.32333	2400.44894	444.31895	3504.4069	1697.66788	7240.8478	2.01171	2.0905	6.24E-03	4.52E-03	8.64E-04	3.09E-03	5.94E-04	5.24E-03	5.73E-03	2.45E-03	4.54E-04	4.25E-03	1.38E-03	5.89E-03	9.43E-04	9.91E-04	4.2657E-02
551336.6	4173057.12	2820.20855	4500.10845	824.17182	6350.25168	951.22288	3690.28027	2835.35922	2666.39	466.81745	5355.15221	3147.13012	4598.22366	0.40013	0.40535	4.49E-03	5.07E-03	9.28E-04	5.48E-03	8.26E-04	3.20E-03	4.08E-03	2.72E-03	4.77E-04	6.50E-03	2.56E-03	3.74E-03	1.88E-04	1.92E-04	4.0458E-02
551354.91	4173108.24	2822.15067	4404.94199	813.77643	6055.96856	927.59552	4100.24605	2842.20532	2607.71816	460.15407	5162.41881	2957.73262	5047.16313	0.41465	0.41949	4.49E-03	4.96E-03	9.17E-04	5.22E-03	8.05E-04	3.56E-03	4.09E-03	2.66E-03	4.70E-04	6.27E-03	2.41E-03	4.11E-03	1.94E-04	1.99E-04	4.0357E-02
551413.31	4173213.26	2959.68389	4446.03512	818.8603	5421.5463	855.80497	4622.26449	2981.99581	2649.59442	466.60352	4915.72801	2475.11103	5584.04726	0.46502	0.46928	4.71E-03	5.01E-03	9.22E-04	4.68E-03	7.43E-04	4.01E-03	4.29E-03	2.71E-03	4.76E-04	5.97E-03	2.01E-03	4.54E-03	2.18E-04	2.22E-04	4.0515E-02
551464.29	4173261.39	3121.25193	4410.46713	789.34668	4974.36751	817.05344	4964.05551	3148.43187	2655.45598	451.97579	4532.35109	2299.16618	6009.34265	0.55118	0.55568	4.97E-03	4.97E-03	8.89E-04	4.29E-03	7.09E-04	4.31E-03	4.53E-03	2.71E-03	4.61E-04	5.50E-03	1.87E-03	4.89E-03	2.58E-04	2.63E-04	4.0625E-02
551365.18	4172723.37	2554.92137	3424.81536	1042.11073	8400.34372	1463.66464	2226.6641	2548.29852	1963.93327	575.73334	5972.24259	5148.26321	2848.48486	0.37552	0.38407	4.07E-03	3.86E-03	1.17E-03	7.24E-03	1.27E-03	1.93E-03	3.67E-03	2.01E-03	5.88E-04	7.25E-03	4.19E-03	2.32E-03	1.76E-04	1.82E-04	3.9925E-02
551360.82	4173124.98	2825.44766	4373.66544	815.86412	5990.81084	915.71965	4192.35494	2846.21922	2584.08225	461.35005	5131.36442	2866.60137	5143.239	0.41966	0.42409	4.50E-03	4.93E-03	9.19E-04	5.17E-03	7.95E-04	3.64E-03	4.10E-03	2.64E-03	4.71E-04	6.23E-03	2.33E-03	4.19E-03	1.97E-04	2.01E-04	4.0297E-02
551324.56	4172853.3	2592.86701	3680.80749	992.86546	8125.55159	1239.98127	2478.47921	2588.83558	2113.68161	554.64793	6121.89856	4502.97761	3144.27712	0.39269	0.40031	4.13E-03	4.15E-03	1.12E-03	7.01E-03	1.08E-03	2.15E-03	3.73E-03	2.16E-03	5.66E-04	7.43E-03	3.66E-03	2.56E-03	1.84E-04	1.90E-04	4.0108E-02
551331.86	4172818.83	2561.95106	3559.83859	1009.85331	8257.53292	1310.725	2400.1009	2556.39683	2044.63832	562.45365	6050.11413	4762.18514	3046.09046	0.39213	0.4004	4.08E-03	4.01E-03	1.14E-03	7.12E-03	1.14E-03	2.08E-03	3.68E-03	2.09E-03	5.74E-04	7.34E-03	3.88E-03	2.48E-03	1.84E-04	1.90E-04	3.9984E-02
551333.38	4173048.17	2808.86021	4483.54992	826.06886	6384.95447	952.38687	3598.03917	2822.86587	2653.72162	468.06	5382.82609	3173.11007	4491.4495	0.39739	0.4023	4.47E-03	5.05E-03	9.30E-04	5.51E-03	8.27E-04	3.12E-03	4.07E-03	2.71E-03	4.78E-04	6.53E-03	2.58E-03	3.66E-03	1.86E-04	1.91E-04	4.0309E-02
551360.88	4172731.73	2542.75321	3428.92489	1036.51151	8350.19053	1449.19869	2241.9863	2536.12286	1966.80964	572.90448	5947.77583	5105.89495	2864.31893	0.3765	0.38508	4.05E-03	3.86E-03	1.17E-03	7.20E-03	1.26E-03	1.95E-03	3.65E-03	2.01E-03	5.85E-04	7.22E-03	4.16E-03	2.33E-03	1.76E-04	1.82E-04	3.9793E-02
551431.46	4173233.52	3009.75058	4444.31464	809.83473	5236.69196	842.78237	4687.59252	3033.08964	2653.45146	462.44596	4758.15404	2402.15058	5699.82949	0.49614	0.50004	4.79E-03	5.01E-03	9.12E-04	4.52E-03	7.32E-04	4.07E-03	4.37E-03	2.71E-03	4.72E-04	5.78E-03	1.95E-03	4.64E-03	2.33E-04	2.37E-04	4.0414E-02
551356.58	4172740.1	2535.39957	3435.5666	1033.14038	8325.75582	1437.30192	2258.29454	2528.74377	1971.0183	571.33127	5937.10934	5079.40711	2881.77607	0.37847	0.38711	4.03E-03	3.87E-03	1.16E-03	7.18E-03	1.25E-03	1.96E-03	3.64E-03	2.01E-03	5.83E-04	7.21E-03	4.13E-03	2.35E-03	1.77E-04	1.83E-04	3.9742E-02
551483.21	4173279.21	3180.39172	4338.10002	773.08607	4788.88305	794.57298	5101.5679	3210.80186	2611.65514	442.94932	4380.22236	2199.54209	6158.52142	0.58681	0.59183	5.06E-03	4.89E-03	8.71E-04	4.13E-03	6.90E-04	4.43E-03	4.62E-03	2.67E-03	4.52E-04	5.32E-03	1.79E-03	5.01E-03	2.75E-04	2.80E-04	4.0485E-02
551577.22	4173331.21	3532.35371	4157.10358	762.35738	4020.06486	716.65456	5731.02849	3581.1897	2501.76575	438.73873	3841.20876	1840.79601	6853.54538	1.01176	1.02678	5.62E-03	4.68E-03	8.59E-04	3.47E-03	6.22E-04	4.98E-03	5.16E-03	2.55E-03	4.48E-04	4.66E-03	1.50E-03	5.58E-03	4.74E-04	4.87E-04	4.1087E-02
551554.9	4173322.37	3428.01829	4196.56494	759.75515	4208.02178	734.47324	5585.4029	3472.70857	2527.20404	436.34616	3978.73052	1920.62819	6684.29246	0.8504	0.86162	5.45E-03	4.73E-03	8.56E-04	3.63E-03	6.38E-04	4.85E-03	5.00E-03	2.58E-03	4.45E-04	4.83E-03	1.56E-03	5.44E-03	3.99E-04	4.08E-04	4.0821E-02
551330.15	4173039.22	2795.83883	4458.59272	828.75738	6421.73644	953.75994	3505.46372	2808.6537	2634.68477	469.76773	5413.78624	3198.91343	4383.23858	0.39381	0.39919	4.45E-03	5.02E-03	9.33E-04	5.54E-03	8.28E-04	3.04E-03	4.04E-03	2.69E-03	4.80E-04	6.57E-03	2.60E-03	3.57E-03	1.85E-04	1.89E-04	4.0145E-02
551366.74	4173141.72	2820.02293	4329.33356	814.46029	5848.39725	901.44375	4240.86186	2841.10139	2554.6732	460.81181	5072.56906	2769.69768	5189.78287	0.42348	0.42753	4.49E-03	4.88E-03	9.17E-04	5.04E-03	7.83E-04	3.68E-03	4.09E-03	2.61E-03	4.70E-04	6.16E-03	2.25E-03	4.22E-03	1.98E-04	2.03E-04	3.9997E-02
551352.28	4172748.46	2520.08957	3423.02304	1024.38335	8241.9479	1415.73499	2264.62701	2513.50299	1964.55091	566.86903	5889.96349	5011.53138	2886.60156	0.37718	0.38575	4.01E-03	3.86E-03	1.15E-03	7.11E-03	1.23E-03	1.97E-03	3.62E-03	2.01E-03	5.79E-04	7.15E-03	4.08E-03	2.35E-03	1.77E-04	1.83E-04	3.9465E-02
551332.54	4172809.81	2536.02462	3501.29749	1004.08408	8171.65016	1313.89603	2363.65094	2530.28468	2011.40031	558.79439	5959.95236	4754.12146	3000.36125	0.38641	0.39466	4.04E-03	3.94E-03	1.13E-03	7.05E-03	1.14E-03	2.05E-03	3.64E-03	2.05E-03	5.70E-04	7.24E-03	3.87E-03	2.44E-03	1.81E-04	1.87E-04	3.9533E-02
551326.93	4173030.27	2778.70114	4420.71583	831.30747	6452.64781	954.70822	3411.05755	2790.34003	2606.9907	471.38031	5439.76443	3222.94199	4271.74873	0.39022	0.39567	4.42E-03	4.98E-03	9.36E-04	5.56E-03	8.29E-04	2.96E-03	4.02E-03	2.66E-03	4.81E-04	6.60E-03	2.62E-03	3.48E-03	1.83E-04	1.88E-04	3.9928E-02
551318.63	4172877.31	2593.3028	3741.29129	969.10917	7842.71374	1173.45109	2525.0588	2590.67364	2150.26869	542.77317	6063.53396	4228.30504	3201.71391	0.38672	0.39383	4.13E-03	4.21E-03	1.09E-03	6.76E-03	1.02E-03	2.19E-03	3.73E-03	2.20E-03	5.54E-04	7.36E-03	3.44E-03	2.61E-03	1.81E-04	1.87E-04	3.9663E-02
551391.56	4172662.28	2619.56488	3207.7961	1070.52301	8349.90291	1518.02149	2042.94924	2612.39922	1844.17217	591.41278	5841.22245	5251.90584	2634.6457	0.34869	0.35613	4.17E-03	3.61E-03	1.21E-03	7.20E-03	1.32E-03	1.77E-03	3.76E-03	1.88E-03	6.04E-04	7.09E-03	4.27E-03	2.14E-03	1.63E-04	1.69E-04	3.9371E-02
551672.04	4172580.71	4928.90593	2269.53644	1911.38479	5052.8017	2964.55391	1524.25444	4876.80061	1354.40319	1015.0059	3967.1597	5647.94178	2049.15561	0.19001	0.19207	7.84E-03	2.56E-03	2.15E-03	4.36E-03	2.57E-03	1.32E-03	7.02E-03	1.38E-03	1.04E-03	4.82E-03	4.60E-03	1.67E-03	8.91E-05	9.10E-05	4.1510E-02
551323.7	4173021.31	2759.64992	4373.9563	834.60472	6485.20418	956.20042	3317.86519	2770.10162	2573.34454	473.40337	5466.14731	3246.69249	4160.86052	0.3866	0.3921	4.39E-03	4.93E-03	9.40E-04	5.59E-03	8.30E-04	2.88E-03	3.99E-03	2.63E-03	4.83E-04	6.64E-03	2.64E-03	3.39E-03	1.81E-04	1.86E-04	3.9693E-02
551648.9	4172566.87	4618.54499	2334.50694	1877.33751	5234.40073	2969.99607	1559.43403	4571.44937	1394.40973	1000.8751	4143.51851	5622.33935	2089.20413	0.18802	0.18952	7.35E-03	2.63E-03	2.11E-03	4.51E-03	2.58E-03	1.35E-03	6.58E-03	1.42E-03	1.02E-03	5.03E-03	4.58E-03	1.70E-03	8.81E-05	8.98E-05	4.1053E-02
551492.67	4173288.12	3169.82815	4230.70158	757.39285	4651.25304	779.49303	5084.73894	3201.68115	2548.32447	433.97137	4253.46601	2147.2679	6126.71983	0.60145	0.60716	5.04E-03	4.76E-03	8.53E-04	4.01E-03	6.77E-04	4.42E-03	4.61E-03	2.60E-03	4.43E-04	5.16E-03	1.75E-03	4.99E-03	2.82E-04	2.88E-04	3.9888E-02
551532.17	4173313.14	3300.30435	4158.67486	749.72915	4345.43791	746.78615	5344.82596	3340.09999	2504.51865	429.91241	4050.55836	1990.99674	6407.75655	0.72786	0.73562	5.25E-03	4.68E-03	8.44E-04	3.75E-03	6.48E-04	4.64E-03	4.81E-03	2.56E-03	4.39E-04	4.92E-03	1.62E-03	5.21E-03	3.41E-04	3.49E-04	4.0065E-02
551315.99	4172912.64	2630.06334	3904.60731	940.88248	7474.77279	1091.40827	2659.22635	2629.7268	2249.08292	529.94333	6011.53117	3880.16865	3367.94034	0.38454	0.39122	4.19E-03	4.40E-03	1.06E-03	6.45E-03	9.48E-04	2.31E-03	3.79E-03	2.30E-03	5.41E-04	7.30E-03	3.16E-03	2.74E-03	1.80E-04	1.85E-04	3.9533E-02
551322.87	4172842.92	2542.16999	3565.71626	979.00979	7974.45689	1237.4269	2407.96751	2537.82531	2048.21385	546.4554	5961.9476	4476.52798	3055.20682	0.38297	0.3905	4.05E-03	4.02E-03	1.10E-03	6.88E-03	1.07E-03	2.09E-03	3.65E-03	2.09E-03	5.58E-04	7.24E-03	3.64E-03	2.49E-03	1.79E-04	1.85E-04	3.9242E-02
551372.66	4173158.46	2801.43973	4262.95706	807.76052	5683.17382	883.87803	4238.85139	2822.46111	2514.57069	457.47047	4974.5897	2672.62067	5178.27546	0.42427	0.42795	4.46E-03	4.80E-03	9.10E-04	4.90E-03	7.67E-04	3.68E-03	4.06E-03	2.57E-03	4.67E-04	6.04E-03	2.18E-03	4.21E-03	1.99E-04	2.03E-04	3.9448E-02
551333.62	4172798.58	2508.13986	3440.49177	998.0621	8077.98665	1318.99914	2323.96263	2502.21388	1976.56185	554.87169	5862.74928	4747.5526	2951.00839	0.38002	0.38823	3.99E-03	3.87E-03	1.12E-03	6.97E-03	1.15E-03	2.02E-03	3.60E-03	2.02E-03	5.66E-04	7.12E-03	3.86E-03	2.40E-03	1.78E-04	1.84E-04	3.9053E-02
551407.55	4172628.59	2683.03647	3062.52443	1110.52494	8162.91013	1584.77189	1947.36966	2673.74643	1764.35021	613.81361	5684.63414	5284.0824	2516.13982	0.33208	0.33872	4.27E-03	3.45E-03	1.25E-03	7.04E-03	1.38E-03	1.69E-03	3.85E-03	1.80E-03	6.27E-04	6.90E-03	4.30E-03	2.05E-03	1.56E-04	1.61E-04	3.8920E-02
551374.67	4172689.94	2533.24347	3263.46488	1028.36773	8182.63348	1452.72038	2099.36028	2526.91506	1872.75673	567.96927	5789.81021	5056.70445	2697.56597	0.35314	0.36089	4.03E-03	3.68E-03	1.16E-03	7.06E-03	1.26E-03	1.82E-03	3.64E-03	1.91E-03	5.80E-04	7.03E-03	4.12E-03	2.20E-03	1.66E-04	1.71E-04	3.8813E-02
551320.45	4173012.29	2733.39275	4309.0018	836.39771	6499.8555	956.16916	3220.74354	2742.65762	2529.07651	474.48259	5475.90888	3240.21353	4043.89788	0.38196	0.38749	4.35E-03	4.85E-03	9.42E-04	5.61E-03	8.30E-04	2.80E-03	3.95E-03	2.58E-03	4.84E-04	6.65E-03	2.64E-03	3.29E-03	1.79E-04	1.84E-04	3.9332E-02
551564.5	4173331.41	3407.13237	4078.42533	747.56784	4043.73414	714.33911	5477.78482	3452.66455	2454.8597	429.63689	3838.09325	1852.13972	6557.59104	0.88486	0.89593	5.42E-03	4.59E-03	8.42E-04	3.49E-03	6.20E-04	4.76E-03	4.97E-03	2.51E-03	4.39E-04	4.66E-03	1.51E-03	5.34E-03	4.15E-04	4.25E-04	3.9981E-02
551604.33	4173342.73	3608.92095	3969.49432	749.37902	3721.91301	685.30057	5679.02603	3661.28223	2383.47836	432.48982	3578.66206	1727.87564	6800.42834	1.28093	1.30928	5.74E-03	4.47E-03	8.44E-04	3.21E-03	5.95E-04	4.93E-03	5.27E-03	2.43E-03	4.42E-04	4.34E-03	1.41E-03	5.53E-03	6.00E-04	6.21E-04	4.0447E-02
551347.98	4172756.83	2485.88521	3372.88023	1004.1882	8028.37754	1375.02101	2251.44343	2479.56119	1937.17127	556.1885	5764.26625	4857.72666	2866.42481	0.36912	0.37732	3.96E-03	3.80E-03	1.13E-03	6.92E-03	1.19E-03	1.95E-03	3.57E-03	1.98E-03	5.68E-04	7.00E-03	3.95E-03	2.33E-03	1.73E-04	1.79E-04	3.8711E-02
551734	4172617.51	5342.86268	2059.83374	1687.62449	5313.35842	2524.52864	1383.12857	5288.27582	1217.70772	898.91697	3672.362	5714.76399	1861.30604	0.2394	0.24492	8.50E-03	2.32E-03	1.90E-03	4.58E-03	2.19E-03	1.20E-03	7.62E-03	1.24E-03	9.18E-04	4.46E-03	4.65E-03	1.51E-03	1.12E-04	1.16E-04	4.1327E-02
551376.24	4173168.42	2791.36007	4226.23624	802.95019	5583.07065	871.43277	4225.81933	2812.22823	2493.05821	455.04348	4911.52567	2614.0739	5159.10502	0.42307	0.42716	4.44E-03	4.76E-03	9.04E-04	4.82E-03	7.57E-04	3.67E-03	4.05E-03	2.55E-03	4.65E-04	5.96E-03	2.13E-03	4.20E-03	1.98E-04	2.02E-04	3.9096E-02
551502.13	4173297.03	3167.43519	4144.1588	745.46856	4524.48527	764.89461	5074.2439	3200.95309	2495.92687	427.09547	4147.15007	2090.38337	6105.14756	0.61902	0.62436	5.04E-03	4.67E-03	8.40E-04	3.90E-03	6.64E-04	4.41E-03	4.61E-03	2.55E-03	4.36E-04	5.03E-03	1.70E-03	4.97E-03	2.90E-04	2.96E-04	3.9404E-02
551714.28	4172607.25	5301.90153	2116.07279	1785.56601	5000.08342	2647.79154	1427.49087	5246.22668	1255.54656	947.99975	3678.4681	5548.1717	1923.07345	0.21319	0.21738	8.44E-03	2.38E-03	2.01E-03	4.31E-03	2.30E-03	1.24E-03	7.56E-03	1.28E-03	9.68E-04	4.47E-03	4.52E-03	1.57E-03	9.99E-05	1.03E-04	4.1236E-02
551418.77	4173228.26	2905.89468	4289.81177	796.4555	5174.06498	830.77032	4447.16592	2927.75141	2553.78575	453.20442	4676.70303	2383.63312	5415.07487	0.46383	0.46753	4.62E-03	4.83E-03	8.97E-04	4.46E-03	7.21E-04	3.86E-03	4.22E-03	2.61E-03	4.63E-04	5.68E-03	1.94E-03	4.41E-03	2.17E-04	2.22E-04	3.9147E-02
551335.72	4172788.79	2485.11357	3391.79031	991.8671	7977.15776	1320.93938	2292.17455	2479.11248	1948.81722	550.97513	5774.70503	4726.6171	2911.59178	0.37339	0.38149	3.95E-03	3.82E-03	1.12E-03	6.88E-03	1.15E-03	1.99E-03	3.57E-03	1.99E-03	5.63E-04	7.01E-03	3.85E-03	2.37E-03	1.75E-04	1.81E-04	3.8614E-02
551660.21	4173343.57	4092.18687	3744.15459	740.4474	3326.55191	652.57926	5728.94665	4159.67422	2219.70819	430.3791	3208.34311	1594.91959	6907.77067	3.87928	4.13047	6.51E-03	4.22E-03	8.34E-04	2.87E-03	5.67E-04	4.97E-03	5.99E-03	2.27E-03	4.39E-04	3.89E-03	1.30E-03	5.62E-03	1.82E-03	1.96E-03	4.3259E-02
551437.01	4173246.54	2957.48215	4279.40625	783.97771	5015.98267	815.79115	4558.25563	2980.72298	2563.37636	448.04097	4544.0454	2322.31477	5541.41664	0.48983	0.49431	4.71E-03	4.82E-03	8.83E-04	4.33E-03	7.08E-04	3.96E-03	4.29E-03	2.62E-03	4.57E-04	5.52E-03	1.89E-03	4.51E-03	2.30E-04	2.34E-04	3.9148E-02
551586.7	4173340.14	3493.16842	4000.57537	745.74534	3842.21381	694.48291	5554.6885	3542.14476	2405.57822	429.52307	3677.13844	1771.20871	6649.48246	1.05607	1.0724	5.56E-03	4.51E-03	8.40E-04	3.31E-03	6.03E-04	4.82E-03	5.10E-03	2.46E-03	4.39E-04	4.46E-03	1.44E-03	5.41E-03	4.95E-04	5.08E-04	3.9960E-02
551647.17	4173345.46	3951.75847	3793.7761	742.96502	3388.42631	658.2265	5737.76892	4014.60341	2257.4364	431.18055	3285.2801	1618.80078	6904.44826	2.71281	2.84356	6.29E-03	4.27E-03	8.37E-04	2.92E-03	5.72E-04	4.98E-03	5.78E-03	2.30E-03	4.40E-04	3.99E-03	1.32E-03	5.62E-03	1.27E-03	1.35E-03	4.1944E-02
551317.23	4173003.32	2703.19662	4233.14818	837.63697	6505.1815	955.56249	3124.30275	2711.33393	2478.68968	475.18956	5475.986	3247.64727	3926.97755	0.37685	0.38247	4.30E-03	4.77E-03	9.43E-04	5.61E-03	8.30E-04	2.71E-03	3.90E-03	2.53E-03	4.85E-04	6.65E-03	2.64E-03	3.20E-03	1.77E-04	1.81E-04	3.8931E-02
551673.25	4173341.67	4227.69994	3675.52531	734.2673	3257.43334	645.34578	5662.0103	4300.22013	2170.34511	427.38962	3122.89257	1568.23907	6843.36848	6.11904	6.70172	6.73E-03	4.14E-03	8.27E-04	2.81E-03	5.60E-04	4.92E-03	6.19E-03	2.22E-03	4.36E-04	3.79E-03	1.28E-03	5.57E-03	2.87E-03	3.18E-03	4.5506E-02
551316.94	4172866.98	2532.72469	3601.55862	951.05911	7672.24579	1164.42401	2436.79049	2529.77086	2069.7877	532.11152	5878.27012	4180.00126	3091.05724	0.37377	0.38064	4.03E-03	4.06E-03	1.07E-03	6.62E-03	1.01E-03	2.12E-03	3.64E-03	2.11E-03	5.43E-04	7.14E-03	3.40E-03	2.52E-03	1.75E-04	1.80E-04	3.8610E-02
551511.59	4173305.94	3187.22157	4100.29161	739.80859	4416.14692	751.17787	5096.40058	3222.52969	2467.51966	423.9053	4072.46813	2033.71193	6127.01011	0.64067	0.64679	5.07E-03	4.62E-03	8.33E-04	3.81E-03	6.52E-04	4.43E-03	4.64E-03	2.52E-03	4.33E-04	4.94E-03	1.66E-03	4.99E-03	3.00E-04	3.07E-04	3.9194E-02
551379.33	4173177	2780.84581	4190.91702	796.8543	5492.29617	860.13625	4204.96453	2801.53886	2472.88876	452.33002	4870.55713	2563.92887	5131.81782	0.42166	0.42542	4.43E-03	4.72E-03	8.97E-04	4.74E-03	7.47E-04	3.65E-03	4.03E-03	2.52E-03	4.62E-04	5.91E-03	2.09E-03	4.18E-03	1.98E-04	2.02E-04	3.8774E-02
551634.13	4173347.36	3815.07116	3825.84974	742.07927	3442.46881	662.23806	5693.0983	3873.73171	2283.23782	429.94032	3352.72595	1639.32355	6840.72152	1.99232	2.07017	6.07E-03	4.31E-03	8.36E-04	2.97E-03	5.75E-04	4.94E-03	5.58E-03	2.33E-03	4.39E-04	4.07E-03	1.33E-03	5.57E-03	9.34E-04	9.81E-04	4.0938E-02
551343.68	4172765.19	2467.65263	3347.52384	992.56146	7918.06172	1348.03161	2248.53458	2461.47786	1923.32429	550.19689	5702.01498	4768.02665	2860.13688	0.36587	0.37391	3.93E-03	3.77E-03	1.12E-03	6.83E-03	1.17E-03	1.95E-03	3.54E-03	1.96E-03	5.62E-04	6.92E-03	3.88E-03	2.33E-03	1.71E-04	1.77E-04	3.8316E-02
551541.87	4173322.27	3274.59539	4045.72569	737.32445	4191.70822	728.22607	5249.61597	3315.57702	2437.258	422.91416	3919.70132	1924.84701	6290.59717	0.75217	0.7598	5.21E-03	4.56E-03	8.30E-04	3.62E-03	6.32E-04	4.56E-03	4.77E-03	2.49E-03	4.32E-04	4.76E-03	1.57E-03	5.12E-03	3.53E-04	3.60E-04	3.9256E-02
551368.51	4172696.82	2489.77768	3237.63589	1007.37533	7999.52104	1418.80485	2095.55532	2483.67888	1857.80027	556.43519	5687.70266	4923.657	2688.84372	0.34843	0.35603	3.96E-03	3.65E-03	1.13E-03	6.90E-03	1.23E-03	1.82E-03	3.58E-03	1.90E-03	5.68E-04	6.90E-03	4.01E-03	2.19E-03	1.63E-04	1.69E-04	3.8167E-02
551686.3	4173339.77	4373.32885	3601.91652	725.24238	3183.54523	636.8128	5563.87228	4451.70273	2116.72626	422.72933	3036.99653	1538.25327	6744.57194	11.59345	13.35081	6.96E-03	4.06E-03	8.17E-04	2.75E-03	5.53E-04	4.83E-03	6.41E-03	2.16E-03	4.32E-04	3.69E-03	1.25E-03	5.49E-03	5.43E-03	6.33E-03	5.1155E-02
551450.51	4173260.59	2970.79752	4197.55761	766.01542	4854.60759	797.78171	4596.2762	2995.31112	2524.52319	438.28019	4385.98137	2262.402	5577.60098	0.50474	0.50857	4.73E-03	4.73E-03	8.63E-04	4.19E-03	6.93E-04	3.99E-03	4.31E-03	2.58E-03	4.47E-04	5.32E-03	1.84E-03	4.54E-03	2.37E-04	2.41E-04	3.8709E-02
551314	4172994.36	2675.36184	4158.23925	840.78253	6525.47794	957.44722	3034.17295	2682.39352	2429.09012	476.91543	5483.70287	3261.54843	3817.56447	0.37299	0.37844	4.26E-03	4.68E-03	9.47E-04	5.63E-03	8.31E-04	2.63E-03	3.86E-03	2.48E-03	4.87E-04	6.66E-03	2.65E-03	3.11E-03	1.75E-04	1.79E-04	3.8584E-02
551337.01	4173087.32	2709.52922	4207.86304	781.72604	5875.76641	903.61387	3709.61426	2726.85669	2493.56108	442.25858	4960.69767	2908.77287	4594.46915	0.38507	0.38966	4.31E-03	4.74E-03	8.80E-04	5.07E-03	7.85E-04	3.22E-03	3.93E-03	2.55E-03	4.52E-04	6.02E-03	2.37E-03	3.74E-03	1.80E-04	1.85E-04	3.8423E-02
551382.42	4173185.59	2770.34262	4154.97572	790.26158	5399.42374	848.40202	4213.8053	2790.8409	2467.28684	448.82749	4801.71692	2513.46766	5098.86632	0.41852	0.42186	4.41E-03	4.68E-03	8.90E-04	4.66E-03	7.37E-04	3.66E-03	4.02E-03	2.52E-03	4.58E-04	5.83E-03	2.05E-03	4.15E-03	1.96E-04	2.00E-04	3.8447E-02
551469.63	4173278.6	3033.66438	4147.55542	750.94684	4683.19591	778.56172	4740.63587	3060.98898	2496.26488	430.04596	4251.80641	2174.39533	5737.3449	0.53531	0.54006	4.83E-03	4.67E-03	8.46E-04	4.04E-03	6.76E-04	4.12E-03	4.41E-03	2.55E-03	4.39E-04	5.16E-03	1.77E-03	4.67E-03	2.51E-04	2.56E-04	3.8679E-02
551397.67	4172635.12	2604.61466	3033.18122	1067.63105	7978.20453	1514.87483	1934.94823	2596.53627	1746.66379	590.09541	5577.39671	5102.33565	2498.4807	0.32684	0.33346	4.14E-03	3.42E-03	1.20E-03	6.88E-03	1.32E-03	1.68E-03	3.74E-03	1.78E-03	6.02E-04	6.77E-03	4.15E-03	2.03E-03	1.53E-04	1.58E-04	3.8033E-02
551333.79	4173078.36	2704.09841	4213.42554	781.66668	5905.35191	903.83895	3635.89974	2720.58951	2497.8844	442.36705	4976.85041	2933.71416	4512.45513	0.3806	0.38524	4.30E-03	4.75E-03	8.80E-04	5.09E-03	7.85E-04	3.16E-03	3.92E-03	2.55E-03	4.52E-04	6.04E-03	2.39E-03	3.67E-03	1.78E-04	1.83E-04	3.8346E-02
551312.67	4172901.12	2553.30931	3727.05373	922.46685	7308.82275	1079.29831	2538.35581	2552.41363	2146.13282	518.65437	5819.43576	3828.69353	3216.65001	0.36916	0.37555	4.06E-03	4.20E-03	1.04E-03	6.30E-03	9.37E-04	2.20E-03	3.68E-03	2.19E-03	5.30E-04	7.06E-03	3.12E-03	2.62E-03	1.73E-04	1.78E-04	3.8290E-02
551330.56	4173069.41	2702.37984	4223.40585	783.95391	5948.45593	906.36919	3563.83817	2717.93353	2503.24547	443.80456	5009.72377	2961.15016	4432.09635	0.3785	0.38281	4.30E-03	4.76E-03	8.83E-04	5.13E-03	7.87E-04	3.09E-03	3.91E-03	2.56E-03	4.53E-04	6.08E-03	2.41E-03	3.61E-03	1.77E-04	1.81E-04	3.8332E-02
551351.54	4173128.26	2708.0692	4121.98434	781.53633	5691.62681	879.18068	3940.23434	2727.68735	2433.83646	441.86513	4866.38866	2740.57481	4837.98806	0.39531	0.3996	4.31E-03	4.64E-03	8.80E-04	4.91E-03	7.63E-04	3.42E-03	3.93E-03	2.48E-03	4.51E-04	5.91E-03	2.23E-03	3.94E-03	1.85E-04	1.89E-04	3.8240E-02
551345.62	4173111.52	2697.16123	4133.91124	776.91455	5733.84522	888.53357	3849.53767	2716.15532	2446.30576	439.24037	4872.42791	2822.46102	4740.91009	0.38975	0.39371	4.29E-03	4.66E-03	8.75E-04	4.95E-03	7.72E-04	3.34E-03	3.91E-03	2.50E-03	4.48E-04	5.92E-03	2.30E-03	3.86E-03	1.83E-04	1.87E-04	3.8179E-02
551327.34	4173060.46	2696.11093	4221.20621	785.81408	5983.70094	907.92104	3485.13595	2710.62881	2500.67357	445.02224	5037.58196	2985.95638	4342.56858	0.37598	0.38038	4.29E-03	4.75E-03	8.85E-04	5.16E-03	7.88E-04	3.03E-03	3.90E-03	2.55E-03	4.54E-04	6.12E-03	2.43E-03	3.53E-03	1.76E-04	1.80E-04	3.8252E-02
551422.27	4173237.04	2869.69503	4187.1082	778.59079	5029.71374	814.54535	4359.5026	2891.336	2498.81703	444.31425	4538.68091	2333.32328	5308.18657	0.46205	0.46621	4.57E-03	4.72E-03	8.77E-04	4.34E-03	7.07E-04	3.79E-03	4.16E-03	2.55E-03	4.54E-04	5.51E-03	1.90E-03	4.32E-03	2.17E-04	2.21E-04	3.8325E-02
551321.35	4172827.73	2466.81377	3401.80702	955.89778	7705.28088	1225.04938	2309.53537	2462.15301	1955.36172	533.02244	5711.95977	4395.01965	2930.66021	0.36672	0.37402	3.93E-03	3.83E-03	1.08E-03	6.65E-03	1.06E-03	2.01E-03	3.55E-03	2.00E-03	5.44E-04	6.93E-03	3.58E-03	2.39E-03	1.72E-04	1.77E-04	3.7879E-02
551574.09	4173340.44	3374.58985	3943.92965	733.36668	3876.10855	693.58846	5339.20793	3420.51818	2372.6961	421.77841	3688.53605	1784.61638	6395.62698	0.91895	0.93069	5.37E-03	4.44E-03	8.26E-04	3.34E-03	6.02E-04	4.64E-03	4.93E-03	2.42E-03	4.31E-04	4.48E-03	1.45E-03	5.21E-03	4.31E-04	4.41E-04	3.9005E-02

551360.15	4172712.05	2452.66537	3239.72243	990.16754	7851.52404	1387.20742	2118.02411	2446.67683	1859.16131	547.12683	5613.45487	4808.67466	2710.71965	0.34787	0.35548	3.90E-03	3.65E-03	1.12E-03	6.77E-03	1.20E-03	1.84E-03	3.52E-03	1.90E-03	5.59E-04	6.81E-03	3.91E-03	2.21E-03	1.63E-04	1.68E-04	3.7728E-02
551324.11	4173051.51	2685.19474	4206.17334	787.24756	6010.94134	908.5335	3401.07675	2698.65781	2489.49114	445.98935	5060.06945	3008.03063	4245.39158	0.37292	0.37739	4.27E-03	4.74E-03	8.87E-04	5.18E-03	7.89E-04	2.95E-03	3.89E-03	2.54E-03	4.55E-04	6.14E-03	2.45E-03	3.46E-03	1.75E-04	1.79E-04	3.8106E-02
551315.26	4172856.65	2485.70663	3491.36548	939.43868	7559.18161	1165.28304	2367.53644	2482.37893	2006.74704	525.09513	5740.43828	4172.72964	3003.69037	0.36534	0.37212	3.96E-03	3.93E-03	1.06E-03	6.52E-03	1.01E-03	2.06E-03	3.58E-03	2.05E-03	5.36E-04	6.97E-03	3.40E-03	2.44E-03	1.71E-04	1.76E-04	3.7849E-02
551310.78	4172985.39	2642.17695	4071.60526	842.19982	6528.22585	957.99139	2942.78357	2648.13737	2373.42407	477.60605	5473.12279	3270.47694	3706.06477	0.36818	0.37389	4.20E-03	4.59E-03	9.49E-04	5.63E-03	8.32E-04	2.56E-03	3.81E-03	2.42E-03	4.88E-04	6.64E-03	2.66E-03	3.02E-03	1.73E-04	1.77E-04	3.8152E-02
551355.83	4172720.45	2440.75679	3245.05652	985.08769	7807.60434	1375.41278	2133.0059	2434.75554	1862.53338	544.49567	5591.82595	4772.38412	2726.3229	0.34901	0.35666	3.88E-03	3.65E-03	1.11E-03	6.73E-03	1.19E-03	1.85E-03	3.51E-03	1.90E-03	5.56E-04	6.79E-03	3.88E-03	2.22E-03	1.64E-04	1.69E-04	3.7616E-02
551385.51	4173194.17	2759.31221	4117.03573	783.13242	5304.07049	836.41407	4179.57632	2779.57473	2443.3721	444.99135	4729.64696	2463.24606	5060.42992	0.41605	0.41961	4.39E-03	4.64E-03	8.82E-04	4.57E-03	7.26E-04	3.63E-03	4.00E-03	2.49E-03	4.54E-04	5.74E-03	2.00E-03	4.12E-03	1.95E-04	1.99E-04	3.8050E-02
551479.19	4173287.61	3035.87787	4067.43684	737.68481	4565.39196	765.66303	4754.3102	3064.65415	2449.28651	422.50726	4146.23136	2126.6734	5743.67102	0.54878	0.55364	4.83E-03	4.58E-03	8.31E-04	3.94E-03	6.65E-04	4.13E-03	4.41E-03	2.50E-03	4.31E-04	5.03E-03	1.73E-03	4.67E-03	2.57E-04	2.62E-04	3.8277E-02
551357.46	4173145	2701.09556	4079.15817	780.06691	5563.80411	866.193	3979.02917	2720.96927	2405.69891	441.24698	4812.45141	2653.8694	4874.30288	0.3987	0.40218	4.30E-03	4.59E-03	8.79E-04	4.80E-03	7.52E-04	3.46E-03	3.92E-03	2.46E-03	4.50E-04	5.84E-03	2.16E-03	3.97E-03	1.87E-04	1.91E-04	3.7948E-02
551351.51	4172728.86	2431.96712	3249.87919	981.47275	7777.59551	1364.80029	2147.83249	2425.93542	1865.79159	542.72061	5577.07735	4745.16082	2741.85193	0.3506	0.3583	3.87E-03	3.66E-03	1.11E-03	6.71E-03	1.19E-03	1.86E-03	3.49E-03	1.90E-03	5.54E-04	6.77E-03	3.86E-03	2.23E-03	1.64E-04	1.70E-04	3.7544E-02
551668.78	4172571.41	4688.72394	2195.98789	1808.73636	4842.23514	2786.56271	1480.55473	4640.57661	1310.07397	962.56224	3819.54173	5313.61029	1988.21812	0.17979	0.18152	7.46E-03	2.47E-03	2.04E-03	4.18E-03	2.42E-03	1.29E-03	6.68E-03	1.34E-03	9.83E-04	4.64E-03	4.32E-03	1.62E-03	8.43E-05	8.60E-05	3.9606E-02
551320.89	4173042.56	2675.70788	4189.2976	790.52496	6049.74954	910.42472	3319.91525	2688.06341	2475.73549	448.02717	5094.20486	3032.17617	4150.98231	0.37035	0.37488	4.26E-03	4.72E-03	8.90E-04	5.22E-03	7.91E-04	2.88E-03	3.87E-03	2.53E-03	4.57E-04	6.18E-03	2.47E-03	3.38E-03	1.74E-04	1.78E-04	3.7995E-02
551322.06	4172818.27	2447.6757	3354.54487	954.33793	7670.95279	1234.26297	2279.86952	2442.72721	1928.39877	531.72278	5653.12796	4418.3277	2893.31875	0.36365	0.37102	3.89E-03	3.78E-03	1.07E-03	6.62E-03	1.07E-03	1.98E-03	3.52E-03	1.97E-03	5.43E-04	6.86E-03	3.60E-03	2.35E-03	1.70E-04	1.76E-04	3.7604E-02
551608.04	4173351.15	3536.75488	3814.87014	729.30649	3521.14962	664.93062	5429.82566	3587.8757	2286.67916	421.08275	3442.9421	1670.56911	6514.74446	1.26329	1.28773	5.63E-03	4.30E-03	8.21E-04	3.04E-03	5.77E-04	4.71E-03	5.17E-03	2.33E-03	4.30E-04	4.18E-03	1.36E-03	5.30E-03	5.92E-04	6.10E-04	3.9050E-02
551317.66	4173033.6	2657.89296	4152.46837	791.98795	6069.12692	910.3348	3231.72597	2669.18063	2449.55227	449.00668	5111.20373	3051.40442	4046.85028	0.36665	0.37122	4.23E-03	4.68E-03	8.92E-04	5.23E-03	7.90E-04	2.81E-03	3.84E-03	2.50E-03	4.58E-04	6.21E-03	2.48E-03	3.29E-03	1.72E-04	1.76E-04	3.7762E-02
551347.19	4172737.26	2415.16777	3235.9144	972.65655	7690.35862	1344.70982	2153.00458	2409.18664	1858.56493	538.16061	5526.29968	4679.56162	2745.18939	0.34913	0.35676	3.84E-03	3.64E-03	1.10E-03	6.63E-03	1.17E-03	1.87E-03	3.47E-03	1.90E-03	5.49E-04	6.71E-03	3.81E-03	2.23E-03	1.64E-04	1.69E-04	3.7253E-02
551309.31	4172880.55	2489.26255	3553.76002	919.38787	7322.16214	1108.13698	2415.65161	2487.22437	2044.39015	515.17282	5695.55245	3940.86204	3063.19484	0.3616	0.368	3.96E-03	4.00E-03	1.04E-03	6.31E-03	9.62E-04	2.10E-03	3.58E-03	2.09E-03	5.26E-04	6.91E-03	3.21E-03	2.49E-03	1.69E-04	1.74E-04	3.7527E-02
551551.57	4173331.41	3231.86873	3913.89045	722.91043	4030.67453	708.70567	5116.2047	3273.58241	2359.39617	414.7424	3776.38538	1857.6477	6128.94129	0.77505	0.78343	5.14E-03	4.41E-03	8.14E-04	3.48E-03	6.15E-04	4.44E-03	4.71E-03	2.41E-03	4.23E-04	4.58E-03	1.51E-03	4.99E-03	3.63E-04	3.71E-04	3.8265E-02
551307.55	4172976.43	2607.65168	3980.89934	843.27798	6527.22221	958.96187	2853.80229	2612.61395	2316.13603	478.01927	5453.96694	3280.30366	3597.21262	0.36303	0.36802	4.15E-03	4.48E-03	9.50E-04	5.63E-03	8.33E-04	2.48E-03	3.76E-03	2.36E-03	4.88E-04	6.62E-03	2.67E-03	2.93E-03	1.70E-04	1.74E-04	3.7701E-02
551322.77	4172808.8	2424.1755	3301.79362	949.74338	7600.47341	1238.34074	2247.0326	2419.02155	1898.2807	528.72787	5574.84837	4416.6192	2852.06536	0.35878	0.36615	3.86E-03	3.72E-03	1.07E-03	6.55E-03	1.08E-03	1.95E-03	3.48E-03	1.94E-03	5.40E-04	6.77E-03	3.59E-03	2.32E-03	1.68E-04	1.74E-04	3.7214E-02
551658.01	4172564.49	4521.54807	2208.6355	1777.94007	4860.58778	2755.36155	1487.98641	4476.15294	1318.37644	948.25351	3856.21709	5235.23904	1995.05954	0.17635	0.17778	7.20E-03	2.49E-03	2.00E-03	4.19E-03	2.39E-03	1.29E-03	6.45E-03	1.35E-03	9.68E-04	4.68E-03	4.26E-03	1.62E-03	8.27E-05	8.43E-05	3.9055E-02
551388.6	4173202.76	2742.65737	4067.79203	774.88182	5199.52312	824.45307	4135.22677	2762.67172	2415.6138	440.53263	4649.65208	2415.01072	5007.09957	0.41362	0.41707	4.36E-03	4.58E-03	8.73E-04	4.48E-03	7.16E-04	3.59E-03	3.98E-03	2.47E-03	4.50E-04	5.64E-03	1.97E-03	4.07E-03	1.94E-04	1.98E-04	3.7580E-02
551488.76	4173296.61	3030.46033	3977.97279	724.3157	4443.36358	752.14297	4746.87916	3060.7745	2395.86363	414.82083	4038.66386	2072.45806	5724.85197	0.56246	0.56752	4.82E-03	4.48E-03	8.16E-04	3.83E-03	6.53E-04	4.12E-03	4.41E-03	2.45E-03	4.24E-04	4.90E-03	1.69E-03	4.66E-03	2.64E-04	2.69E-04	3.7784E-02
551373.18	4172676.87	2460.28497	3107.45954	990.18054	7749.95229	1392.20639	2006.94522	2454.42607	1785.18692	547.16725	5502.16944	4792.50653	2580.93793	0.33038	0.33733	3.92E-03	3.50E-03	1.12E-03	6.68E-03	1.21E-03	1.74E-03	3.53E-03	1.82E-03	5.59E-04	6.68E-03	3.90E-03	2.10E-03	1.55E-04	1.60E-04	3.7076E-02
551314.44	4173024.65	2639.86675	4110.54847	794.70443	6094.8485	911.33712	3146.44037	2650.0519	2419.64375	450.70136	5133.0814	3053.63489	3945.3756	0.36315	0.3678	4.20E-03	4.63E-03	8.95E-04	5.26E-03	7.91E-04	2.73E-03	3.82E-03	2.47E-03	4.60E-04	6.23E-03	2.49E-03	3.21E-03	1.70E-04	1.74E-04	3.7524E-02
551363.37	4173161.74	2672.26748	3997.8235	771.72558	5402.76236	848.61001	3959.09109	2692.06605	2357.64026	436.80506	4706.187	2569.76784	4840.91864	0.3974	0.40142	4.25E-03	4.50E-03	8.69E-04	4.66E-03	7.37E-04	3.44E-03	3.88E-03	2.41E-03	4.46E-04	5.71E-03	2.09E-03	3.94E-03	1.86E-04	1.90E-04	3.7309E-02
551323.88	4172797.11	2406.5848	3261.76214	949.22856	7572.79284	1250.76815	2219.24807	2401.16429	1875.14122	527.85827	5522.10707	4446.95603	2817.63412	0.35581	0.36325	3.83E-03	3.67E-03	1.07E-03	6.53E-03	1.09E-03	1.93E-03	3.46E-03	1.91E-03	5.39E-04	6.70E-03	3.62E-03	2.29E-03	1.67E-04	1.72E-04	3.6983E-02
551955.01	4173205.79	4827.05793	3359.40559	572.31029	2534.5756	494.00964	5640.76166	4967.89098	1918.08606	335.17038	2515.62501	1188.40654	6867.45414	0.39872	0.39186	7.68E-03	3.78E-03	6.45E-04	2.19E-03	4.29E-04	4.90E-03	7.15E-03	1.96E-03	3.42E-04	3.05E-03	9.67E-04	5.59E-03	1.87E-04	1.86E-04	3.9060E-02
551387.79	4172641.64	2517.26665	2985.9753	1021.01363	7714.53377	1440.36411	1914.46259	2510.28732	1718.93634	564.39838	5424.11063	4876.7172	2470.08699	0.31823	0.32467	4.01E-03	3.36E-03	1.15E-03	6.65E-03	1.25E-03	1.66E-03	3.62E-03	1.75E-03	5.76E-04	6.58E-03	3.97E-03	2.01E-03	1.49E-04	1.54E-04	3.6898E-02
551651.45	4173353.8	3841.98006	3605.76876	717.36317	3249.47296	636.34761	5387.20342	3902.76374	2142.82959	416.3174	3139.37891	1562.3872	6497.4863	2.70508	2.83332	6.11E-03	4.06E-03	8.08E-04	2.80E-03	5.53E-04	4.68E-03	5.62E-03	2.19E-03	4.25E-04	3.81E-03	1.27E-03	5.29E-03	1.27E-03	1.34E-03	4.0230E-02
551313.57	4172846.32	2433.23248	3374.70567	924.1046	7397.79288	1159.0291	2295.90464	2429.62111	1940.36517	516.13595	5577.29954	4132.17056	2913.11466	0.35496	0.3616	3.87E-03	3.80E-03	1.04E-03	6.38E-03	1.01E-03	1.99E-03	3.50E-03	1.98E-03	5.27E-04	6.77E-03	3.36E-03	2.37E-03	1.66E-04	1.71E-04	3.6943E-02
551304.32	4172967.46	2571.05321	3886.2348	843.43496	6517.84941	959.87994	2766.61077	2575.10249	2257.26565	477.83664	5423.23228	3289.51868	3490.31218	0.35747	0.36266	4.09E-03	4.38E-03	9.50E-04	5.62E-03	8.33E-04	2.40E-03	3.71E-03	2.30E-03	4.88E-04	6.58E-03	2.68E-03	2.84E-03	1.68E-04	1.72E-04	3.7217E-02
551664.64	4173351.88	3973.09165	3551.48383	713.53445	3187.42321	630.30184	5357.76711	4038.35068	2102.77257	414.71918	3062.29926	1538.26592	6475.70623	3.92974	4.18403	6.32E-03	4.00E-03	8.04E-04	2.75E-03	5.47E-04	4.65E-03	5.82E-03	2.15E-03	4.23E-04	3.72E-03	1.25E-03	5.27E-03	1.84E-03	1.98E-03	4.1525E-02
551561.27	4173340.55	3241.57557	3848.73075	716.74643	3891.58633	690.78789	5079.51063	3284.35685	2317.02681	411.60655	3672.08073	1795.32837	6089.16871	0.80732	0.81751	5.16E-03	4.33E-03	8.07E-04	3.36E-03	6.00E-04	4.41E-03	4.73E-03	2.37E-03	4.20E-04	4.46E-03	1.46E-03	4.96E-03	3.78E-04	3.87E-04	3.7823E-02
551638.27	4173355.72	3714.8314	3645.30834	717.95013	3304.5546	640.89312	5369.9759	3771.64288	2172.72603	416.01512	3208.7494	1583.39918	6466.40606	1.96946	2.04756	5.91E-03	4.11E-03	8.09E-04	2.85E-03	5.56E-04	4.66E-03	5.43E-03	2.22E-03	4.25E-04	3.90E-03	1.29E-03	5.26E-03	9.23E-04	9.70E-04	3.9310E-02
551498.32	4173305.62	3034.62616	3911.00912	714.85018	4333.43563	738.8779	4748.14279	3066.56375	2354.58527	409.36762	3951.63533	2018.10283	5718.95106	0.57849	0.58361	4.83E-03	4.40E-03	8.05E-04	3.74E-03	6.42E-04	4.12E-03	4.42E-03	2.40E-03	4.18E-04	4.80E-03	1.64E-03	4.65E-03	2.71E-04	2.77E-04	3.7420E-02
551399.76	4172622.17	2564.6168	2914.26491	1048.50023	7623.75824	1484.71516	1868.08879	2556.28168	1679.83329	579.83918	5349.38298	4906.7541	2412.4958	0.30995	0.31597	4.08E-03	3.28E-03	1.18E-03	6.57E-03	1.29E-03	1.62E-03	3.68E-03	1.71E-03	5.92E-04	6.49E-03	3.99E-03	1.96E-03	1.45E-04	1.50E-04	3.6765E-02
551342.86	4172745.67	2386.03346	3195.94892	956.14402	7519.60592	1311.58154	2144.31688	2380.24776	1836.72816	529.44117	5423.67307	4558.17994	2730.91473	0.34327	0.35066	3.80E-03	3.60E-03	1.08E-03	6.49E-03	1.14E-03	1.86E-03	3.43E-03	1.88E-03	5.41E-04	6.58E-03	3.71E-03	2.22E-03	1.61E-04	1.66E-04	3.6646E-02
551311.19	4173015.62	2611.46342	4045.51692	794.51698	6091.13033	909.30171	3053.53409	2620.56238	2376.32312	450.66112	5129.65389	3056.70311	3833.22506	0.35809	0.36277	4.16E-03	4.56E-03	8.95E-04	5.25E-03	7.90E-04	2.65E-03	3.77E-03	2.43E-03	4.60E-04	6.23E-03	2.49E-03	3.12E-03	1.68E-04	1.72E-04	3.7136E-02
551583.68	4173349.48	3335.45332	3799.38129	717.72058	3707.78239	672.40212	5178.8031	3381.41051	2284.20109	413.08948	3534.46772	1718.01229	6209.43003	0.95281	0.96712	5.31E-03	4.28E-03	8.08E-04	3.20E-03	5.84E-04	4.50E-03	4.87E-03	2.33E-03	4.22E-04	4.29E-03	1.40E-03	5.05E-03	4.47E-04	4.58E-04	3.7944E-02
551428.05	4173250.63	2822.07999	4038.32432	754.09089	4822.69642	788.46581	4244.06971	2843.58759	2417.8856	430.71416	4337.54714	2254.97525	5166.85016	0.45654	0.45983	4.49E-03	4.55E-03	8.49E-04	4.16E-03	6.85E-04	3.69E-03	4.10E-03	2.47E-03	4.40E-04	5.27E-03	1.84E-03	4.20E-03	2.14E-04	2.18E-04	3.7159E-02
551325.99	4172787.28	2386.8404	3220.34512	944.56034	7493.52019	1253.88086	2192.41181	2381.3234	1851.51004	524.84224	5449.3693	4435.15335	2784.29272	0.35041	0.35777	3.80E-03	3.63E-03	1.06E-03	6.46E-03	1.09E-03	1.90E-03	3.43E-03	1.89E-03	5.36E-04	6.62E-03	3.61E-03	2.27E-03	1.64E-04	1.70E-04	3.6624E-02
551366.97	4173171.75	2655.90562	3952.34515	766.29084	5304.65953	837.61605	3936.11379	2675.53461	2331.47296	433.96815	4639.84782	2518.80779	4809.28925	0.39671	0.40063	4.23E-03	4.45E-03	8.63E-04	4.57E-03	7.27E-04	3.42E-03	3.85E-03	2.38E-03	4.43E-04	5.63E-03	2.05E-03	3.91E-03	1.86E-04	1.90E-04	3.6910E-02
551391.69	4173211.35	2720.21543	4007.3058	765.53552	5086.51079	812.53285	4047.5506	2739.93121	2371.79664	435.44225	4562.18768	2368.77703	4939.14469	0.41336	0.41615	4.33E-03	4.51E-03	8.62E-04	4.39E-03	7.06E-04	3.51E-03	3.95E-03	2.42E-03	4.45E-04	5.54E-03	1.93E-03	4.02E-03	1.94E-04	1.97E-04	3.7000E-02
551367.01	4172683.76	2418.89382	3088.53113	970.40217	7594.19607	1361.40673	2005.31659	2413.27484	1773.89373	536.24877	5416.91799	4675.71948	2575.4586	0.32678	0.33364	3.85E-03	3.48E-03	1.09E-03	6.55E-03	1.18E-03	1.74E-03	3.48E-03	1.81E-03	5.47E-04	6.58E-03	3.81E-03	2.10E-03	1.53E-04	1.58E-04	3.6516E-02
551677.83	4173349.97	4097.63768	3479.88521	706.19348	3118.66997	622.69716	5276.45936	4167.69749	2052.3341	410.99438	2977.79602	1511.36923	6392.95294	6.3722	7.002	6.52E-03	3.92E-03	7.95E-04	2.69E-03	5.41E-04	4.58E-03	6.00E-03	2.10E-03	4.20E-04	3.62E-03	1.23E-03	5.20E-03	2.99E-03	3.32E-03	4.3917E-02
551595	4173353.05	3378.93363	3752.70555	715.95457	3611.54326	663.01752	5197.91139	3426.3522	2254.40289	412.56178	3452.89241	1681.49562	6234.79758	1.0498	1.06524	5.38E-03	4.23E-03	8.06E-04	3.11E-03	5.76E-04	4.51E-03	4.93E-03	2.30E-03	4.21E-04	4.19E-03	1.37E-03	5.07E-03	4.92E-04	5.05E-04	3.7902E-02
551436.62	4173259.69	2833.04981	4000.00976	744.28796	4734.39819	778.46352	4270.68893	2855.28065	2401.41219	425.4612	4249.43139	2220.48396	5194.18781	0.46482	0.46815	4.51E-03	4.51E-03	8.38E-04	4.08E-03	6.76E-04	3.71E-03	4.11E-03	2.45E-03	4.34E-04	5.16E-03	1.81E-03	4.23E-03	2.18E-04	2.22E-04	3.6950E-02
551307.96	4173006.66	2586.02353	3982.13153	796.52193	6103.39603	909.57404	2967.58586	2594.06196	2333.74117	451.80554	5136.75803	3065.28669	3729.31266	0.35415	0.35871	4.12E-03	4.48E-03	8.97E-04	5.26E-03	7.90E-04	2.58E-03	3.74E-03	2.38E-03	4.61E-04	6.24E-03	2.49E-03	3.04E-03	1.66E-04	1.70E-04	3.6809E-02
551507.88	4173314.63	3042.16827	3855.5431	707.65839	4227.12813	725.37269	4746.47322	3075.67065	2320.01509	405.25694	3873.24103	1964.20674	5711.86256	0.59647	0.60172	4.84E-03	4.34E-03	7.97E-04	3.65E-03	6.30E-04	4.12E-03	4.43E-03	2.37E-03	4.14E-04	4.70E-03	1.60E-03	4.65E-03	2.80E-04	2.85E-04	3.7103E-02
551691.01	4173348.05	4247.48525	3415.36075	696.84666	3047.44179	614.1863	5187.51832	4323.55408	2003.56121	406.12715	2899.16652	1480.82169	6305.73106	12.69787	14.71007	6.76E-03	3.85E-03	7.85E-04	2.63E-03	5.33E-04	4.50E-03	6.23E-03	2.05E-03	4.15E-04	3.52E-03	1.21E-03	5.13E-03	5.95E-03	6.97E-03	5.0522E-02
551307.63	4172870.26	2432.02558	3424.17865	902.516	7167.07315	1099.0667	2332.41382	2429.66706	1969.62948	505.19652	5527.806	3895.37751	2958.81283	0.34959	0.35577	3.87E-03	3.86E-03	1.02E-03	6.18E-03	9.54E-04	2.03E-03	3.50E-03	2.01E-03	5.16E-04	6.71E-03	3.17E-03	2.41E-03	1.64E-04	1.69E-04	3.6551E-02
551338.54	4172754.07	2369.07285	3173.33805	946.15584	7424.66211	1288.53507	2142.75988	2363.38588	1824.46434	524.28576	5367.95767	4483.70463	2726.30166	0.34082	0.34808	3.77E-03	3.57E-03	1.07E-03	6.40E-03	1.12E-03	1.86E-03	3.40E-03	1.86E-03	5.35E-04	6.52E-03	3.65E-03	2.22E-03	1.60E-04	1.65E-04	3.6303E-02
551688.08	4172578.4	4759.04146	2083.53994	1728.55995	4599.34502	2595.55742	1413.11658	4710.46878	1240.25737	919.01063	3579.74973	5070.1397	1900.1364	0.17836	0.18057	7.57E-03	2.35E-03	1.95E-03	3.97E-03	2.25E-03	1.23E-03	6.78E-03	1.27E-03	9.38E-04	4.35E-03	4.13E-03	1.55E-03	8.36E-05	8.56E-05	3.8490E-02
551301.1	4172958.5	2531.20433	3787.54393	841.83238	6492.70003	959.87661	2680.40968	2534.42064	2196.41881	476.54258	5376.32133	3294.9	3384.52281	0.35178	0.3569	4.03E-03	4.27E-03	9.48E-04	5.60E-03	8.33E-04	2.33E-03	3.65E-03	2.24E-03	4.87E-04	6.53E-03	2.68E-03	2.75E-03	1.65E-04	1.69E-04	3.6678E-02
551370.06	4173180.34	2646.17627	3921.82052	761.91668	5223.10458	828.4336	3915.99972	2665.61769	2314.0578	431.74272	4586.81582	2473.30816	4783.274	0.39655	0.39969	4.21E-03	4.42E-03	8.58E-04	4.50E-03	7.19E-04	3.40E-03	3.84E-03	2.36E-03	4.41E-04	5.57E-03	2.01E-03	3.89E-03	1.86E-04	1.89E-04	3.6602E-02
551539.98	4173332.68	3123.78545	3806.34842	705.82612	4006.04618	701.38713	4875.99872	3162.70964	2292.58887	404.62712	3728.57234	1852.10838	5850.50979	0.69835	0.70462	4.97E-03	4.29E-03	7.95E-04	3.45E-03	6.09E-04	4.23E-03	4.55E-03	2.34E-03	4.13E-04	4.53E-03	1.51E-03	4.76E-03	3.27E-04	3.34E-04	3.7115E-02
551327.74	4173090.65	2592.3605	3954.45343	746.70675	5557.70321	863.31716	3497.82737	2608.85896	2342.46919	422.38595	4682.11012	2769.39608	4333.1247	0.36216	0.36638	4.13E-03	4.45E-03	8.41E-04	4.79E-03	7.50E-04	3.04E-03	3.76E-03	2.39E-03	4.31E-04	5.68E-03	2.25E-03	3.53E-03	1.70E-04	1.74E-04	3.6388E-02
551304.74	4172997.69	2561.21917	3916.81884	799.65807	6124.0444	911.50121	2885.72493	2568.21985	2290.22386	453.5304	5146.49075	3078.1198	3630.09867	0.35051	0.3551	4.08E-03	4.41E-03	9.01E-04	5.28E-03	7.91E-04	2.51E-03	3.70E-03	2.34E-03	4.63E-04	6.25E-03	2.51E-03	2.95E-03	1.64E-04	1.68E-04	3.6506E-02
551465.59	4173286.98	2901.34078	3898.47394	717.5806	4464.85172	750.59072	4434.2108	2927.37727	2347.26648	410.82172	4028.49849	2101.68278	5370.2051	0.50243	0.50663	4.62E-03	4.39E-03	8.08E-04	3.85E-03	6.52E-04	3.85E-03	4.22E-03	2.40E-03	4.19E-04	4.89E-03	1.71E-03	4.37E-03	2.35E-04	2.40E-04	3.6647E-02
551324.52	4173081.7	2590.27131	3965.00122	747.54245	5589.50274	865.16268	3435.23639	2606.00527	2349.44479	423.00061	4702.90093	2792.98088	4264.10869	0.35834	0.36259	4.12E-03	4.47E-03	8.42E-04	4.82E-03	7.51E-04	2.98E-03	3.75E-03	2.40E-03	4.32E-04	5.71E-03	2.27E-03	3.47E-03	1.68E-04	1.72E-04	3.6360E-02
551336.34	4173114.81	2589.27068	3904.29776	745.30029	5454.99531	852.92277	3631.75286	2607.25934	2308.69431	421.31009	4626.80677	2696.04633	4475.50547	0.36784	0.37189	4.12E-03	4.40E-03	8.39E-04	4.70E-03	7.41E-04	3.15E-03	3.75E-03	2.36E-03	4.30E-04	5.62E-03	2.19E-03	3.64E-03	1.72E-04	1.76E-04	3.6300E-02
551394.78	4173219.93	2698.51196	3946.82217	755.882	4974.45164	800.38617	3991.10664	2717.96078	2339.18515	430.33613	4447.56934	2322.35746	4870.99914	0.41158	0.41452	4.29E-03	4.45E-03	8.51E-04	4.29E-03	6.95E-04	3.47E-03	3.91E-03	2.39E-03	4.39E-04	5.40E-03	1.89E-03	3.96E-03	1.93E-04	1.96E-04	3.6426E-02
551339.29	4173123.18	2590.2774	3891.10606	746.28664	5421.63539	848.44868	3669.71501	2608.62181	2298.81523	421.82476	4616.62003	2660.83716	4515.2915	0.36981	0.37379	4.12E-03	4.38E-03	8.41E-04	4.68E-03	7.37E-04	3.19E-03	3.76E-03	2.35E-03	4.31E-04	5.60E-03	2.17E-03	3.67E-03	1.73E-04	1.77E-04	3.6273E-02
551373.15	4173188.92	2641.78561	3900.70534	757.84041	5145.83645	818.33659	3899.05895	2661.01713	2301.98915	429.74665	4538.59416	2425.91736	4762.47347	0.39527	0.39876	4.20E-03	4.39E-03	8.54E-04	4.44E-03	7.11E-04	3.39E-03	3.83E-03	2.35E-03	4.39E-04	5.51E-03	1.97E-03	3.88E-03	1.85E-04	1.89E-04	3.6340E-02
551321.3	4173072.75	2586.96825	3971.03908	748.91098	5621.30985	866.69401	3368.41681	2601.8309	2352.85402	423.90503	4726.69952	2815.82151	4189.40359	0.35616	0.36048	4.12E-03	4.47E-03	8.43E-04	4.85E-03	7.53E-04	2.92E-03	3.75E-03	2.40E-03	4.33E-04	5.74E-03	2.29E-03	3.41E-03	1.67E-04	1.71E-04	3.6317E-02
551611.89	4173359.55	3454.43962	3655.85922	708.58585	3387.77168	644.90419	5172.3609	3504.11312	2188.75546	409.19618	3307.52534	1615.98875	6217.07444	1.23666	1.25926	5.50E-03	4.12E-03	7.98E-04	2.92E-03	5.60E-04	4.49E-03	5.05E-03	2.23E-03	4.18E-04	4.02E-03	1.32E-03	5.06E-03	5.80E-04	5.97E-04	3.7651E-02
551517.44	4173323.63	3044.54334	3797.01793	700.64788	4116.00942	711.14811	4726.98077	3079.55627	2284.02842	401.31272	3790.97325	1909.44321	5684.95369	0.61467	0.62044	4.84E-03	4.28E-03	7.89E-04	3.55E-03	6.17E-04	4.10E-03	4.44E-03	2.33E-03	4.10E-04	4.60E-03	1.55E-03	4.63E-03	2.88E-04	2.94E-04	3.6724E-02
551390.07	4172628.57	2493.07989	2887.40176	1010.20744	7460.0137	1423.24474	1856.41024	2485.8188	1663.68447	558.64122	5253.39953	4747.39165	2396.02018	0.30522	0.3112	3.97E-03	3.25E-03	1.14E-03	6.43E-03	1.24E-03	1.61E-03	3.58E-03	1.70E-03	5.70E-04	6.38E-03	3.86E-03	1.95E-03	1.43E-04	1.47E-04	3.5969E-02
551570.97	4173349.68	3222.57578	3741.68581	705.40769	3738.32243	671.4885	4978.83484	3265.77642	2250.69307	405.4269	3541.81047	1730.79777	5972.95606	0.8371	0.84614	5.13E-03	4.21E-03	7.94E-04	3.22E-03	5.83E-04	4.32E-03	4.70E-03	2.30E-03	4.14E-04	4.30E-03	1.41E-03	4.86E-03	3.92E-04	4.01E-04	3.7045E-02
551318.07	4173063.8	2583.84558	3974.39278	751.48816	5658.61489	868.66627	3300.28351	2597.76098	2353.62141	425.52286	4758.09592	2839.03662	4112.43519	0.35419	0.35821	4.11E-03	4.48E-03	8.46E-04	4.88E-03	7.54E-04	2.87E-03	3.74E-03	2.40E-03	4.34E-04	5.78E-03	2.31E-03	3.35E-03	1.66E-04	1.70E-04	3.6282E-02
551360.83	4172690.65	2376.12749	3060.49294	949.96171	7415.63548	1328.93322	1999.80315	2370.7188	1757.76837	525.00651	5314.98191	4548.88908	2564.7424	0.32201	0.32873	3.78E-03	3.45E-03	1.07E-03	6.40E-03	1.15E-03	1.74E-03	3.41E-03	1.79E-03	5.36E-04	6.45E-03	3.70E-03	2.09E-03	1.51E-04	1.56E-04	3.5877E-02
551345.21	4173139.92	2592.19886	3867.30689	748.20959	5354.10707	838.62155	3726.54251	2610.90532	2280.87213	423.0216	4593.44506	2583.8279	4573.76349	0.37387	0.37775	4.12E-03	4.36E-03	8.43E-04	4.62E-03	7.28E-04	3.24E-03	3.76E-03	2.33E-03	4.32E-04	5.58E-03	2.10E-03	3.72E-03	1.75E-04	1.79E-04	3.6181E-02
551377.91	4172648.17	2429.85388	2931.31714	975.85665	7421.22345	1369.53654	1890.97387	2423.78824	1686.93183	539.55017	5253.33495	4642.4669	2437.37494	0.30856	0.31476	3.87E-03	3.30E-03	1.10E-03	6.40E-03	1.19E-03	1.64E-03	3.49E-03	1.72E-03	5.51E-04	6.38E-03	3.78E-03	1.98E-03	1.45E-04	1.49E-04	3.5695E-02
551301.51	4172988.73	2530.94964	3839.60977	800.99861	6127.14602	911.96382	2801.98851	2536.9526	2240.40685	454.19089	5138.17718	3085.74487	3528.05587	0.34578	0.35097	4.03E-03	4.32E-03	9.02E-04	5.28E-03	7.92E-04	2.43E-03	3.65E-03	2.29E-03	4.64E-04	6.24E-03	2.51E-03	2.87E-03	1.62E-04	1.66E-04	3.6116E-02
551305.95	4172859.97	2387.77455	3321.5437	891.6895	7066.07153	1099.6282	2266.82055	2385.05122	1910.75117	498.64168	5403.24723	3888.31275	2876.08326	0.34181	0.3479	3.80E-03	3.74E-03	1.00E-03	6.09E-03	9.55E-04	1.97E-03	3.43E-03	1.95E-03	5.09E-04	6.56E-03	3.16E-03	2.34E-03	1.60E-04	1.65E-04	3.5846E-02
551314.85	4173054.85	2567.17543	3949.46175	750.20242	5661.13295	866.78471	3216.69375	2580.13892	2337.58806	424.94539	4759.05413	2853.8752	4015.09898	0.35023	0.35468	4.09E-03	4.45E-03	8.45E-04	4.88E-03	7.53E-04	2.79E-03	3.72E-03	2.39E-03	4.34E-04	5.78E-03	2.32E-03	3.27E-03	1.64E-04	1.68E-04	3.6042E-02
551346.11	4172718.26	2337.78283	3084.96642	934.87819	7298.95227	1298.21397	2049.09721	2332.2996	1772.1054	516.97864	5260.58543	4452.00058	2616.74706	0.3267	0.33363	3.72E-03	3.47E-03	1.05E-03	6.29E-03	1.13E-03	1.78E-03	3.36E-03	1.81E-03	5.28E-04	6.39E-03	3.62E-03	2.13E-03	1.53E-04	1.58E-04	3.5595E-02
551297.87	4172949.53	2485.38806	3681.06011	836.75189	6436.19158	956.70956	2592.78299	2487.87299	2131.55037	473.28855	5303.69335	3288.0509	3276.94664	0.3453	0.35035	3.95E-03	4.15E-03	9.42E-04	5.55E-03	8.31E-04	2.25E-03	3.58E-03	2.18E-03	4.83E-04	6.44E-03	2.68E-03	2.67E-03	1.62E-04	1.66E-04	3.6028E-02
551350.39	4172709.93	2343.38684	3074.79291	936.42157	7306.91628	1303.78319	2032.55198	2337.97438	1766.06938	517.68529	5263.04721	4462.80406	2598.71846	0.32425	0.33108	3.73E-03	3.46E-03	1.05E-03	6.30E-03	1.13E-03	1.76E-03	3.37E-03	1.80E-03	5.29E-04	6.39E-03	3.63E-03	2.11E-03	1.52E-04	1.57E-04	3.5589E-02
551354.68	4172701.6	2350.2195	3061.28121	938.36099	7317.44545	1308.85835	2014.53421	2344.87994	1758.29106	518.67517	5264.78226	4474.9555	2578.92688	0.32172	0.32846	3.74E-03	3.45E-03	1.06E-03	6.31E-03	1.14E-03	1.75E-03	3.38E-03	1.80E-03	5.30E-04	6.39E-03	3.64E-03	2.10E-03	1.51E-04	1.56E-04	3.5581E-02
551475.25	4173296.07	2899.09735	3817.35328	704.23104	4352.12077	738.45994	4438.5329	2926.41657	2299.41767	403.1734	3926.90226	2050.39805	5365.77717	0.5139	0.51818	4.61E-03	4.30E-03	7.93E-04	3.75E-03	6.41E-04	3.85E-03	4.21E-03	2.35E-03	4.12E-04	4.77E-03	1.67E-03	4.37E-03	2.41E-04	2.46E-04	3.6217E-02
551376.24	4173197.51	2630.54824	3865.99909	750.74275	5058.44436	807.56078	3868.27225	2649.53972	2282.7711	426.59426	4475.6109	2380.38938	4724.81017	0.39323	0.39613	4.19E-03	4.35E-03	8.46E-04	4.36E-03	7.01E-04	3.36E-03	3.82E-03	2.33E-03	4.36E-04	5.43E-03	1.94E-03	3.85E-03	1.84E-04	1.88E-04	3.5978E-02
551311.62	4173045.89	2557.30059	3933.11931	752.66335	5690.32262	867.83181	3141.67981	2569.23697	2324.74644	426.51513	4785.85893	2873.9612	3927.91439	0.34759	0.35211	4.07E-03	4.43E-03	8.48E-04	4.91E-03	7.54E-04	2.73E-03	3.70E-03	2.37E-03	4.35E-04	5.81E-03	2.34E-03	3.20E-03	1.63E-04	1.67E-04	3.5920E-02
551549.44	4173341.59	3104.84781	3718.70222	696.403	3871.02339	684.27798	4797.84884	3144.5851	2239.74995	399.4051	3618.27782	1792.63789	5757.01922	0.71954	0.72633	4.94E-03	4.19E-03	7.84E-04	3.34E-03	5.94E-04	4.17E-03	4.53E-03	2.29E-03	4.08E-04	4.39E-03	1.46E-03	4.69E-03	3.37E-04	3.44E-04	3.6453E-02
551311.5	4172827.8	2352.92239	3199.58981	901.02256	7136.24494	1150.10292	2189.36721	2348.86621	1840.77442	502.62866	5322.60186	4063.80032	2778.26333	0.3391	0.34558	3.74E-03	3.60E-03	1.01E-03	6.15E-03	9.99E-04	1.90E-03	3.38E-03	1.88E-03	5.13E-04	6.46E-03	3.31E-03	2.26E-03	1.59E-04	1.64E-04	3.5545E-02
551707.63	4172588.66	4835.96186	1996.77387	1640.97848	4518.07181	2412.44176	1357.60729	4787.40744	1185.27129	873.34544	3422.90509	4922.69487	1826.06655	0.18506	0.18804	7.70E-03	2.25E-03	1.85E-03	3.90E-03	2.09E-03	1.18E-03	6.89E-03	1.21E-03	8.92E-04	4.16E-03	4.01E-03	1.49E-03	8.67E-05	8.91E-05	3.7783E-02
551351.13	4173156.66	2570.06164	3801.47735	742.66814	5219.63122	824.1075	3725.70832	2588.81896	2240.99369	420.02674	4513.4133	2508.26658	4563.43571	0.37438	0.37765	4.09E-03	4.28E-03	8.36E-04	4.50E-03	7.16E-04	3.24E-03	3.73E-03	2.29E-03	4.29E-04	5.48E-03	2.04E-03	3.71E-03	1.75E-04	1.79E-04	3.5694E-02
551299.99	4172883.77	2390.33767	3378.04946	872.9504	6846.97452	1047.52452	2312.38162	2388.83325	1945.02625	489.3818	5356.0291	3679.93715	2932.4582	0.33868	0.34446	3.80E-03	3.80E-03	9.83E-04	5.91E-03	9.10E-04	2.01E-03	3.44E-03	1.99E-03	5.00E-04	6.50E-03	2.99E-03	2.39E-03	1.59E-04	1.63E-04	3.5545E-02
551308.4	4173036.94	2540.18284	3899.58725	753.59759	5703.0866	867.21125	3060.90229	2551.14089	2301.22308	427.18358	4798.46928	2875.73592	3832.57605	0.344	0.34856	4.04E-03	4.39E-03	8.49E-04	4.92E-03	7.53E-04	2.66E-03	3.67E-03	2.35E-03	4.36E-04	5.83E-03	2.34E-03	3.12E-03	1.61E-04	1.65E-04	3.5683E-02
551341.83	4172726.58	2317.19326	3065.37724	924.3551	7192.43221	1276.83689	2050.70616	2311.78787	1761.66827	511.4343	5196.75383	4376.87046	2615.58409	0.32423	0.33106	3.69E-03	3.45E-03	1.04E-03	6.20E-03	1.11E-03	1.78E-03	3.33E-03	1.80E-03	5.22E-04	6.31E-03	3.56E-03	2.13E-03	1.52E-04	1.57E-04	3.5232E-02
551379.33	4173206.1	2620.34206	3831.98406	743.91883	4970.54818	796.38295	3836.14437	2639.10416	2264.05889	422.70762	4428.92135	2334.45519	4686.19365	0.39055	0.39438	4.17E-03	4.32E-03	8.38E-04	4.29E-03	6.92E-04	3.33E-03	3.80E-03	2.31E-03	4.32E-04	5.38E-03	1.90E-03	3.81E-03	1.83E-04	1.87E-04	3.5637E-02
551298.28	4172979.76	2496.72452	3753.6709	800.70943	6115.20705	911.19837	2717.52956	2501.80702	2186.15971	453.86758	5113.18655	3088.97472	3424.76688	0.34058	0.34542	3.97E-03	4.23E-03	9.02E-04	5.27E-03	7.91E-04	2.36E-03	3.60E-03	2.23E-03	4.63E-04	6.21E-03	2.51E-03	2.79E-03	1.60E-04	1.64E-04	3.5657E-02
551598.7	4173361.47	3303.11953	3606.21182	696.9836	3477.91371	643.76093	4972.93647	3349.23581	2164.2264	401.72057	3323.694	1627.85276	5974.21623	1.02507	1.03902	5.26E-03	4.06E-03	7.85E-04	3.00E-03	5.59E-04	4.32E-03	4.82E-03	2.21E-03	4.10E-04	4.03E-03	1.32E-03	4.86E-03	4.80E-04	4.92E-04	3.6617E-02
551646.87	4173363.43	3656.46205	3461.0574	694.2488	3155.90708	618.86419	5070.19639	3712.71911	2058.50714	402.51571	3049.59309	1523.09571	6121.48022	2.14883	2.23647	5.82E-03	3.90E-03	7.82E-04	2.72E-03	5.37E-04	4.40E-03	5.35E-03	2.10E-03	4.11E-04	3.70E-03	1.24E-03	4.98E-03	1.01E-03	1.06E-03	3.8010E-02
551484.9	4173305.17	2897.41561	3742.12203	692.72614	4244.09429	726.08208	4436.86292	2926.27859	2253.77717	396.52489	3835.04661	1998.71399	5355.16076	0.52651	0.53086	4.61E-03	4.21E-03	7.80E-04	3.66E-03	6.30E-04	3.85E-03	4.21E-03	2.30E-03	4.05E-04	4.66E-03	1.63E-03	4.36E-03	2.47E-04	2.52E-04	3.5808E-02
551312.18	4172818.59	2331.80522	3150.16253	897.56474	7082.0139	1154.83178	2159.16937	2327.50227	1812.43692	500.35337	5255.60226	4069.31389	2740.19845	0.33518	0.34168	3.71E-03	3.55E-03	1.01E-03	6.11E-03	1.00E-03	1.87E-03	3.35E-03	1.85E-03	5.11E-04	6.38E-03	3.31E-03	2.23E-03	1.57E-04	1.62E-04	3.5209E-02
551659.73	4173361.56	3768.3411	3410.73325	691.25737	3099.79293	613.53848	5048.51712	3828.33639	2022.60331	401.31999	2978.13301	1501.61415	6105.90336	2.98095	3.12873	6.00E-03	3.84E-03	7.79E-04	2.67E-03	5.33E-04	4.38E-03	5.51E-03	2.06E-03	4.10E-04	3.62E-03	1.22E-03	4.97E-03	1.40E-03	1.48E-03	3.8881E-02
551634	4173365.3	3549.70152	3499.38149	694.53229	3205.9361	622.89331	5054.55427	3602.67278	2085.73175	402.10963	3114.22177	1541.59783	6095.18219	1.63135	1.67693	5.65E-03	3.94E-03	7.82E-04	2.76E-03	5.41E-04	4.39E-03	5.19E-03	2.13E-03	4.11E-04	3.78E-03	1.25E-03	4.96E-03	7.65E-04	7.95E-04	3.7350E-02
551365.52	4172670.68	2356.84912	2954.28098	938.6973	7243.31806	1311.94204	1923.45456	2351.59484	1698.31476	518.96932	5178.5905	4463.81888	2472.5015	0.30819	0.31444	3.75E-03	3.33E-03	1.06E-03	6.25E-03	1.14E-03	1.67E-03	3.39E-03	1.73E-03	5.30E-04	6.29E-03	3.63E-03	2.01E-03	1.44E-04	1.49E-04	3.5067E-02
551305.17	4173027.99	2523.63682	3862.73222	756.02053	5724.56408	867.92406	2983.21657	2533.56406	2275.06608	428.70577	4818.2248	2886.97755	3740.14337	0.34073	0.34532	4.02E-03	4.35E-03	8.51E-04	4.94E-03	7.54E-04	2.59E-03	3.65E-03	2.32E-03	4.38E-04	5.85E-03	2.35E-03	3.04E-03	1.60E-04	1.64E-04	3.5474E-02
551294.65	4172940.57	2442.00777	3580.46466	832.64588	6388.01676	955.6604	2511.80332	2443.81764	2071.30786	470.48038	5235.79565	3288.12581	3176.71532	0.33925	0.34459	3.89E-03	4.03E-03	9.38E-04	5.51E-03	8.30E-04	2.18E-03	3.52E-03	2.11E-03	4.80E-04	6.36E-03	2.68E-03	2.59E-03	1.59E-04	1.63E-04	3.5431E-02
551380.39	4172634.97	2419.65322	2853.5287	972.19513	7262.79401	1363.81121	1841.76542	2413.29595	1643.46612	537.63776	5138.19535	4574.66062	2375.50893	0.29922	0.30509	3.85E-03	3.21E-03	1.09E-03	6.26E-03	1.18E-03	1.60E-03	3.48E-03	1.68E-03	5.49E-04	6.24E-03	3.72E-03	1.93E-03	1.40E-04	1.45E-04	3.5087E-02
551494.56	4173314.26	2917.63871	3709.19324	687.69565	4159.86406	714.60641	4466.57899	2948.0882	2231.74221	393.65746	3778.64203	1950.71072	5385.86887	0.54309	0.547	4.64E-03	4.18E-03	7.75E-04	3.59E-03	6.20E-04	3.88E-03	4.25E-03	2.28E-03	4.02E-04	4.59E-03	1.59E-03	4.38E-03	2.55E-04	2.59E-04	3.5679E-02
551672.59	4173359.69	3888.01687	3352.89388	685.70028	3038.6441	607.00554	4995.52063	3952.30408	1980.82434	398.64052	2903.37462	1477.25965	6055.53659	4.45229	4.77234	6.19E-03	3.78E-03	7.72E-04	2.62E-03	5.27E-04	4.34E-03	5.69E-03	2.02E-03	4.07E-04	3.52E-03	1.20E-03	4.93E-03	2.09E-03	2.26E-03	4.0346E-02
551354.61	4173166.5	2550.70695	3752.58076	737.42411	5130.36098	814.04127	3704.68109	2569.35324	2212.56051	417.19285	4451.16522	2464.19791	4533.41122	0.37334	0.37651	4.06E-03	4.23E-03	8.31E-04	4.42E-03	7.07E-04	3.22E-03	3.70E-03	2.26E-03	4.26E-04	5.40E-03	2.01E-03	3.69E-03	1.75E-04	1.78E-04	3.5301E-02
551580.67	4173358.82	3189.11593	3613.87629	691.35345	3580.47992	651.41741	4842.14232	3232.32697	2172.20829	397.65707	3400.25449	1666.98338	5814.5691	0.86357	0.87274	5.07E-03	4.07E-03	7.79E-04	3.09E-03	5.66E-04	4.20E-03	4.66E-03	2.22E-03	4.06E-04	4.13E-03	1.36E-03	4.73E-03	4.05E-04	4.14E-04	3.6095E-02
551400.53	4173235.69	2652.55196	3821.1078	735.17835	4763.58292	776.25947	3876.41343	2671.53981	2271.84517	418.72351	4260.81974	2239.16825	4732.24612	0.40827	0.41174	4.22E-03	4.30E-03	8.28E-04	4.11E-03	6.74E-04	3.37E-03	3.85E-03	2.32E-03	4.27E-04	5.17E-03	1.82E-03	3.85E-03	1.91E-04	1.95E-04	3.5328E-02
551304.27	4172849.69	2337.3503	3210.53451	876.87346	6915.95719	1093.00334	2197.85434	2334.34766	1847.44513	489.99497	5251.0358	3847.92487	2788.8803	0.33199	0.33794	3.72E-03	3.62E-03	9.88E-04	5.96E-03	9.49E-04	1.91E-03	3.36E-03	1.89E-03	5.00E-04	6.37E-03	3.13E-03	2.27E-03	1.56E-04	1.60E-04	3.4985E-02
551295.06	4172970.8	2464.16694	3671.00311	801.45356	6112.12842	912.61991	2638.52855	2468.37953	2134.32143	454.06185	5090.51581	3098.86034	3328.14084	0.33582	0.34088	3.92E-03	4.13E-03	9.03E-04	5.27E-03	7.92E-04	2.29E-03	3.55E-03	2.18E-03	4.64E-04	6.18E-03	2.52E-03	2.71E-03	1.57E-04	1.62E-04	3.5240E-02
551746.97	4172609.18	4789.55099	1871.64418	1444.3401	4913.2376	2158.50182	1262.68923	4744.99708	1103.52627	773.61624	3349.58994	5055.34972	1694.34469	0.22266	0.22773	7.62E-03	2.11E-03	1.63E-03	4.24E-03	1.87E-03	1.10E-03	6.83E-03	1.13E-03	7.90E-04	4.07E-03	4.11E-03	1.38E-03	1.04E-04	1.08E-04	3.7086E-02
551558.9	4173350.5	3089.4777	3633.54171	687.39405	3735.79947	666.98485	4722.32102	3129.77505	2187.46697	394.49721	3508.02254	1733.87899	5668.77861	0.7412	0.74932	4.92E-03	4.09E-03	7.74E-04	3.22E-03	5.79E-04	4.10E-03	4.51E-03	2.23E-03	4.03E-04	4.26E-03	1.41E-03	4.61E-03	3.47E-04	3.55E-04	3.5813E-02
551312.87	4172809.38	2309.87677	3102.14332	893.23274	7016.0002	1157.63188	2129.89288	2305.37486	1785.02932	497.57487	5184.80091	4066.03678	2703.21831	0.33075	0.33724	3.68E-03	3.49E-03	1.01E-03	6.05E-03	1.01E-03	1.85E-03	3.32E-03	1.82E-03	5.08E-04	6.29E-03	3.31E-03	2.20E-03	1.55E-04	1.60E-04	3.4850E-02
551685.45	4173357.82	4003.34651	3283.68923	677.2504	2972.50861	599.19003	4905.82291	4072.27028	1932.22226	394.21078	2824.68303	1450.4781	5961.90558	7.64129	8.53488	6.37E-03	3.70E-03	7.63E-04	2.56E-03	5.20E-04	4.26E-03	5.86E-03	1.97E-03	4.02E-04	3.43E-03	1.18E-03	4.85E-03	3.58E-03	4.04E-03	4.3503E-02
551301.92	4173018.96	2499.60894	3808.61512	756.59695	5727.25547	866.69511	2900.40173	2508.52122	2238.64341	429.09048	4821.30485	2891.03065	3640.43932	0.33641	0.34108	3.98E-03	4.29E-03	8.52E-04	4.94E-03	7.53E-04	2.52E-03	3.61E-03	2.29E-03	4.38E-04	5.85E-03	2.35E-03	2.96E-03	1.58E-04	1.62E-04	3.5154E-02
551382.42	4173214.68	2601.13003	3781.15299	735.67577	4870.72846	785.36861	3787.92522	2619.61728	2236.60115	418.59801	4330.18963	2291.49281	4627.67218	0.38913	0.39246	4.14E-03	4.26E-03	8.29E-04	4.20E-03	6.82E-04	3.29E-03	3.77E-03	2.28E-03	4.27E-04	5.26E-03	1.86E-03	3.77E-03	1.82E-04	1.86E-04	3.5138E-02
551504.21	4173323.36	2927.96599	3665.14381	681.90944	4065.24097	702.04061	4470.08062	2960.00424	2203.87543	390.36255	3712.15538	1900.40146	5386.03803	0.55914	0.56312	4.66E-03	4.13E-03	7.68E-04	3.51E-03	6.10E-04	3.88E-03	4.26E-03	2.25E-03	3.99E-04	4.51E-03	1.55E-03	4.38E-03	2.62E-04	2.67E-04	3.5429E-02
551316.02	4172786.87	2291.50641	3056.68727	898.38171	7029.55539	1187.32383	2096.2764	2286.48	1758.57839	499.38494	5138.71327	4152.61817	2661.68197	0.32856	0.33524	3.65E-03	3.44E-03	1.01E-03	6.06E-03	1.03E-03	1.82E-03	3.29E-03	1.80E-03	5.10E-04	6.24E-03	3.38E-03	2.17E-03	1.54E-04	1.59E-04	3.4710E-02
551357.7	4173175.09	2538.68785	3719.89315	733.65043	5056.19946	805.60689	3686.80068	2557.17823	2193.67511	415.24803	4403.27639	2424.28963	4509.06352	0.37299	0.37606	4.04E-03	4.19E-03	8.26E-04	4.36E-03	7.00E-04	3.20E-03	3.68E-03	2.24E-03	4.24E-04	5.35E-03	1.97E-03	3.67E-03	1.75E-04	1.78E-04	3.5005E-02
551314.14	4172795.64	2293.64372	3064.71283	894.42594	7005.00759	1172.99393	2104.03178	2288.81708	1763.37597	497.60092	5141.48019	4108.81306	2670.94895	0.32852	0.33511	3.65E-03	3.45E-03	1.01E-03	6.04E-03	1.02E-03	1.83E-03	3.30E-03	1.80E-03	5.08E-04	6.24E-03	3.34E-03	2.17E-03	1.54E-04	1.59E-04	3.4672E-02
551298.31	4172873.53	2344.83554	3273.47814	861.58275	6750.85653	1045.65098	2242.91178	2342.9671	1884.4097	482.46192	5234.50043	3666.49494	2845.35096	0.33022	0.33588	3.73E-03	3.69E-03	9.70E-04	5.82E-03	9.08E-04	1.95E-03	3.37E-03	1.92E-03	4.93E-04	6.35E-03	2.98E-03	2.32E-03	1.55E-04	1.59E-04	3.4825E-02
551337.54	4172734.91	2284.92218	3021.48263	906.79308	7010.14081	1243.36428	2039.43061	2279.71792	1737.6699	502.08994	5085.34148	4252.4665	2598.04652	0.31786	0.32443	3.64E-03	3.40E-03	1.02E-03	6.05E-03	1.08E-03	1.77E-03	3.28E-03	1.77E-03	5.13E-04	6.17E-03	3.46E-03	2.11E-03	1.49E-04	1.54E-04	3.4578E-02
551698.32	4173355.95	4142.12505	3223.92509	667.15803	2904.73341	590.72466	4815.9376	4216.86614	1886.92317	388.81375	2753.35576	1420.08169	5872.29975	8.8191	13.39336	6.59E-03	3.63E-03	7.51E-04	2.51E-03	5.13E-04	4.18E-03	6.07E-03	1.93E-03	3.97E-04	3.34E-03	1.16E-03	4.78E-03	4.13E-03	6.35E-03	4.6328E-02
551333.26	4172743.24	2275.11944	3011.33376	901.50975	6964.41179	1229.38478	2043.75603	2269.92573	1732.27369	499.44796	5057.63665	4213.50521	2601.12685	0.31775	0.3243	3.62E-03	3.39E-03	1.02E-03	6.01E-03	1.07E-03	1.77E-03	3.27E-03	1.77E-03	5.10E-04	6.14E-03	3.43E-03	2.12E-03	1.49E-04	1.54E-04	3.4412E-02
551455.56	4173289.72	2777.33895	3715.27633	694.37977	4323.52992	731.07128	4149.40614	2801.15967	2236.78603	397.38551	3880.74406	2055.54206	5034.28107	0.46662	0.46973	4.42E-03	4.18E-03	7.82E-04	3.73E-03	6.35E-04	3.60E-03	4.03E-03	2.28E-03	4.06E-04	4.71E-03	1.67E-03	4.10E-03	2.19E-04	2.23E-04	3.4998E-02
551360.79	4173183.67	2532.29477	3697.87143	730.52954	4985.98158	797.5851	3671.53048	2550.6018	2180.95136	413.73199	4361.67873	2382.38962	4489.42936	0.37277	0.37627	4.03E-03	4.16E-03	8.23E-04	4.30E-03	6.93E-04	3.19E-03	3.67E-03	2.23E-03	4.22E-04	5.30E-03	1.94E-03	3.65E-03	1.75E-04	1.78E-04	3.4761E-02
551685.07	4172569.12	4508.28532	2005.039	1627.20696	4356.60719	2422.0862	1366.90347	4463.82066	1193.24043	867.12414	3417.5994	4722.19049	1836.25668	0.16628	0.16808	7.17E-03	2.26E-03	1.83E-03	3.76E-03	2.10E-03	1.19E-03	6.43E-03	1.22E-03	8.85E-04	4.15E-03	3.84E-03	1.49E-03	7.79E-05	7.97E-05	3.6488E-02
551298.69	4173009.99	2475.27309	3750.53111	757.94253	5733.90924	866.36562	2820.75455	2483.20128	2199.75962	429.87311	4825.12126	2896.43171	3544.14882	0.33276	0.33727	3.94E-03	4.22E-03	8.54E-04	4.95E-03	7.52E-04	2.45E-03	3.58E-03	2.25E-03	4.39E-04	5.86E-03	2.36E-03	2.88E-03	1.56E-04	1.60E-04	3.4839E-02
551766.78	4172619.45	4551.80599	1802.32835	1326.68304	5261.69247	2097.51776	1205.70019	4512.70008	1058.28836	713.18093	3375.16326	5254.79213	1614.23457	0.24321	0.24902	7.24E-03	2.03E-03	1.49E-03	4.54E-03	1.82E-03	1.05E-03	6.50E-03	1.08E-03	7.28E-04	4.10E-03	4.28E-03	1.31E-03	1.14E-04	1.18E-04	3.6401E-02
551359.34	4172677.58	2311.30357	2925.72258	916.62022	7062.19701	1277.58026	1916.70332	2306.33175	1681.75563	506.80238	5075.47762	4332.50482	2460.47624	0.30317	0.30927	3.68E-03	3.30E-03	1.03E-03	6.09E-03	1.11E-03	1.66E-03	3.32E-03	1.72E-03	5.17E-04	6.16E-03	3.53E-03	2.00E-03	1.42E-04	1.47E-04	3.4404E-02
551291.83	4172961.83	2428.18362	3583.89911	800.55147	6094.21721	913.15799	2559.85334	2431.60807	2080.18524	453.21653	5052.65753	3105.21368	3231.91515	0.3309	0.33526	3.86E-03	4.04E-03	9.02E-04	5.26E-03	7.93E-04	2.22E-03	3.50E-03	2.12E-03	4.63E-04	6.13E-03	2.53E-03	2.63E-03	1.55E-04	1.59E-04	3.4767E-02
551291.42	4172931.6	2392.77804	3471.75319	824.73028	6305.81631	950.31113	2428.48643	2394.03541	2007.03594	465.48234	5143.36386	3271.87943	3073.13924	0.33079	0.336	3.81E-03	3.91E-03	9.29E-04	5.44E-03	8.25E-04	2.11E-03	3.45E-03	2.05E-03	4.75E-04	6.24E-03	2.66E-03	2.50E-03	1.55E-04	1.59E-04	3.4713E-02
551608.28	4173369.04	3295.07787	3487.47321	683.40898	3334.79943	625.61644	4839.96946	3341.43602	2088.37571	394.31597	3193.43532	1571.07697	5825.50846	1.07993	1.09726	5.24E-03	3.93E-03	7.70E-04	2.88E-03	5.43E-04	4.20E-03	4.81E-03	2.13E-03	4.03E-04	3.88E-03	1.28E-03	4.74E-03	5.06E-04	5.20E-04	3.5832E-02
551751.51	4173330.29	4648.76558	3035.38432	640.67515	2757.32967	575.44878	4557.23751	4748.57122	1763.20855	374.19864	2563.37859	1367.27012	5579.92799	2.51468	2.31116	7.40E-03	3.42E-03	7.22E-04	2.38E-03	5.00E-04	3.96E-03	6.84E-03	1.80E-03	3.82E-04	3.11E-03	1.11E-03	4.54E-03	1.18E-03	1.10E-03	3.8433E-02
551315.25	4173085.04	2484.17811	3739.27901	715.81598	5299.36951	829.00346	3251.04169	2499.20165	2214.56665	405.00021	4452.64687	2662.16873	4036.23898	0.33815	0.34205	3.95E-03	4.21E-03	8.06E-04	4.57E-03	7.20E-04	2.82E-03	3.60E-03	2.26E-03	4.13E-04	5.41E-03	2.17E-03	3.28E-03	1.58E-04	1.62E-04	3.4535E-02
551318.48	4173093.99	2481.85135	3721.84354	713.68385	5261.8713	826.5088	3302.32196	2497.57896	2203.93386	403.67476	4424.08126	2638.97572	4091.81208	0.34128	0.34478	3.95E-03	4.19E-03	8.04E-04	4.54E-03	7.18E-04	2.87E-03	3.60E-03	2.25E-03	4.12E-04	5.37E-03	2.15E-03	3.33E-03	1.60E-04	1.63E-04	3.4499E-02
551385.51	4173223.27	2577.66176	3721.743	726.89995	4765.68222	773.91854	3731.3727	2595.86818	2204.84724	413.25285	4240.2951	2249.48463	4559.07507	0.38876	0.39151	4.10E-03	4.19E-03	8.19E-04	4.11E-03	6.72E-04	3.24E-03	3.74E-03	2.25E-03	4.22E-04	5.15E-03	1.83E-03	3.71E-03	1.82E-04	1.86E-04	3.4602E-02
551363.88	4173192.26	2524.45945	3672.8841	726.41814	4912.03578	789.04519	3650.143	2542.55772	2166.82626	411.65381	4313.71458	2340.39418	4462.92765	0.37244	0.37523	4.02E-03	4.14E-03	8.18E-04	4.24E-03	6.85E-04	3.17E-03	3.66E-03	2.21E-03	4.20E-04	5.24E-03	1.90E-03	3.63E-03	1.75E-04	1.78E-04	3.4483E-02
551302.59	4172839.4	2292.93818	3113.89741	864.31948	6782.68353	1088.68071	2138.00355	2289.66427	1792.30615	482.66489	5116.9247	3815.34595	2713.14394	0.3238	0.32967	3.65E-03	3.51E-03	9.73E-04	5.85E-03	9.45E-04	1.86E-03	3.30E-03	1.83E-03	4.93E-04	6.21E-03	3.11E-03	2.21E-03	1.52E-04	1.56E-04	3.4234E-02
551295.47	4173001.03	2449.30543	3686.71605	759.28207	5739.08621	866.30888	2742.61101	2456.28826	2157.65563	430.59882	4824.32019	2901.90853	3449.33042	0.32893	0.33368	3.90E-03	4.15E-03	8.55E-04	4.95E-03	7.52E-04	2.38E-03	3.54E-03	2.20E-03	4.40E-04	5.86E-03	2.36E-03	2.81E-03	1.54E-04	1.58E-04	3.4506E-02
551312.03	4173076.09	2475.97751	3735.48704	715.13269	5311.94947	828.61824	3184.79479	2490.20787	2212.79443	404.74164	4459.56299	2678.78767	3961.31058	0.33562	0.33923	3.94E-03	4.21E-03	8.05E-04	4.58E-03	7.19E-04	2.77E-03	3.59E-03	2.26E-03	4.13E-04	5.41E-03	2.18E-03	3.22E-03	1.57E-04	1.61E-04	3.4413E-02
551513.87	4173332.45	2905.90141	3576.84878	670.91759	3945.69728	694.25563	4407.16764	2939.12164	2151.62712	384.04562	3611.99638	1845.51445	5305.39608	0.57196	0.57669	4.62E-03	4.03E-03	7.56E-04	3.40E-03	6.03E-04	3.83E-03	4.23E-03	2.20E-03	3.92E-04	4.38E-03	1.50E-03	4.32E-03	2.68E-04	2.73E-04	3.4808E-02
551324.69	4172759.9	2255.37176	2984.64819	889.2813	6864.875	1197.1812	2044.45382	2250.28139	1717.74884	493.30544	5000.90779	4122.715	2598.14826	0.31646	0.3229	3.59E-03	3.36E-03	1.00E-03	5.92E-03	1.04E-03	1.78E-03	3.24E-03	1.75E-03	5.04E-04	6.07E-03	3.36E-03	2.11E-03	1.48E-04	1.53E-04	3.4027E-02
551704.31	4172579.36	4620.982	1939.76609	1571.85901	4314.24279	2301.39458	1323.77958	4575.65447	1151.51856	837.66814	3305.06358	4652.18626	1779.19472	0.17355	0.17607	7.35E-03	2.18E-03	1.77E-03	3.72E-03	2.00E-03	1.15E-03	6.59E-03	1.18E-03	8.55E-04	4.01E-03	3.79E-03	1.45E-03	8.13E-05	8.34E-05	3.6209E-02
551465.01	4173298.62	2772.39506	3636.40728	680.77481	4217.04599	720.12396	4151.14404	2797.56653	2190.93593	389.59662	3781.80012	2007.66688	5027.10248	0.47551	0.47924	4.41E-03	4.10E-03	7.67E-04	3.64E-03	6.25E-04	3.60E-03	4.03E-03	2.24E-03	3.98E-04	4.59E-03	1.63E-03	4.09E-03	2.23E-04	2.27E-04	3.4570E-02
551318.14	4172777	2255.75737	2990.22257	884.26128	6848.77988	1174.37294	2056.89281	2250.80885	1721.15702	491.22402	5008.23186	4071.90813	2611.85646	0.3184	0.32481	3.59E-03	3.37E-03	9.96E-04	5.91E-03	1.02E-03	1.79E-03	3.24E-03	1.76E-03	5.02E-04	6.08E-03	3.31E-03	2.13E-03	1.49E-04	1.54E-04	3.3988E-02
551568.36	4173359.41	3062.58	3530.74819	676.15599	3594.61871	648.95597	4619.91061	3103.03934	2124.74818	388.30416	3386.41526	1674.74832	5549.18913	0.76139	0.76969	4.87E-03	3.98E-03	7.62E-04	3.10E-03	5.63E-04	4.01E-03	4.47E-03	2.17E-03	3.96E-04	4.11E-03	1.36E-03	4.52E-03	3.57E-04	3.65E-04	3.5033E-02
551370.7	4172641.37	2338.10371	2801.96897	930.62493	6994.43678	1299.18885	1819.27383	2332.57053	1613.28083	514.75495	4980.286	4362.24101	2344.294	0.29038	0.29603	3.72E-03	3.16E-03	1.05E-03	6.03E-03	1.13E-03	1.58E-03	3.36E-03	1.65E-03	5.26E-04	6.05E-03	3.55E-03	1.91E-03	1.36E-04	1.40E-04	3.3977E-02
551308.8	4173067.14	2465.56402	3725.38706	714.64053	5321.52336	827.70869	3114.65925	2478.93893	2206.49629	404.6094	4466.57419	2694.25409	3881.03346	0.33254	0.33658	3.92E-03	4.20E-03	8.05E-04	4.59E-03	7.19E-04	2.70E-03	3.57E-03	2.25E-03	4.13E-04	5.42E-03	2.19E-03	3.16E-03	1.56E-04	1.60E-04	3.4262E-02
551405.96	4173248.99	2612.31147	3707.58281	715.65795	4590.37394	754.10741	3781.69524	2631.06353	2211.58768	407.99094	4095.49886	2172.5758	4616.7844	0.40298	0.40629	4.16E-03	4.18E-03	8.06E-04	3.96E-03	6.55E-04	3.28E-03	3.79E-03	2.26E-03	4.17E-04	4.97E-03	1.77E-03	3.76E-03	1.89E-04	1.93E-04	3.4378E-02
551546.13	4173350.65	2981.5459	3541.18282	671.57372	3734.38789	663.00405	4507.64798	3019.26568	2131.49816	384.99458	3478.7312	1737.63709	5416.74575	0.66505	0.67102	4.74E-03	3.99E-03	7.56E-04	3.22E-03	5.76E-04	3.91E-03	4.35E-03	2.18E-03	3.93E-04	4.22E-03	1.41E-03	4.41E-03	3.12E-04	3.18E-04	3.4792E-02
551327.05	4173118.09	2458.45123	3638.63803	706.19867	5130.81922	815.54779	3396.17381	2475.55175	2152.82072	399.1271	4329.83203	2564.42992	4185.93055	0.34387	0.34757	3.91E-03	4.10E-03	7.95E-04	4.42E-03	7.08E-04	2.95E-03	3.57E-03	2.20E-03	4.07E-04	5.26E-03	2.09E-03	3.41E-03	1.61E-04	1.65E-04	3.4134E-02
551296.64	4172863.28	2297.45696	3167.59691	848.54293	6630.28234	1041.11648	2174.67227	2295.27273	1823.62524	474.71202	5101.41385	3639.45999	2759.33068	0.3212	0.32672	3.66E-03	3.57E-03	9.56E-04	5.72E-03	9.04E-04	1.89E-03	3.31E-03	1.86E-03	4.85E-04	6.19E-03	2.96E-03	2.25E-03	1.51E-04	1.55E-04	3.4048E-02
551353.15	4172684.48	2271.2714	2899.02142	897.89516	6900.42551	1248.38155	1911.25824	2266.48097	1666.42502	496.48373	4981.54956	4219.47154	2450.05587	0.29893	0.30493	3.61E-03	3.27E-03	1.01E-03	5.95E-03	1.08E-03	1.66E-03	3.26E-03	1.70E-03	5.07E-04	6.05E-03	3.43E-03	1.99E-03	1.40E-04	1.45E-04	3.3818E-02
551320.41	4172768.23	2245.27799	2969.92363	882.17749	6809.73907	1179.20959	2041.27031	2240.2911	1709.54399	489.72077	4971.70407	4070.15803	2592.79519	0.31528	0.32164	3.57E-03	3.34E-03	9.94E-04	5.87E-03	1.02E-03	1.77E-03	3.23E-03	1.75E-03	5.00E-04	6.04E-03	3.31E-03	2.11E-03	1.48E-04	1.52E-04	3.3811E-02
551332.97	4173134.83	2458.33389	3612.42813	708.24469	5074.34181	807.23986	3454.42226	2475.92582	2133.77233	400.19357	4313.83467	2515.84372	4245.78712	0.34761	0.35121	3.91E-03	4.07E-03	7.98E-04	4.38E-03	7.01E-04	3.00E-03	3.57E-03	2.18E-03	4.09E-04	5.24E-03	2.05E-03	3.46E-03	1.63E-04	1.66E-04	3.4077E-02
551292.24	4172992.06	2425.26641	3623.87499	762.11113	5756.48523	868.43548	2669.14253	2431.28306	2116.45022	432.10208	4828.55339	2914.01706	3360.13112	0.32524	0.3296	3.86E-03	4.08E-03	8.58E-04	4.96E-03	7.54E-04	2.32E-03	3.50E-03	2.16E-03	4.41E-04	5.86E-03	2.37E-03	2.73E-03	1.52E-04	1.56E-04	3.4215E-02
551366.97	4173200.84	2513.88082	3642.23648	721.14028	4833.19618	779.41275	3621.49026	2531.73751	2149.91251	408.9215	4257.91048	2298.95334	4427.92021	0.37141	0.37414	4.00E-03	4.10E-03	8.12E-04	4.17E-03	6.77E-04	3.14E-03	3.65E-03	2.19E-03	4.17E-04	5.17E-03	1.87E-03	3.60E-03	1.74E-04	1.77E-04	3.4158E-02
551288.61	4172952.87	2385.56589	3487.56926	796.00137	6042.82856	909.99963	2479.04705	2388.3006	2021.49542	450.31222	4988.28962	3097.96141	3132.6229	0.32507	0.32965	3.80E-03	3.93E-03	8.97E-04	5.21E-03	7.90E-04	2.15E-03	3.44E-03	2.06E-03	4.60E-04	6.06E-03	2.52E-03	2.55E-03	1.52E-04	1.56E-04	3.4173E-02
551341.06	4172706.98	2247.14458	2927.67961	890.09469	6847.92934	1233.05593	1953.88696	2242.2039	1682.84052	492.27238	4962.13825	4174.42282	2496.17223	0.30425	0.31046	3.58E-03	3.30E-03	1.00E-03	5.91E-03	1.07E-03	1.70E-03	3.23E-03	1.72E-03	5.03E-04	6.02E-03	3.40E-03	2.03E-03	1.43E-04	1.47E-04	3.3741E-02
551335.93	4173143.2	2458.38095	3600.92083	709.34644	5041.32432	802.53939	3474.63584	2476.09315	2125.22296	400.82435	4305.0029	2482.43542	4266.07365	0.34916	0.35269	3.91E-03	4.06E-03	7.99E-04	4.35E-03	6.97E-04	3.02E-03	3.57E-03	2.17E-03	4.09E-04	5.23E-03	2.02E-03	3.47E-03	1.64E-04	1.67E-04	3.4022E-02
551763.57	4173325.59	4673.16137	2964.05506	628.27552	2705.18096	567.45645	4435.84846	4776.15339	1721.34923	366.93083	2508.31053	1346.66932	5432.95286	1.85972	1.73618	7.44E-03	3.34E-03	7.08E-04	2.33E-03	4.93E-04	3.85E-03	6.88E-03	1.76E-03	3.75E-04	3.05E-03	1.10E-03	4.42E-03	8.72E-04	8.23E-04	3.7427E-02
551638.09	4173373.67	3464.12516	3344.69388	672.84664	3082.81377	603.50418	4788.82887	3515.59389	1990.72035	389.63131	2987.15022	1490.45245	5786.81844	1.5908	1.63257	5.51E-03	3.77E-03	7.58E-04	2.66E-03	5.24E-04	4.16E-03	5.06E-03	2.03E-03	3.98E-04	3.63E-03	1.21E-03	4.71E-03	7.46E-04	7.74E-04	3.5940E-02
551651.09	4173371.78	3565.41815	3302.17973	671.42328	3032.24522	599.07294	4786.99764	3620.07236	1961.03045	389.31461	2921.88829	1471.49605	5792.46613	2.10937	2.18742	5.67E-03	3.72E-03	7.56E-04	2.62E-03	5.20E-04	4.16E-03	5.21E-03	2.00E-03	3.97E-04	3.55E-03	1.20E-03	4.71E-03	9.89E-04	1.04E-03	3.6538E-02
551383.43	4172621.39	2378.07301	2730.80622	950.48807	6912.17098	1327.57588	1772.39275	2371.66678	1574.77005	525.99955	4908.44122	4377.22485	2286.46094	0.28215	0.28745	3.78E-03	3.08E-03	1.07E-03	5.96E-03	1.15E-03	1.54E-03	3.42E-03	1.61E-03	5.37E-04	5.96E-03	3.56E-03	1.86E-03	1.32E-04	1.36E-04	3.3794E-02
551664.08	4173369.89	3684.58412	3257.64331	667.94445	2977.39355	593.62576	4765.39121	3743.214	1927.55223	387.86127	2855.02507	1449.27684	5778.55779	2.94852	3.08196	5.86E-03	3.67E-03	7.52E-04	2.57E-03	5.15E-04	4.14E-03	5.39E-03	1.97E-03	3.96E-04	3.47E-03	1.18E-03	4.70E-03	1.38E-03	1.46E-03	3.7451E-02
551305.58	4173058.18	2450.13514	3703.79931	713.25059	5320.31336	825.4548	3038.9763	2462.6387	2192.49232	403.98201	4466.16391	2707.04373	3793.18193	0.32884	0.33293	3.90E-03	4.17E-03	8.03E-04	4.59E-03	7.17E-04	2.64E-03	3.55E-03	2.24E-03	4.12E-04	5.42E-03	2.20E-03	3.09E-03	1.54E-04	1.58E-04	3.4039E-02
551474.46	4173307.51	2773.37433	3570.84189	669.94243	4121.80799	704.94932	4157.6944	2799.82121	2151.076	383.34787	3699.93116	1961.68947	5026.92219	0.4856	0.48889	4.41E-03	4.02E-03	7.55E-04	3.55E-03	6.12E-04	3.61E-03	4.03E-03	2.20E-03	3.91E-04	4.49E-03	1.60E-03	4.09E-03	2.28E-04	2.32E-04	3.4225E-02
551288.19	4172922.64	2341.01941	3360.16071	814.37599	6209.04576	942.44448	2345.56425	2341.80861	1941.52121	459.0657	5036.37058	3246.0131	2969.77602	0.32167	0.32674	3.73E-03	3.78E-03	9.17E-04	5.35E-03	8.18E-04	2.04E-03	3.37E-03	1.98E-03	4.69E-04	6.11E-03	2.64E-03	2.42E-03	1.51E-04	1.55E-04	3.3939E-02
551523.52	4173341.55	2897.83106	3515.57717	663.81728	3836.9497	673.12772	4364.98713	2932.21338	2114.69211	380.08345	3529.76436	1792.5453	5252.77865	0.5874	0.59188	4.61E-03	3.96E-03	7.48E-04	3.31E-03	5.84E-04	3.79E-03	4.22E-03	2.16E-03	3.88E-04	4.29E-03	1.46E-03	4.27E-03	2.75E-04	2.81E-04	3.4347E-02
551595.42	4173370.91	3153.50916	3435.23856	671.73958	3364.70083	624.21289	4652.79522	3196.67189	2061.78184	386.86774	3203.51512	1581.46181	5597.2726	0.91162	0.92306	5.02E-03	3.87E-03	7.57E-04	2.90E-03	5.42E-04	4.04E-03	4.60E-03	2.10E-03	3.95E-04	3.89E-03	1.29E-03	4.56E-03	4.27E-04	4.37E-04	3.4827E-02
551389.38	4173233.94	2551.5966	3651.31168	714.46841	4638.74721	758.22522	3665.43248	2569.49323	2167.19334	406.49325	4130.21825	2196.47525	4479.49758	0.38501	0.38823	4.06E-03	4.11E-03	8.05E-04	4.00E-03	6.58E-04	3.18E-03	3.70E-03	2.21E-03	4.15E-04	5.01E-03	1.79E-03	3.65E-03	1.80E-04	1.84E-04	3.3959E-02
551345.36	4172698.61	2242.21457	2899.91166	885.42904	6793.69048	1227.04273	1929.29667	2237.46142	1667.13452	489.67055	4925.60992	4141.80337	2467.55071	0.29898	0.305	3.57E-03	3.27E-03	9.97E-04	5.86E-03	1.07E-03	1.68E-03	3.22E-03	1.70E-03	5.00E-04	5.98E-03	3.37E-03	2.01E-03	1.40E-04	1.45E-04	3.3499E-02
551336.75	4172715.35	2229.80067	2914.86139	881.83883	6766.2691	1216.7199	1958.30096	2224.8972	1676.09646	487.91023	4912.93707	4117.6404	2498.7237	0.30294	0.3091	3.55E-03	3.28E-03	9.93E-04	5.84E-03	1.06E-03	1.70E-03	3.20E-03	1.71E-03	4.98E-04	5.96E-03	3.35E-03	2.03E-03	1.42E-04	1.46E-04	3.3468E-02
551370.06	4173209.43	2504.29969	3612.43382	715.43523	4753.51696	769.34582	3591.7518	2521.92558	2133.60811	405.97205	4200.39302	2257.01791	4392.17008	0.36971	0.37293	3.99E-03	4.07E-03	8.06E-04	4.10E-03	6.68E-04	3.12E-03	3.63E-03	2.18E-03	4.14E-04	5.10E-03	1.84E-03	3.57E-03	1.73E-04	1.77E-04	3.3831E-02
551677.08	4173368	3781.34272	3188.61827	660.80942	2915.34995	586.57485	4686.46377	3843.76154	1880.9284	384.14637	2776.95419	1425.2332	5694.4388	4.46657	4.78013	6.02E-03	3.59E-03	7.44E-04	2.51E-03	5.09E-04	4.07E-03	5.54E-03	1.92E-03	3.92E-04	3.37E-03	1.16E-03	4.63E-03	2.09E-03	2.27E-03	3.8818E-02
551289.02	4172983.1	2394.52998	3548.12551	762.19797	5748.90047	868.02771	2592.29722	2399.67582	2068.30972	432.01269	4809.20533	2917.6225	3266.33684	0.3207	0.32501	3.81E-03	4.00E-03	8.58E-04	4.96E-03	7.54E-04	2.25E-03	3.46E-03	2.11E-03	4.41E-04	5.84E-03	2.37E-03	2.66E-03	1.50E-04	1.54E-04	3.3812E-02
551302.36	4173049.23	2431.43939	3673.20129	711.6638	5313.15197	822.50286	2961.18325	2443.05171	2172.33229	403.28252	4463.10396	2702.66513	3701.7771	0.32518	0.32893	3.87E-03	4.14E-03	8.02E-04	4.58E-03	7.14E-04	2.57E-03	3.52E-03	2.22E-03	4.12E-04	5.42E-03	2.20E-03	3.01E-03	1.52E-04	1.56E-04	3.3762E-02
551301.65	4172827.69	2249.57646	3020.29632	852.30149	6644.70148	1084.40106	2080.67203	2246.0289	1738.77307	475.61411	4982.24316	3780.56291	2640.6628	0.31546	0.32126	3.58E-03	3.40E-03	9.60E-04	5.73E-03	9.42E-04	1.81E-03	3.23E-03	1.78E-03	4.86E-04	6.05E-03	3.08E-03	2.15E-03	1.48E-04	1.52E-04	3.3490E-02
551341.84	4173159.94	2442.09756	3550.26927	706.36617	4953.02705	790.05633	3476.61499	2459.81961	2093.79081	399.2522	4248.0952	2413.81938	4260.54833	0.3501	0.35331	3.89E-03	4.00E-03	7.96E-04	4.27E-03	6.86E-04	3.02E-03	3.54E-03	2.14E-03	4.08E-04	5.16E-03	1.96E-03	3.47E-03	1.64E-04	1.67E-04	3.3665E-02
551723.9	4172589.62	4641.38866	1868.64225	1479.31701	4352.75299	2145.62935	1274.05459	4597.15977	1105.96725	790.34588	3211.44134	4587.84244	1711.25498	0.18515	0.18854	7.39E-03	2.10E-03	1.67E-03	3.75E-03	1.86E-03	1.11E-03	6.62E-03	1.13E-03	8.07E-04	3.90E-03	3.73E-03	1.39E-03	8.68E-05	8.94E-05	3.5638E-02
551285.38	4172943.9	2349.12555	3402.53438	794.42571	6019.3515	911.86661	2407.444	2351.18498	1970.27343	448.93978	4941.15084	3108.04351	3044.19796	0.32012	0.325	3.74E-03	3.83E-03	8.95E-04	5.19E-03	7.92E-04	2.09E-03	3.39E-03	2.01E-03	4.58E-04	6.00E-03	2.53E-03	2.48E-03	1.50E-04	1.54E-04	3.3704E-02
551743.76	4173340.38	4453.21882	2976.0364	631.31217	2718.48239	566.72644	4422.57281	4545.32937	1730.38577	368.53864	2529.8403	1348.6091	5418.1049	3.33338	3.005	7.09E-03	3.35E-03	7.11E-04	2.34E-03	4.92E-04	3.84E-03	6.55E-03	1.77E-03	3.76E-04	3.07E-03	1.10E-03	4.41E-03	1.56E-03	1.42E-03	3.8079E-02

551483.91	4173316.41	2776.15723	3513.73999	661.20024	4032.27236	695.41587	4160.5002	2804.03422	2115.61225	378.2854	3628.18772	1915.90205	5023.72612	0.49398	0.49781	4.42E-03	3.96E-03	7.45E-04	3.48E-03	6.04E-04	3.61E-03	4.04E-03	2.16E-03	3.86E-04	4.40E-03	1.56E-03	4.09E-03	2.32E-04	2.36E-04	3.3918E-02
551493.36	4173325.31	2802.23262	3500.0509	659.03344	3966.94936	689.32209	4197.46798	2831.71172	2104.86076	377.07679	3591.63279	1873.18984	5065.07967	0.51304	0.51639	4.46E-03	3.94E-03	7.42E-04	3.42E-03	5.99E-04	3.64E-03	4.08E-03	2.15E-03	3.85E-04	4.36E-03	1.52E-03	4.12E-03	2.40E-04	2.45E-04	3.3912E-02
551690.08	4173366.11	3904.36107	3129.15757	652.16968	2851.60088	578.80815	4607.38929	3971.67233	1837.22284	379.61135	2705.47706	1397.74742	5614.79742	8.02417	9.0061	6.21E-03	3.52E-03	7.35E-04	2.46E-03	5.03E-04	4.00E-03	5.72E-03	1.88E-03	3.88E-04	3.28E-03	1.14E-03	4.57E-03	3.76E-03	4.27E-03	4.2438E-02
551299.13	4173040.28	2417.9516	3647.70945	713.22841	5328.33414	822.29158	2890.399	2428.62769	2154.04944	404.28681	4480.37038	2710.64375	3618.3506	0.32215	0.32594	3.85E-03	4.11E-03	8.03E-04	4.60E-03	7.14E-04	2.51E-03	3.50E-03	2.20E-03	4.13E-04	5.44E-03	2.21E-03	2.94E-03	1.51E-04	1.54E-04	3.3583E-02
551555.69	4173359.66	2960.38096	3456.64288	662.30197	3604.93219	646.31475	4428.38034	2998.47909	2080.18473	379.89383	3372.07857	1681.09428	5323.34202	0.68168	0.68687	4.71E-03	3.89E-03	7.46E-04	3.11E-03	5.61E-04	3.85E-03	4.32E-03	2.12E-03	3.88E-04	4.09E-03	1.37E-03	4.33E-03	3.19E-04	3.26E-04	3.4134E-02
551724.04	4173352.21	4250.81691	3019.94773	637.58991	2752.42002	569.09673	4470.42914	4333.18945	1759.68785	371.90782	2578.26047	1359.36014	5471.89622	8.92044	7.61388	6.76E-03	3.40E-03	7.18E-04	2.37E-03	4.94E-04	3.88E-03	6.24E-03	1.80E-03	3.80E-04	3.13E-03	1.11E-03	4.45E-03	4.18E-03	3.61E-03	4.2529E-02
551410.14	4173258.81	2579.58012	3615.47353	699.7014	4463.44324	737.7338	3709.83943	2598.22786	2162.13628	399.15818	3966.42306	2123.95531	4528.41096	0.39949	0.40207	4.10E-03	4.07E-03	7.88E-04	3.85E-03	6.41E-04	3.22E-03	3.74E-03	2.21E-03	4.08E-04	4.82E-03	1.73E-03	3.69E-03	1.87E-04	1.91E-04	3.3640E-02
551612.09	4173377.45	3230.12871	3355.43399	665.20888	3212.02295	607.50795	4633.86705	3275.37653	2006.09203	383.96828	3075.88447	1520.91652	5587.93185	1.05254	1.06551	5.14E-03	3.78E-03	7.49E-04	2.77E-03	5.28E-04	4.02E-03	4.72E-03	2.05E-03	3.92E-04	3.73E-03	1.24E-03	4.55E-03	4.93E-04	5.05E-04	3.4665E-02
551743.56	4172599.88	4590.53092	1813.63087	1387.99415	4571.33056	2041.52714	1230.30863	4548.64646	1069.93805	743.93796	3194.83682	4680.97104	1650.11882	0.20407	0.20847	7.30E-03	2.04E-03	1.56E-03	3.94E-03	1.77E-03	1.07E-03	6.55E-03	1.09E-03	7.60E-04	3.88E-03	3.81E-03	1.34E-03	9.56E-05	9.88E-05	3.5322E-02
551294.97	4172853.03	2249.98402	3063.86508	834.72239	6495.52547	1034.95982	2109.18767	2247.51981	1764.30556	466.64236	4962.88759	3602.70003	2676.58349	0.31217	0.31756	3.58E-03	3.45E-03	9.40E-04	5.60E-03	8.99E-04	1.83E-03	3.24E-03	1.80E-03	4.76E-04	6.02E-03	2.93E-03	2.18E-03	1.46E-04	1.50E-04	3.3250E-02
551302.38	4172818.06	2228.87901	2972.59485	848.95802	6591.74805	1088.41129	2051.79489	2225.08225	1711.51319	473.43408	4918.71649	3784.64921	2604.05778	0.31167	0.31749	3.55E-03	3.35E-03	9.56E-04	5.68E-03	9.45E-04	1.78E-03	3.20E-03	1.75E-03	4.83E-04	5.97E-03	3.08E-03	2.12E-03	1.46E-04	1.50E-04	3.3165E-02
551345.35	4173169.84	2424.74777	3507.85249	702.15949	4874.78094	781.12379	3457.12216	2442.34634	2069.07474	396.95942	4195.8864	2373.39579	4232.97308	0.34936	0.35251	3.86E-03	3.95E-03	7.91E-04	4.20E-03	6.78E-04	3.00E-03	3.52E-03	2.11E-03	4.05E-04	5.09E-03	1.93E-03	3.44E-03	1.64E-04	1.67E-04	3.3320E-02
551577.82	4173368.33	3026.11306	3413.65589	663.01885	3449.97284	630.37116	4493.8275	3066.39079	2053.51209	381.00573	3256.68399	1615.70924	5402.12746	0.77838	0.78662	4.82E-03	3.84E-03	7.47E-04	2.98E-03	5.47E-04	3.90E-03	4.42E-03	2.10E-03	3.89E-04	3.95E-03	1.31E-03	4.40E-03	3.65E-04	3.73E-04	3.4136E-02
551332.45	4172723.72	2204.43483	2884.15918	868.75169	6633.16944	1191.73309	1953.19743	2199.65595	1659.40192	480.95168	4830.68772	4027.31793	2489.21967	0.29895	0.30496	3.51E-03	3.25E-03	9.78E-04	5.72E-03	1.03E-03	1.70E-03	3.17E-03	1.69E-03	4.91E-04	5.86E-03	3.28E-03	2.03E-03	1.40E-04	1.45E-04	3.2992E-02
551285.79	4172974.13	2362.31623	3470.40449	761.87502	5737.0484	867.98592	2517.37467	2366.66724	2019.32415	431.63857	4782.80406	2921.73605	3174.83246	0.31586	0.32046	3.76E-03	3.91E-03	8.58E-04	4.95E-03	7.54E-04	2.19E-03	3.41E-03	2.06E-03	4.41E-04	5.81E-03	2.38E-03	2.58E-03	1.48E-04	1.52E-04	3.3392E-02
551361.01	4172647.76	2266.41302	2756.78777	895.78959	6755.88443	1246.39309	1800.56855	2261.45115	1586.61859	495.54214	4840.12718	4180.41724	2317.52093	0.28311	0.28859	3.61E-03	3.10E-03	1.01E-03	5.83E-03	1.08E-03	1.56E-03	3.26E-03	1.62E-03	5.06E-04	5.88E-03	3.40E-03	1.89E-03	1.33E-04	1.37E-04	3.3009E-02
551502.8	4173334.21	2806.99315	3457.02039	653.465	3880.11952	680.44864	4189.84188	2837.86441	2078.066	373.90786	3530.02158	1826.55562	5052.60614	0.52603	0.52986	4.47E-03	3.89E-03	7.36E-04	3.35E-03	5.91E-04	3.64E-03	4.09E-03	2.12E-03	3.82E-04	4.29E-03	1.49E-03	4.11E-03	2.47E-04	2.51E-04	3.3643E-02
551373.15	4173218.02	2479.70537	3555.79843	706.63275	4656.66911	758.09393	3537.42399	2497.03298	2103.27345	401.17709	4117.3627	2219.10316	4325.70339	0.36726	0.3704	3.95E-03	4.00E-03	7.96E-04	4.02E-03	6.58E-04	3.07E-03	3.60E-03	2.15E-03	4.10E-04	5.00E-03	1.81E-03	3.52E-03	1.72E-04	1.76E-04	3.3318E-02
551373.65	4172627.86	2308.74348	2698.88539	915.25269	6732.97576	1273.24757	1758.20508	2303.17162	1555.72036	506.50738	4802.38713	4221.00328	2266.75056	0.27667	0.28187	3.67E-03	3.04E-03	1.03E-03	5.81E-03	1.11E-03	1.53E-03	3.32E-03	1.59E-03	5.17E-04	5.83E-03	3.44E-03	1.84E-03	1.30E-04	1.34E-04	3.2979E-02
551441.95	4173289.08	2647.94479	3546.68266	674.30494	4204.88933	714.48045	3863.54986	2669.44163	2135.27158	385.68814	3754.31793	2020.74136	4697.47503	0.42988	0.43314	4.21E-03	3.99E-03	7.59E-04	3.63E-03	6.20E-04	3.35E-03	3.84E-03	2.18E-03	3.94E-04	4.56E-03	1.64E-03	3.82E-03	2.01E-04	2.05E-04	3.3419E-02
551295.91	4173031.33	2394.84248	3601.76346	712.0356	5316.83807	819.05959	2812.02104	2404.61337	2123.42763	403.72531	4475.35294	2707.93875	3524.44225	0.31829	0.32234	3.81E-03	4.06E-03	8.02E-04	4.59E-03	7.11E-04	2.44E-03	3.46E-03	2.17E-03	4.12E-04	5.43E-03	2.20E-03	2.87E-03	1.49E-04	1.53E-04	3.3258E-02
551351.67	4172671.41	2226.59881	2799.38787	876.13149	6672.35842	1216.06756	1845.58058	2222.03788	1609.8758	484.57953	4820.04442	4085.19501	2368.41621	0.28616	0.29176	3.54E-03	3.15E-03	9.87E-04	5.75E-03	1.06E-03	1.60E-03	3.20E-03	1.64E-03	4.95E-04	5.85E-03	3.32E-03	1.93E-03	1.34E-04	1.38E-04	3.2810E-02
551328.15	4172732.09	2190.92292	2868.76528	861.9067	6567.89827	1176.40119	1954.81274	2186.1686	1651.09443	477.41695	4789.76367	3979.29772	2488.76278	0.29792	0.30389	3.49E-03	3.23E-03	9.71E-04	5.66E-03	1.02E-03	1.70E-03	3.15E-03	1.69E-03	4.87E-04	5.81E-03	3.24E-03	2.03E-03	1.40E-04	1.44E-04	3.2755E-02
551348.44	4173178.42	2410.52724	3473.46858	698.4532	4806.24979	773.12206	3435.69027	2427.9682	2049.36489	394.97481	4149.91387	2337.88132	4204.45285	0.34869	0.35177	3.84E-03	3.91E-03	7.87E-04	4.15E-03	6.71E-04	2.98E-03	3.50E-03	2.09E-03	4.03E-04	5.04E-03	1.90E-03	3.42E-03	1.63E-04	1.67E-04	3.3019E-02
551282.15	4172934.94	2303.61788	3304.28708	787.45005	5947.26804	907.22313	2330.43211	2305.1414	1912.02737	444.52555	4859.70337	3094.38007	2948.5735	0.31252	0.31729	3.67E-03	3.72E-03	8.87E-04	5.13E-03	7.88E-04	2.02E-03	3.32E-03	1.95E-03	4.54E-04	5.90E-03	2.52E-03	2.40E-03	1.46E-04	1.50E-04	3.3055E-02
551394.65	4173247.36	2516.00647	3554.24868	697.29942	4479.51877	737.82845	3580.69919	2533.60865	2115.89066	397.10598	3982.56555	2132.71229	4376.5707	0.38024	0.3833	4.00E-03	4.00E-03	7.85E-04	3.86E-03	6.41E-04	3.11E-03	3.65E-03	2.16E-03	4.05E-04	4.83E-03	1.74E-03	3.56E-03	1.78E-04	1.82E-04	3.3112E-02
551451.49	4173298.06	2654.72251	3492.41562	663.17047	4117.19012	698.96251	3887.4072	2677.50431	2104.22902	379.39725	3674.25686	1979.35791	4718.72618	0.43853	0.44182	4.22E-03	3.93E-03	7.47E-04	3.55E-03	6.07E-04	3.38E-03	3.86E-03	2.15E-03	3.87E-04	4.46E-03	1.61E-03	3.84E-03	2.06E-04	2.09E-04	3.3156E-02
551292.65	4173022.29	2375.14689	3557.67906	713.10789	5323.53719	818.16026	2738.74457	2383.95059	2093.15693	404.40052	4483.48048	2711.05277	3436.53222	0.3151	0.31916	3.78E-03	4.01E-03	8.03E-04	4.59E-03	7.10E-04	2.38E-03	3.43E-03	2.14E-03	4.13E-04	5.44E-03	2.21E-03	2.80E-03	1.48E-04	1.51E-04	3.2997E-02
551282.56	4172965.17	2328.97798	3392.08529	761.09332	5720.83438	868.33536	2444.91097	2332.5838	1970.38823	430.92368	4749.66567	2926.57562	3086.48456	0.31112	0.31567	3.71E-03	3.82E-03	8.57E-04	4.93E-03	7.54E-04	2.12E-03	3.36E-03	2.01E-03	4.40E-04	5.77E-03	2.38E-03	2.51E-03	1.46E-04	1.50E-04	3.2960E-02
551351.53	4173187.01	2410.41732	3464.97399	697.56245	4748.58748	766.38127	3428.51742	2427.67017	2044.06005	394.73159	4125.87421	2298.98564	4195.32926	0.34978	0.35248	3.84E-03	3.90E-03	7.86E-04	4.10E-03	6.65E-04	2.98E-03	3.50E-03	2.09E-03	4.03E-04	5.01E-03	1.87E-03	3.41E-03	1.64E-04	1.67E-04	3.2873E-02
551284.64	4172910.4	2270.79747	3211.01046	797.39296	6062.20476	928.6158	2237.55737	2271.08321	1854.33767	448.77415	4878.12022	3190.53022	2834.9704	0.3084	0.31325	3.61E-03	3.62E-03	8.98E-04	5.23E-03	8.06E-04	1.94E-03	3.27E-03	1.89E-03	4.58E-04	5.92E-03	2.60E-03	2.31E-03	1.45E-04	1.48E-04	3.2846E-02
551303.1	4172808.44	2198.28044	2909.79411	840.08491	6475.15492	1083.43143	2014.99662	2194.34546	1675.97829	468.17831	4817.74718	3749.07753	2557.20264	0.30483	0.31055	3.50E-03	3.28E-03	9.46E-04	5.58E-03	9.41E-04	1.75E-03	3.16E-03	1.71E-03	4.78E-04	5.85E-03	3.05E-03	2.08E-03	1.43E-04	1.47E-04	3.2617E-02
551289.43	4173013.33	2361.6087	3521.03985	717.76255	5359.34329	821.34872	2674.47499	2369.47782	2066.95257	407.05675	4511.5105	2726.11376	3359.58228	0.3124	0.31648	3.76E-03	3.97E-03	8.08E-04	4.62E-03	7.13E-04	2.32E-03	3.41E-03	2.11E-03	4.16E-04	5.48E-03	2.22E-03	2.73E-03	1.46E-04	1.50E-04	3.2854E-02
551376.24	4173226.6	2459.41738	3505.5517	698.02191	4564.03783	746.43973	3488.34823	2476.46846	2076.50719	396.50844	4038.22815	2179.73023	4266.26321	0.36502	0.36748	3.91E-03	3.95E-03	7.86E-04	3.94E-03	6.48E-04	3.03E-03	3.57E-03	2.12E-03	4.05E-04	4.90E-03	1.77E-03	3.47E-03	1.71E-04	1.74E-04	3.2846E-02
551763.31	4172610.15	4370.73132	1740.50486	1270.432	4821.78136	1943.84649	1172.82628	4333.89242	1023.00535	683.58395	3180.04131	4783.17197	1569.67728	0.22123	0.22638	6.96E-03	1.96E-03	1.43E-03	4.16E-03	1.69E-03	1.02E-03	6.24E-03	1.04E-03	6.98E-04	3.86E-03	3.89E-03	1.28E-03	1.04E-04	1.07E-04	3.4436E-02
551655.39	4173380.11	3491.54696	3161.02862	649.90589	2916.16273	580.26366	4536.60607	3545.04248	1873.01873	376.93176	2805.03987	1421.56259	5503.23456	2.0659	2.12692	5.56E-03	3.56E-03	7.32E-04	2.51E-03	5.04E-04	3.94E-03	5.11E-03	1.91E-03	3.85E-04	3.41E-03	1.16E-03	4.48E-03	9.68E-04	1.01E-03	3.5226E-02
551293.3	4172842.79	2208.39511	2973.49997	823.08322	6376.19446	1031.08591	2052.45813	2205.64916	1712.59232	459.8461	4841.02625	3573.82496	2604.82858	0.30471	0.31002	3.51E-03	3.35E-03	9.27E-04	5.50E-03	8.95E-04	1.78E-03	3.18E-03	1.75E-03	4.69E-04	5.88E-03	2.91E-03	2.12E-03	1.43E-04	1.47E-04	3.2556E-02
551599.09	4173379.34	3084.40313	3306.06661	654.35932	3244.23887	606.54683	4459.59296	3126.37413	1982.35481	376.94152	3087.64821	1532.48414	5372.85168	0.88318	0.89288	4.91E-03	3.72E-03	7.37E-04	2.80E-03	5.27E-04	3.87E-03	4.50E-03	2.02E-03	3.85E-04	3.75E-03	1.25E-03	4.37E-03	4.14E-04	4.23E-04	3.3682E-02
551642.26	4173382.02	3379.90905	3196.90656	651.72761	2965.4744	584.80357	4536.98996	3429.92449	1900.25253	377.43433	2865.7822	1441.42881	5493.64548	1.54121	1.57801	5.38E-03	3.60E-03	7.34E-04	2.56E-03	5.08E-04	3.94E-03	4.94E-03	1.94E-03	3.85E-04	3.48E-03	1.17E-03	4.47E-03	7.22E-04	7.48E-04	3.4576E-02
551461.03	4173307.04	2664.73468	3443.93195	653.72746	4036.72626	689.86332	3913.26717	2688.7134	2074.64091	373.98808	3605.60065	1938.51938	4742.77441	0.44785	0.45137	4.24E-03	3.88E-03	7.36E-04	3.48E-03	5.99E-04	3.40E-03	3.87E-03	2.12E-03	3.82E-04	4.38E-03	1.58E-03	3.86E-03	2.10E-04	2.14E-04	3.2944E-02
551512.25	4173343.11	2786.40166	3381.24025	644.00329	3773.44024	668.99039	4131.67171	2818.30203	2033.26599	368.47659	3442.6011	1776.43301	4978.78249	0.53708	0.54054	4.43E-03	3.81E-03	7.25E-04	3.25E-03	5.81E-04	3.59E-03	4.06E-03	2.08E-03	3.76E-04	4.18E-03	1.45E-03	4.05E-03	2.52E-04	2.56E-04	3.3086E-02
551319.54	4172748.83	2168.8702	2838.43708	849.53307	6461.06005	1146.32454	1953.91632	2164.18009	1634.41297	471.11751	4723.76479	3891.46223	2483.71053	0.29629	0.30215	3.45E-03	3.20E-03	9.57E-04	5.57E-03	9.95E-04	1.70E-03	3.12E-03	1.67E-03	4.81E-04	5.73E-03	3.17E-03	2.02E-03	1.39E-04	1.43E-04	3.2341E-02
551668.51	4173378.2	3599.49522	3110.74847	645.15756	2860.92555	574.41806	4497.24764	3656.74465	1836.85307	374.67411	2737.23623	1399.22209	5467.18229	2.88781	3.00264	5.73E-03	3.50E-03	7.27E-04	2.47E-03	4.99E-04	3.90E-03	5.27E-03	1.88E-03	3.83E-04	3.32E-03	1.14E-03	4.45E-03	1.35E-03	1.42E-03	3.6041E-02
551302.76	4173079.42	2370.55975	3517.73184	683.09328	5023.01492	792.48616	3013.64472	2384.19959	2083.4619	386.56885	4210.80339	2550.52162	3748.72894	0.31623	0.31991	3.77E-03	3.96E-03	7.69E-04	4.33E-03	6.88E-04	2.62E-03	3.43E-03	2.13E-03	3.95E-04	5.11E-03	2.08E-03	3.05E-03	1.48E-04	1.52E-04	3.2634E-02
551736.9	4173350.34	4257.27543	2906.84395	620.25596	2673.38276	557.03146	4273.88359	4342.22393	1692.234	361.83051	2489.308	1327.88251	5237.97751	4.6195	4.06234	6.77E-03	3.27E-03	6.99E-04	2.31E-03	4.84E-04	3.71E-03	6.25E-03	1.73E-03	3.69E-04	3.02E-03	1.08E-03	4.26E-03	2.17E-03	1.93E-03	3.8054E-02
551305.99	4173088.38	2367.05733	3500.88529	679.94717	4984.76957	790.0309	3060.73955	2381.42751	2073.97243	384.66404	4177.21335	2529.70228	3800.05911	0.31761	0.32086	3.77E-03	3.94E-03	7.66E-04	4.30E-03	6.86E-04	2.66E-03	3.43E-03	2.12E-03	3.93E-04	5.07E-03	2.06E-03	3.09E-03	1.49E-04	1.52E-04	3.2581E-02
551565.25	4173368.66	2918.31463	3345.22569	649.6188	3466.3153	628.63789	4308.64416	2956.29358	2013.70007	372.78563	3248.41564	1623.55379	5181.37179	0.69536	0.69997	4.64E-03	3.77E-03	7.32E-04	2.99E-03	5.46E-04	3.74E-03	4.26E-03	2.06E-03	3.81E-04	3.94E-03	1.32E-03	4.22E-03	3.26E-04	3.32E-04	3.3253E-02
551756.95	4173338.46	4411.60742	2852.45802	611.1526	2633.08611	552.89478	4203.16671	4504.94093	1658.54629	356.67201	2437.88741	1314.1722	5153.40959	2.22776	2.04322	7.02E-03	3.21E-03	6.88E-04	2.27E-03	4.80E-04	3.65E-03	6.49E-03	1.69E-03	3.64E-04	2.96E-03	1.07E-03	4.19E-03	1.04E-03	9.68E-04	3.6102E-02
551354.62	4173195.59	2397.51528	3433.31876	693.13928	4676.85508	757.79163	3400.31461	2414.5456	2026.44801	392.41021	4075.76673	2262.21101	4160.24223	0.34882	0.35144	3.82E-03	3.87E-03	7.81E-04	4.03E-03	6.58E-04	2.95E-03	3.48E-03	2.07E-03	4.01E-04	4.95E-03	1.84E-03	3.39E-03	1.63E-04	1.67E-04	3.2558E-02
551345.47	4172678.32	2187.59509	2771.91781	858.02785	6516.70162	1188.15243	1839.32189	2183.20918	1594.17572	474.59626	4728.14243	3977.803	2357.0852	0.28201	0.2875	3.48E-03	3.12E-03	9.66E-04	5.62E-03	1.03E-03	1.60E-03	3.14E-03	1.63E-03	4.85E-04	5.74E-03	3.24E-03	1.92E-03	1.32E-04	1.36E-04	3.2239E-02
551363.86	4172634.32	2246.2089	2671.19594	885.09186	6567.91337	1228.21002	1746.72357	2241.23294	1538.89532	489.81733	4705.74286	4083.23054	2250.16397	0.27214	0.27726	3.57E-03	3.01E-03	9.97E-04	5.66E-03	1.07E-03	1.52E-03	3.23E-03	1.57E-03	5.00E-04	5.71E-03	3.32E-03	1.83E-03	1.28E-04	1.31E-04	3.2252E-02
551306.29	4172785.36	2168.71348	2846.35397	838.59402	6416.74356	1100.56094	1974.08296	2164.3554	1639.57821	466.42008	4731.05105	3784.02786	2505.68518	0.2993	0.30506	3.45E-03	3.21E-03	9.44E-04	5.53E-03	9.56E-04	1.71E-03	3.12E-03	1.67E-03	4.76E-04	5.74E-03	3.08E-03	2.04E-03	1.40E-04	1.45E-04	3.2219E-02
551286.2	4173004.36	2338.49988	3464.63922	718.95187	5364.30575	821.00626	2603.10639	2345.468	2029.46542	407.50594	4511.56567	2729.76002	3273.14245	0.30851	0.31279	3.72E-03	3.90E-03	8.10E-04	4.63E-03	7.13E-04	2.26E-03	3.38E-03	2.07E-03	4.16E-04	5.48E-03	2.22E-03	2.66E-03	1.45E-04	1.48E-04	3.2554E-02
551315.24	4172757.2	2157.9732	2821.5891	842.67994	6405.39566	1129.66875	1949.98354	2153.35491	1625.0509	467.62331	4691.36972	3842.46303	2477.2791	0.29507	0.30085	3.43E-03	3.18E-03	9.49E-04	5.52E-03	9.81E-04	1.69E-03	3.10E-03	1.66E-03	4.77E-04	5.70E-03	3.13E-03	2.02E-03	1.38E-04	1.43E-04	3.2116E-02
551701.81	4172570.12	4371.44783	1860.25561	1476.34925	4053.89661	2140.26148	1276.87471	4330.11422	1104.04437	788.46306	3138.85716	4305.65374	1714.71778	0.1603	0.16235	6.96E-03	2.10E-03	1.66E-03	3.50E-03	1.86E-03	1.11E-03	6.24E-03	1.13E-03	8.05E-04	3.81E-03	3.50E-03	1.40E-03	7.51E-05	7.69E-05	3.4208E-02
551309.21	4173097.33	2353.40446	3463.95098	674.20725	4924.4916	785.11444	3093.15483	2368.42205	2052.65755	381.29127	4123.90578	2503.47749	3832.40706	0.3176	0.32118	3.74E-03	3.90E-03	7.59E-04	4.25E-03	6.82E-04	2.69E-03	3.41E-03	2.10E-03	3.89E-04	5.01E-03	2.04E-03	3.12E-03	1.49E-04	1.52E-04	3.2380E-02
551720.56	4173360.82	4081.83898	2933.13745	623.18487	2692.72045	557.22489	4292.37101	4158.88357	1710.62492	363.2905	2523.14171	1332.61197	5257.21257	12.80412	10.63619	6.50E-03	3.30E-03	7.02E-04	2.32E-03	4.84E-04	3.73E-03	5.99E-03	1.75E-03	3.71E-04	3.06E-03	1.08E-03	4.28E-03	6.00E-03	5.04E-03	4.4609E-02
551299.54	4173070.47	2355.16604	3499.05878	680.4201	5012.63718	789.41509	2943.75242	2368.03801	2072.53745	385.20382	4200.86725	2560.63352	3668.1109	0.31281	0.31617	3.75E-03	3.94E-03	7.66E-04	4.32E-03	6.85E-04	2.56E-03	3.41E-03	2.12E-03	3.93E-04	5.10E-03	2.08E-03	2.99E-03	1.47E-04	1.50E-04	3.2405E-02
551279.34	4172956.2	2290.9478	3307.35892	757.94176	5681.99236	866.33372	2371.79297	2293.88517	1918.78489	428.83407	4698.43769	2922.97866	2996.51086	0.30649	0.311	3.65E-03	3.72E-03	8.54E-04	4.90E-03	7.52E-04	2.06E-03	3.30E-03	1.96E-03	4.38E-04	5.70E-03	2.38E-03	2.44E-03	1.44E-04	1.47E-04	3.2449E-02
551470.56	4173316.03	2666.46013	3385.05929	643.84186	3950.1768	680.21274	3920.02068	2691.79634	2038.45489	368.2761	3532.21146	1895.66847	4743.71323	0.45485	0.45771	4.24E-03	3.81E-03	7.25E-04	3.41E-03	5.91E-04	3.40E-03	3.88E-03	2.08E-03	3.76E-04	4.29E-03	1.54E-03	3.86E-03	2.13E-04	2.17E-04	3.2637E-02
551304.4	4172794.17	2166.81457	2846.41436	832.93776	6373.04335	1084.75946	1976.41537	2162.67713	1639.90183	463.66465	4718.7868	3732.27242	2508.25872	0.2982	0.30386	3.45E-03	3.21E-03	9.38E-04	5.50E-03	9.42E-04	1.72E-03	3.11E-03	1.67E-03	4.73E-04	5.73E-03	3.04E-03	2.04E-03	1.40E-04	1.44E-04	3.2100E-02
551681.64	4173376.3	3686.01848	3039.40778	637.12273	2799.2177	567.09472	4408.97257	3746.86958	1789.60999	370.39231	2660.17236	1375.0977	5370.63031	4.44266	4.73685	5.87E-03	3.42E-03	7.18E-04	2.41E-03	4.92E-04	3.83E-03	5.40E-03	1.83E-03	3.78E-04	3.23E-03	1.12E-03	4.37E-03	2.08E-03	2.24E-03	3.7389E-02
551357.71	4173204.18	2391.09197	3412.77485	689.48264	4608.89765	749.59981	3378.14292	2407.87629	2015.12572	390.60573	4032.94886	2223.63667	4133.4625	0.34806	0.35101	3.80E-03	3.84E-03	7.77E-04	3.97E-03	6.51E-04	2.93E-03	3.47E-03	2.06E-03	3.99E-04	4.90E-03	1.81E-03	3.36E-03	1.63E-04	1.66E-04	3.2307E-02
551278.93	4172925.97	2252.36136	3197.86382	776.54481	5846.02368	897.56104	2250.41329	2253.45242	1849.50566	437.86962	4754.5366	3062.11594	2848.89682	0.3035	0.30815	3.58E-03	3.60E-03	8.75E-04	5.04E-03	7.79E-04	1.95E-03	3.25E-03	1.89E-03	4.47E-04	5.77E-03	2.49E-03	2.32E-03	1.42E-04	1.46E-04	3.2287E-02
551282.98	4172995.4	2320.49928	3415.63224	723.28347	5395.32714	824.81481	2539.6766	2326.55179	1996.54005	410.07098	4528.12465	2746.25084	3196.51385	0.30557	0.30985	3.69E-03	3.85E-03	8.15E-04	4.65E-03	7.16E-04	2.21E-03	3.35E-03	2.04E-03	4.19E-04	5.50E-03	2.24E-03	2.60E-03	1.43E-04	1.47E-04	3.2360E-02
551296.31	4173061.52	2347.33542	3491.20241	681.37984	5028.0739	789.20566	2882.04971	2359.38284	2066.48552	385.90039	4216.76149	2575.01326	3597.38226	0.31035	0.31374	3.74E-03	3.93E-03	7.67E-04	4.34E-03	6.85E-04	2.50E-03	3.40E-03	2.11E-03	3.94E-04	5.12E-03	2.10E-03	2.93E-03	1.45E-04	1.49E-04	3.2297E-02
551521.7	4173352.01	2781.44926	3333.11709	638.45251	3678.15734	658.94563	4098.40427	2814.35832	2004.10813	365.42458	3373.4765	1728.13818	4937.74962	0.55029	0.55325	4.43E-03	3.75E-03	7.19E-04	3.17E-03	5.72E-04	3.56E-03	4.05E-03	2.05E-03	3.73E-04	4.10E-03	1.41E-03	4.02E-03	2.58E-04	2.62E-04	3.2715E-02
551616.01	4173385.84	3155.18038	3219.26902	646.49838	3092.8567	589.74327	4420.72536	3199.11422	1922.7884	373.2207	2958.5287	1473.0945	5339.79414	1.01549	1.02575	5.02E-03	3.63E-03	7.28E-04	2.67E-03	5.12E-04	3.84E-03	4.61E-03	1.96E-03	3.81E-04	3.59E-03	1.20E-03	4.35E-03	4.76E-04	4.86E-04	3.3442E-02
551380.19	4173237.45	2441.9766	3453.95027	687.77263	4453.56938	732.58108	3438.53996	2458.76579	2048.95806	391.02769	3947.4418	2128.26164	4206.78274	0.36218	0.36453	3.89E-03	3.89E-03	7.75E-04	3.84E-03	6.36E-04	2.99E-03	3.54E-03	2.09E-03	3.99E-04	4.79E-03	1.73E-03	3.42E-03	1.70E-04	1.73E-04	3.2336E-02
551281.17	4172889.17	2212.62332	3066.59126	793.1007	6055.17559	946.94655	2127.04761	2211.92648	1768.61139	444.89969	4776.32014	3257.52167	2697.53735	0.30066	0.30548	3.52E-03	3.45E-03	8.93E-04	5.22E-03	8.22E-04	1.85E-03	3.19E-03	1.81E-03	4.54E-04	5.80E-03	2.65E-03	2.20E-03	1.41E-04	1.45E-04	3.2135E-02
551340.35	4172687.25	2160.36235	2758.33539	845.36383	6403.43551	1167.54441	1843.01559	2156.08633	1586.70558	467.64847	4663.21888	3899.22538	2358.23603	0.2798	0.28523	3.44E-03	3.11E-03	9.52E-04	5.52E-03	1.01E-03	1.60E-03	3.11E-03	1.62E-03	4.77E-04	5.66E-03	3.17E-03	1.92E-03	1.31E-04	1.35E-04	3.1856E-02
551796.13	4173315.36	4534.73708	2745.02922	607.81914	2540.56242	539.14769	4054.3575	4638.24106	1595.78344	342.84719	2442.72598	1277.84588	4965.65567	1.12472	1.07364	7.22E-03	3.09E-03	6.85E-04	2.19E-03	4.68E-04	3.52E-03	6.68E-03	1.63E-03	3.50E-04	2.97E-03	1.04E-03	4.04E-03	5.27E-04	5.09E-04	3.4914E-02
551720.55	4172580.32	4423.44596	1805.99178	1410.49093	4096.36424	2028.84992	1237.59195	4382.44327	1069.03142	754.53259	3072.34875	4277.38104	1661.21512	0.17084	0.17367	7.04E-03	2.03E-03	1.59E-03	3.53E-03	1.76E-03	1.07E-03	6.31E-03	1.09E-03	7.70E-04	3.73E-03	3.48E-03	1.35E-03	8.01E-05	8.23E-05	3.3929E-02
551480.1	4173325.01	2666.72763	3329.40573	635.31634	3866.12038	671.09969	3917.60145	2693.40907	2003.94838	363.32161	3464.32948	1852.36385	4734.63157	0.46448	0.46779	4.24E-03	3.75E-03	7.16E-04	3.33E-03	5.83E-04	3.40E-03	3.88E-03	2.05E-03	3.71E-04	4.21E-03	1.51E-03	3.85E-03	2.18E-04	2.22E-04	3.2329E-02
551308.42	4172775.46	2144.0733	2800.656	829.93951	6305.59415	1095.74984	1946.44674	2139.72082	1613.71697	461.28756	4644.31342	3741.30535	2470.78939	0.29275	0.29836	3.41E-03	3.15E-03	9.35E-04	5.44E-03	9.51E-04	1.69E-03	3.08E-03	1.65E-03	4.71E-04	5.64E-03	3.04E-03	2.01E-03	1.37E-04	1.41E-04	3.1753E-02
551331.71	4172704.06	2142.54247	2767.0164	839.19677	6348.69467	1154.84773	1867.75635	2138.16222	1592.12564	464.37633	4634.48551	3860.13682	2384.08884	0.28227	0.2878	3.41E-03	3.12E-03	9.45E-04	5.48E-03	1.00E-03	1.62E-03	3.08E-03	1.63E-03	4.74E-04	5.63E-03	3.14E-03	1.94E-03	1.32E-04	1.36E-04	3.1726E-02
551552.49	4173368.83	2843.33682	3297.19475	639.19365	3482.33517	626.74079	4168.621	2879.44472	1983.21409	366.47214	3246.69096	1630.99254	5018.02777	0.62787	0.63261	4.52E-03	3.71E-03	7.20E-04	3.00E-03	5.44E-04	3.62E-03	4.15E-03	2.02E-03	3.74E-04	3.94E-03	1.33E-03	4.08E-03	2.94E-04	3.00E-04	3.2618E-02
551694.77	4173374.39	3785.29344	2972.02878	627.35672	2735.53621	559.0237	4313.13686	3850.41965	1743.0332	365.09508	2587.09653	1348.16934	5267.64304	8.36623	9.40756	6.02E-03	3.35E-03	7.07E-04	2.36E-03	4.85E-04	3.75E-03	5.55E-03	1.78E-03	3.73E-04	3.14E-03	1.10E-03	4.29E-03	3.92E-03	4.46E-03	4.1269E-02
551279.75	4172986.43	2296.74021	3355.73004	725.61929	5407.67988	826.95392	2473.4367	2301.94637	1957.72467	411.26451	4526.20722	2757.25926	3116.03985	0.30216	0.30607	3.65E-03	3.78E-03	8.17E-04	4.66E-03	7.18E-04	2.15E-03	3.32E-03	2.00E-03	4.20E-04	5.49E-03	2.24E-03	2.54E-03	1.42E-04	1.45E-04	3.2076E-02
551293.09	4173052.57	2329.34481	3462.78466	679.584	5017.5083	786.01476	2810.41222	2340.57749	2048.10727	385.05295	4211.7245	2567.07394	3513.13311	0.30648	0.31028	3.71E-03	3.90E-03	7.65E-04	4.33E-03	6.83E-04	2.44E-03	3.37E-03	2.09E-03	3.93E-04	5.11E-03	2.09E-03	2.86E-03	1.44E-04	1.47E-04	3.2029E-02
551769.09	4173333.75	4403.89001	2775.99237	598.08224	2581.50161	544.92076	4076.37999	4499.08934	1614.73495	348.97001	2380.05229	1294.53142	4997.95931	1.67151	1.55865	7.01E-03	3.13E-03	6.74E-04	2.23E-03	4.73E-04	3.54E-03	6.48E-03	1.65E-03	3.56E-04	2.89E-03	1.05E-03	4.07E-03	7.83E-04	7.39E-04	3.5064E-02
551310.93	4172765.57	2137.24368	2787.69138	829.94589	6289.90197	1103.86343	1935.31916	2132.81534	1606.09483	460.92979	4622.49424	3754.27457	2457.4536	0.29081	0.29642	3.40E-03	3.14E-03	9.35E-04	5.42E-03	9.58E-04	1.68E-03	3.07E-03	1.64E-03	4.71E-04	5.61E-03	3.06E-03	2.00E-03	1.36E-04	1.40E-04	3.1665E-02
551336.03	4172695.66	2142.37634	2750.78266	837.284	6327.43075	1153.45791	1849.43448	2138.14118	1582.78859	463.26817	4619.28117	3847.28694	2363.32094	0.27886	0.28426	3.41E-03	3.10E-03	9.43E-04	5.46E-03	1.00E-03	1.61E-03	3.08E-03	1.62E-03	4.73E-04	5.61E-03	3.13E-03	1.92E-03	1.31E-04	1.35E-04	3.1610E-02
551360.8	4173212.77	2375.4328	3375.47851	683.4051	4530.81364	739.93253	3340.66141	2391.95488	1995.00756	387.3774	3971.96064	2186.74089	4087.72319	0.34619	0.34915	3.78E-03	3.80E-03	7.70E-04	3.91E-03	6.42E-04	2.90E-03	3.44E-03	2.04E-03	3.95E-04	4.82E-03	1.78E-03	3.33E-03	1.62E-04	1.65E-04	3.1935E-02
551291.8	4172827.76	2156.52723	2862.6696	809.17488	6220.77425	1026.53887	1983.65725	2153.42494	1649.03575	451.69372	4686.6969	3537.15683	2517.81683	0.29525	0.3005	3.43E-03	3.22E-03	9.11E-04	5.36E-03	8.91E-04	1.72E-03	3.10E-03	1.68E-03	4.61E-04	5.69E-03	2.88E-03	2.05E-03	1.38E-04	1.42E-04	3.1690E-02
551401.32	4173263.22	2469.57534	3426.19686	674.30603	4263.47054	713.64181	3479.16191	2486.96253	2047.71162	384.44266	3795.27401	2059.19279	4251.90733	0.37467	0.37694	3.93E-03	3.86E-03	7.59E-04	3.68E-03	6.20E-04	3.02E-03	3.58E-03	2.09E-03	3.92E-04	4.61E-03	1.68E-03	3.46E-03	1.76E-04	1.79E-04	3.2028E-02
551408.99	4173270.22	2485.89228	3422.14824	670.14623	4216.84972	709.85923	3513.88739	2503.77051	2050.54418	382.39718	3752.63363	2044.28698	4290.9522	0.38135	0.38422	3.96E-03	3.85E-03	7.55E-04	3.64E-03	6.16E-04	3.05E-03	3.61E-03	2.09E-03	3.90E-04	4.56E-03	1.66E-03	3.49E-03	1.79E-04	1.82E-04	3.2031E-02
551276.11	4172947.24	2251.14489	3220.91847	753.64437	5632.5418	863.51235	2299.95354	2253.48477	1866.96135	426.00974	4638.64687	2916.01373	2907.69081	0.30034	0.30478	3.58E-03	3.63E-03	8.49E-04	4.86E-03	7.50E-04	2.00E-03	3.25E-03	1.91E-03	4.35E-04	5.63E-03	2.37E-03	2.37E-03	1.41E-04	1.44E-04	3.1906E-02
551531.15	4173360.91	2774.72011	3283.60808	632.88172	3578.87374	636.22429	4060.12668	2808.42569	1973.98407	362.39326	3300.5589	1679.43642	4891.86799	0.56217	0.5656	4.42E-03	3.70E-03	7.13E-04	3.09E-03	5.52E-04	3.53E-03	4.04E-03	2.02E-03	3.70E-04	4.01E-03	1.37E-03	3.98E-03	2.63E-04	2.68E-04	3.2307E-02
551418.61	4173279.28	2503.20717	3403.28717	662.61804	4148.27715	703.83978	3553.08358	2521.80188	2044.8996	378.4706	3688.96616	2015.74818	4333.80243	0.38929	0.39212	3.98E-03	3.83E-03	7.46E-04	3.58E-03	6.11E-04	3.09E-03	3.63E-03	2.09E-03	3.86E-04	4.48E-03	1.64E-03	3.53E-03	1.82E-04	1.86E-04	3.1957E-02
551489.64	4173333.99	2670.78692	3286.3943	629.25426	3788.71257	663.12523	3914.97298	2698.78009	1976.93772	359.8127	3407.64875	1809.18748	4727.06009	0.47566	0.47897	4.25E-03	3.70E-03	7.09E-04	3.27E-03	5.76E-04	3.40E-03	3.89E-03	2.02E-03	3.67E-04	4.14E-03	1.47E-03	3.85E-03	2.23E-04	2.27E-04	3.2081E-02
551586.09	4173381.23	2935.26477	3227.80537	639.35402	3259.75854	603.84444	4245.90316	2974.17518	1940.3278	367.5654	3077.38456	1538.24708	5112.56535	0.76163	0.76646	4.67E-03	3.64E-03	7.20E-04	2.81E-03	5.24E-04	3.69E-03	4.28E-03	1.98E-03	3.75E-04	3.74E-03	1.25E-03	4.16E-03	3.57E-04	3.63E-04	3.2557E-02
551729.08	4173360.44	4074.41631	2850.66856	610.5884	2634.64368	548.19241	4149.54298	4152.71651	1661.40809	355.95176	2458.07075	1309.25548	5087.38144	7.48843	6.33432	6.48E-03	3.21E-03	6.88E-04	2.27E-03	4.76E-04	3.60E-03	5.98E-03	1.70E-03	3.63E-04	2.98E-03	1.07E-03	4.14E-03	3.51E-03	3.00E-03	3.9475E-02
551289.87	4173043.62	2310.95605	3430.15025	678.56514	5009.7262	783.20774	2739.78131	2321.32696	2026.40126	384.59982	4210.55429	2565.96713	3429.3742	0.30323	0.30655	3.68E-03	3.86E-03	7.64E-04	4.32E-03	6.80E-04	2.38E-03	3.34E-03	2.07E-03	3.93E-04	5.11E-03	2.09E-03	2.79E-03	1.42E-04	1.45E-04	3.1767E-02
551749.77	4173348.47	4242.61526	2798.1655	602.25996	2594.6881	544.35277	4083.35215	4329.44547	1627.86962	351.29599	2405.43626	1295.36997	5010.10998	2.82508	2.54012	6.75E-03	3.15E-03	6.78E-04	2.24E-03	4.73E-04	3.55E-03	6.24E-03	1.66E-03	3.59E-04	2.92E-03	1.05E-03	4.08E-03	1.32E-03	1.20E-03	3.5672E-02
551740.16	4172590.59	4384.76557	1751.64702	1326.13382	4249.4862	1922.10738	1195.10157	4345.73387	1033.78821	711.49363	3039.92928	4321.59069	1602.09878	0.18648	0.19022	6.98E-03	1.97E-03	1.49E-03	3.66E-03	1.67E-03	1.04E-03	6.26E-03	1.06E-03	7.26E-04	3.69E-03	3.52E-03	1.30E-03	8.74E-05	9.02E-05	3.3545E-02
551354.07	4172640.78	2181.69511	2633.94921	854.5657	6368.35817	1182.78745	1731.45741	2177.20159	1516.73021	472.94831	4587.8837	3930.17378	2228.04227	0.2664	0.27139	3.47E-03	2.97E-03	9.62E-04	5.49E-03	1.03E-03	1.50E-03	3.14E-03	1.55E-03	4.83E-04	5.57E-03	3.20E-03	1.81E-03	1.25E-04	1.29E-04	3.1425E-02
551574.81	4173377.67	2881.24616	3236.53888	637.17809	3329.42304	610.88295	4192.48271	2918.93678	1947.90076	365.86115	3126.44794	1567.06988	5045.35134	0.70831	0.71271	4.58E-03	3.65E-03	7.18E-04	2.87E-03	5.30E-04	3.64E-03	4.20E-03	1.99E-03	3.74E-04	3.80E-03	1.28E-03	4.11E-03	3.32E-04	3.38E-04	3.2403E-02
551276.52	4172977.47	2269.61887	3290.41693	726.71062	5408.73282	828.47477	2406.99285	2274.04431	1916.05062	411.70239	4511.88262	2765.82939	3035.17356	0.29835	0.30225	3.61E-03	3.71E-03	8.18E-04	4.66E-03	7.19E-04	2.09E-03	3.27E-03	1.96E-03	4.20E-04	5.48E-03	2.25E-03	2.47E-03	1.40E-04	1.43E-04	3.1743E-02
551327.38	4172712.47	2121.56486	2744.97134	828.99771	6246.84081	1135.76731	1866.57024	2117.25401	1580.19956	458.94537	4570.89148	3791.95739	2379.69289	0.27976	0.28521	3.38E-03	3.09E-03	9.34E-04	5.39E-03	9.86E-04	1.62E-03	3.05E-03	1.61E-03	4.69E-04	5.55E-03	3.09E-03	1.94E-03	1.31E-04	1.35E-04	3.1365E-02
551292.5	4172818.38	2137.67517	2819.49597	806.24494	6173.82279	1029.83341	1957.50214	2134.33367	1624.40773	449.77534	4631.01964	3540.24415	2484.56341	0.29187	0.29714	3.40E-03	3.18E-03	9.08E-04	5.32E-03	8.94E-04	1.70E-03	3.07E-03	1.66E-03	4.59E-04	5.62E-03	2.88E-03	2.02E-03	1.37E-04	1.41E-04	3.1398E-02
551602.88	4173387.75	3018.51891	3182.56115	637.43091	3128.63288	589.4708	4275.78654	3059.34266	1906.37114	367.26878	2976.45748	1485.30709	5159.2315	0.85347	0.86125	4.80E-03	3.58E-03	7.18E-04	2.70E-03	5.12E-04	3.71E-03	4.41E-03	1.95E-03	3.75E-04	3.61E-03	1.21E-03	4.20E-03	4.00E-04	4.08E-04	3.2585E-02
551499.18	4173342.98	2681.88726	3260.05168	625.93715	3717.88263	656.17313	3918.8466	2711.2443	1959.85633	357.95655	3362.90164	1766.31315	4729.45883	0.4889	0.4918	4.27E-03	3.67E-03	7.05E-04	3.21E-03	5.70E-04	3.40E-03	3.90E-03	2.00E-03	3.65E-04	4.08E-03	1.44E-03	3.85E-03	2.29E-04	2.33E-04	3.1925E-02
551279.44	4172878.55	2169.63657	2972.05705	782.22669	5966.86985	943.50264	2061.81362	2168.59906	1713.62048	438.29688	4669.1637	3239.42719	2615.78977	0.29277	0.29747	3.45E-03	3.35E-03	8.81E-04	5.15E-03	8.19E-04	1.79E-03	3.12E-03	1.75E-03	4.47E-04	5.67E-03	2.64E-03	2.13E-03	1.37E-04	1.41E-04	3.1468E-02
551286.64	4173034.66	2295.81242	3399.58208	679.78303	5018.69558	782.52044	2674.07021	2305.30695	2004.99711	385.37386	4222.39398	2569.65304	3351.26547	0.30064	0.30398	3.65E-03	3.83E-03	7.66E-04	4.33E-03	6.79E-04	2.32E-03	3.32E-03	2.05E-03	3.93E-04	5.13E-03	2.09E-03	2.73E-03	1.41E-04	1.44E-04	3.1567E-02
551385.53	4173251.07	2413.23763	3373.96856	672.70291	4310.29999	714.17203	3368.05725	2429.74021	2006.7847	382.84935	3817.9202	2067.37091	4121.44876	0.35826	0.36047	3.84E-03	3.80E-03	7.58E-04	3.72E-03	6.20E-04	2.92E-03	3.50E-03	2.05E-03	3.91E-04	4.63E-03	1.68E-03	3.35E-03	1.68E-04	1.71E-04	3.1609E-02
551323.06	4172720.87	2110.35613	2734.46427	823.89101	6197.47456	1124.28466	1870.45093	2106.03428	1574.5929	456.31517	4539.34871	3757.00793	2382.19893	0.27949	0.28492	3.36E-03	3.08E-03	9.28E-04	5.34E-03	9.76E-04	1.62E-03	3.03E-03	1.61E-03	4.66E-04	5.51E-03	3.06E-03	1.94E-03	1.31E-04	1.35E-04	3.1191E-02
551312.44	4173106.28	2286.07775	3330.17725	650.38964	4724.33904	764.46966	3059.22181	2301.78242	1976.1846	367.68241	3940.77604	2442.7183	3780.40756	0.31178	0.31526	3.64E-03	3.75E-03	7.33E-04	4.07E-03	6.64E-04	2.66E-03	3.31E-03	2.02E-03	3.75E-04	4.78E-03	1.99E-03	3.08E-03	1.46E-04	1.49E-04	3.1368E-02
551363.89	4173221.35	2353.56514	3326.86787	675.63859	4446.35446	729.25542	3292.50503	2369.79574	1968.97603	383.15877	3898.25392	2150.76589	4029.01429	0.34392	0.34681	3.75E-03	3.75E-03	7.61E-04	3.83E-03	6.33E-04	2.86E-03	3.41E-03	2.01E-03	3.91E-04	4.73E-03	1.75E-03	3.28E-03	1.61E-04	1.64E-04	3.1482E-02
551650.74	4173389.75	3334.77638	3047.06536	630.65622	2838.78146	565.38372	4301.56564	3384.52817	1806.77748	365.4466	2732.1943	1388.03554	5222.39478	1.62475	1.65938	5.31E-03	3.43E-03	7.10E-04	2.45E-03	4.91E-04	3.74E-03	4.87E-03	1.84E-03	3.73E-04	3.32E-03	1.13E-03	4.25E-03	7.61E-04	7.86E-04	3.3460E-02
551447.48	4173306.47	2551.40519	3307.03158	636.4838	3937.32121	673.56548	3668.03174	2573.09498	1992.71498	364.02387	3499.92444	1910.44078	4455.45856	0.41149	0.41442	4.06E-03	3.72E-03	7.17E-04	3.40E-03	5.85E-04	3.18E-03	3.71E-03	2.03E-03	3.72E-04	4.25E-03	1.55E-03	3.63E-03	1.93E-04	1.96E-04	3.1598E-02
551663.58	4173387.88	3435.78469	3004.86648	627.02147	2788.93848	560.30437	4276.878	3488.92029	1776.03656	363.81736	2671.11353	1367.73258	5202.64411	2.17397	2.22468	5.47E-03	3.38E-03	7.06E-04	2.41E-03	4.87E-04	3.71E-03	5.02E-03	1.81E-03	3.71E-04	3.24E-03	1.11E-03	4.23E-03	1.02E-03	1.05E-03	3.4036E-02
551272.89	4172938.27	2211.71257	3136.12758	748.84658	5582.6797	861.16753	2230.97697	2213.51685	1816.47724	422.84796	4575.4675	2910.66113	2822.22179	0.29402	0.29838	3.52E-03	3.53E-03	8.43E-04	4.81E-03	7.48E-04	1.94E-03	3.19E-03	1.85E-03	4.32E-04	5.55E-03	2.37E-03	2.30E-03	1.38E-04	1.41E-04	3.1368E-02
551275.3	4172913.55	2188.04235	3063.50273	761.94306	5722.36431	886.50504	2150.48625	2188.61749	1770.67149	428.94181	4617.48295	3018.03819	2724.35525	0.29185	0.29631	3.48E-03	3.45E-03	8.58E-04	4.94E-03	7.70E-04	1.87E-03	3.15E-03	1.81E-03	4.38E-04	5.61E-03	2.46E-03	2.22E-03	1.37E-04	1.40E-04	3.1316E-02
551273.3	4172968.5	2240.44823	3222.35658	726.97201	5402.30332	829.87761	2341.70094	2244.15138	1873.30886	411.60585	4488.56408	2773.79608	2955.68047	0.29461	0.29824	3.57E-03	3.63E-03	8.19E-04	4.66E-03	7.21E-04	2.03E-03	3.23E-03	1.91E-03	4.20E-04	5.45E-03	2.26E-03	2.41E-03	1.38E-04	1.41E-04	3.1382E-02
551283.39	4173025.63	2278.69147	3361.95639	681.07059	5027.29985	781.9691	2607.91032	2287.28293	1978.97154	386.16654	4232.18805	2572.9001	3272.03937	0.29749	0.3012	3.63E-03	3.79E-03	7.67E-04	4.34E-03	6.79E-04	2.26E-03	3.29E-03	2.02E-03	3.94E-04	5.14E-03	2.09E-03	2.66E-03	1.39E-04	1.43E-04	3.1344E-02
551759.87	4172600.85	4218.95906	1690.90176	1227.90693	4481.80176	1836.50794	1146.0891	4183.86532	994.649	661.01846	3031.28949	4426.77015	1533.39694	0.20353	0.20809	6.71E-03	1.90E-03	1.38E-03	3.87E-03	1.59E-03	9.95E-04	6.03E-03	1.02E-03	6.75E-04	3.68E-03	3.60E-03	1.25E-03	9.54E-05	9.86E-05	3.2896E-02
551293.2	4172809	2113.64795	2769.43214	800.31033	6093.37221	1028.1695	1927.83733	2110.14287	1596.01104	446.17973	4555.87049	3521.69103	2446.75277	0.2869	0.29211	3.36E-03	3.12E-03	9.01E-04	5.26E-03	8.93E-04	1.67E-03	3.04E-03	1.63E-03	4.56E-04	5.53E-03	2.87E-03	1.99E-03	1.34E-04	1.38E-04	3.0991E-02
551508.71	4173351.96	2677.73372	3215.3249	620.46217	3632.65197	647.29321	3891.92268	2708.19808	1932.76933	354.86209	3301.51161	1721.00707	4695.03332	0.50002	0.50328	4.26E-03	3.62E-03	6.99E-04	3.13E-03	5.62E-04	3.38E-03	3.90E-03	1.97E-03	3.62E-04	4.01E-03	1.40E-03	3.82E-03	2.34E-04	2.39E-04	3.1594E-02
551676.42	4173386.02	3527.50936	2948.58736	620.67624	2733.99819	553.9597	4216.46368	3584.11189	1737.26914	360.53935	2603.76457	1345.45219	5139.90955	3.07647	3.18919	5.61E-03	3.32E-03	6.99E-04	2.36E-03	4.81E-04	3.66E-03	5.16E-03	1.77E-03	3.68E-04	3.16E-03	1.09E-03	4.18E-03	1.44E-03	1.51E-03	3.4829E-02
551625.05	4173393.49	3128.95036	3091.66694	629.98568	2921.19096	571.95996	4250.28077	3172.79978	1842.67652	363.99201	2832.7392	1421.48929	5145.13362	1.04803	1.05721	4.98E-03	3.48E-03	7.10E-04	2.52E-03	4.97E-04	3.69E-03	4.57E-03	1.88E-03	3.72E-04	3.44E-03	1.16E-03	4.19E-03	4.91E-04	5.01E-04	3.2475E-02
551314.42	4172737.68	2089.93818	2707.95458	813.4531	6104.62543	1099.36868	1871.78955	2085.62699	1560.02999	450.99816	4479.73595	3685.04661	2379.94422	0.27857	0.28394	3.33E-03	3.05E-03	9.16E-04	5.26E-03	9.55E-04	1.63E-03	3.00E-03	1.59E-03	4.60E-04	5.44E-03	3.00E-03	1.94E-03	1.31E-04	1.35E-04	3.0833E-02
551280.16	4173016.66	2265.24867	3327.52078	684.82251	5055.40822	784.27924	2547.7533	2272.97047	1954.54246	388.31278	4254.59098	2584.38491	3200.00479	0.29488	0.29847	3.60E-03	3.75E-03	7.71E-04	4.36E-03	6.81E-04	2.21E-03	3.27E-03	2.00E-03	3.96E-04	5.17E-03	2.10E-03	2.60E-03	1.38E-04	1.41E-04	3.1194E-02
551457.1	4173315.53	2555.97284	3253.85688	626.45593	3857.66093	664.29186	3683.3498	2578.903	1960.30291	358.24702	3429.97265	1871.48361	4466.96361	0.41954	0.42245	4.07E-03	3.66E-03	7.06E-04	3.33E-03	5.77E-04	3.20E-03	3.71E-03	2.00E-03	3.66E-04	4.16E-03	1.52E-03	3.64E-03	1.97E-04	2.00E-04	3.1340E-02
551562.15	4173377.92	2794.33767	3185.00267	626.02654	3348.02908	627.3623	4044.98771	2830.15358	1916.94531	359.04268	3125.08622	1575.40631	4870.42889	0.63819	0.64169	4.45E-03	3.59E-03	7.05E-04	2.89E-03	5.45E-04	3.51E-03	4.08E-03	1.96E-03	3.67E-04	3.79E-03	1.28E-03	3.96E-03	2.99E-04	3.04E-04	3.1726E-02
551366.98	4173229.94	2342.24595	3295.20617	669.30388	4369.30702	719.5459	3258.63467	2358.24383	1952.21824	379.83383	3838.5024	2112.60317	3988.61587	0.3423	0.3451	3.73E-03	3.71E-03	7.54E-04	3.77E-03	6.25E-04	2.83E-03	3.40E-03	1.99E-03	3.88E-04	4.66E-03	1.72E-03	3.25E-03	1.60E-04	1.64E-04	3.1141E-02
551277.7	4172867.93	2129.80964	2884.15713	772.21005	5882.62778	941.82477	2002.4621	2128.44325	1662.80201	432.25994	4567.5112	3225.9884	2541.11958	0.28584	0.29045	3.39E-03	3.25E-03	8.70E-04	5.07E-03	8.18E-04	1.74E-03	3.07E-03	1.70E-03	4.41E-04	5.55E-03	2.63E-03	2.07E-03	1.34E-04	1.38E-04	3.0851E-02
551276.93	4173007.7	2250.56108	3288.48009	688.93863	5085.3936	787.34428	2488.6528	2257.40654	1927.48385	390.60657	4275.07582	2598.10592	3128.92674	0.2922	0.29581	3.58E-03	3.70E-03	7.76E-04	4.39E-03	6.84E-04	2.16E-03	3.25E-03	1.97E-03	3.99E-04	5.19E-03	2.11E-03	2.55E-03	1.37E-04	1.40E-04	3.1037E-02
551518.25	4173360.94	2675.60634	3176.74794	616.02196	3546.93826	638.29339	3866.31531	2707.00787	1909.21435	352.4463	3241.9908	1675.54129	4663.62658	0.51356	0.5164	4.26E-03	3.58E-03	6.94E-04	3.06E-03	5.54E-04	3.36E-03	3.90E-03	1.95E-03	3.60E-04	3.94E-03	1.36E-03	3.80E-03	2.41E-04	2.45E-04	3.1287E-02
551742.08	4173358.55	4064.30005	2740.58502	593.24063	2558.14535	536.26695	3962.06096	4144.50986	1596.39525	345.83236	2371.98899	1278.58495	4862.57297	3.90264	3.40777	6.47E-03	3.09E-03	6.68E-04	2.21E-03	4.66E-04	3.44E-03	5.97E-03	1.63E-03	3.53E-04	2.88E-03	1.04E-03	3.96E-03	1.83E-03	1.62E-03	3.5608E-02
551326.64	4173146.48	2243.04058	3193.64989	643.74629	4559.82914	752.49062	3133.65064	2259.89367	1891.93341	363.40159	3831.51298	2340.00442	3842.13752	0.31513	0.31782	3.57E-03	3.60E-03	7.25E-04	3.93E-03	6.53E-04	2.72E-03	3.25E-03	1.93E-03	3.71E-04	4.65E-03	1.90E-03	3.13E-03	1.48E-04	1.51E-04	3.0736E-02
551310.1	4172746.09	2075.90935	2685.82398	805.45771	6034.18736	1081.88439	1865.4685	2071.67053	1547.69394	446.85007	4435.75504	3630.55717	2370.35359	0.27666	0.28194	3.30E-03	3.02E-03	9.07E-04	5.20E-03	9.39E-04	1.62E-03	2.98E-03	1.58E-03	4.56E-04	5.39E-03	2.95E-03	1.93E-03	1.30E-04	1.34E-04	3.0551E-02
551270.07	4172959.54	2203.75459	3143.30717	723.56547	5361.71971	827.16183	2272.87299	2206.85069	1825.1375	409.41628	4439.19177	2767.47204	2870.95127	0.28961	0.29374	3.51E-03	3.54E-03	8.15E-04	4.62E-03	7.18E-04	1.97E-03	3.18E-03	1.86E-03	4.18E-04	5.39E-03	2.25E-03	2.34E-03	1.36E-04	1.39E-04	3.0890E-02
551689.27	4173384.15	3604.61169	2879.22685	611.79667	2674.5339	546.48605	4123.30552	3664.58548	1691.52174	355.70882	2531.35161	1321.46932	5036.65475	4.94296	5.27681	5.74E-03	3.24E-03	6.89E-04	2.31E-03	4.75E-04	3.58E-03	5.28E-03	1.73E-03	3.63E-04	3.07E-03	1.08E-03	4.10E-03	2.32E-03	2.50E-03	3.6462E-02
551589.76	4173389.66	2883.87253	3123.98861	625.04882	3150.81022	587.68367	4099.69883	2921.88343	1875.58469	359.46593	2977.25395	1492.69108	4943.73114	0.73699	0.7423	4.59E-03	3.52E-03	7.04E-04	2.72E-03	5.10E-04	3.56E-03	4.21E-03	1.91E-03	3.67E-04	3.61E-03	1.21E-03	4.02E-03	3.45E-04	3.52E-04	3.1639E-02
551342.54	4172652.12	2113.07196	2600.62808	822.76138	6146.52195	1135.70523	1723.71248	2109.00103	1496.82253	455.32939	4460.51232	3763.85393	2213.68689	0.26102	0.26589	3.36E-03	2.93E-03	9.27E-04	5.30E-03	9.86E-04	1.50E-03	3.04E-03	1.53E-03	4.65E-04	5.42E-03	3.06E-03	1.80E-03	1.22E-04	1.26E-04	3.0560E-02
551320.72	4173129.74	2240.86976	3212.47024	638.37227	4575.76474	752.33356	3093.78344	2257.51919	1905.42817	360.53717	3821.81495	2370.34773	3802.81868	0.31187	0.31469	3.57E-03	3.62E-03	7.19E-04	3.95E-03	6.53E-04	2.69E-03	3.25E-03	1.95E-03	3.68E-04	4.64E-03	1.93E-03	3.09E-03	1.46E-04	1.49E-04	3.0712E-02
551612.2	4173395.36	3011.62104	3079.95974	624.63655	3003.51042	573.05376	4157.60816	3052.59549	1840.55527	360.27643	2863.29804	1434.82414	5026.98567	0.88152	0.88679	4.79E-03	3.47E-03	7.04E-04	2.59E-03	4.98E-04	3.61E-03	4.40E-03	1.88E-03	3.68E-04	3.48E-03	1.17E-03	4.09E-03	4.13E-04	4.20E-04	3.1874E-02
551317.77	4173121.37	2241.512	3226.46324	636.5659	4584.03729	751.64187	3067.93221	2257.91637	1914.85814	359.64034	3822.37951	2384.57118	3777.02309	0.31059	0.31324	3.57E-03	3.63E-03	7.17E-04	3.95E-03	6.53E-04	2.66E-03	3.25E-03	1.95E-03	3.67E-04	4.64E-03	1.94E-03	3.07E-03	1.46E-04	1.48E-04	3.0710E-02
551466.72	4173324.59	2555.76846	3197.01139	616.89513	3777.02927	655.12242	3685.67408	2579.97928	1925.15537	352.70631	3361.07823	1831.31802	4463.01825	0.42766	0.4301	4.07E-03	3.60E-03	6.95E-04	3.26E-03	5.69E-04	3.20E-03	3.72E-03	1.97E-03	3.60E-04	4.08E-03	1.49E-03	3.63E-03	2.00E-04	2.04E-04	3.1037E-02
551332.56	4173163.22	2245.09324	3179.67039	648.86648	4526.44648	748.64827	3152.47698	2261.8739	1882.2894	366.25678	3836.68829	2292.82138	3858.82164	0.31791	0.32051	3.57E-03	3.58E-03	7.31E-04	3.90E-03	6.50E-04	2.74E-03	3.26E-03	1.92E-03	3.74E-04	4.66E-03	1.87E-03	3.14E-03	1.49E-04	1.52E-04	3.0694E-02
551273.71	4172998.73	2233.0936	3242.9765	692.55194	5110.54568	790.42279	2429.3224	2239.08953	1896.94129	392.58449	4288.20174	2611.6988	3057.23589	0.28932	0.29326	3.55E-03	3.65E-03	7.80E-04	4.41E-03	6.86E-04	2.11E-03	3.22E-03	1.94E-03	4.01E-04	5.21E-03	2.13E-03	2.49E-03	1.36E-04	1.39E-04	3.0845E-02
551762.63	4173346.6	4192.62486	2687.9099	583.48622	2516.09992	531.26801	3891.66125	4280.0529	1563.88779	340.26045	2322.78884	1262.85135	4778.14936	1.94315	1.7794	6.67E-03	3.03E-03	6.57E-04	2.17E-03	4.61E-04	3.38E-03	6.16E-03	1.60E-03	3.47E-04	2.82E-03	1.03E-03	3.89E-03	9.11E-04	8.43E-04	3.3965E-02
551269.66	4172929.31	2167.14365	3044.11764	740.58065	5507.74507	854.7828	2159.48769	2168.50959	1762.17003	417.71242	4491.11486	2889.83576	2733.34041	0.28654	0.29079	3.45E-03	3.43E-03	8.34E-04	4.75E-03	7.42E-04	1.88E-03	3.12E-03	1.80E-03	4.26E-04	5.45E-03	2.35E-03	2.22E-03	1.34E-04	1.38E-04	3.0728E-02
551336.08	4173173.17	2245.34617	3172.26095	651.06091	4495.3041	744.22543	3153.11038	2261.95963	1877.05929	367.57394	3832.16017	2262.72151	3857.67047	0.31877	0.32179	3.57E-03	3.57E-03	7.33E-04	3.88E-03	6.46E-04	2.74E-03	3.26E-03	1.92E-03	3.75E-04	4.65E-03	1.84E-03	3.14E-03	1.49E-04	1.53E-04	3.0624E-02
551977.46	4173223.99	3910.90441	2758.6652	501.22957	2216.02776	440.01705	4474.21114	4012.71667	1599.42721	292.80301	2179.24966	1059.49096	5458.16957	0.35229	0.34593	6.22E-03	3.11E-03	5.65E-04	1.91E-03	3.82E-04	3.88E-03	5.78E-03	1.63E-03	2.99E-04	2.65E-03	8.62E-04	4.44E-03	1.65E-04	1.64E-04	3.2063E-02
551330.56	4172685.2	2077.45899	2640.96561	806.99056	6042.27449	1109.81236	1780.04269	2073.52169	1520.05635	446.55929	4423.4005	3672.85968	2275.62329	0.26492	0.26993	3.31E-03	2.97E-03	9.09E-04	5.21E-03	9.64E-04	1.55E-03	2.99E-03	1.55E-03	4.56E-04	5.37E-03	2.99E-03	1.85E-03	1.24E-04	1.28E-04	3.0367E-02
551476.34	4173333.65	2565.97225	3162.81818	611.42631	3711.95984	648.32974	3699.37374	2591.50501	1902.88556	349.52199	3314.14341	1792.29533	4474.80021	0.43768	0.44012	4.08E-03	3.56E-03	6.89E-04	3.20E-03	5.63E-04	3.21E-03	3.73E-03	1.94E-03	3.57E-04	4.02E-03	1.46E-03	3.64E-03	2.05E-04	2.09E-04	3.0880E-02
551271.85	4172892.42	2127.23767	2920.88844	754.79161	5685.84468	897.41354	2040.07692	2126.92964	1685.95699	423.60812	4506.30782	3055.71178	2587.25337	0.28279	0.28717	3.39E-03	3.29E-03	8.50E-04	4.90E-03	7.79E-04	1.77E-03	3.06E-03	1.72E-03	4.32E-04	5.47E-03	2.49E-03	2.11E-03	1.33E-04	1.36E-04	3.0528E-02
551270.48	4172989.77	2212.66181	3191.46122	695.49746	5128.57431	793.32101	2369.68734	2217.84559	1863.29567	394.1251	4292.09174	2624.65282	2984.90053	0.28649	0.28986	3.52E-03	3.59E-03	7.83E-04	4.42E-03	6.89E-04	2.06E-03	3.19E-03	1.90E-03	4.02E-04	5.21E-03	2.14E-03	2.43E-03	1.34E-04	1.37E-04	3.0614E-02
551294.66	4172792.7	2073.28456	2690.06468	789.30414	5950.19504	1024.10724	1880.70762	2069.58156	1550.94419	439.51593	4428.02034	3481.23773	2386.70644	0.27819	0.28328	3.30E-03	3.03E-03	8.89E-04	5.13E-03	8.89E-04	1.63E-03	2.98E-03	1.58E-03	4.49E-04	5.38E-03	2.83E-03	1.94E-03	1.30E-04	1.34E-04	3.0300E-02
551339.17	4173181.76	2239.22187	3155.18874	650.58134	4450.96037	738.43163	3140.78876	2255.65018	1866.91159	367.3766	3810.80569	2233.63821	3841.25929	0.31934	0.3218	3.56E-03	3.55E-03	7.33E-04	3.84E-03	6.41E-04	2.73E-03	3.25E-03	1.91E-03	3.75E-04	4.63E-03	1.82E-03	3.13E-03	1.50E-04	1.53E-04	3.0459E-02
551392.37	4173267.32	2373.73499	3263.8523	651.95614	4107.78744	691.718	3281.14574	2390.05246	1948.49955	371.48022	3648.79774	1996.96949	4014.89687	0.35293	0.35551	3.78E-03	3.68E-03	7.34E-04	3.54E-03	6.01E-04	2.85E-03	3.44E-03	1.99E-03	3.79E-04	4.43E-03	1.63E-03	3.27E-03	1.65E-04	1.68E-04	3.0647E-02
551702.11	4173382.28	3686.165	2812.1385	601.35731	2613.30381	538.36568	4022.89917	3749.96585	1646.28266	349.93705	2462.34946	1295.14397	4925.98667	10.14508	11.42872	5.87E-03	3.17E-03	6.77E-04	2.25E-03	4.67E-04	3.49E-03	5.40E-03	1.68E-03	3.57E-04	2.99E-03	1.05E-03	4.01E-03	4.75E-03	5.42E-03	4.1587E-02
551404.72	4173278.38	2396.64536	3255.76914	645.38542	4036.6095	686.40997	3330.65487	2413.68555	1952.0141	368.23566	3582.55949	1974.80925	4070.03183	0.36274	0.36482	3.81E-03	3.67E-03	7.27E-04	3.48E-03	5.96E-04	2.89E-03	3.48E-03	1.99E-03	3.76E-04	4.35E-03	1.61E-03	3.31E-03	1.70E-04	1.73E-04	3.0633E-02
551571.8	4173387.02	2784.77762	3111.70285	617.80482	3227.54893	593.37842	3980.40346	2820.64843	1870.58814	354.63688	3026.96322	1523.00171	4797.86798	0.64642	0.65056	4.43E-03	3.50E-03	6.96E-04	2.78E-03	5.15E-04	3.46E-03	4.06E-03	1.91E-03	3.62E-04	3.67E-03	1.24E-03	3.90E-03	3.03E-04	3.08E-04	3.1151E-02
551527.79	4173369.93	2671.09643	3135.40654	611.33606	3455.93425	628.39782	3835.15694	2703.21861	1883.87962	349.927	3177.32937	1629.38847	4626.56212	0.52356	0.52624	4.25E-03	3.53E-03	6.89E-04	2.98E-03	5.46E-04	3.33E-03	3.89E-03	1.92E-03	3.57E-04	3.86E-03	1.33E-03	3.77E-03	2.45E-04	2.49E-04	3.0944E-02
551485.96	4173342.71	2574.74626	3132.26149	607.10586	3646.67109	641.73985	3704.55216	2601.6322	1883.16735	347.02416	3270.05809	1752.27664	4477.62298	0.44789	0.45072	4.10E-03	3.53E-03	6.84E-04	3.14E-03	5.57E-04	3.22E-03	3.75E-03	1.92E-03	3.54E-04	3.97E-03	1.43E-03	3.64E-03	2.10E-04	2.14E-04	3.0715E-02
551414.42	4173287.52	2414.38632	3238.50323	638.06658	3972.99242	680.82685	3369.43041	2432.08313	1946.5602	364.40155	3523.52555	1944.61483	4112.85712	0.37007	0.37211	3.84E-03	3.65E-03	7.19E-04	3.43E-03	5.91E-04	2.93E-03	3.50E-03	1.99E-03	3.72E-04	4.28E-03	1.58E-03	3.35E-03	1.73E-04	1.76E-04	3.0570E-02
551326.27	4172693.54	2059.80133	2629.76435	799.07087	5966.38945	1096.04687	1783.97392	2055.90101	1514.11306	442.27996	4377.47049	3622.51089	2277.76677	0.26373	0.26871	3.28E-03	2.96E-03	9.00E-04	5.15E-03	9.52E-04	1.55E-03	2.96E-03	1.55E-03	4.52E-04	5.31E-03	2.95E-03	1.85E-03	1.24E-04	1.27E-04	3.0111E-02
551336.33	4172659.06	2078.4468	2581.42406	807.04993	6024.3601	1112.34316	1720.49203	2074.53291	1485.63495	446.61945	4389.19652	3677.2443	2206.66515	0.25814	0.26295	3.31E-03	2.91E-03	9.09E-04	5.20E-03	9.66E-04	1.49E-03	2.99E-03	1.52E-03	4.56E-04	5.33E-03	2.99E-03	1.80E-03	1.21E-04	1.25E-04	3.0102E-02
551357.01	4172627.28	2133.2573	2512.40445	827.99192	6043.60605	1138.08688	1660.26698	2129.07132	1448.95219	458.60428	4368.42623	3738.30461	2137.64951	0.24979	0.25425	3.39E-03	2.83E-03	9.33E-04	5.21E-03	9.88E-04	1.44E-03	3.07E-03	1.48E-03	4.68E-04	5.30E-03	3.04E-03	1.74E-03	1.17E-04	1.20E-04	3.0135E-02
551370.99	4173240.97	2307.54459	3218.93635	656.55265	4222.3202	704.59648	3185.68841	2323.18967	1911.79105	372.82568	3725.76667	2066.53102	3899.38315	0.3381	0.34077	3.67E-03	3.63E-03	7.39E-04	3.64E-03	6.12E-04	2.77E-03	3.35E-03	1.95E-03	3.81E-04	4.52E-03	1.68E-03	3.17E-03	1.58E-04	1.61E-04	3.0433E-02
551266.85	4172950.57	2166.2777	3064.02045	719.54086	5315.5514	824.22222	2205.84059	2168.81409	1777.49974	406.77346	4384.84188	2759.98115	2788.15044	0.28391	0.28798	3.45E-03	3.45E-03	8.10E-04	4.58E-03	7.16E-04	1.92E-03	3.12E-03	1.81E-03	4.15E-04	5.32E-03	2.25E-03	2.27E-03	1.33E-04	1.36E-04	3.0385E-02
551342.26	4173190.34	2233.17651	3138.79304	649.67128	4403.02136	731.95338	3124.52024	2249.38942	1857.32965	366.97044	3785.99133	2203.74842	3820.88919	0.31996	0.32306	3.55E-03	3.54E-03	7.32E-04	3.80E-03	6.36E-04	2.71E-03	3.24E-03	1.90E-03	3.75E-04	4.60E-03	1.79E-03	3.11E-03	1.50E-04	1.53E-04	3.0279E-02
551305.77	4172754.5	2052.07983	2646.69013	791.75754	5906.82837	1055.29783	1848.43865	2048.01923	1525.82656	439.59498	4356.88604	3538.903	2347.35254	0.27188	0.27697	3.27E-03	2.98E-03	8.92E-04	5.09E-03	9.16E-04	1.61E-03	2.95E-03	1.56E-03	4.49E-04	5.29E-03	2.88E-03	1.91E-03	1.27E-04	1.31E-04	3.0048E-02
551296.56	4172783.87	2059.50935	2662.78748	786.21578	5901.2437	1026.03305	1864.52266	2055.719	1535.38003	437.50864	4381.77837	3473.88899	2366.21857	0.2749	0.27993	3.28E-03	3.00E-03	8.85E-04	5.09E-03	8.91E-04	1.62E-03	2.96E-03	1.57E-03	4.47E-04	5.32E-03	2.83E-03	1.93E-03	1.29E-04	1.33E-04	3.0070E-02
551267.26	4172980.8	2189.1212	3134.69678	697.38821	5137.15808	795.77687	2309.73199	2193.55615	1826.90429	395.03203	4285.10384	2635.96318	2911.97006	0.28302	0.28691	3.48E-03	3.53E-03	7.85E-04	4.43E-03	6.91E-04	2.01E-03	3.16E-03	1.87E-03	4.03E-04	5.20E-03	2.15E-03	2.37E-03	1.33E-04	1.36E-04	3.0340E-02
551321.98	4172701.88	2047.66724	2622.72275	794.04717	5916.9329	1086.25369	1789.79656	2043.74699	1510.48993	439.6162	4346.70723	3589.91202	2282.58637	0.26359	0.26856	3.26E-03	2.95E-03	8.94E-04	5.10E-03	9.43E-04	1.55E-03	2.94E-03	1.54E-03	4.49E-04	5.28E-03	2.92E-03	1.86E-03	1.24E-04	1.27E-04	2.9948E-02
551281.95	4172827.81	2068.42484	2715.96393	768.93155	5832.24342	972.69116	1892.47292	2065.72288	1565.47731	429.3619	4414.34599	3314.69379	2402.34702	0.27678	0.28154	3.29E-03	3.06E-03	8.66E-04	5.03E-03	8.45E-04	1.64E-03	2.97E-03	1.60E-03	4.38E-04	5.36E-03	2.70E-03	1.96E-03	1.30E-04	1.33E-04	3.0021E-02
551599.36	4173397.22	2883.55066	3040.39552	615.30088	3034.03557	572.49392	4018.72914	2921.74345	1821.85629	354.23554	2875.69468	1445.25	4854.18848	0.75591	0.75876	4.59E-03	3.42E-03	6.93E-04	2.62E-03	4.97E-04	3.49E-03	4.21E-03	1.86E-03	3.62E-04	3.49E-03	1.18E-03	3.95E-03	3.54E-04	3.60E-04	3.1070E-02
551642.02	4173399.98	3158.06924	2947.6858	612.4688	2777.47029	552.21308	4080.88689	3203.53093	1750.34731	354.46575	2678.2936	1361.05106	4955.95453	1.21303	1.223	5.03E-03	3.32E-03	6.90E-04	2.40E-03	4.79E-04	3.54E-03	4.61E-03	1.79E-03	3.62E-04	3.25E-03	1.11E-03	4.03E-03	5.69E-04	5.80E-04	3.1756E-02
551774.6	4173341.91	4178.06795	2621.02649	571.45763	2468.55074	523.69092	3782.8153	4266.8259	1525.53896	333.17585	2271.58041	1244.03062	4644.47876	1.49395	1.39242	6.65E-03	2.95E-03	6.44E-04	2.13E-03	4.55E-04	3.28E-03	6.14E-03	1.56E-03	3.40E-04	2.76E-03	1.01E-03	3.78E-03	7.00E-04	6.60E-04	3.3065E-02
551654.98	4173398.1	3251.44965	2912.25551	610.32513	2732.46329	547.89173	4072.73261	3299.82343	1724.69244	353.67753	2622.19482	1342.89889	4954.2453	1.54209	1.56322	5.17E-03	3.28E-03	6.87E-04	2.36E-03	4.76E-04	3.54E-03	4.75E-03	1.76E-03	3.61E-04	3.18E-03	1.09E-03	4.03E-03	7.23E-04	7.41E-04	3.2156E-02
551718.55	4172571.11	4177.15852	1725.6643	1320.41049	3815.98948	1877.42731	1190.05526	4139.97909	1021.21767	707.79984	2901.77593	3928.07604	1596.1423	0.15644	0.15877	6.65E-03	1.94E-03	1.49E-03	3.29E-03	1.63E-03	1.03E-03	5.96E-03	1.04E-03	7.23E-04	3.52E-03	3.20E-03	1.30E-03	7.33E-05	7.52E-05	3.1927E-02
551298.69	4172773.93	2048.01109	2641.25569	784.3516	5865.40679	1030.61513	1850.67021	2044.13682	1522.99339	436.14501	4345.0919	3475.46255	2348.89901	0.27218	0.27718	3.26E-03	2.97E-03	8.83E-04	5.06E-03	8.95E-04	1.61E-03	2.94E-03	1.55E-03	4.45E-04	5.27E-03	2.83E-03	1.91E-03	1.28E-04	1.31E-04	2.9895E-02
551345.35	4173198.93	2228.87986	3125.59813	648.6612	4354.43965	725.06223	3107.38703	2244.84684	1849.76739	366.56661	3760.51857	2173.66845	3800.13159	0.32115	0.32421	3.55E-03	3.52E-03	7.31E-04	3.76E-03	6.30E-04	2.70E-03	3.23E-03	1.89E-03	3.74E-04	4.57E-03	1.77E-03	3.09E-03	1.51E-04	1.54E-04	3.0108E-02
551736.78	4172581.29	4187.50874	1691.46572	1266.03931	3967.10947	1812.75192	1160.52005	4151.19485	998.55082	679.97606	2896.92858	4003.20163	1554.93476	0.17098	0.17414	6.66E-03	1.91E-03	1.43E-03	3.42E-03	1.57E-03	1.01E-03	5.98E-03	1.02E-03	6.94E-04	3.52E-03	3.26E-03	1.27E-03	8.01E-05	8.25E-05	3.1893E-02
551290.27	4173073.81	2213.95664	3227.52341	634.41192	4614.42989	739.83784	2745.44199	2226.4595	1913.8879	359.19113	3859.64715	2393.44982	3420.05611	0.29056	0.29362	3.52E-03	3.64E-03	7.15E-04	3.98E-03	6.42E-04	2.38E-03	3.21E-03	1.95E-03	3.67E-04	4.69E-03	1.95E-03	2.78E-03	1.36E-04	1.39E-04	3.0098E-02
551734.15	4173368.66	3905.1267	2694.82904	585.00823	2523.92141	528.32721	3860.92958	3979.5142	1570.94946	340.85364	2346.11757	1261.4753	4740.62996	6.0677	5.05361	6.21E-03	3.04E-03	6.59E-04	2.18E-03	4.59E-04	3.35E-03	5.73E-03	1.60E-03	3.48E-04	2.85E-03	1.03E-03	3.86E-03	2.84E-03	2.40E-03	3.6551E-02
551667.95	4173396.21	3348.24162	2869.04975	605.89879	2682.9253	542.573	4039.95429	3399.92044	1693.44097	351.56892	2562.13417	1322.28316	4924.67664	2.05283	2.08182	5.33E-03	3.23E-03	6.82E-04	2.31E-03	4.71E-04	3.51E-03	4.90E-03	1.73E-03	3.59E-04	3.11E-03	1.08E-03	4.01E-03	9.62E-04	9.87E-04	3.2662E-02
551495.58	4173351.78	2570.83245	3088.16728	601.327	3569.68124	633.69637	3682.93182	2598.8634	1856.31143	343.70576	3213.67204	1709.91483	4448.58153	0.45726	0.46002	4.09E-03	3.48E-03	6.77E-04	3.08E-03	5.50E-04	3.20E-03	3.74E-03	1.90E-03	3.51E-04	3.90E-03	1.39E-03	3.62E-03	2.14E-04	2.18E-04	3.0408E-02

551629.05	4173401.87	3056.93375	2965.5894	611.72921	2816.11149	555.23525	4050.6441	3099.59206	1765.59396	353.49286	2724.88433	1377.11017	4911.96844	0.99962	1.00498	4.86E-03	3.34E-03	6.89E-04	2.43E-03	4.82E-04	3.52E-03	4.46E-03	1.80E-03	3.61E-04	3.31E-03	1.12E-03	4.00E-03	4.69E-04	4.76E-04	3.1320E-02
551283.82	4173055.91	2210.85211	3231.20982	640.83686	4672.51237	742.89869	2647.12722	2221.79122	1912.49533	363.08934	3920.74821	2415.45736	3308.29482	0.28774	0.29069	3.52E-03	3.64E-03	7.22E-04	4.03E-03	6.45E-04	2.30E-03	3.20E-03	1.95E-03	3.71E-04	4.76E-03	1.97E-03	2.69E-03	1.35E-04	1.38E-04	3.0066E-02
551755.08	4173356.66	4043.43383	2641.59723	575.97477	2483.09303	523.85823	3791.28871	4125.11369	1537.66803	335.73508	2294.72079	1246.54905	4658.12187	2.41642	2.16465	6.43E-03	2.98E-03	6.49E-04	2.14E-03	4.55E-04	3.29E-03	5.94E-03	1.57E-03	3.43E-04	2.79E-03	1.01E-03	3.79E-03	1.13E-03	1.03E-03	3.3550E-02
551725.69	4173374.32	3824.2668	2705.52153	586.10521	2531.38811	528.08613	3866.62625	3895.15292	1578.45966	341.36359	2360.73408	1263.05138	4746.22284	11.13553	8.82643	6.09E-03	3.05E-03	6.60E-04	2.18E-03	4.59E-04	3.36E-03	5.61E-03	1.61E-03	3.49E-04	2.87E-03	1.03E-03	3.86E-03	5.22E-03	4.18E-03	4.0520E-02
551270.13	4172881.85	2086.94084	2833.85117	744.8262	5606.57048	894.10164	1978.71879	2086.3056	1635.28249	417.52501	4410.06542	3038.94433	2510.35903	0.27552	0.27979	3.32E-03	3.19E-03	8.39E-04	4.84E-03	7.76E-04	1.72E-03	3.00E-03	1.67E-03	4.26E-04	5.35E-03	2.47E-03	2.04E-03	1.29E-04	1.33E-04	2.9913E-02
551293.5	4173082.76	2204.57733	3202.78515	628.62542	4561.99213	735.59845	2781.91215	2217.82156	1900.44012	355.7836	3809.7504	2373.55765	3458.92487	0.29156	0.29475	3.51E-03	3.61E-03	7.08E-04	3.93E-03	6.39E-04	2.42E-03	3.19E-03	1.94E-03	3.63E-04	4.63E-03	1.93E-03	2.82E-03	1.37E-04	1.40E-04	2.9958E-02
551443.53	4173314.93	2457.014	3140.43267	611.96256	3771.91004	649.91891	3471.88172	2477.77091	1892.13612	349.89922	3341.5593	1845.8434	4220.00827	0.38951	0.3921	3.91E-03	3.54E-03	6.89E-04	3.25E-03	5.64E-04	3.01E-03	3.57E-03	1.93E-03	3.57E-04	4.06E-03	1.50E-03	3.43E-03	1.83E-04	1.86E-04	3.0187E-02
551301.45	4172762.9	2035.75788	2619.95042	781.70419	5820.8161	1034.48743	1836.05675	2031.83911	1510.80869	434.33486	4305.32992	3471.0751	2330.7699	0.26891	0.27387	3.24E-03	2.95E-03	8.80E-04	5.02E-03	8.98E-04	1.59E-03	2.93E-03	1.54E-03	4.43E-04	5.23E-03	2.82E-03	1.90E-03	1.26E-04	1.30E-04	2.9700E-02
551296.72	4173091.71	2200.30498	3184.75111	625.77169	4531.78645	734.11032	2821.96187	2214.1919	1890.01211	354.01652	3779.46479	2360.01003	3501.95465	0.29255	0.29526	3.50E-03	3.59E-03	7.05E-04	3.91E-03	6.37E-04	2.45E-03	3.19E-03	1.93E-03	3.61E-04	4.59E-03	1.92E-03	2.85E-03	1.37E-04	1.40E-04	2.9905E-02
551537.32	4173378.91	2650.82523	3072.78694	603.94549	3353.11519	616.74027	3775.71311	2683.26084	1846.45275	345.82329	3095.78466	1581.59086	4555.42886	0.53082	0.53396	4.22E-03	3.46E-03	6.80E-04	2.89E-03	5.36E-04	3.28E-03	3.86E-03	1.89E-03	3.53E-04	3.76E-03	1.29E-03	3.71E-03	2.49E-04	2.53E-04	3.0422E-02
551559.49	4173387.61	2705.57402	3063.34188	607.34439	3241.23805	591.59962	3847.42692	2739.75377	1841.27551	348.26877	3023.2234	1528.99117	4640.16573	0.58772	0.58964	4.31E-03	3.45E-03	6.84E-04	2.80E-03	5.14E-04	3.34E-03	3.95E-03	1.88E-03	3.56E-04	3.67E-03	1.24E-03	3.78E-03	2.75E-04	2.79E-04	3.0516E-02
551264.03	4172971.84	2159.52471	3068.8141	696.49157	5121.61897	795.66143	2246.91178	2163.28702	1785.45397	394.31835	4256.95836	2638.65206	2835.49742	0.27891	0.28248	3.44E-03	3.46E-03	7.84E-04	4.42E-03	6.91E-04	1.95E-03	3.12E-03	1.82E-03	4.03E-04	5.17E-03	2.15E-03	2.31E-03	1.31E-04	1.34E-04	2.9965E-02
551282.63	4172818.65	2049.12806	2673.04538	765.28014	5779.26688	973.82752	1866.55711	2046.21565	1541.04088	427.0826	4357.7657	3310.28346	2369.32923	0.2732	0.27796	3.26E-03	3.01E-03	8.62E-04	4.98E-03	8.46E-04	1.62E-03	2.95E-03	1.57E-03	4.36E-04	5.29E-03	2.69E-03	1.93E-03	1.28E-04	1.32E-04	2.9712E-02
551287.05	4173064.86	2201.69108	3212.44931	632.85586	4604.96554	736.4972	2685.06924	2213.48561	1904.01014	358.44856	3858.52968	2391.14388	3350.17494	0.28795	0.29104	3.50E-03	3.62E-03	7.13E-04	3.97E-03	6.40E-04	2.33E-03	3.19E-03	1.94E-03	3.66E-04	4.68E-03	1.95E-03	2.73E-03	1.35E-04	1.38E-04	2.9904E-02
551265.97	4172916.7	2109.10096	2924.35549	728.54731	5407.95338	846.82902	2067.76677	2109.93875	1691.62211	410.25886	4375.10464	2857.8805	2619.22795	0.27648	0.28059	3.36E-03	3.29E-03	8.21E-04	4.66E-03	7.35E-04	1.80E-03	3.04E-03	1.73E-03	4.19E-04	5.31E-03	2.33E-03	2.13E-03	1.30E-04	1.33E-04	2.9881E-02
551280.6	4173046.95	2199.89464	3212.17904	641.86923	4680.92649	741.97856	2588.77098	2210.00571	1898.72886	363.77172	3933.84163	2417.95775	3239.77424	0.28499	0.28858	3.50E-03	3.62E-03	7.23E-04	4.04E-03	6.44E-04	2.25E-03	3.18E-03	1.94E-03	3.71E-04	4.78E-03	1.97E-03	2.64E-03	1.34E-04	1.37E-04	2.9914E-02
551680.91	4173394.32	3431.85693	2811.53876	598.82874	2628.57071	536.05441	3972.84717	3486.83541	1654.36259	347.83185	2495.98201	1299.99891	4853.02266	2.89989	2.96762	5.46E-03	3.17E-03	6.74E-04	2.27E-03	4.65E-04	3.45E-03	5.02E-03	1.69E-03	3.55E-04	3.03E-03	1.06E-03	3.95E-03	1.36E-03	1.41E-03	3.3353E-02
551330.11	4172665.99	2043.14775	2555.67865	791.04925	5889.22521	1088.19802	1714.34081	2039.37713	1470.97235	437.77638	4307.40208	3585.8044	2195.76773	0.25459	0.25931	3.25E-03	2.88E-03	8.91E-04	5.08E-03	9.45E-04	1.49E-03	2.94E-03	1.50E-03	4.47E-04	5.23E-03	2.92E-03	1.79E-03	1.19E-04	1.23E-04	2.9595E-02
551505.2	4173360.84	2574.48508	3060.34159	598.0638	3498.62377	626.5161	3671.19328	2603.58631	1838.99596	341.91226	3167.92297	1668.00016	4433.33316	0.46837	0.47067	4.10E-03	3.45E-03	6.74E-04	3.02E-03	5.44E-04	3.19E-03	3.75E-03	1.88E-03	3.49E-04	3.85E-03	1.36E-03	3.61E-03	2.20E-04	2.23E-04	3.0196E-02
551277.38	4173038	2194.36299	3199.25793	646.12989	4715.2968	744.53724	2537.17193	2203.63083	1887.7801	366.26252	3966.47509	2430.08704	3179.27766	0.28311	0.28672	3.49E-03	3.60E-03	7.28E-04	4.07E-03	6.46E-04	2.20E-03	3.17E-03	1.93E-03	3.74E-04	4.82E-03	1.98E-03	2.59E-03	1.33E-04	1.36E-04	2.9863E-02
551274.12	4173028.96	2189.91913	3184.99353	652.00044	4762.19672	749.05009	2487.55783	2198.29934	1875.52111	369.61851	4007.03022	2447.83607	3120.88214	0.28144	0.28508	3.48E-03	3.59E-03	7.34E-04	4.11E-03	6.50E-04	2.16E-03	3.17E-03	1.91E-03	3.77E-04	4.86E-03	1.99E-03	2.54E-03	1.32E-04	1.35E-04	2.9845E-02
551616.08	4173403.75	2948.28924	2963.20223	607.85441	2896.34781	556.83688	3980.57921	2988.22853	1768.7178	350.68318	2759.53227	1390.87265	4820.89425	0.84471	0.84762	4.69E-03	3.34E-03	6.85E-04	2.50E-03	4.84E-04	3.46E-03	4.30E-03	1.81E-03	3.58E-04	3.35E-03	1.13E-03	3.92E-03	3.96E-04	4.02E-04	3.0822E-02
551376.41	4173254.79	2288.94348	3161.37152	644.10651	4092.98738	688.49308	3133.0686	2304.32212	1881.83283	366.2192	3618.74243	2007.32827	3836.26061	0.33508	0.33762	3.64E-03	3.56E-03	7.25E-04	3.53E-03	5.98E-04	2.72E-03	3.32E-03	1.92E-03	3.74E-04	4.39E-03	1.63E-03	3.12E-03	1.57E-04	1.60E-04	2.9856E-02
551348.44	4173207.51	2210.72616	3087.6439	643.44761	4278.51816	715.75507	3068.90603	2226.42234	1828.93152	363.74975	3704.87944	2137.52374	3752.68433	0.31987	0.32194	3.52E-03	3.48E-03	7.25E-04	3.69E-03	6.21E-04	2.66E-03	3.21E-03	1.87E-03	3.71E-04	4.50E-03	1.74E-03	3.05E-03	1.50E-04	1.53E-04	2.9735E-02
551347.13	4172633.8	2079.72969	2487.89933	803.80306	5898.92652	1103.44695	1650.84997	2075.89829	1433.92921	445.1798	4283.28274	3625.28764	2123.40441	0.2462	0.2506	3.31E-03	2.80E-03	9.05E-04	5.09E-03	9.58E-04	1.43E-03	2.99E-03	1.46E-03	4.54E-04	5.20E-03	2.95E-03	1.73E-03	1.15E-04	1.19E-04	2.9516E-02
551263.62	4172941.61	2122.77673	2976.31569	711.85849	5241.06826	816.81582	2135.53996	2124.83779	1725.4696	402.07788	4308.29333	2736.81156	2700.93705	0.27664	0.28061	3.38E-03	3.35E-03	8.02E-04	4.52E-03	7.09E-04	1.85E-03	3.06E-03	1.76E-03	4.10E-04	5.23E-03	2.23E-03	2.20E-03	1.30E-04	1.33E-04	2.9766E-02
551299.95	4173100.67	2183.58232	3143.57837	619.20687	4469.96429	728.78756	2845.41649	2198.09065	1865.97956	350.18225	3723.27153	2335.4902	3523.61353	0.2928	0.29587	3.47E-03	3.54E-03	6.97E-04	3.86E-03	6.33E-04	2.47E-03	3.17E-03	1.91E-03	3.58E-04	4.52E-03	1.90E-03	2.87E-03	1.37E-04	1.40E-04	2.9665E-02
551270.89	4173020	2179.94909	3158.42495	656.47779	4796.24234	752.30843	2434.58509	2187.49699	1856.08491	372.16787	4034.51712	2461.58198	3057.70564	0.27944	0.28275	3.47E-03	3.56E-03	7.39E-04	4.14E-03	6.53E-04	2.11E-03	3.15E-03	1.89E-03	3.80E-04	4.90E-03	2.00E-03	2.49E-03	1.31E-04	1.34E-04	2.9749E-02
551309.12	4172726.89	2013.52672	2583.90055	778.28317	5766.64629	1052.121	1793.58531	2009.59398	1489.33255	431.43931	4248.83748	3485.11999	2281.00851	0.26192	0.26683	3.20E-03	2.91E-03	8.77E-04	4.97E-03	9.14E-04	1.56E-03	2.89E-03	1.52E-03	4.40E-04	5.16E-03	2.84E-03	1.86E-03	1.23E-04	1.26E-04	2.9390E-02
551756.43	4172591.55	4053.18651	1636.09336	1178.5504	4153.77872	1727.06747	1115.70818	4020.13488	962.98853	634.94321	2880.38796	4078.21558	1492.21492	0.18626	0.19022	6.45E-03	1.84E-03	1.33E-03	3.58E-03	1.50E-03	9.69E-04	5.79E-03	9.83E-04	6.48E-04	3.50E-03	3.32E-03	1.21E-03	8.73E-05	9.02E-05	3.1299E-02
551283.32	4172809.5	2031.39471	2634.87098	762.0871	5731.28159	975.29493	1843.59262	2028.29032	1519.30435	425.0298	4305.98719	3306.96605	2340.03515	0.26989	0.27464	3.23E-03	2.97E-03	8.58E-04	4.94E-03	8.47E-04	1.60E-03	2.92E-03	1.55E-03	4.34E-04	5.23E-03	2.69E-03	1.90E-03	1.26E-04	1.30E-04	2.9435E-02
551514.83	4173369.9	2583.35522	3041.7	596.18693	3427.43208	619.23058	3666.74681	2613.42093	1826.78592	340.99936	3125.41426	1626.03826	4428.39484	0.48119	0.48337	4.11E-03	3.43E-03	6.71E-04	2.96E-03	5.38E-04	3.18E-03	3.76E-03	1.87E-03	3.48E-04	3.79E-03	1.32E-03	3.60E-03	2.26E-04	2.29E-04	3.0039E-02
551453.23	4173324.06	2452.2145	3076.17104	600.37702	3687.52333	639.74618	3470.68787	2474.14534	1853.32154	343.20268	3263.84808	1807.88557	4211.41515	0.39547	0.39803	3.90E-03	3.46E-03	6.76E-04	3.18E-03	5.55E-04	3.01E-03	3.56E-03	1.89E-03	3.50E-04	3.96E-03	1.47E-03	3.43E-03	1.85E-04	1.89E-04	2.9833E-02
551586.51	4173399.09	2777.068	2999.03802	605.16622	3056.43144	571.04367	3881.36877	2813.03626	1799.28789	347.86712	2882.28454	1451.77122	4687.1441	0.66593	0.66927	4.42E-03	3.38E-03	6.82E-04	2.64E-03	4.96E-04	3.37E-03	4.05E-03	1.84E-03	3.55E-04	3.50E-03	1.18E-03	3.81E-03	3.12E-04	3.17E-04	3.0348E-02
551267.67	4173011.03	2168.12464	3126.40223	661.05899	4830.06918	756.0086	2381.79221	2174.83545	1833.50879	374.72982	4058.71189	2476.76358	2994.36974	0.27727	0.28038	3.45E-03	3.52E-03	7.45E-04	4.17E-03	6.56E-04	2.07E-03	3.13E-03	1.87E-03	3.83E-04	4.93E-03	2.02E-03	2.44E-03	1.30E-04	1.33E-04	2.9635E-02
551989.27	4173224.29	3761.26861	2677.8902	485.62459	2154.80865	427.14605	4255.03407	3858.99211	1546.00409	283.59372	2117.1503	1030.10006	5197.36068	0.33345	0.32751	5.99E-03	3.02E-03	5.47E-04	1.86E-03	3.71E-04	3.69E-03	5.56E-03	1.58E-03	2.90E-04	2.57E-03	8.38E-04	4.23E-03	1.56E-04	1.55E-04	3.0847E-02
551693.88	4173392.44	3503.59717	2744.37696	589.51047	2570.41423	528.50477	3880.10746	3561.8255	1610.143	342.71494	2426.55805	1275.88202	4749.64488	4.71007	4.91077	5.58E-03	3.09E-03	6.64E-04	2.22E-03	4.59E-04	3.37E-03	5.13E-03	1.64E-03	3.50E-04	2.95E-03	1.04E-03	3.87E-03	2.21E-03	2.33E-03	3.4883E-02
551260.8	4172962.87	2126.03712	2997.75396	693.78697	5088.77453	793.7814	2183.65068	2129.20219	1741.91871	392.5569	4214.80931	2635.05758	2757.77089	0.27501	0.27855	3.38E-03	3.38E-03	7.81E-04	4.39E-03	6.89E-04	1.90E-03	3.07E-03	1.78E-03	4.01E-04	5.12E-03	2.14E-03	2.24E-03	1.29E-04	1.32E-04	2.9527E-02
551304.83	4172735.23	2002.56603	2567.07322	772.45604	5715.80625	1038.9621	1790.17687	1998.65724	1479.93798	428.44155	4215.97686	3446.23737	2275.1501	0.26095	0.2658	3.19E-03	2.89E-03	8.70E-04	4.93E-03	9.02E-04	1.55E-03	2.88E-03	1.51E-03	4.37E-04	5.12E-03	2.80E-03	1.85E-03	1.22E-04	1.26E-04	2.9183E-02
551268.4	4172871.28	2049.93428	2753.0847	735.74277	5533.35397	892.8429	1922.92649	2048.98272	1588.46123	412.0024	4319.17705	3027.76138	2440.25033	0.26923	0.27342	3.26E-03	3.10E-03	8.29E-04	4.77E-03	7.75E-04	1.67E-03	2.95E-03	1.62E-03	4.21E-04	5.24E-03	2.46E-03	1.99E-03	1.26E-04	1.30E-04	2.9351E-02
551264.44	4173002.07	2152.76288	3086.70241	664.79906	4856.40539	759.32134	2327.73879	2158.66798	1806.66739	376.78732	4073.6657	2490.55084	2929.12501	0.27453	0.27817	3.43E-03	3.48E-03	7.49E-04	4.19E-03	6.59E-04	2.02E-03	3.11E-03	1.84E-03	3.85E-04	4.95E-03	2.03E-03	2.38E-03	1.29E-04	1.32E-04	2.9474E-02
552063.28	4173187.41	4028.05389	2728.26746	473.88895	2173.8017	408.36169	3908.2441	4136.93824	1566.78557	277.73427	2148.08477	1000.74299	4823.54307	0.25594	0.25222	6.41E-03	3.07E-03	5.34E-04	1.87E-03	3.55E-04	3.39E-03	5.96E-03	1.60E-03	2.84E-04	2.61E-03	8.14E-04	3.93E-03	1.20E-04	1.20E-04	3.1067E-02
551284	4172800.34	2014.13943	2599.46085	758.74107	5682.7249	976.52463	1822.26351	2010.87364	1499.12259	422.87063	4255.399	3301.74702	2312.82841	0.2666	0.27133	3.21E-03	2.93E-03	8.55E-04	4.90E-03	8.48E-04	1.58E-03	2.90E-03	1.53E-03	4.32E-04	5.17E-03	2.69E-03	1.88E-03	1.25E-04	1.29E-04	2.9166E-02
551351.53	4173216.1	2192.19841	3048.83102	637.6354	4199.49129	705.91134	3027.69987	2207.60983	1807.86518	360.62727	3645.38543	2100.68041	3702.34515	0.316	0.31868	3.49E-03	3.43E-03	7.18E-04	3.62E-03	6.13E-04	2.63E-03	3.18E-03	1.85E-03	3.68E-04	4.43E-03	1.71E-03	3.01E-03	1.48E-04	1.51E-04	2.9345E-02
551462.93	4173333.2	2454.21609	3027.80487	592.09394	3616.86313	631.6726	3475.49823	2477.3676	1822.88363	338.37533	3204.87	1770.74018	4211.40213	0.40303	0.40511	3.91E-03	3.41E-03	6.67E-04	3.12E-03	5.48E-04	3.02E-03	3.57E-03	1.86E-03	3.45E-04	3.89E-03	1.44E-03	3.43E-03	1.89E-04	1.92E-04	2.9582E-02
551472.63	4173342.34	2473.88491	3013.21002	589.54957	3569.68913	627.1116	3504.01313	2498.44375	1811.9584	336.8966	3177.46259	1735.48536	4242.27426	0.41296	0.41543	3.94E-03	3.39E-03	6.64E-04	3.08E-03	5.45E-04	3.04E-03	3.60E-03	1.85E-03	3.44E-04	3.86E-03	1.41E-03	3.45E-03	1.94E-04	1.97E-04	2.9565E-02
551334.88	4172645.94	2029.55035	2481.00126	782.79599	5778.69224	1074.75324	1656.16366	2025.92352	1428.75973	433.41137	4217.93978	3528.82231	2126.16555	0.24523	0.24965	3.23E-03	2.79E-03	8.82E-04	4.98E-03	9.33E-04	1.44E-03	2.92E-03	1.46E-03	4.42E-04	5.12E-03	2.87E-03	1.73E-03	1.15E-04	1.18E-04	2.9035E-02
551303.17	4173109.62	2151.6863	3074.65988	607.80195	4368.01686	718.48918	2847.10172	2166.71483	1825.67759	343.59447	3633.9786	2297.05947	3517.64666	0.29178	0.29502	3.42E-03	3.46E-03	6.85E-04	3.77E-03	6.24E-04	2.47E-03	3.12E-03	1.86E-03	3.51E-04	4.41E-03	1.87E-03	2.86E-03	1.37E-04	1.40E-04	2.9190E-02
551568.94	4173396.51	2684.55195	2984.26749	598.06627	3125.66526	576.14869	3770.59963	2718.57361	1792.59389	343.17904	2925.41886	1479.51514	4551.43042	0.59217	0.59498	4.27E-03	3.36E-03	6.74E-04	2.70E-03	5.00E-04	3.27E-03	3.92E-03	1.83E-03	3.50E-04	3.55E-03	1.20E-03	3.70E-03	2.78E-04	2.82E-04	2.9891E-02
551747.27	4173366.75	3883.40889	2590.02816	567.957	2450.30296	516.53623	3685.53616	3959.19922	1509.35175	330.88586	2264.07279	1231.52165	4529.43987	3.2092	2.78168	6.18E-03	2.92E-03	6.40E-04	2.11E-03	4.49E-04	3.20E-03	5.70E-03	1.54E-03	3.38E-04	2.75E-03	1.00E-03	3.69E-03	1.50E-03	1.32E-03	3.3338E-02
551603.12	4173405.64	2824.62292	2931.60832	599.85182	2929.47363	556.78806	3861.00249	2861.80867	1754.92469	345.41595	2775.90586	1402.00137	4670.46512	0.72539	0.72666	4.49E-03	3.30E-03	6.76E-04	2.53E-03	4.83E-04	3.35E-03	4.12E-03	1.79E-03	3.53E-04	3.37E-03	1.14E-03	3.80E-03	3.40E-04	3.44E-04	3.0097E-02
551261.22	4172993.1	2134.98599	3041.93441	668.12467	4877.97349	762.7077	2273.66789	2140.11655	1777.22139	378.54895	4081.5067	2504.6414	2863.61467	0.27213	0.27548	3.40E-03	3.43E-03	7.52E-04	4.21E-03	6.62E-04	1.97E-03	3.08E-03	1.81E-03	3.86E-04	4.95E-03	2.04E-03	2.33E-03	1.28E-04	1.31E-04	2.9284E-02
551262.53	4172895.66	2052.61715	2794.79595	722.26213	5377.03198	856.74469	1964.57073	2052.61029	1614.41332	405.4816	4277.25556	2891.8157	2491.32124	0.26818	0.27222	3.27E-03	3.15E-03	8.13E-04	4.64E-03	7.44E-04	1.71E-03	2.96E-03	1.65E-03	4.14E-04	5.19E-03	2.35E-03	2.03E-03	1.26E-04	1.29E-04	2.9161E-02
551524.45	4173378.96	2571.8894	2995.51644	590.68036	3338.38211	609.43228	3626.60901	2602.49761	1799.00652	337.97996	3059.6947	1581.41738	4380.0744	0.48841	0.49063	4.09E-03	3.37E-03	6.65E-04	2.88E-03	5.29E-04	3.15E-03	3.75E-03	1.84E-03	3.45E-04	3.71E-03	1.29E-03	3.56E-03	2.29E-04	2.33E-04	2.9646E-02
551395.25	4173281.64	2302.02603	3105.53203	625.04475	3896.84384	666.64199	3141.10848	2317.95858	1860.20563	356.39068	3450.79949	1919.12648	3843.05939	0.3415	0.34383	3.66E-03	3.50E-03	7.04E-04	3.36E-03	5.79E-04	2.73E-03	3.34E-03	1.90E-03	3.64E-04	4.19E-03	1.56E-03	3.13E-03	1.60E-04	1.63E-04	2.9335E-02
551414.29	4173299.57	2339.19471	3079.32078	611.97304	3785.7527	648.5344	3218.82961	2356.47289	1852.53301	349.56202	3348.47276	1866.19101	3929.84744	0.35459	0.35647	3.72E-03	3.47E-03	6.89E-04	3.26E-03	5.63E-04	2.79E-03	3.39E-03	1.89E-03	3.57E-04	4.07E-03	1.52E-03	3.20E-03	1.66E-04	1.69E-04	2.9262E-02
551706.84	4173390.55	3562.30148	2671.37342	578.41829	2509.57897	520.11095	3769.82028	3623.68685	1563.05683	336.46872	2356.43159	1250.32279	4624.06506	9.76219	6.2883	5.67E-03	3.01E-03	6.51E-04	2.16E-03	4.52E-04	3.27E-03	5.22E-03	1.60E-03	3.44E-04	2.86E-03	1.02E-03	3.76E-03	4.58E-03	2.98E-03	3.7573E-02
551260.39	4172932.64	2076.71709	2885.13731	702.0924	5154.8384	807.42284	2064.5625	2078.3852	1671.68718	396.19461	4219.37586	2703.23064	2612.69172	0.26867	0.27253	3.30E-03	3.25E-03	7.91E-04	4.45E-03	7.01E-04	1.79E-03	2.99E-03	1.71E-03	4.04E-04	5.12E-03	2.20E-03	2.13E-03	1.26E-04	1.29E-04	2.9092E-02
551768.07	4173354.76	3982.78834	2537.59743	557.76251	2407.82599	511.09136	3614.35235	4064.51736	1477.4883	325.00624	2216.33462	1215.01462	4443.11932	1.6892	1.5452	6.34E-03	2.86E-03	6.28E-04	2.08E-03	4.44E-04	3.14E-03	5.85E-03	1.51E-03	3.32E-04	2.69E-03	9.89E-04	3.62E-03	7.92E-04	7.32E-04	3.1996E-02
551646.22	4173408.33	3083.80139	2823.40563	593.69171	2676.46684	535.67908	3878.00266	3128.06304	1674.51695	343.61433	2574.13921	1317.88174	4718.28686	1.14547	1.14936	4.91E-03	3.18E-03	6.69E-04	2.31E-03	4.65E-04	3.37E-03	4.50E-03	1.71E-03	3.51E-04	3.13E-03	1.07E-03	3.84E-03	5.37E-04	5.45E-04	3.0581E-02
551404.77	4173290.61	2311.46692	3080.66206	616.90333	3828.47703	653.96016	3165.27593	2327.94137	1851.18545	352.09917	3385.15233	1890.53701	3868.07459	0.3468	0.34928	3.68E-03	3.47E-03	6.95E-04	3.30E-03	5.68E-04	2.75E-03	3.35E-03	1.89E-03	3.59E-04	4.11E-03	1.54E-03	3.15E-03	1.63E-04	1.66E-04	2.9187E-02
551316.93	4172690.6	1984.84934	2518.38945	764.84317	5648.33528	1045.15642	1721.98251	1981.24486	1450.79679	423.45946	4161.67591	3425.82617	2197.16082	0.25023	0.25483	3.16E-03	2.84E-03	8.61E-04	4.87E-03	9.08E-04	1.50E-03	2.85E-03	1.48E-03	4.32E-04	5.05E-03	2.79E-03	1.79E-03	1.17E-04	1.21E-04	2.8764E-02
551659.3	4173406.43	3172.92681	2785.93494	590.68122	2631.39969	531.10014	3860.13929	3220.05002	1647.67685	342.308	2518.27764	1299.42485	4704.91417	1.44708	1.45448	5.05E-03	3.14E-03	6.65E-04	2.27E-03	4.61E-04	3.35E-03	4.64E-03	1.68E-03	3.49E-04	3.06E-03	1.06E-03	3.83E-03	6.78E-04	6.89E-04	3.0915E-02
551257.99	4172984.14	2113.28444	2990.337	670.03651	4887.28415	765.18178	2218.24665	2117.69888	1744.13699	379.48072	4076.48664	2515.6889	2796.18866	0.26897	0.27258	3.36E-03	3.37E-03	7.55E-04	4.21E-03	6.64E-04	1.93E-03	3.05E-03	1.78E-03	3.87E-04	4.95E-03	2.05E-03	2.28E-03	1.26E-04	1.29E-04	2.9036E-02
551328.66	4172652.88	2002.66697	2471.01203	771.44083	5696.46281	1058.61264	1657.21612	1999.11804	1422.77005	427.06951	4170.50778	3470.0185	2124.8444	0.24396	0.24837	3.19E-03	2.78E-03	8.69E-04	4.91E-03	9.19E-04	1.44E-03	2.88E-03	1.45E-03	4.36E-04	5.06E-03	2.82E-03	1.73E-03	1.14E-04	1.18E-04	2.8726E-02
551482.33	4173351.47	2467.97203	2964.77854	582.71071	3496.52357	619.17506	3484.21432	2493.65827	1782.2962	332.90806	3120.4901	1695.85175	4214.40015	0.42065	0.42264	3.93E-03	3.34E-03	6.56E-04	3.02E-03	5.38E-04	3.03E-03	3.59E-03	1.82E-03	3.40E-04	3.79E-03	1.38E-03	3.43E-03	1.97E-04	2.00E-04	2.9248E-02
551633.14	4173410.23	2987.07165	2845.09433	593.9332	2715.74342	539.03341	3860.91136	3028.58669	1692.04894	343.26885	2621.63593	1334.36261	4689.89748	0.94785	0.94927	4.75E-03	3.20E-03	6.69E-04	2.34E-03	4.68E-04	3.35E-03	4.36E-03	1.73E-03	3.50E-04	3.18E-03	1.09E-03	3.82E-03	4.44E-04	4.50E-04	3.0208E-02
551354.62	4173224.69	2173.30795	3008.91364	631.17943	4117.71518	695.53066	2984.58436	2188.42502	1786.44159	357.16052	3582.07747	2063.38358	3649.88932	0.31432	0.31642	3.46E-03	3.39E-03	7.11E-04	3.55E-03	6.04E-04	2.59E-03	3.15E-03	1.82E-03	3.65E-04	4.35E-03	1.68E-03	2.97E-03	1.47E-04	1.50E-04	2.8941E-02
551308.48	4173124.65	2125.89073	3007.62984	600.97509	4289.76093	712.62487	2870.16202	2141.51407	1785.31274	339.50762	3567.62545	2259.89118	3534.13882	0.29236	0.29517	3.38E-03	3.39E-03	6.77E-04	3.70E-03	6.19E-04	2.49E-03	3.08E-03	1.82E-03	3.47E-04	4.33E-03	1.84E-03	2.88E-03	1.37E-04	1.40E-04	2.8835E-02
551300.54	4172743.57	1977.61373	2526.46926	758.75928	5587.74404	1013.1713	1772.63705	1973.86952	1457.25081	421.15261	4134.51394	3357.05565	2251.4022	0.25615	0.26083	3.15E-03	2.85E-03	8.55E-04	4.82E-03	8.80E-04	1.54E-03	2.84E-03	1.49E-03	4.30E-04	5.02E-03	2.73E-03	1.83E-03	1.20E-04	1.24E-04	2.8673E-02
551383.41	4173271.42	2258.19468	3071.64681	625.60596	3923.47117	668.26329	3062.4539	2273.40285	1834.84258	356.1865	3469.7083	1937.04342	3749.86674	0.3313	0.33315	3.59E-03	3.46E-03	7.05E-04	3.38E-03	5.80E-04	2.66E-03	3.27E-03	1.87E-03	3.64E-04	4.21E-03	1.58E-03	3.05E-03	1.55E-04	1.58E-04	2.9045E-02
551284.93	4172791.23	1988.7822	2551.44213	750.53485	5583.95915	970.63472	1794.2131	1985.45684	1471.8736	418.0433	4173.7899	3264.41583	2277.02209	0.26095	0.26557	3.16E-03	2.87E-03	8.45E-04	4.82E-03	8.43E-04	1.56E-03	2.86E-03	1.50E-03	4.27E-04	5.07E-03	2.66E-03	1.85E-03	1.22E-04	1.26E-04	2.8714E-02
551266.68	4172860.72	2014.24299	2675.67017	726.5581	5454.55079	891.33581	1870.69193	2012.98919	1543.71417	406.54137	4227.70909	3013.37472	2374.46772	0.26329	0.26742	3.21E-03	3.01E-03	8.18E-04	4.70E-03	7.74E-04	1.62E-03	2.90E-03	1.58E-03	4.15E-04	5.13E-03	2.45E-03	1.93E-03	1.23E-04	1.27E-04	2.8797E-02
551423.81	4173308.54	2346.94199	3040.58337	602.13172	3715.19661	639.63888	3242.26756	2365.15016	1831.88623	344.12219	3281.24869	1835.43262	3952.67385	0.35811	0.35999	3.73E-03	3.42E-03	6.78E-04	3.20E-03	5.55E-04	2.82E-03	3.41E-03	1.87E-03	3.51E-04	3.98E-03	1.49E-03	3.22E-03	1.68E-04	1.71E-04	2.9072E-02
551257.58	4172953.91	2083.54815	2914.03544	686.4791	5013.51147	785.81441	2114.94544	2086.24817	1691.83849	388.15327	4143.89459	2610.34463	2672.67776	0.2683	0.27204	3.32E-03	3.28E-03	7.73E-04	4.32E-03	6.82E-04	1.84E-03	3.00E-03	1.73E-03	3.96E-04	5.03E-03	2.12E-03	2.18E-03	1.26E-04	1.29E-04	2.8926E-02
551672.38	4173404.53	3258.89029	2738.4661	585.31098	2581.7859	525.42714	3815.37736	3309.09217	1614.56243	339.58557	2457.69919	1278.79105	4659.82279	1.89814	1.90205	5.19E-03	3.08E-03	6.59E-04	2.23E-03	4.56E-04	3.31E-03	4.77E-03	1.65E-03	3.47E-04	2.98E-03	1.04E-03	3.79E-03	8.90E-04	9.01E-04	3.1293E-02
551620.06	4173412.14	2883.23037	2848.29136	591.17702	2792.89837	541.03323	3806.70236	2922.08596	1698.46112	341.11278	2658.37393	1348.53759	4617.58459	0.8041	0.80457	4.59E-03	3.21E-03	6.66E-04	2.41E-03	4.70E-04	3.31E-03	4.21E-03	1.73E-03	3.48E-04	3.23E-03	1.10E-03	3.76E-03	3.77E-04	3.81E-04	2.9777E-02
551590.15	4173407.52	2722.64453	2898.90707	590.9986	2955.29755	555.93815	3741.75039	2757.67252	1737.65112	339.80132	2787.4191	1409.58344	4524.41965	0.64083	0.64125	4.33E-03	3.26E-03	6.66E-04	2.55E-03	4.83E-04	3.25E-03	3.97E-03	1.77E-03	3.47E-04	3.38E-03	1.15E-03	3.68E-03	3.00E-04	3.04E-04	2.9453E-02
551254.76	4172975.17	2088.92092	2934.89763	670.91144	4887.63248	767.16895	2162.71685	2092.68197	1709.0514	379.76104	4061.55336	2525.21173	2728.52559	0.26581	0.26913	3.32E-03	3.31E-03	7.56E-04	4.22E-03	6.66E-04	1.88E-03	3.01E-03	1.74E-03	3.88E-04	4.93E-03	2.06E-03	2.22E-03	1.25E-04	1.28E-04	2.8749E-02
551492.03	4173360.61	2466.12903	2929.0966	578.08538	3429.183	612.20971	3466.89409	2492.89698	1760.44701	330.25628	3073.39983	1656.20568	4191.14384	0.42866	0.43093	3.92E-03	3.30E-03	6.51E-04	2.96E-03	5.32E-04	3.01E-03	3.59E-03	1.80E-03	3.37E-04	3.73E-03	1.35E-03	3.41E-03	2.01E-04	2.04E-04	2.8993E-02
551260.82	4172885.14	2015.08378	2715.2735	713.14155	5306.66809	853.59531	1907.12072	2014.76954	1567.9642	399.89038	4191.23223	2876.46957	2419.42732	0.26152	0.26547	3.21E-03	3.06E-03	8.03E-04	4.58E-03	7.41E-04	1.66E-03	2.90E-03	1.60E-03	4.08E-04	5.09E-03	2.34E-03	1.97E-03	1.23E-04	1.26E-04	2.8599E-02
551534.07	4173388.03	2543.17723	2927.34549	582.31071	3237.33352	597.92479	3557.08244	2573.94928	1758.86129	333.27285	2976.72263	1535.00127	4296.15358	0.49431	0.49577	4.05E-03	3.30E-03	6.56E-04	2.79E-03	5.19E-04	3.09E-03	3.71E-03	1.80E-03	3.40E-04	3.61E-03	1.25E-03	3.50E-03	2.32E-04	2.35E-04	2.9068E-02
551296.25	4172751.91	1961.27372	2499.45862	749.29741	5505.61172	993.97974	1760.48202	1957.6453	1442.08347	416.18408	4083.33915	3295.07429	2235.00661	0.25337	0.25793	3.12E-03	2.82E-03	8.44E-04	4.75E-03	8.63E-04	1.53E-03	2.82E-03	1.47E-03	4.25E-04	4.96E-03	2.68E-03	1.82E-03	1.19E-04	1.22E-04	2.8335E-02
551780.12	4173350.07	3963.33665	2478.43419	546.46166	2362.69941	503.56696	3519.31057	4046.00562	1443.37007	318.37098	2170.32194	1196.26775	4326.4543	1.32794	1.23835	6.31E-03	2.79E-03	6.15E-04	2.04E-03	4.37E-04	3.06E-03	5.83E-03	1.47E-03	3.25E-04	2.63E-03	9.74E-04	3.52E-03	6.22E-04	5.87E-04	3.1209E-02
551314.4	4173141.39	2097.98484	2936.99355	595.56725	4210.74544	706.76734	2878.00141	2113.94874	1742.62409	336.21917	3507.81783	2217.18815	3532.3673	0.2927	0.29539	3.34E-03	3.31E-03	6.71E-04	3.63E-03	6.14E-04	2.50E-03	3.04E-03	1.78E-03	3.43E-04	4.26E-03	1.80E-03	2.87E-03	1.37E-04	1.40E-04	2.8443E-02
551288.97	4172772.4	1962.79551	2502.57275	744.84361	5494.01094	974.62672	1765.34928	1959.31045	1443.97169	414.33073	4090.13017	3252.12068	2240.4035	0.25493	0.25946	3.12E-03	2.82E-03	8.39E-04	4.74E-03	8.46E-04	1.53E-03	2.82E-03	1.47E-03	4.23E-04	4.97E-03	2.65E-03	1.82E-03	1.19E-04	1.23E-04	2.8295E-02
551322.43	4172659.82	1970.01417	2447.41055	756.93647	5575.46253	1037.04787	1651.77766	1966.58455	1409.34066	419.03799	4096.45452	3388.96191	2115.0081	0.2409	0.24523	3.13E-03	2.76E-03	8.53E-04	4.81E-03	9.00E-04	1.43E-03	2.83E-03	1.44E-03	4.28E-04	4.97E-03	2.76E-03	1.72E-03	1.13E-04	1.16E-04	2.8267E-02
551357.71	4173233.27	2154.03646	2967.63238	624.03529	4033.56801	684.65814	2940.23242	2168.86549	1764.48467	353.33195	3515.03843	2025.80586	3596.05746	0.31191	0.31443	3.43E-03	3.34E-03	7.03E-04	3.48E-03	5.94E-04	2.55E-03	3.12E-03	1.80E-03	3.61E-04	4.27E-03	1.65E-03	2.93E-03	1.46E-04	1.49E-04	2.8522E-02
551760.4	4173364.84	3859.49096	2501.80237	559.20784	2379.03584	504.37417	3535.03406	3936.45339	1456.66704	321.34569	2194.23533	1199.89393	4349.27608	2.03268	1.81704	6.14E-03	2.82E-03	6.30E-04	2.05E-03	4.38E-04	3.07E-03	5.67E-03	1.49E-03	3.28E-04	2.66E-03	9.77E-04	3.54E-03	9.53E-04	8.61E-04	3.1626E-02
551256.63	4172919.84	2029.47785	2786.0416	694.89774	5097.59749	806.00599	1984.81816	2030.57493	1612.88803	391.43781	4136.40892	2695.50263	2513.83369	0.26109	0.26486	3.23E-03	3.14E-03	7.83E-04	4.40E-03	7.00E-04	1.72E-03	2.92E-03	1.65E-03	4.00E-04	5.02E-03	2.19E-03	2.05E-03	1.22E-04	1.26E-04	2.8449E-02
551291.97	4172760.25	1954.71368	2488.75662	744.6028	5474.65795	982.12098	1755.44082	1951.14785	1435.97767	413.83421	4066.431	3262.93928	2228.15176	0.25289	0.25741	3.11E-03	2.80E-03	8.39E-04	4.72E-03	8.53E-04	1.52E-03	2.81E-03	1.47E-03	4.22E-04	4.94E-03	2.66E-03	1.81E-03	1.19E-04	1.22E-04	2.8195E-02
551268.11	4173041.34	2110.73154	3034.58907	619.57966	4476.82272	714.27108	2421.0721	2119.72312	1790.96059	351.1591	3763.7463	2316.4678	3033.76675	0.26869	0.27167	3.36E-03	3.42E-03	6.98E-04	3.86E-03	6.20E-04	2.10E-03	3.05E-03	1.83E-03	3.59E-04	4.57E-03	1.89E-03	2.47E-03	1.26E-04	1.29E-04	2.8476E-02
551271.33	4173050.29	2111.81361	3038.95552	614.04318	4432.61719	710.20004	2464.42686	2121.60288	1796.57285	347.95909	3723.22471	2300.59752	3084.06775	0.27007	0.27301	3.36E-03	3.42E-03	6.92E-04	3.82E-03	6.17E-04	2.14E-03	3.06E-03	1.83E-03	3.55E-04	4.52E-03	1.87E-03	2.51E-03	1.27E-04	1.29E-04	2.8457E-02
551501.73	4173369.75	2466.20519	2901.10813	574.76308	3362.83063	605.48199	3450.47094	2493.94511	1743.36396	328.42198	3030.25928	1616.18447	4170.26278	0.43768	0.43947	3.92E-03	3.27E-03	6.47E-04	2.90E-03	5.26E-04	3.00E-03	3.59E-03	1.78E-03	3.35E-04	3.68E-03	1.32E-03	3.39E-03	2.05E-04	2.08E-04	2.8769E-02
551264.85	4173032.3	2107.33583	3023.34875	625.23232	4521.37453	718.67942	2376.06475	2115.49594	1780.91981	354.38547	3802.50421	2333.23848	2980.92023	0.26685	0.2702	3.35E-03	3.41E-03	7.04E-04	3.90E-03	6.24E-04	2.06E-03	3.05E-03	1.82E-03	3.62E-04	4.62E-03	1.90E-03	2.43E-03	1.25E-04	1.28E-04	2.8470E-02
551274.56	4173059.24	2111.41163	3037.96436	608.97109	4391.38527	706.7424	2507.09037	2121.98895	1798.56134	345.01172	3683.57544	2286.23182	3132.9848	0.27109	0.27436	3.36E-03	3.42E-03	6.86E-04	3.79E-03	6.14E-04	2.18E-03	3.06E-03	1.84E-03	3.52E-04	4.47E-03	1.86E-03	2.55E-03	1.27E-04	1.30E-04	2.8429E-02
551735.28	4172572.1	3965.17384	1618.83732	1190.09313	3694.70912	1684.76328	1117.09652	3932.07603	955.45496	640.2541	2740.03621	3682.25431	1495.68171	0.15688	0.15955	6.31E-03	1.82E-03	1.34E-03	3.19E-03	1.46E-03	9.70E-04	5.66E-03	9.75E-04	6.54E-04	3.33E-03	3.00E-03	1.22E-03	7.35E-05	7.56E-05	3.0074E-02
551254.35	4172944.94	2045.61489	2837.90848	680.83924	4958.96479	780.94148	2051.90426	2047.84929	1646.47445	384.61724	4082.9707	2595.9408	2594.63732	0.2622	0.26587	3.26E-03	3.20E-03	7.67E-04	4.28E-03	6.78E-04	1.78E-03	2.95E-03	1.68E-03	3.93E-04	4.96E-03	2.11E-03	2.11E-03	1.23E-04	1.26E-04	2.8407E-02
551277.78	4173068.2	2109.3489	3031.22908	604.28185	4352.54313	703.73126	2548.24713	2120.70062	1796.5345	342.23184	3644.93602	2272.82903	3179.44312	0.27243	0.27567	3.36E-03	3.41E-03	6.81E-04	3.75E-03	6.11E-04	2.21E-03	3.05E-03	1.83E-03	3.49E-04	4.42E-03	1.85E-03	2.59E-03	1.28E-04	1.31E-04	2.8387E-02
551281.01	4173077.15	2106.30785	3020.2146	600.28809	4317.9783	701.38656	2588.09556	2118.37807	1791.39723	339.84541	3609.46435	2260.71458	3223.68413	0.27382	0.27676	3.35E-03	3.40E-03	6.76E-04	3.72E-03	6.09E-04	2.25E-03	3.05E-03	1.83E-03	3.47E-04	4.38E-03	1.84E-03	2.62E-03	1.28E-04	1.31E-04	2.8341E-02
551261.63	4173023.33	2099.83319	3002.56774	630.07071	4558.15497	722.45621	2328.8759	2107.19323	1765.23512	357.13361	3832.50658	2348.03148	2924.83237	0.26526	0.26832	3.34E-03	3.38E-03	7.10E-04	3.93E-03	6.27E-04	2.02E-03	3.03E-03	1.80E-03	3.65E-04	4.65E-03	1.91E-03	2.38E-03	1.24E-04	1.27E-04	2.8410E-02
551304.01	4172715.72	1943.27925	2471.41364	746.02926	5465.44584	1008.55993	1721.37888	1939.69957	1425.12727	413.51594	4042.08778	3304.97649	2189.83282	0.24706	0.25156	3.09E-03	2.78E-03	8.40E-04	4.71E-03	8.76E-04	1.49E-03	2.79E-03	1.45E-03	4.22E-04	4.91E-03	2.69E-03	1.78E-03	1.16E-04	1.19E-04	2.8085E-02
551511.43	4173378.88	2482.55614	2897.55317	574.90577	3304.89315	599.85123	3460.5361	2511.22257	1739.88583	328.68247	3002.13285	1577.25551	4183.44406	0.44898	0.45065	3.95E-03	3.26E-03	6.47E-04	2.85E-03	5.21E-04	3.00E-03	3.62E-03	1.78E-03	3.36E-04	3.64E-03	1.28E-03	3.40E-03	2.10E-04	2.14E-04	2.8723E-02
551264.95	4172850.15	1977.45504	2597.8131	716.2332	5358.07555	887.28064	1819.44809	1975.93363	1498.76147	400.52883	4128.27913	2987.42044	2309.8494	0.25696	0.26102	3.15E-03	2.93E-03	8.07E-04	4.62E-03	7.70E-04	1.58E-03	2.85E-03	1.53E-03	4.09E-04	5.01E-03	2.43E-03	1.88E-03	1.20E-04	1.24E-04	2.8202E-02
551753.01	4172582.25	3901.51366	1586.88237	1134.93809	3881.83751	1637.81299	1088.02395	3870.28528	934.45401	611.83751	2752.33721	3790.82557	1454.66244	0.17163	0.17506	6.21E-03	1.79E-03	1.28E-03	3.35E-03	1.42E-03	9.45E-04	5.57E-03	9.54E-04	6.25E-04	3.34E-03	3.09E-03	1.18E-03	8.04E-05	8.30E-05	2.9915E-02
551606.98	4173414.04	2769.99752	2828.58215	584.93002	2829.22789	541.6468	3712.20065	2806.27274	1691.31876	336.90479	2680.68312	1360.33957	4497.30826	0.69481	0.69457	4.41E-03	3.19E-03	6.59E-04	2.44E-03	4.70E-04	3.22E-03	4.04E-03	1.73E-03	3.44E-04	3.25E-03	1.11E-03	3.66E-03	3.26E-04	3.29E-04	2.9175E-02
551284.23	4173086.1	2100.43379	3002.11613	596.1967	4281.43266	698.87406	2623.79201	2113.17165	1781.50073	337.41555	3572.54552	2247.24677	3262.193	0.27494	0.27783	3.34E-03	3.38E-03	6.71E-04	3.69E-03	6.07E-04	2.28E-03	3.04E-03	1.82E-03	3.44E-04	4.34E-03	1.83E-03	2.65E-03	1.29E-04	1.32E-04	2.8261E-02
551258.4	4173014.37	2089.26077	2974.42308	634.45358	4590.27286	726.03823	2280.43056	2095.83066	1745.27816	359.58904	3855.90396	2362.30485	2866.78621	0.26309	0.26616	3.32E-03	3.35E-03	7.15E-04	3.96E-03	6.30E-04	1.98E-03	3.02E-03	1.78E-03	3.67E-04	4.68E-03	1.92E-03	2.33E-03	1.23E-04	1.26E-04	2.8312E-02
551452.36	4173335.43	2363.27022	2911.34853	575.2568	3517.6103	615.46066	3290.4154	2384.69679	1752.9747	328.70941	3103.96856	1738.4876	3993.79515	0.37623	0.37845	3.76E-03	3.28E-03	6.48E-04	3.03E-03	5.34E-04	2.86E-03	3.43E-03	1.79E-03	3.36E-04	3.77E-03	1.41E-03	3.25E-03	1.76E-04	1.79E-04	2.8461E-02
551316.23	4172670.86	1945.94684	2437.1517	746.65471	5486.47273	1021.1408	1657.84775	1942.56394	1403.80687	413.34794	4043.71986	3329.58806	2119.09013	0.2398	0.24412	3.10E-03	2.74E-03	8.41E-04	4.73E-03	8.87E-04	1.44E-03	2.80E-03	1.43E-03	4.22E-04	4.91E-03	2.71E-03	1.72E-03	1.12E-04	1.16E-04	2.7965E-02
551320.31	4173158.13	2074.53957	2878.44555	592.94014	4142.19521	701.45473	2869.9456	2090.51577	1707.30238	334.56707	3464.42937	2173.70765	3514.32751	0.29239	0.29479	3.30E-03	3.24E-03	6.68E-04	3.57E-03	6.09E-04	2.49E-03	3.01E-03	1.74E-03	3.42E-04	4.21E-03	1.77E-03	2.86E-03	1.37E-04	1.40E-04	2.8091E-02
551287.46	4173095.05	2091.60362	2977.1712	591.87661	4241.8834	696.03065	2654.40486	2104.9458	1767.06949	334.83663	3533.73481	2231.98597	3293.87233	0.27576	0.2786	3.33E-03	3.35E-03	6.67E-04	3.66E-03	6.04E-04	2.30E-03	3.03E-03	1.80E-03	3.42E-04	4.29E-03	1.82E-03	2.68E-03	1.29E-04	1.32E-04	2.8141E-02
551259.1	4172874.62	1981.33517	2642.36361	705.172	5245.4026	852.94722	1855.38943	1980.71577	1525.55236	395.00781	4112.17382	2868.6609	2354.52262	0.25594	0.25982	3.15E-03	2.98E-03	7.94E-04	4.52E-03	7.41E-04	1.61E-03	2.85E-03	1.56E-03	4.03E-04	4.99E-03	2.33E-03	1.92E-03	1.20E-04	1.23E-04	2.8098E-02
551543.69	4173397.09	2534.45115	2880.95886	576.94112	3143.6807	586.91138	3518.65077	2565.39017	1730.07409	330.39214	2906.51985	1490.24976	4252.03508	0.49859	0.49976	4.03E-03	3.24E-03	6.50E-04	2.71E-03	5.10E-04	3.06E-03	3.69E-03	1.77E-03	3.37E-04	3.53E-03	1.21E-03	3.46E-03	2.34E-04	2.37E-04	2.8674E-02
551565.94	4173405.86	2589.46152	2865.17286	579.33817	3030.11111	559.90262	3577.72979	2621.76289	1719.85077	332.30539	2829.97504	1438.59282	4324.36739	0.54345	0.54525	4.12E-03	3.23E-03	6.52E-04	2.61E-03	4.86E-04	3.11E-03	3.78E-03	1.76E-03	3.39E-04	3.44E-03	1.17E-03	3.52E-03	2.55E-04	2.58E-04	2.8716E-02
551577.19	4173409.41	2625.39823	2853.01124	580.37772	2970.66625	553.84918	3608.45178	2658.48282	1711.52026	333.23263	2786.86861	1413.83564	4363.19119	0.57343	0.57374	4.18E-03	3.21E-03	6.54E-04	2.56E-03	4.81E-04	3.13E-03	3.83E-03	1.75E-03	3.40E-04	3.38E-03	1.15E-03	3.55E-03	2.69E-04	2.72E-04	2.8762E-02
551255.18	4173005.4	2075.77623	2939.82271	638.25895	4617.1857	729.49089	2231.14688	2081.57633	1721.70491	361.691	3872.1884	2376.07653	2807.37139	0.26088	0.26425	3.30E-03	3.31E-03	7.19E-04	3.98E-03	6.33E-04	1.94E-03	3.00E-03	1.76E-03	3.69E-04	4.70E-03	1.93E-03	2.28E-03	1.22E-04	1.25E-04	2.8177E-02
551273.53	4172808.67	1949.23123	2501.15314	724.96555	5382.58209	924.94599	1759.42193	1946.48674	1443.05605	404.44121	4061.44348	3103.8881	2233.38891	0.25338	0.2577	3.10E-03	2.82E-03	8.17E-04	4.64E-03	8.03E-04	1.53E-03	2.80E-03	1.47E-03	4.13E-04	4.93E-03	2.53E-03	1.82E-03	1.19E-04	1.22E-04	2.7913E-02
551251.54	4172966.21	2045.29959	2851.35035	662.42973	4805.67245	757.72123	2093.33813	2048.59973	1658.06144	374.85304	3986.49019	2496.40232	2643.17688	0.26044	0.26368	3.25E-03	3.21E-03	7.46E-04	4.14E-03	6.58E-04	1.82E-03	2.95E-03	1.69E-03	3.83E-04	4.84E-03	2.03E-03	2.15E-03	1.22E-04	1.25E-04	2.8127E-02
551290.68	4173104	2081.27701	2948.43129	587.90516	4203.4822	693.35311	2680.63653	2095.16663	1750.10776	332.4666	3496.88122	2216.20446	3319.77529	0.27647	0.27925	3.31E-03	3.32E-03	6.62E-04	3.63E-03	6.02E-04	2.33E-03	3.02E-03	1.79E-03	3.39E-04	4.25E-03	1.80E-03	2.70E-03	1.30E-04	1.32E-04	2.8006E-02
551299.71	4172724.09	1927.21849	2447.01839	737.92742	5389.78679	992.58094	1714.26847	1923.69201	1411.52881	409.24192	3992.36658	3252.91453	2179.09955	0.24494	0.24936	3.07E-03	2.76E-03	8.31E-04	4.65E-03	8.62E-04	1.49E-03	2.77E-03	1.44E-03	4.18E-04	4.85E-03	2.65E-03	1.77E-03	1.15E-04	1.18E-04	2.7782E-02
551253.21	4172898.89	1986.28542	2683.35413	694.12417	5113.28152	822.71818	1897.64198	1986.52599	1551.18853	389.76619	4078.77417	2755.6848	2406.14006	0.25591	0.25967	3.16E-03	3.02E-03	7.82E-04	4.41E-03	7.14E-04	1.65E-03	2.86E-03	1.58E-03	3.98E-04	4.95E-03	2.24E-03	1.96E-03	1.20E-04	1.23E-04	2.7975E-02
551461.88	4173344.4	2363.37881	2867.35986	567.9355	3454.10426	608.19327	3289.68712	2385.95723	1725.14264	324.416	3051.77564	1704.09033	3987.90661	0.38274	0.38449	3.76E-03	3.23E-03	6.40E-04	2.98E-03	5.28E-04	2.86E-03	3.44E-03	1.76E-03	3.31E-04	3.70E-03	1.39E-03	3.25E-03	1.79E-04	1.82E-04	2.8221E-02
551293.91	4173112.96	2070.62096	2918.53558	584.64014	4168.61952	691.12324	2703.06067	2084.9482	1732.17325	330.47114	3464.38985	2200.58005	3340.88042	0.2772	0.27992	3.29E-03	3.29E-03	6.58E-04	3.60E-03	6.00E-04	2.35E-03	3.00E-03	1.77E-03	3.37E-04	4.21E-03	1.79E-03	2.72E-03	1.30E-04	1.33E-04	2.7869E-02
551251.95	4172996.44	2057.72379	2896.65243	640.65131	4631.2953	731.82905	2179.62682	2062.81451	1693.41419	362.93669	3875.36965	2386.4335	2744.87441	0.25838	0.26146	3.27E-03	3.26E-03	7.22E-04	3.99E-03	6.35E-04	1.89E-03	2.97E-03	1.73E-03	3.71E-04	4.70E-03	1.94E-03	2.23E-03	1.21E-04	1.24E-04	2.7977E-02
551361.8	4173244.48	2126.54531	2908.26504	613.15443	3917.37098	669.43866	2878.97356	2141.01186	1733.0932	347.48726	3418.80747	1976.09629	3521.64463	0.30918	0.31112	3.38E-03	3.28E-03	6.91E-04	3.38E-03	5.81E-04	2.50E-03	3.08E-03	1.77E-03	3.55E-04	4.15E-03	1.61E-03	2.87E-03	1.45E-04	1.47E-04	2.7934E-02
551471.4	4173353.36	2374.11099	2845.54961	564.66461	3406.21712	603.33777	3301.12612	2397.90581	1710.58217	322.49619	3020.78483	1670.52993	3998.45582	0.39043	0.39249	3.78E-03	3.20E-03	6.36E-04	2.94E-03	5.24E-04	2.87E-03	3.45E-03	1.75E-03	3.29E-04	3.67E-03	1.36E-03	3.25E-03	1.83E-04	1.86E-04	2.8125E-02
551521.13	4173388.02	2462.84496	2845.52129	568.43374	3217.44116	590.14276	3409.82666	2491.90352	1709.16692	325.07532	2934.71408	1534.00796	4121.89937	0.45495	0.4564	3.92E-03	3.20E-03	6.40E-04	2.77E-03	5.12E-04	2.96E-03	3.59E-03	1.74E-03	3.32E-04	3.56E-03	1.25E-03	3.35E-03	2.13E-04	2.16E-04	2.8273E-02
551251.13	4172935.98	2006.98563	2761.30782	674.08608	4899.79376	775.64003	1989.95901	2008.8091	1601.07029	380.43917	4015.5251	2577.77364	2517.81775	0.25592	0.25951	3.19E-03	3.11E-03	7.59E-04	4.23E-03	6.73E-04	1.73E-03	2.89E-03	1.63E-03	3.88E-04	4.87E-03	2.10E-03	2.05E-03	1.20E-04	1.23E-04	2.7871E-02
551593.9	4173415.94	2671.07648	2802.77607	577.18561	2857.78138	541.27671	3608.28205	2705.23164	1678.41926	331.94946	2696.01089	1368.85752	4368.92636	0.61548	0.61485	4.25E-03	3.16E-03	6.50E-04	2.46E-03	4.70E-04	3.13E-03	3.90E-03	1.71E-03	3.39E-04	3.27E-03	1.11E-03	3.56E-03	2.88E-04	2.91E-04	2.8596E-02
551400.56	4173298.82	2232.00051	2937.8416	594.69793	3671.13857	631.86985	3010.02537	2247.75771	1766.07236	339.38269	3238.36386	1826.25439	3680.80977	0.32831	0.33045	3.55E-03	3.31E-03	6.70E-04	3.17E-03	5.49E-04	2.61E-03	3.24E-03	1.80E-03	3.46E-04	3.93E-03	1.49E-03	3.00E-03	1.54E-04	1.57E-04	2.7969E-02
551274.24	4172799.15	1930.60205	2463.62968	720.76327	5326.46187	924.54773	1736.99464	1927.71098	1421.66915	401.82615	4006.65099	3092.38258	2204.73734	0.24977	0.25405	3.07E-03	2.77E-03	8.12E-04	4.59E-03	8.03E-04	1.51E-03	2.78E-03	1.45E-03	4.10E-04	4.86E-03	2.52E-03	1.79E-03	1.17E-04	1.20E-04	2.7614E-02
551390.96	4173289.78	2205.64824	2934.67741	599.05306	3710.8814	637.11445	2961.24964	2220.73762	1760.90919	341.52328	3273.19747	1847.26986	3624.17169	0.32376	0.32531	3.51E-03	3.31E-03	6.75E-04	3.20E-03	5.53E-04	2.57E-03	3.20E-03	1.80E-03	3.49E-04	3.97E-03	1.50E-03	2.95E-03	1.52E-04	1.54E-04	2.7892E-02
551410.15	4173307.86	2249.10959	2920.25939	587.52898	3617.38747	624.86907	3046.36762	2265.65984	1758.25943	335.5515	3188.1581	1801.12511	3720.82807	0.33425	0.33637	3.58E-03	3.29E-03	6.62E-04	3.12E-03	5.43E-04	2.65E-03	3.26E-03	1.80E-03	3.43E-04	3.87E-03	1.47E-03	3.03E-03	1.57E-04	1.59E-04	2.7918E-02
551624.12	4173420.51	2818.85761	2737.27205	574.79024	2693.55107	525.76646	3639.32315	2856.68327	1630.82083	331.71154	2560.89035	1307.86694	4421.28233	0.76128	0.75936	4.49E-03	3.08E-03	6.47E-04	2.32E-03	4.57E-04	3.16E-03	4.11E-03	1.66E-03	3.39E-04	3.11E-03	1.06E-03	3.60E-03	3.57E-04	3.60E-04	2.8761E-02
551329.91	4173185.09	2047.3766	2811.5932	592.40046	4037.76927	690.95632	2830.39658	2062.87779	1667.75263	334.12831	3412.14861	2099.04429	3459.5306	0.29252	0.29448	3.26E-03	3.17E-03	6.67E-04	3.48E-03	6.00E-04	2.46E-03	2.97E-03	1.70E-03	3.41E-04	4.14E-03	1.71E-03	2.82E-03	1.37E-04	1.40E-04	2.7589E-02
551299.19	4173127.93	2048.56764	2861.20148	579.13643	4105.36832	686.69209	2725.06578	2063.43306	1697.59728	327.14959	3409.73705	2169.99506	3357.36342	0.27754	0.28044	3.26E-03	3.22E-03	6.52E-04	3.54E-03	5.96E-04	2.37E-03	2.97E-03	1.73E-03	3.34E-04	4.14E-03	1.77E-03	2.73E-03	1.30E-04	1.33E-04	2.7577E-02
551257.38	4172864.1	1946.13033	2567.62405	695.81102	5167.37326	850.25025	1804.08329	1945.22681	1482.27648	389.4562	4023.84207	2850.50037	2289.99368	0.24998	0.25379	3.10E-03	2.89E-03	7.84E-04	4.46E-03	7.38E-04	1.57E-03	2.80E-03	1.51E-03	3.98E-04	4.88E-03	2.32E-03	1.86E-03	1.17E-04	1.20E-04	2.7552E-02
551480.91	4173362.33	2374.76523	2814.27187	560.40299	3348.76369	597.33571	3291.55523	2399.65154	1691.09601	320.02215	2980.711	1634.81051	3984.21038	0.39756	0.39951	3.78E-03	3.17E-03	6.31E-04	2.89E-03	5.19E-04	2.86E-03	3.46E-03	1.73E-03	3.27E-04	3.62E-03	1.33E-03	3.24E-03	1.86E-04	1.89E-04	2.7921E-02
551326.23	4173174.87	2039.30015	2803.62438	586.43256	4034.89733	690.58466	2826.50148	2055.01023	1663.32971	330.75563	3391.99174	2115.79361	3455.45364	0.29149	0.29422	3.25E-03	3.16E-03	6.60E-04	3.48E-03	6.00E-04	2.45E-03	2.96E-03	1.70E-03	3.38E-04	4.12E-03	1.72E-03	2.81E-03	1.37E-04	1.39E-04	2.7520E-02
551295.4	4172732.46	1906.12601	2413.08865	726.79197	5286.85462	971.62887	1700.53828	1902.71069	1392.55173	403.32344	3925.35566	3182.06861	2160.16682	0.24138	0.24567	3.03E-03	2.72E-03	8.19E-04	4.56E-03	8.44E-04	1.48E-03	2.74E-03	1.42E-03	4.12E-04	4.77E-03	2.59E-03	1.76E-03	1.13E-04	1.16E-04	2.7366E-02
551248.72	4172987.47	2031.70728	2840.64036	639.66298	4617.25742	730.84802	2122.99143	2036.17921	1657.73224	362.2807	3854.06579	2386.11883	2675.80741	0.25462	0.25793	3.23E-03	3.20E-03	7.20E-04	3.98E-03	6.35E-04	1.84E-03	2.93E-03	1.69E-03	3.70E-04	4.68E-03	1.94E-03	2.18E-03	1.19E-04	1.22E-04	2.7648E-02
551419.75	4173316.89	2252.56575	2876.53371	576.9052	3546.07137	615.55225	3062.03955	2269.93935	1734.24897	329.63206	3118.50981	1772.00342	3734.57972	0.33919	0.34085	3.58E-03	3.24E-03	6.50E-04	3.06E-03	5.34E-04	2.66E-03	3.27E-03	1.77E-03	3.37E-04	3.79E-03	1.44E-03	3.04E-03	1.59E-04	1.62E-04	2.7689E-02
551327.22	4172639.75	1932.64844	2343.12833	735.75346	5351.50903	1002.30627	1579.24487	1929.60633	1350.56784	407.64742	3936.43924	3255.10946	2026.31581	0.22691	0.23081	3.08E-03	2.64E-03	8.29E-04	4.62E-03	8.70E-04	1.37E-03	2.78E-03	1.38E-03	4.16E-04	4.78E-03	2.65E-03	1.65E-03	1.06E-04	1.09E-04	2.7267E-02
551275.19	4172789.77	1909.68054	2423.93916	714.69458	5251.9376	921.41092	1713.59307	1906.69676	1399.0009	398.18883	3941.83754	3068.3965	2174.90801	0.24537	0.24957	3.04E-03	2.73E-03	8.05E-04	4.53E-03	8.00E-04	1.49E-03	2.75E-03	1.43E-03	4.07E-04	4.79E-03	2.50E-03	1.77E-03	1.15E-04	1.18E-04	2.7258E-02
551610.93	4173422.42	2720.40236	2731.60062	570.50986	2733.18278	527.02443	3572.53337	2755.88618	1631.1277	328.71249	2590.09981	1320.1526	4335.0918	0.66325	0.663	4.33E-03	3.08E-03	6.43E-04	2.36E-03	4.58E-04	3.10E-03	3.97E-03	1.67E-03	3.36E-04	3.14E-03	1.07E-03	3.53E-03	3.11E-04	3.14E-04	2.8307E-02
551333	4173193.68	2032.21109	2780.83836	589.63454	3981.66218	684.33769	2801.01184	2047.46931	1650.06934	332.58753	3376.04332	2068.04946	3422.77262	0.2917	0.29431	3.23E-03	3.13E-03	6.64E-04	3.43E-03	5.94E-04	2.43E-03	2.95E-03	1.68E-03	3.40E-04	4.10E-03	1.68E-03	2.79E-03	1.37E-04	1.39E-04	2.7306E-02
551530.83	4173397.16	2444.41371	2794.97004	562.22914	3128.40226	580.04271	3361.06703	2473.64758	1678.97658	321.63634	2866.21197	1490.66943	4063.66002	0.46023	0.46171	3.89E-03	3.15E-03	6.33E-04	2.70E-03	5.04E-04	2.92E-03	3.56E-03	1.71E-03	3.28E-04	3.48E-03	1.21E-03	3.31E-03	2.16E-04	2.19E-04	2.7830E-02
551429.34	4173325.93	2262.90775	2842.6832	568.48216	3488.12247	608.10835	3087.46434	2281.26343	1713.72129	324.85413	3065.38213	1743.60397	3760.31264	0.34454	0.34658	3.60E-03	3.20E-03	6.40E-04	3.01E-03	5.28E-04	2.68E-03	3.29E-03	1.75E-03	3.32E-04	3.72E-03	1.42E-03	3.06E-03	1.61E-04	1.64E-04	2.7553E-02
551248.31	4172957.24	1996.41436	2761.0479	651.27018	4698.92483	743.64413	2021.52583	1999.33271	1604.29608	368.37327	3896.69722	2451.00433	2553.96284	0.25217	0.25559	3.18E-03	3.11E-03	7.33E-04	4.05E-03	6.46E-04	1.76E-03	2.88E-03	1.64E-03	3.76E-04	4.73E-03	1.99E-03	2.08E-03	1.18E-04	1.21E-04	2.7410E-02
551251.5	4172888.41	1943.50503	2598.10367	681.91484	5015.82727	813.35685	1836.12898	1943.49393	1501.39051	382.51829	3977.85864	2717.5841	2329.23657	0.24774	0.25137	3.09E-03	2.93E-03	7.68E-04	4.33E-03	7.06E-04	1.59E-03	2.80E-03	1.53E-03	3.91E-04	4.83E-03	2.21E-03	1.90E-03	1.16E-04	1.19E-04	2.7307E-02
551320.98	4172646.71	1915.23089	2344.5484	729.50463	5314.20422	994.64142	1585.7537	1912.17373	1350.96849	404.08555	3916.58708	3227.38249	2032.3131	0.22743	0.23138	3.05E-03	2.64E-03	8.22E-04	4.58E-03	8.64E-04	1.38E-03	2.75E-03	1.38E-03	4.13E-04	4.75E-03	2.63E-03	1.65E-03	1.07E-04	1.10E-04	2.7131E-02
551490.43	4173371.29	2368.72203	2778.80368	555.81721	3285.69015	590.6962	3267.96644	2394.52955	1669.73795	317.3964	2935.78557	1597.73769	3953.76621	0.40407	0.40588	3.77E-03	3.13E-03	6.26E-04	2.83E-03	5.13E-04	2.84E-03	3.45E-03	1.70E-03	3.24E-04	3.56E-03	1.30E-03	3.22E-03	1.89E-04	1.92E-04	2.7650E-02
551291.1	4172740.83	1892.27509	2390.13661	719.17933	5221.14874	955.94179	1690.9313	1888.92806	1379.65214	399.33739	3883.16847	3133.23231	2146.95919	0.2394	0.2436	3.01E-03	2.69E-03	8.10E-04	4.50E-03	8.30E-04	1.47E-03	2.72E-03	1.41E-03	4.08E-04	4.71E-03	2.55E-03	1.75E-03	1.12E-04	1.15E-04	2.7090E-02
551580.82	4173417.84	2575.90542	2763.56219	567.55601	2876.45059	539.7036	3488.15629	2608.13854	1656.57543	325.93723	2699.68454	1373.97739	4222.63025	0.55054	0.5516	4.10E-03	3.11E-03	6.39E-04	2.48E-03	4.69E-04	3.03E-03	3.76E-03	1.69E-03	3.33E-04	3.28E-03	1.12E-03	3.44E-03	2.58E-04	2.61E-04	2.7961E-02
551305.11	4173144.67	2021.37708	2794.95458	573.74952	4032.45525	681.2251	2729.49525	2036.53578	1657.7119	323.88088	3353.21868	2131.39965	3352.54078	0.27779	0.28058	3.22E-03	3.15E-03	6.46E-04	3.48E-03	5.92E-04	2.37E-03	2.93E-03	1.69E-03	3.31E-04	4.07E-03	1.73E-03	2.73E-03	1.30E-04	1.33E-04	2.7203E-02
551367.29	4173258.51	2105.58094	2853.31048	601.24445	3791.98163	651.88633	2823.88941	2119.7146	1705.03688	341.21601	3315.81094	1918.60185	3455.41991	0.30607	0.30834	3.35E-03	3.21E-03	6.77E-04	3.27E-03	5.66E-04	2.45E-03	3.05E-03	1.74E-03	3.48E-04	4.03E-03	1.56E-03	2.81E-03	1.43E-04	1.46E-04	2.7360E-02
551245.5	4172978.51	2006.68287	2786.9116	639.34652	4607.85766	731.14965	2069.66727	2010.55653	1623.65295	361.92911	3834.08747	2389.70478	2611.00017	0.25128	0.25457	3.19E-03	3.14E-03	7.20E-04	3.97E-03	6.35E-04	1.80E-03	2.90E-03	1.66E-03	3.70E-04	4.65E-03	1.94E-03	2.12E-03	1.18E-04	1.21E-04	2.7343E-02
551262.25	4172827.77	1910.57009	2459.64692	698.49171	5171.96334	879.2335	1730.68268	1908.54205	1419.28798	390.2236	3946.34942	2938.21364	2197.47514	0.24551	0.2495	3.04E-03	2.77E-03	7.87E-04	4.46E-03	7.63E-04	1.50E-03	2.75E-03	1.45E-03	3.98E-04	4.79E-03	2.39E-03	1.79E-03	1.15E-04	1.18E-04	2.7124E-02
551247.29	4172922.99	1961.23771	2668.04636	667.11301	4844.03308	773.78648	1913.63259	1962.51655	1545.67674	375.84076	3937.53347	2568.90866	2423.26742	0.24873	0.25223	3.12E-03	3.00E-03	7.51E-04	4.18E-03	6.72E-04	1.66E-03	2.83E-03	1.58E-03	3.84E-04	4.78E-03	2.09E-03	1.97E-03	1.17E-04	1.20E-04	2.7255E-02
551262.07	4173053.63	2036.74138	2892.54688	591.236	4229.59419	683.88682	2356.52589	2046.21037	1709.90976	334.97436	3550.43052	2201.72934	2949.22649	0.25666	0.25973	3.24E-03	3.26E-03	6.66E-04	3.65E-03	5.94E-04	2.05E-03	2.95E-03	1.75E-03	3.42E-04	4.31E-03	1.79E-03	2.40E-03	1.20E-04	1.23E-04	2.7233E-02
551258.84	4173044.68	2035.36304	2888.30966	596.14909	4268.13047	687.43092	2316.05934	2044.07999	1704.76914	337.81998	3586.14297	2215.41882	2902.28386	0.25528	0.25837	3.24E-03	3.25E-03	6.71E-04	3.68E-03	5.97E-04	2.01E-03	2.94E-03	1.74E-03	3.45E-04	4.35E-03	1.80E-03	2.36E-03	1.20E-04	1.22E-04	2.7242E-02
551336.09	4173202.26	2024.15065	2762.84293	588.84511	3938.79896	678.74072	2778.08745	2039.15065	1639.98016	332.20454	3352.47527	2040.49034	3394.75386	0.29133	0.29318	3.22E-03	3.11E-03	6.63E-04	3.40E-03	5.89E-04	2.41E-03	2.94E-03	1.67E-03	3.39E-04	4.07E-03	1.66E-03	2.76E-03	1.37E-04	1.39E-04	2.7113E-02
551265.29	4173062.58	2035.81335	2890.30294	586.39817	4190.91149	680.53835	2395.24401	2046.01473	1710.82179	332.16197	3513.18079	2188.26927	2993.46961	0.25791	0.26072	3.24E-03	3.26E-03	6.60E-04	3.61E-03	5.91E-04	2.08E-03	2.95E-03	1.75E-03	3.39E-04	4.27E-03	1.78E-03	2.44E-03	1.21E-04	1.24E-04	2.7199E-02
551255.59	4173035.63	2031.40895	2877.13601	600.97989	4305.51238	691.06977	2273.64794	2039.34383	1695.20787	340.57897	3619.1214	2229.40477	2852.45503	0.25371	0.25682	3.23E-03	3.24E-03	6.77E-04	3.71E-03	6.00E-04	1.97E-03	2.94E-03	1.73E-03	3.48E-04	4.39E-03	1.81E-03	2.32E-03	1.19E-04	1.22E-04	2.7223E-02
551279.48	4172769.77	1887.844	2382.68142	711.23642	5185.76965	928.2029	1689.62921	1884.66276	1375.46759	395.71712	3874.77379	3069.08862	2144.30614	0.24059	0.24474	3.00E-03	2.68E-03	8.01E-04	4.47E-03	8.06E-04	1.47E-03	2.71E-03	1.40E-03	4.04E-04	4.70E-03	2.50E-03	1.75E-03	1.13E-04	1.16E-04	2.6932E-02
551268.52	4173071.53	2032.83721	2882.03324	581.67741	4152.73552	677.37722	2431.98154	2043.75425	1707.61707	329.38053	3475.48276	2175.14491	3034.69387	0.25905	0.26181	3.23E-03	3.25E-03	6.55E-04	3.58E-03	5.88E-04	2.11E-03	2.94E-03	1.74E-03	3.36E-04	4.22E-03	1.77E-03	2.47E-03	1.21E-04	1.24E-04	2.7145E-02
551286.79	4172749.21	1883.22334	2374.92534	713.72444	5179.48358	943.41641	1683.91774	1879.92813	1371.03907	396.54319	3857.65214	3097.66695	2137.44415	0.23841	0.24256	3.00E-03	2.67E-03	8.04E-04	4.47E-03	8.19E-04	1.46E-03	2.71E-03	1.40E-03	4.05E-04	4.68E-03	2.52E-03	1.74E-03	1.12E-04	1.15E-04	2.6906E-02
551252.36	4173026.67	2024.59351	2858.81429	605.48608	4339.29983	694.59735	2230.10327	2031.78043	1681.32081	343.13897	3646.93533	2242.92853	2800.75933	0.25223	0.25505	3.22E-03	3.22E-03	6.82E-04	3.74E-03	6.03E-04	1.94E-03	2.93E-03	1.72E-03	3.50E-04	4.43E-03	1.83E-03	2.28E-03	1.18E-04	1.21E-04	2.7169E-02
551314.75	4172653.66	1892.98248	2334.35588	720.69374	5246.06225	982.46241	1586.72827	1889.94153	1345.05069	399.15123	3874.98214	3181.88801	2031.0102	0.22655	0.23049	3.01E-03	2.63E-03	8.12E-04	4.52E-03	8.53E-04	1.38E-03	2.72E-03	1.37E-03	4.08E-04	4.70E-03	2.59E-03	1.65E-03	1.06E-04	1.09E-04	2.6873E-02
551499.95	4173380.26	2366.21126	2752.74546	552.72646	3225.14124	584.52335	3249.00595	2392.80621	1654.04507	315.69841	2896.48948	1560.45658	3930.06081	0.41122	0.41255	3.77E-03	3.10E-03	6.23E-04	2.78E-03	5.08E-04	2.82E-03	3.45E-03	1.69E-03	3.22E-04	3.52E-03	1.27E-03	3.20E-03	1.93E-04	1.96E-04	2.7428E-02
551271.74	4173080.48	2028.39061	2868.9524	577.41738	4116.97766	674.63294	2466.70863	2039.97133	1701.08606	326.85073	3439.37569	2162.72315	3072.87308	0.26015	0.26287	3.23E-03	3.23E-03	6.50E-04	3.55E-03	5.86E-04	2.14E-03	2.94E-03	1.74E-03	3.34E-04	4.18E-03	1.76E-03	2.50E-03	1.22E-04	1.25E-04	2.7079E-02
551255.67	4172853.58	1910.27927	2492.83367	685.53412	5074.56372	845.62073	1754.02499	1909.12563	1438.9899	383.49123	3928.92382	2823.31404	2226.96532	0.2438	0.24753	3.04E-03	2.81E-03	7.72E-04	4.38E-03	7.34E-04	1.52E-03	2.75E-03	1.47E-03	3.92E-04	4.77E-03	2.30E-03	1.81E-03	1.14E-04	1.17E-04	2.6975E-02
551298.94	4172704.48	1874.9712	2363.1664	714.4029	5176.74423	965.02977	1651.65194	1871.75419	1363.30356	395.97333	3843.79345	3129.98027	2101.78114	0.2329	0.23702	2.98E-03	2.66E-03	8.05E-04	4.46E-03	8.38E-04	1.43E-03	2.70E-03	1.39E-03	4.04E-04	4.67E-03	2.55E-03	1.71E-03	1.09E-04	1.12E-04	2.6824E-02
551339.18	4173210.85	2020.58732	2752.73489	588.97291	3902.01828	673.36023	2759.03177	2035.31132	1634.63235	332.38302	3334.65564	2014.42529	3372.03581	0.29088	0.29336	3.22E-03	3.10E-03	6.63E-04	3.37E-03	5.85E-04	2.40E-03	2.93E-03	1.67E-03	3.39E-04	4.05E-03	1.64E-03	2.74E-03	1.36E-04	1.39E-04	2.6971E-02
551274.97	4173089.44	2022.74011	2851.97058	573.62861	4084.05828	672.34536	2499.14649	2034.94442	1691.69259	324.60021	3405.71927	2150.85661	3107.72749	0.26124	0.26391	3.22E-03	3.21E-03	6.46E-04	3.52E-03	5.84E-04	2.17E-03	2.93E-03	1.73E-03	3.31E-04	4.13E-03	1.75E-03	2.53E-03	1.22E-04	1.25E-04	2.7004E-02
551597.75	4173424.34	2620.02267	2708.72736	563.50472	2763.46236	526.99558	3477.82648	2653.33438	1620.6131	324.1481	2607.01499	1329.39529	4216.61151	0.58949	0.58785	4.17E-03	3.05E-03	6.35E-04	2.38E-03	4.58E-04	3.02E-03	3.82E-03	1.65E-03	3.31E-04	3.16E-03	1.08E-03	3.43E-03	2.76E-04	2.79E-04	2.7755E-02
551249.13	4173017.7	2014.69591	2833.33567	609.48181	4368.2483	697.84823	2185.12276	2021.14061	1663.24802	345.383	3668.29373	2255.76593	2746.89138	0.25017	0.25301	3.21E-03	3.19E-03	6.86E-04	3.77E-03	6.06E-04	1.90E-03	2.91E-03	1.70E-03	3.53E-04	4.45E-03	1.84E-03	2.24E-03	1.17E-04	1.20E-04	2.7077E-02
551242.27	4172969.54	1981.68258	2733.54665	639.17987	4599.05994	732.27319	2018.61833	1984.97629	1590.56057	361.63405	3812.50373	2395.64909	2548.50022	0.24857	0.25159	3.15E-03	3.08E-03	7.20E-04	3.97E-03	6.36E-04	1.75E-03	2.86E-03	1.62E-03	3.69E-04	4.63E-03	1.95E-03	2.07E-03	1.17E-04	1.19E-04	2.7047E-02
551245.09	4172948.28	1965.28829	2697.73146	648.20836	4668.85059	741.98976	1966.50604	1967.72221	1566.34492	366.29492	3854.16855	2446.91966	2486.06838	0.24737	0.25073	3.13E-03	3.04E-03	7.30E-04	4.03E-03	6.44E-04	1.71E-03	2.83E-03	1.60E-03	3.74E-04	4.68E-03	1.99E-03	2.02E-03	1.16E-04	1.19E-04	2.7009E-02
551249.79	4172877.94	1913.78359	2534.02838	675.44888	4969.47505	814.16962	1789.19945	1913.46562	1463.96593	378.48486	3912.24688	2715.96142	2270.46271	0.24307	0.24666	3.05E-03	2.85E-03	7.61E-04	4.29E-03	7.07E-04	1.55E-03	2.76E-03	1.49E-03	3.86E-04	4.75E-03	2.21E-03	1.85E-03	1.14E-04	1.17E-04	2.6882E-02
551540.53	4173406.29	2430.88529	2747.55465	556.52812	3038.73009	569.54225	3318.62984	2460.17771	1650.02095	318.53534	2797.84432	1447.5983	4014.16901	0.46478	0.46557	3.87E-03	3.09E-03	6.27E-04	2.62E-03	4.95E-04	2.88E-03	3.54E-03	1.68E-03	3.25E-04	3.40E-03	1.18E-03	3.27E-03	2.18E-04	2.21E-04	2.7419E-02

551278.19	4173098.39	2014.75618	2829.52446	569.80584	4049.84717	669.93322	2527.12551	2027.51383	1678.66772	322.32044	3371.48571	2137.86824	3136.6243	0.2621	0.26472	3.21E-03	3.19E-03	6.42E-04	3.49E-03	5.82E-04	2.19E-03	2.92E-03	1.71E-03	3.29E-04	4.09E-03	1.74E-03	2.55E-03	1.23E-04	1.25E-04	2.6900E-02
551282.49	4172757.58	1873.74612	2359.40735	707.65229	5134.22369	929.88865	1675.44105	1870.53265	1362.2339	393.41656	3830.98178	3058.05896	2126.34608	0.23715	0.24124	2.98E-03	2.66E-03	7.97E-04	4.43E-03	8.07E-04	1.45E-03	2.69E-03	1.39E-03	4.02E-04	4.65E-03	2.49E-03	1.73E-03	1.11E-04	1.14E-04	2.6708E-02
551311.03	4173161.41	1993.83764	2731.92099	569.34785	3957.41624	675.00027	2713.88477	2008.99558	1619.99785	321.23225	3301.5036	2088.47049	3325.89517	0.27767	0.28034	3.17E-03	3.08E-03	6.41E-04	3.41E-03	5.86E-04	2.36E-03	2.89E-03	1.65E-03	3.28E-04	4.01E-03	1.70E-03	2.71E-03	1.30E-04	1.33E-04	2.6799E-02
551370.83	4173266.98	2089.26529	2811.62404	592.22219	3708.68224	640.30462	2787.1097	2103.2342	1683.46291	336.3796	3243.44824	1883.45976	3410.72748	0.30409	0.30584	3.32E-03	3.17E-03	6.67E-04	3.20E-03	5.56E-04	2.42E-03	3.03E-03	1.72E-03	3.43E-04	3.94E-03	1.53E-03	2.78E-03	1.43E-04	1.45E-04	2.6958E-02
551509.47	4173389.22	2368.36878	2735.00786	550.85725	3165.25414	578.46346	3237.68738	2395.62233	1643.001	314.7477	2860.69187	1523.06538	3916.71673	0.41867	0.41983	3.77E-03	3.08E-03	6.20E-04	2.73E-03	5.02E-04	2.81E-03	3.45E-03	1.68E-03	3.21E-04	3.47E-03	1.24E-03	3.19E-03	1.96E-04	1.99E-04	2.7257E-02
551245.91	4173008.74	2002.01411	2801.74373	612.92638	4392.25207	700.95324	2139.33276	2007.73799	1641.72163	347.28583	3683.02768	2268.05235	2691.6821	0.24807	0.2512	3.19E-03	3.16E-03	6.90E-04	3.79E-03	6.09E-04	1.86E-03	2.89E-03	1.68E-03	3.55E-04	4.47E-03	1.85E-03	2.19E-03	1.16E-04	1.19E-04	2.6951E-02
551306.44	4172668.8	1869.37981	2329.27189	711.61489	5168.67215	968.78662	1598.88355	1866.32365	1342.52943	394.09129	3829.05781	3131.33215	2041.96327	0.2267	0.23067	2.97E-03	2.62E-03	8.01E-04	4.46E-03	8.41E-04	1.39E-03	2.69E-03	1.37E-03	4.02E-04	4.65E-03	2.55E-03	1.66E-03	1.06E-04	1.09E-04	2.6622E-02
551243.89	4172902.11	1919.53881	2572.26097	665.89515	4853.3228	787.95961	1830.54935	1920.01261	1488.04369	374.03347	3882.84344	2618.92209	2320.77184	0.24357	0.24706	3.05E-03	2.90E-03	7.50E-04	4.19E-03	6.84E-04	1.59E-03	2.77E-03	1.52E-03	3.82E-04	4.71E-03	2.13E-03	1.89E-03	1.14E-04	1.17E-04	2.6792E-02
551281.42	4173107.34	2005.18779	2803.39453	566.20073	4016.03046	667.60499	2550.83841	2018.45035	1663.22926	320.16358	3338.42971	2124.25788	3159.97031	0.26283	0.2654	3.19E-03	3.16E-03	6.38E-04	3.46E-03	5.80E-04	2.21E-03	2.91E-03	1.70E-03	3.27E-04	4.05E-03	1.73E-03	2.57E-03	1.23E-04	1.26E-04	2.6778E-02
551294.62	4172712.89	1860.9275	2342.81337	707.77355	5114.18722	952.0849	1646.86488	1857.72775	1351.97506	392.47966	3801.82997	3088.22162	2093.97128	0.23142	0.23548	2.96E-03	2.64E-03	7.97E-04	4.41E-03	8.27E-04	1.43E-03	2.68E-03	1.38E-03	4.01E-04	4.62E-03	2.51E-03	1.70E-03	1.08E-04	1.12E-04	2.6574E-02
551810.67	4173342.58	3752.89472	2297.09903	529.48116	2217.10318	476.76912	3217.60595	3831.76925	1339.29827	297.02081	2116.85236	1131.93143	3956.13553	0.88716	0.84288	5.97E-03	2.59E-03	5.96E-04	1.91E-03	4.14E-04	2.79E-03	5.52E-03	1.37E-03	3.03E-04	2.57E-03	9.21E-04	3.22E-03	4.16E-04	3.99E-04	2.8990E-02
551985.01	4173243.64	3395.29407	2395.70838	456.73639	2006.02794	406.26459	3779.30803	3475.70596	1392.40324	266.26254	1957.51489	976.94807	4615.40683	0.33125	0.32489	5.40E-03	2.70E-03	5.14E-04	1.73E-03	3.53E-04	3.28E-03	5.01E-03	1.42E-03	2.72E-04	2.38E-03	7.95E-04	3.76E-03	1.55E-04	1.54E-04	2.7916E-02
551284.64	4173116.29	1994.69354	2775.19969	563.00199	3983.72542	665.45209	2570.14982	2008.3565	1646.35015	318.21759	3307.83845	2110.1791	3177.80479	0.26322	0.26601	3.17E-03	3.13E-03	6.34E-04	3.44E-03	5.78E-04	2.23E-03	2.89E-03	1.68E-03	3.25E-04	4.02E-03	1.72E-03	2.59E-03	1.23E-04	1.26E-04	2.6646E-02
551242.68	4172999.77	1984.09537	2760.64249	614.65306	4401.28858	702.55049	2090.51182	1989.15251	1614.85162	348.16716	3683.22815	2275.76307	2632.40769	0.24556	0.24841	3.16E-03	3.11E-03	6.92E-04	3.80E-03	6.10E-04	1.82E-03	2.86E-03	1.65E-03	3.55E-04	4.47E-03	1.85E-03	2.14E-03	1.15E-04	1.18E-04	2.6747E-02
551241.86	4172939.31	1939.12205	2642.36821	647.02455	4657.25011	744.64882	1917.57124	1941.08364	1533.14707	365.19854	3821.72667	2456.89578	2425.74915	0.24373	0.24705	3.09E-03	2.98E-03	7.29E-04	4.02E-03	6.47E-04	1.67E-03	2.80E-03	1.57E-03	3.73E-04	4.64E-03	2.00E-03	1.97E-03	1.14E-04	1.17E-04	2.6697E-02
551302.14	4172677.15	1855.10719	2318.65349	705.65239	5112.19935	958.90196	1601.49658	1852.05366	1336.8437	390.8478	3792.99199	3095.66341	2042.92462	0.22596	0.22992	2.95E-03	2.61E-03	7.95E-04	4.41E-03	8.33E-04	1.39E-03	2.67E-03	1.36E-03	3.99E-04	4.60E-03	2.52E-03	1.66E-03	1.06E-04	1.09E-04	2.6423E-02
551467.71	4173362.08	2280.35513	2701.09683	542.71643	3268.4392	582.51331	3116.99384	2303.16231	1623.23152	309.81833	2886.77494	1618.13614	3778.21112	0.36783	0.36955	3.63E-03	3.04E-03	6.11E-04	2.82E-03	5.06E-04	2.71E-03	3.32E-03	1.66E-03	3.16E-04	3.50E-03	1.32E-03	3.07E-03	1.72E-04	1.75E-04	2.6847E-02
551584.56	4173426.26	2528.24042	2676.803	554.96434	2785.25571	525.96886	3371.96461	2559.66547	1603.27591	318.78143	2615.09681	1335.43419	4086.81328	0.52911	0.52939	4.02E-03	3.01E-03	6.25E-04	2.40E-03	4.57E-04	2.93E-03	3.69E-03	1.64E-03	3.25E-04	3.17E-03	1.09E-03	3.33E-03	2.48E-04	2.51E-04	2.7185E-02
551396.41	4173307.09	2141.70771	2780.37512	569.98577	3500.46701	607.99467	2844.0568	2156.70419	1673.56362	325.22996	3075.52107	1761.71751	3479.1156	0.31153	0.31346	3.41E-03	3.13E-03	6.42E-04	3.02E-03	5.28E-04	2.47E-03	3.11E-03	1.71E-03	3.32E-04	3.73E-03	1.43E-03	2.83E-03	1.46E-04	1.49E-04	2.6638E-02
551518.99	4173398.19	2352.08165	2693.14089	545.61561	3088.50468	570.00168	3196.29344	2379.62858	1618.21921	311.84431	2803.63853	1483.32877	3866.78469	0.42341	0.42435	3.74E-03	3.03E-03	6.15E-04	2.66E-03	4.95E-04	2.78E-03	3.43E-03	1.65E-03	3.18E-04	3.40E-03	1.21E-03	3.15E-03	1.98E-04	2.01E-04	2.6879E-02
551406.07	4173316.2	2161.66723	2768.5108	563.67582	3455.53595	601.8195	2883.53643	2177.44803	1668.24958	321.87385	3033.84656	1739.36028	3523.64602	0.31736	0.31885	3.44E-03	3.12E-03	6.35E-04	2.98E-03	5.23E-04	2.50E-03	3.14E-03	1.70E-03	3.29E-04	3.68E-03	1.42E-03	2.87E-03	1.49E-04	1.51E-04	2.6633E-02
551342.27	4173219.44	1988.65312	2694.14764	579.73153	3799.55562	660.74489	2700.1928	2003.04933	1601.60455	327.23522	3253.68182	1970.28806	3299.76959	0.28863	0.29075	3.16E-03	3.03E-03	6.53E-04	3.28E-03	5.74E-04	2.34E-03	2.88E-03	1.64E-03	3.34E-04	3.95E-03	1.60E-03	2.69E-03	1.35E-04	1.38E-04	2.6413E-02
551248.08	4172867.46	1880.32617	2464.05349	666.5343	4897.67641	811.36646	1740.1545	1879.7472	1423.35613	373.18277	3830.71363	2698.1397	2208.85645	0.23745	0.24096	2.99E-03	2.78E-03	7.51E-04	4.22E-03	7.05E-04	1.51E-03	2.71E-03	1.45E-03	3.81E-04	4.65E-03	2.20E-03	1.80E-03	1.11E-04	1.14E-04	2.6368E-02
551289.91	4173131.22	1972.59826	2720.41783	557.38643	3923.61871	661.03552	2587.35903	1986.74836	1613.46202	314.84607	3254.83659	2082.15852	3189.34507	0.26395	0.26637	3.14E-03	3.06E-03	6.28E-04	3.38E-03	5.74E-04	2.25E-03	2.86E-03	1.65E-03	3.21E-04	3.95E-03	1.69E-03	2.60E-03	1.24E-04	1.26E-04	2.6356E-02
551477.31	4173371.11	2284.47893	2678.92536	539.85724	3220.99252	577.70681	3113.29816	2308.34016	1609.24419	308.15885	2856.5454	1584.93432	3771.53497	0.37452	0.37579	3.64E-03	3.02E-03	6.08E-04	2.78E-03	5.02E-04	2.70E-03	3.32E-03	1.64E-03	3.15E-04	3.47E-03	1.29E-03	3.07E-03	1.76E-04	1.78E-04	2.6706E-02
552035.98	4173220.4	3443.1992	2431.21044	439.70003	1980.75841	387.75475	3628.84387	3533.74791	1397.27135	256.69875	1942.77063	941.32379	4453.61338	0.27385	0.26931	5.48E-03	2.74E-03	4.95E-04	1.71E-03	3.37E-04	3.15E-03	5.09E-03	1.43E-03	2.62E-04	2.36E-03	7.66E-04	3.62E-03	1.28E-04	1.28E-04	2.7691E-02
551290.29	4172721.29	1840.44241	2310.60395	697.38435	5017.86454	933.02004	1634.3063	1837.3323	1333.91116	386.94108	3737.9818	3023.82166	2076.49433	0.22821	0.23216	2.93E-03	2.60E-03	7.85E-04	4.33E-03	8.10E-04	1.42E-03	2.65E-03	1.36E-03	3.95E-04	4.54E-03	2.46E-03	1.69E-03	1.07E-04	1.10E-04	2.6182E-02
551316.95	4173178.15	1962.5179	2666.38439	564.00126	3866.10569	666.02876	2675.09356	1977.42215	1581.44183	318.07241	3240.85867	2037.72856	3273.447	0.27688	0.27913	3.12E-03	3.00E-03	6.35E-04	3.33E-03	5.78E-04	2.32E-03	2.85E-03	1.61E-03	3.25E-04	3.93E-03	1.66E-03	2.66E-03	1.30E-04	1.32E-04	2.6303E-02
551297.85	4172685.5	1838.69203	2301.17312	698.39925	5042.28909	946.47919	1600.07409	1835.66825	1327.27694	386.93535	3747.10355	3051.50266	2038.8975	0.22447	0.22839	2.93E-03	2.59E-03	7.87E-04	4.35E-03	8.22E-04	1.39E-03	2.64E-03	1.36E-03	3.95E-04	4.55E-03	2.48E-03	1.66E-03	1.05E-04	1.08E-04	2.6163E-02
551242.19	4172891.68	1884.42844	2502.06644	656.94504	4786.2336	783.03442	1777.79956	1884.63424	1446.76389	368.59575	3806.08615	2598.3256	2255.032	0.23734	0.24074	3.00E-03	2.82E-03	7.40E-04	4.13E-03	6.80E-04	1.54E-03	2.71E-03	1.48E-03	3.76E-04	4.62E-03	2.11E-03	1.84E-03	1.11E-04	1.14E-04	2.6271E-02
551239.46	4172990.81	1952.78898	2699.01588	610.43528	4361.40216	697.6879	2031.91684	1957.30477	1575.73985	345.73541	3643.73943	2262.8775	2560.91088	0.24136	0.24394	3.11E-03	3.04E-03	6.88E-04	3.76E-03	6.06E-04	1.76E-03	2.82E-03	1.61E-03	3.53E-04	4.42E-03	1.84E-03	2.08E-03	1.13E-04	1.16E-04	2.6325E-02
551528.5	4173407.15	2351.74312	2669.59597	542.99003	3017.98257	562.1553	3180.17347	2379.5575	1603.21703	310.51814	2757.33304	1444.61165	3849.02742	0.42955	0.43024	3.74E-03	3.01E-03	6.12E-04	2.60E-03	4.88E-04	2.76E-03	3.43E-03	1.64E-03	3.17E-04	3.35E-03	1.18E-03	3.13E-03	2.01E-04	2.04E-04	2.6654E-02
551345.36	4173228.02	1981.75447	2677.97298	577.72491	3749.82631	653.35818	2674.25849	1995.8601	1593.31412	326.28016	3221.79728	1940.85376	3268.98448	0.28805	0.29011	3.15E-03	3.02E-03	6.51E-04	3.23E-03	5.67E-04	2.32E-03	2.87E-03	1.63E-03	3.33E-04	3.91E-03	1.58E-03	2.66E-03	1.35E-04	1.37E-04	2.6202E-02
551486.9	4173380.15	2284.44585	2655.78591	537.05005	3169.374	572.46188	3100.51112	2309.20346	1595.15325	306.57212	2823.69991	1550.45003	3754.69767	0.38085	0.38199	3.64E-03	2.99E-03	6.05E-04	2.73E-03	4.97E-04	2.69E-03	3.33E-03	1.63E-03	3.13E-04	3.43E-03	1.26E-03	3.06E-03	1.78E-04	1.81E-04	2.6526E-02
551374.58	4173275.79	2054.74538	2737.62928	577.67101	3591.37807	624.53584	2724.62112	2068.5104	1643.53138	328.37549	3134.65398	1830.70678	3334.09324	0.29975	0.30184	3.27E-03	3.08E-03	6.51E-04	3.10E-03	5.42E-04	2.37E-03	2.98E-03	1.68E-03	3.35E-04	3.81E-03	1.49E-03	2.71E-03	1.40E-04	1.43E-04	2.6293E-02
551415.74	4173325.3	2161.40132	2721.22045	552.3923	3383.49975	592.12753	2892.71274	2178.00398	1641.42504	315.55141	2962.59365	1711.83934	3529.63384	0.32098	0.32283	3.44E-03	3.06E-03	6.22E-04	2.92E-03	5.14E-04	2.51E-03	3.14E-03	1.68E-03	3.22E-04	3.60E-03	1.39E-03	2.87E-03	1.50E-04	1.53E-04	2.6371E-02
551237.96	4172926.13	1898.15971	2559.63472	641.9351	4617.10809	744.96833	1847.69361	1899.57277	1483.84916	361.70151	3757.8775	2456.76762	2339.34453	0.23765	0.24091	3.02E-03	2.88E-03	7.23E-04	3.98E-03	6.47E-04	1.60E-03	2.74E-03	1.51E-03	3.69E-04	4.56E-03	2.00E-03	1.90E-03	1.11E-04	1.14E-04	2.6170E-02
551425.41	4173334.41	2175.87496	2696.64246	545.50256	3336.69668	586.01546	2923.47039	2193.47686	1625.70704	311.63478	2921.08539	1686.1786	3562.43214	0.32637	0.32817	3.46E-03	3.04E-03	6.14E-04	2.88E-03	5.09E-04	2.54E-03	3.16E-03	1.66E-03	3.18E-04	3.55E-03	1.37E-03	2.90E-03	1.53E-04	1.56E-04	2.6302E-02
551239.05	4172960.58	1923.08865	2631.91068	622.79223	4448.74855	710.85072	1941.35447	1926.11354	1530.27485	352.30961	3694.49174	2326.16302	2452.13157	0.23915	0.2423	3.06E-03	2.96E-03	7.01E-04	3.84E-03	6.17E-04	1.69E-03	2.77E-03	1.56E-03	3.60E-04	4.49E-03	1.89E-03	2.00E-03	1.12E-04	1.15E-04	2.6162E-02
551295.83	4173147.96	1947.20522	2660.08379	552.46459	3859.43189	656.33833	2590.11735	1961.61156	1577.1942	311.84669	3204.04817	2048.34611	3183.53318	0.264	0.2666	3.10E-03	3.00E-03	6.22E-04	3.33E-03	5.70E-04	2.25E-03	2.83E-03	1.61E-03	3.18E-04	3.89E-03	1.67E-03	2.59E-03	1.24E-04	1.26E-04	2.6015E-02
551293.56	4172693.84	1822.0133	2280.1598	690.8397	4969.37829	933.09988	1596.00582	1819.02245	1315.65079	382.8821	3698.47087	3005.13857	2031.72254	0.22269	0.22655	2.90E-03	2.57E-03	7.78E-04	4.29E-03	8.10E-04	1.39E-03	2.62E-03	1.34E-03	3.91E-04	4.49E-03	2.45E-03	1.65E-03	1.04E-04	1.07E-04	2.5882E-02
552054.51	4173212.58	3417.08661	2421.3867	434.84755	1974.17259	382.05118	3537.98392	3507.26835	1392.22772	254.08112	1937.8978	931.18371	4351.42708	0.25713	0.25306	5.44E-03	2.73E-03	4.90E-04	1.70E-03	3.32E-04	3.07E-03	5.05E-03	1.42E-03	2.59E-04	2.35E-03	7.58E-04	3.54E-03	1.21E-04	1.20E-04	2.7385E-02
551285.97	4172729.7	1824.81876	2285.03658	689.27763	4945.71394	917.23435	1623.69753	1821.7723	1319.54371	382.66073	3690.33329	2973.30453	2061.88508	0.22595	0.22982	2.90E-03	2.57E-03	7.76E-04	4.27E-03	7.96E-04	1.41E-03	2.62E-03	1.35E-03	3.91E-04	4.48E-03	2.42E-03	1.68E-03	1.06E-04	1.09E-04	2.5880E-02
551320.64	4173188.43	1944.13447	2629.46783	560.91436	3807.48706	659.71629	2644.66	1958.79776	1559.898	316.28731	3203.23161	2004.85149	3234.57169	0.27606	0.27822	3.09E-03	2.96E-03	6.32E-04	3.28E-03	5.73E-04	2.30E-03	2.82E-03	1.59E-03	3.23E-04	3.89E-03	1.63E-03	2.63E-03	1.29E-04	1.32E-04	2.5990E-02
551236.23	4172981.84	1933.06856	2655.33969	611.92746	4367.16977	699.99113	1985.68668	1936.99568	1547.91077	346.41168	3636.84839	2272.46281	2504.69484	0.23889	0.24149	3.08E-03	2.99E-03	6.89E-04	3.77E-03	6.08E-04	1.72E-03	2.79E-03	1.58E-03	3.54E-04	4.42E-03	1.85E-03	2.04E-03	1.12E-04	1.14E-04	2.6107E-02
551246.37	4172856.98	1850.12206	2400.3487	658.654	4829.97716	809.60035	1696.15758	1849.27644	1386.3482	368.54765	3755.48724	2683.58002	2153.53809	0.2326	0.23607	2.94E-03	2.70E-03	7.42E-04	4.17E-03	7.03E-04	1.47E-03	2.66E-03	1.42E-03	3.76E-04	4.56E-03	2.18E-03	1.75E-03	1.09E-04	1.12E-04	2.5902E-02
551571.37	4173428.18	2437.45535	2630.35021	544.49315	2796.46362	523.78746	3250.52731	2467.17154	1576.7175	312.3382	2610.33868	1338.67481	3939.37622	0.48035	0.48054	3.88E-03	2.96E-03	6.13E-04	2.41E-03	4.55E-04	2.82E-03	3.55E-03	1.61E-03	3.19E-04	3.17E-03	1.09E-03	3.21E-03	2.25E-04	2.28E-04	2.6542E-02
551496.5	4173389.18	2280.28455	2630.75989	534.04441	3112.74217	566.64093	3080.41977	2305.75471	1580.24271	304.91197	2786.91419	1514.91433	3729.66636	0.38638	0.38766	3.63E-03	2.96E-03	6.01E-04	2.68E-03	4.92E-04	2.67E-03	3.32E-03	1.61E-03	3.11E-04	3.38E-03	1.23E-03	3.04E-03	1.81E-04	1.84E-04	2.6306E-02
551386.74	4173297.99	2078.1581	2716.96178	565.25156	3477.83118	605.90398	2741.21526	2092.28782	1635.95837	322.15028	3043.7127	1772.18458	3354.52872	0.30184	0.30376	3.31E-03	3.06E-03	6.37E-04	3.00E-03	5.26E-04	2.38E-03	3.01E-03	1.67E-03	3.29E-04	3.70E-03	1.44E-03	2.73E-03	1.41E-04	1.44E-04	2.6074E-02
551435.07	4173343.51	2182.12399	2660.79324	537.79455	3282.96816	579.24311	2939.12814	2200.79548	1602.69766	307.16843	2873.56558	1658.15383	3576.55274	0.33152	0.33287	3.47E-03	3.00E-03	6.06E-04	2.83E-03	5.03E-04	2.55E-03	3.17E-03	1.64E-03	3.14E-04	3.49E-03	1.35E-03	2.91E-03	1.55E-04	1.58E-04	2.6142E-02
551235.82	4172951.61	1903.09667	2587.18344	624.52826	4459.00937	716.02959	1897.93003	1905.59824	1503.03775	352.90888	3681.76378	2345.41506	2398.96404	0.23656	0.23969	3.03E-03	2.91E-03	7.03E-04	3.85E-03	6.22E-04	1.65E-03	2.74E-03	1.53E-03	3.60E-04	4.47E-03	1.91E-03	1.95E-03	1.11E-04	1.14E-04	2.5955E-02
551267.6	4172778.27	1824.06686	2284.23752	679.56149	4914.79965	878.47268	1626.08727	1821.2897	1319.21631	378.46488	3694.89043	2888.87762	2063.8092	0.22882	0.23262	2.90E-03	2.57E-03	7.65E-04	4.24E-03	7.63E-04	1.41E-03	2.62E-03	1.35E-03	3.86E-04	4.49E-03	2.35E-03	1.68E-03	1.07E-04	1.10E-04	2.5744E-02
551348.45	4173236.61	1964.21266	2643.19531	571.78923	3674.3691	642.88534	2633.29853	1978.02073	1574.50709	323.12229	3164.42174	1904.17549	3219.5587	0.28598	0.28796	3.13E-03	2.98E-03	6.44E-04	3.17E-03	5.58E-04	2.29E-03	2.85E-03	1.61E-03	3.30E-04	3.84E-03	1.55E-03	2.62E-03	1.34E-04	1.36E-04	2.5828E-02
551233	4172972.88	1911.52511	2609.11876	612.70499	4366.6191	702.05366	1939.75859	1914.89049	1519.11444	346.65703	3623.14244	2281.24218	2448.5389	0.23628	0.23907	3.04E-03	2.94E-03	6.90E-04	3.77E-03	6.10E-04	1.68E-03	2.76E-03	1.55E-03	3.54E-04	4.40E-03	1.86E-03	1.99E-03	1.11E-04	1.13E-04	2.5865E-02
551323.73	4173197.01	1930.12717	2601.82636	558.64041	3758.76039	654.1164	2617.37497	1944.56038	1543.9208	314.99958	3172.65887	1977.03271	3200.50136	0.27536	0.27775	3.07E-03	2.93E-03	6.29E-04	3.24E-03	5.68E-04	2.27E-03	2.80E-03	1.58E-03	3.22E-04	3.85E-03	1.61E-03	2.60E-03	1.29E-04	1.32E-04	2.5738E-02
551281.65	4172738.1	1811.12405	2262.13001	681.86757	4882.68218	902.3403	1612.97909	1808.14412	1306.63989	378.76556	3649.36367	2926.98774	2047.47086	0.22398	0.22777	2.88E-03	2.55E-03	7.68E-04	4.21E-03	7.84E-04	1.40E-03	2.60E-03	1.33E-03	3.87E-04	4.43E-03	2.38E-03	1.67E-03	1.05E-04	1.08E-04	2.5609E-02
551240.48	4172881.24	1848.85116	2430.69705	647.28985	4711.79951	777.55911	1725.91064	1848.80671	1405.17193	362.82407	3724.05693	2573.69788	2190.04251	0.23101	0.23432	2.94E-03	2.74E-03	7.29E-04	4.06E-03	6.75E-04	1.50E-03	2.66E-03	1.43E-03	3.70E-04	4.52E-03	2.09E-03	1.78E-03	1.08E-04	1.11E-04	2.5731E-02
551444.74	4173352.62	2187.23947	2626.93832	531.34747	3232.69892	573.22986	2949.2885	2206.98635	1580.63327	303.39223	2831.84915	1637.80033	3584.46841	0.33655	0.3382	3.48E-03	2.96E-03	5.98E-04	2.79E-03	4.98E-04	2.56E-03	3.18E-03	1.61E-03	3.10E-04	3.44E-03	1.33E-03	2.92E-03	1.58E-04	1.60E-04	2.5992E-02
551269.51	4172769.36	1813.03723	2264.73231	677.0454	4877.62446	879.5347	1615.01956	1810.19983	1308.14971	376.85104	3661.46927	2882.2023	2049.58722	0.22642	0.23019	2.89E-03	2.55E-03	7.63E-04	4.21E-03	7.64E-04	1.40E-03	2.61E-03	1.34E-03	3.85E-04	4.45E-03	2.35E-03	1.67E-03	1.06E-04	1.09E-04	2.5572E-02
552092.91	4173195.34	3487.90612	2399.38075	429.68923	1974.25648	373.79512	3340.53346	3578.56215	1381.3289	251.46635	1939.81732	918.17191	4128.93726	0.22768	0.22439	5.55E-03	2.70E-03	4.84E-04	1.70E-03	3.25E-04	2.90E-03	5.15E-03	1.41E-03	2.57E-04	2.35E-03	7.47E-04	3.36E-03	1.07E-04	1.06E-04	2.7161E-02
551301.74	4173164.7	1920.46375	2600.85209	548.0771	3790.63813	650.67946	2573.38501	1934.85912	1541.83605	309.21053	3155.52918	2009.57848	3156.28126	0.26384	0.26633	3.06E-03	2.93E-03	6.17E-04	3.27E-03	5.65E-04	2.23E-03	2.79E-03	1.57E-03	3.16E-04	3.83E-03	1.64E-03	2.57E-03	1.24E-04	1.26E-04	2.5632E-02
551253.13	4172818.03	1821.2649	2307.66744	663.65324	4839.78297	837.57952	1634.33977	1819.31997	1332.48295	370.66183	3693.28254	2767.71651	2075.27383	0.22882	0.23247	2.90E-03	2.60E-03	7.47E-04	4.17E-03	7.27E-04	1.42E-03	2.62E-03	1.36E-03	3.78E-04	4.48E-03	2.25E-03	1.69E-03	1.07E-04	1.10E-04	2.5566E-02
551506.09	4173398.22	2269.14734	2598.66964	530.03565	3048.20323	559.76147	3049.29787	2295.07004	1561.29057	302.69756	2741.86869	1478.03037	3691.77131	0.39106	0.39213	3.61E-03	2.93E-03	5.97E-04	2.63E-03	4.86E-04	2.65E-03	3.31E-03	1.59E-03	3.09E-04	3.33E-03	1.20E-03	3.00E-03	1.83E-04	1.86E-04	2.6011E-02
551277.33	4172746.51	1803.40929	2248.95409	677.25965	4848.99112	891.54995	1606.1522	1800.46769	1299.19726	376.41375	3628.69755	2897.29848	2038.36739	0.22325	0.227	2.87E-03	2.53E-03	7.63E-04	4.18E-03	7.74E-04	1.39E-03	2.59E-03	1.33E-03	3.84E-04	4.41E-03	2.36E-03	1.66E-03	1.05E-04	1.08E-04	2.5454E-02
551232.59	4172942.65	1876.77524	2533.69988	622.6699	4441.42174	717.15376	1850.68312	1878.84949	1470.99211	351.46922	3647.68104	2350.23299	2340.70824	0.23284	0.23593	2.99E-03	2.85E-03	7.01E-04	3.83E-03	6.23E-04	1.61E-03	2.71E-03	1.50E-03	3.59E-04	4.43E-03	1.91E-03	1.90E-03	1.09E-04	1.12E-04	2.5635E-02
551234.57	4172905.33	1850.08766	2458.34227	636.39919	4587.28257	750.59071	1761.18614	1850.80175	1423.06566	357.60716	3682.93004	2474.71227	2232.65153	0.23063	0.23383	2.94E-03	2.77E-03	7.17E-04	3.96E-03	6.52E-04	1.53E-03	2.67E-03	1.45E-03	3.65E-04	4.47E-03	2.01E-03	1.82E-03	1.08E-04	1.11E-04	2.5571E-02
551326.82	4173205.6	1918.68572	2579.15668	556.97416	3713.2104	648.52571	2590.90968	1932.86446	1531.06152	314.0906	3145.23602	1949.84672	3167.92729	0.2748	0.27684	3.05E-03	2.90E-03	6.27E-04	3.20E-03	5.63E-04	2.25E-03	2.78E-03	1.56E-03	3.21E-04	3.82E-03	1.59E-03	2.58E-03	1.29E-04	1.31E-04	2.5511E-02
551990.2	4173248.87	3241.32125	2290.91204	442.3876	1941.96617	395.03312	3576.14836	3316.22498	1333.20408	257.75376	1890.94378	949.97959	4369.89849	0.32073	0.31452	5.16E-03	2.58E-03	4.98E-04	1.67E-03	3.43E-04	3.11E-03	4.78E-03	1.36E-03	2.63E-04	2.30E-03	7.73E-04	3.56E-03	1.50E-04	1.49E-04	2.6684E-02
551581.23	4173435.71	2433.36997	2571.89545	537.56658	2705.91532	511.79274	3200.74214	2463.09189	1540.09668	308.62078	2533.79886	1300.66341	3883.32203	0.48263	0.48094	3.87E-03	2.90E-03	6.05E-04	2.33E-03	4.44E-04	2.78E-03	3.55E-03	1.57E-03	3.15E-04	3.08E-03	1.06E-03	3.16E-03	2.26E-04	2.28E-04	2.6115E-02
551273.01	4172754.92	1796.98511	2238.48458	672.96835	4820.73312	881.12603	1599.69684	1794.09556	1293.23379	374.24296	3612.74072	2869.41318	2030.02283	0.22269	0.2264	2.86E-03	2.52E-03	7.58E-04	4.16E-03	7.65E-04	1.39E-03	2.58E-03	1.32E-03	3.82E-04	4.39E-03	2.34E-03	1.65E-03	1.04E-04	1.07E-04	2.5321E-02
551297.11	4172665.83	1791.85578	2217.85847	675.92161	4848.19105	915.49058	1536.7111	1789.15293	1279.25598	374.4894	3611.36784	2931.96377	1961.07431	0.21318	0.21679	2.85E-03	2.50E-03	7.61E-04	4.18E-03	7.95E-04	1.33E-03	2.58E-03	1.31E-03	3.82E-04	4.38E-03	2.39E-03	1.60E-03	9.99E-05	1.03E-04	2.5255E-02
551253.86	4172808.38	1802.70996	2269.2791	659.37696	4785.43345	836.03384	1611.09167	1800.59987	1310.5795	368.06755	3640.54556	2754.18629	2045.57215	0.22533	0.22895	2.87E-03	2.56E-03	7.43E-04	4.13E-03	7.26E-04	1.40E-03	2.59E-03	1.34E-03	3.76E-04	4.42E-03	2.24E-03	1.66E-03	1.06E-04	1.09E-04	2.5266E-02
551301.42	4172657.45	1792.87531	2207.77734	674.75829	4837.49329	913.43143	1523.71358	1790.28585	1273.40308	373.88974	3603.84715	2924.17341	1946.52399	0.21099	0.21453	2.85E-03	2.49E-03	7.60E-04	4.17E-03	7.93E-04	1.32E-03	2.58E-03	1.30E-03	3.82E-04	4.38E-03	2.38E-03	1.58E-03	9.89E-05	1.02E-04	2.5187E-02
551352.6	4173248	1945.81601	2603.81171	564.31833	3581.5584	629.3349	2585.86645	1959.2303	1553.90711	319.23462	3093.08686	1857.87377	3162.66613	0.28421	0.28569	3.10E-03	2.93E-03	6.36E-04	3.09E-03	5.46E-04	2.25E-03	2.82E-03	1.59E-03	3.26E-04	3.76E-03	1.51E-03	2.57E-03	1.33E-04	1.35E-04	2.5389E-02
551292.81	4172674.21	1783.11149	2213.18508	672.90576	4818.74216	910.33921	1541.77628	1780.36442	1276.8531	372.85276	3591.78485	2914.21733	1965.47455	0.21349	0.21712	2.84E-03	2.49E-03	7.58E-04	4.16E-03	7.90E-04	1.34E-03	2.56E-03	1.30E-03	3.81E-04	4.36E-03	2.37E-03	1.60E-03	1.00E-04	1.03E-04	2.5156E-02
551515.68	4173407.26	2258.9275	2568.36956	526.29784	2981.47089	552.54359	3020.30166	2285.12051	1543.19572	300.66748	2695.67006	1440.74074	3657.13623	0.39544	0.39601	3.59E-03	2.89E-03	5.93E-04	2.57E-03	4.80E-04	2.62E-03	3.29E-03	1.58E-03	3.07E-04	3.27E-03	1.17E-03	2.98E-03	1.85E-04	1.88E-04	2.5721E-02
551329.91	4173214.18	1907.87385	2557.89427	555.14981	3665.85559	642.36187	2563.34979	1921.77804	1519.16354	313.11317	3116.08427	1921.99823	3134.44831	0.27413	0.27611	3.04E-03	2.88E-03	6.25E-04	3.16E-03	5.58E-04	2.23E-03	2.77E-03	1.55E-03	3.20E-04	3.78E-03	1.56E-03	2.55E-03	1.28E-04	1.31E-04	2.5283E-02
551238.78	4172870.81	1818.00737	2366.85204	639.25624	4649.58711	775.37603	1680.05566	1817.70467	1368.01236	358.02106	3651.61944	2558.91694	2132.52693	0.22594	0.22918	2.89E-03	2.67E-03	7.20E-04	4.01E-03	6.73E-04	1.46E-03	2.62E-03	1.40E-03	3.66E-04	4.43E-03	2.08E-03	1.74E-03	1.06E-04	1.09E-04	2.5266E-02
551473.73	4173379.93	2201.47655	2556.51888	520.94224	3102.37965	559.33095	2952.59293	2224.38372	1535.13599	297.24857	2742.81411	1537.52907	3579.96316	0.35354	0.35452	3.50E-03	2.88E-03	5.87E-04	2.68E-03	4.86E-04	2.56E-03	3.20E-03	1.57E-03	3.03E-04	3.33E-03	1.25E-03	2.91E-03	1.66E-04	1.68E-04	2.5597E-02
551307.66	4173181.44	1893.20525	2544.40415	543.92376	3714.62734	643.49317	2539.55537	1907.35906	1508.59443	306.7258	3106.1611	1965.67099	3110.54534	0.26345	0.26553	3.01E-03	2.87E-03	6.13E-04	3.20E-03	5.59E-04	2.21E-03	2.75E-03	1.54E-03	3.13E-04	3.77E-03	1.60E-03	2.53E-03	1.23E-04	1.26E-04	2.5210E-02
551307.05	4172647.52	1795.77115	2193.24793	673.96678	4827.02915	911.1222	1507.02612	1793.30692	1265.12798	373.55503	3594.50507	2916.58817	1927.78486	0.20834	0.21177	2.86E-03	2.47E-03	7.59E-04	4.16E-03	7.91E-04	1.31E-03	2.58E-03	1.29E-03	3.81E-04	4.36E-03	2.37E-03	1.57E-03	9.76E-05	1.00E-04	2.5109E-02
551232.87	4172894.93	1825.05484	2406.0581	632.03199	4560.24858	752.35495	1719.25479	1825.4681	1392.10758	354.71732	3636.44914	2479.24539	2180.53882	0.22688	0.23005	2.90E-03	2.71E-03	7.12E-04	3.93E-03	6.53E-04	1.49E-03	2.63E-03	1.42E-03	3.62E-04	4.41E-03	2.02E-03	1.77E-03	1.06E-04	1.09E-04	2.5240E-02
551402.05	4173324.59	2076.61407	2623.73871	540.33578	3299.20396	579.28295	2729.70985	2091.72905	1582.08884	308.50124	2885.01935	1680.70513	3336.94912	0.30098	0.30267	3.30E-03	2.96E-03	6.09E-04	2.85E-03	5.03E-04	2.37E-03	3.01E-03	1.62E-03	3.15E-04	3.50E-03	1.37E-03	2.72E-03	1.41E-04	1.43E-04	2.5400E-02
551229.78	4172963.91	1868.95542	2533.26673	603.50444	4279.17578	690.92702	1878.34397	1871.96344	1473.69572	341.31624	3549.35822	2246.59774	2372.27297	0.22999	0.23295	2.97E-03	2.85E-03	6.80E-04	3.69E-03	6.00E-04	1.63E-03	2.70E-03	1.50E-03	3.48E-04	4.31E-03	1.83E-03	1.93E-03	1.08E-04	1.10E-04	2.5263E-02
551525.28	4173416.29	2267.62098	2558.9268	525.57579	2921.8317	546.08386	3020.49738	2294.12499	1536.22897	300.45384	2661.84905	1404.55817	3659.477	0.40127	0.40187	3.61E-03	2.88E-03	5.92E-04	2.52E-03	4.74E-04	2.62E-03	3.30E-03	1.57E-03	3.07E-04	3.23E-03	1.14E-03	2.98E-03	1.88E-04	1.90E-04	2.5610E-02
551483.4	4173389.03	2206.16418	2543.225	519.5977	3060.55056	555.2792	2948.30989	2229.96297	1526.89842	296.51465	2719.90833	1505.41891	3573.69237	0.3593	0.36015	3.51E-03	2.86E-03	5.85E-04	2.64E-03	4.82E-04	2.56E-03	3.21E-03	1.56E-03	3.03E-04	3.30E-03	1.23E-03	2.91E-03	1.68E-04	1.71E-04	2.5490E-02
551288.5	4172682.58	1769.24844	2197.72637	667.03457	4762.13101	900.20359	1540.59918	1766.50391	1268.35602	369.69064	3553.72617	2879.02414	1962.0146	0.21245	0.21605	2.82E-03	2.48E-03	7.51E-04	4.11E-03	7.82E-04	1.34E-03	2.54E-03	1.29E-03	3.77E-04	4.31E-03	2.34E-03	1.60E-03	9.96E-05	1.02E-04	2.4941E-02
551228.62	4172929.27	1837.5603	2456.35425	617.95334	4404.03484	717.3805	1784.28443	1839.09756	1424.85544	348.23046	3588.73744	2350.46836	2258.67271	0.22716	0.23021	2.92E-03	2.77E-03	6.96E-04	3.80E-03	6.23E-04	1.55E-03	2.65E-03	1.45E-03	3.56E-04	4.36E-03	1.91E-03	1.84E-03	1.06E-04	1.09E-04	2.5139E-02
551411.78	4173333.76	2083.66526	2590.25282	531.23552	3242.18146	571.45257	2749.23727	2099.61069	1562.40323	303.39992	2830.07471	1656.36616	3356.45922	0.3051	0.30673	3.32E-03	2.92E-03	5.98E-04	2.80E-03	4.96E-04	2.39E-03	3.02E-03	1.60E-03	3.10E-04	3.44E-03	1.35E-03	2.73E-03	1.43E-04	1.45E-04	2.5243E-02
551641.3	4173444.89	2674.33943	2431.54183	528.22138	2403.91061	481.86792	3193.81148	2710.32619	1442.50708	305.11807	2280.99134	1188.96027	3900.86763	0.6613	0.65264	4.26E-03	2.74E-03	5.95E-04	2.07E-03	4.18E-04	2.77E-03	3.90E-03	1.47E-03	3.12E-04	2.77E-03	9.68E-04	3.17E-03	3.10E-04	3.09E-04	2.6072E-02
551280.69	4172718.88	1765.82503	2194.84586	663.45302	4714.69058	883.61975	1564.71944	1763.03007	1267.8618	368.26369	3527.85901	2838.31534	1987.35624	0.2147	0.21829	2.81E-03	2.47E-03	7.47E-04	4.07E-03	7.67E-04	1.36E-03	2.54E-03	1.29E-03	3.76E-04	4.28E-03	2.31E-03	1.62E-03	1.01E-04	1.03E-04	2.4845E-02
551702.32	4173427.06	3051.75587	2310.60487	516.13797	2243.0615	469.05148	3120.65287	3100.48179	1354.8539	299.57432	2099.20064	1131.94674	3839.29163	1.60353	1.48359	4.86E-03	2.60E-03	5.81E-04	1.93E-03	4.07E-04	2.71E-03	4.47E-03	1.38E-03	3.06E-04	2.55E-03	9.21E-04	3.12E-03	7.52E-04	7.03E-04	2.7294E-02
551654.44	4173442.98	2752.58292	2406.73475	526.22535	2344.02753	478.16799	3188.74713	2790.89882	1423.71096	304.3616	2237.2583	1173.14472	3901.67652	0.754	0.74078	4.38E-03	2.71E-03	5.93E-04	2.02E-03	4.15E-04	2.77E-03	4.02E-03	1.45E-03	3.11E-04	2.72E-03	9.55E-04	3.18E-03	3.53E-04	3.51E-04	2.6223E-02
551333	4173222.77	1893.32599	2530.30943	551.6395	3606.43711	634.45319	2529.25142	1906.94573	1503.76058	311.21342	3075.48572	1890.46815	3093.15109	0.27281	0.275	3.01E-03	2.85E-03	6.21E-04	3.11E-03	5.51E-04	2.20E-03	2.75E-03	1.54E-03	3.18E-04	3.73E-03	1.54E-03	2.52E-03	1.28E-04	1.30E-04	2.4988E-02
551311.37	4173191.76	1877.27205	2512.73589	541.57631	3665.30644	638.33489	2512.98577	1891.19624	1490.09685	305.34593	3075.65115	1936.81508	3076.61547	0.26289	0.2649	2.99E-03	2.83E-03	6.10E-04	3.16E-03	5.54E-04	2.18E-03	2.72E-03	1.52E-03	3.12E-04	3.73E-03	1.58E-03	2.50E-03	1.23E-04	1.26E-04	2.4944E-02
551421.52	4173342.93	2096.4714	2565.42526	524.45348	3197.80196	565.5854	2776.35898	2113.37176	1546.34227	299.53305	2790.48332	1631.19667	3385.04864	0.30984	0.31142	3.34E-03	2.89E-03	5.91E-04	2.76E-03	4.91E-04	2.41E-03	3.04E-03	1.58E-03	3.06E-04	3.39E-03	1.33E-03	2.75E-03	1.45E-04	1.48E-04	2.5167E-02
551493.07	4173398.14	2201.85853	2520.8687	516.90662	3008.37762	549.90195	2929.3748	2226.28465	1513.62144	295.03544	2686.6617	1471.5536	3550.18079	0.36417	0.36486	3.50E-03	2.84E-03	5.82E-04	2.59E-03	4.77E-04	2.54E-03	3.21E-03	1.55E-03	3.01E-04	3.26E-03	1.20E-03	2.89E-03	1.71E-04	1.73E-04	2.5286E-02
551226.55	4172954.95	1844.23691	2483.5211	602.35706	4264.91935	691.62197	1832.8232	1846.78935	1443.62092	340.36847	3521.94395	2250.67032	2316.28431	0.22648	0.22941	2.93E-03	2.80E-03	6.78E-04	3.68E-03	6.01E-04	1.59E-03	2.66E-03	1.47E-03	3.47E-04	4.28E-03	1.83E-03	1.89E-03	1.06E-04	1.09E-04	2.4969E-02
551237.08	4172860.37	1789.31343	2307.08552	631.72794	4587.40491	773.5797	1637.89311	1788.75524	1333.2027	353.58555	3582.0677	2545.04223	2079.60753	0.22136	0.22457	2.85E-03	2.60E-03	7.11E-04	3.96E-03	6.72E-04	1.42E-03	2.58E-03	1.36E-03	3.61E-04	4.35E-03	2.07E-03	1.69E-03	1.04E-04	1.06E-04	2.4828E-02
551667.58	4173441.07	2816.42958	2366.84969	521.76383	2302.81733	473.38102	3154.20339	2856.94495	1396.79453	302.10209	2185.90492	1155.92712	3865.81182	0.86093	0.84006	4.48E-03	2.67E-03	5.88E-04	1.99E-03	4.11E-04	2.74E-03	4.11E-03	1.43E-03	3.08E-04	2.65E-03	9.41E-04	3.15E-03	4.04E-04	3.98E-04	2.6262E-02
551377.08	4173288.89	1977.81927	2587.88317	549.39538	3382.03975	595.59725	2589.26748	1991.11988	1558.7139	312.58227	2940.15636	1745.97626	3168.45386	0.28899	0.2905	3.15E-03	2.91E-03	6.19E-04	2.92E-03	5.17E-04	2.25E-03	2.87E-03	1.59E-03	3.19E-04	3.57E-03	1.42E-03	2.58E-03	1.35E-04	1.38E-04	2.4983E-02
552001.38	4173247.62	3145.98149	2241.66323	432.13954	1904.53738	386.28145	3466.46487	3218.90209	1305.48034	251.75075	1854.12023	930.36318	4239.22314	0.3054	0.29961	5.01E-03	2.52E-03	4.87E-04	1.64E-03	3.35E-04	3.01E-03	4.64E-03	1.33E-03	2.57E-04	2.25E-03	7.57E-04	3.45E-03	1.43E-04	1.42E-04	2.5974E-02
551284.19	4172690.96	1753.06781	2176.10036	659.76239	4692.72651	887.43784	1535.26529	1750.35418	1256.31709	365.78973	3506.78873	2835.23622	1953.44259	0.21068	0.21422	2.79E-03	2.45E-03	7.43E-04	4.05E-03	7.71E-04	1.33E-03	2.52E-03	1.28E-03	3.73E-04	4.26E-03	2.31E-03	1.59E-03	9.87E-05	1.02E-04	2.4666E-02
551431.25	4173352.1	2100.17367	2528.61367	516.68533	3145.47321	558.92711	2787.13445	2118.1113	1522.7275	295.01747	2743.78867	1606.38271	3393.58574	0.31419	0.31533	3.34E-03	2.85E-03	5.82E-04	2.71E-03	4.85E-04	2.42E-03	3.05E-03	1.55E-03	3.01E-04	3.33E-03	1.31E-03	2.76E-03	1.47E-04	1.49E-04	2.4993E-02
551358.17	4173262.22	1924.15307	2553.51694	553.42265	3463.18206	611.60476	2530.71543	1937.18348	1528.1582	313.5355	2997.90623	1800.23101	3096.43683	0.28109	0.2827	3.06E-03	2.88E-03	6.23E-04	2.99E-03	5.31E-04	2.20E-03	2.79E-03	1.56E-03	3.20E-04	3.64E-03	1.47E-03	2.52E-03	1.32E-04	1.34E-04	2.4837E-02
551231.17	4172884.53	1792.09351	2341.16301	623.24393	4494.19401	747.30483	1670.94014	1792.27308	1354.17946	349.43094	3563.3701	2457.31542	2120.11999	0.22112	0.22421	2.85E-03	2.64E-03	7.02E-04	3.88E-03	6.49E-04	1.45E-03	2.58E-03	1.38E-03	3.57E-04	4.33E-03	2.00E-03	1.73E-03	1.04E-04	1.06E-04	2.4748E-02
551314.46	4173200.35	1864.37216	2487.77609	539.62151	3622.08216	633.47587	2488.09579	1878.08629	1475.64852	304.22588	3049.09029	1911.67057	3045.52818	0.26228	0.26423	2.97E-03	2.80E-03	6.08E-04	3.12E-03	5.50E-04	2.16E-03	2.70E-03	1.51E-03	3.11E-04	3.70E-03	1.56E-03	2.48E-03	1.23E-04	1.25E-04	2.4717E-02
551242.56	4172827.74	1772.20761	2241.78861	638.31499	4627.56627	800.02222	1590.94322	1770.71747	1294.81657	356.75533	3555.43093	2628.5217	2020.52791	0.2198	0.22318	2.82E-03	2.52E-03	7.19E-04	3.99E-03	6.95E-04	1.38E-03	2.55E-03	1.32E-03	3.64E-04	4.32E-03	2.14E-03	1.64E-03	1.03E-04	1.06E-04	2.4676E-02
551336.09	4173231.36	1882.00304	2508.00773	548.67212	3551.71662	626.72445	2498.77487	1895.33513	1491.70322	309.66218	3038.44928	1860.36792	3056.51769	0.27169	0.27381	2.99E-03	2.82E-03	6.18E-04	3.06E-03	5.44E-04	2.17E-03	2.73E-03	1.52E-03	3.16E-04	3.69E-03	1.51E-03	2.49E-03	1.27E-04	1.30E-04	2.4730E-02
551680.72	4173439.16	2876.89872	2321.17224	515.51519	2258.55623	467.82186	3103.2588	2919.76207	1366.2114	298.77264	2132.21758	1136.95538	3810.4968	0.99976	0.96255	4.58E-03	2.61E-03	5.81E-04	1.95E-03	4.06E-04	2.69E-03	4.20E-03	1.39E-03	3.05E-04	2.59E-03	9.25E-04	3.10E-03	4.69E-04	4.56E-04	2.6266E-02
551392.32	4173315.42	2012.76653	2565.20518	535.18532	3270.36893	576.15512	2626.30025	2026.81589	1548.58737	305.31443	2848.24243	1678.44176	3212.74271	0.29156	0.29326	3.20E-03	2.89E-03	6.03E-04	2.82E-03	5.00E-04	2.28E-03	2.92E-03	1.58E-03	3.12E-04	3.46E-03	1.37E-03	2.61E-03	1.37E-04	1.39E-04	2.4822E-02
551276.39	4172727.22	1747.32879	2164.60523	653.93129	4630.33284	866.09719	1550.37089	1744.62209	1250.83179	363.18849	3471.80102	2780.84569	1968.16758	0.21176	0.21525	2.78E-03	2.44E-03	7.36E-04	3.99E-03	7.52E-04	1.35E-03	2.51E-03	1.28E-03	3.71E-04	4.21E-03	2.26E-03	1.60E-03	9.92E-05	1.02E-04	2.4488E-02
551223.33	4172945.98	1820.53261	2435.70956	601.24766	4253.2104	693.49075	1789.55721	1822.66358	1414.88054	339.37529	3494.02011	2258.16091	2263.02266	0.22327	0.22617	2.90E-03	2.74E-03	6.77E-04	3.67E-03	6.02E-04	1.55E-03	2.62E-03	1.44E-03	3.46E-04	4.24E-03	1.84E-03	1.84E-03	1.05E-04	1.07E-04	2.4691E-02
551502.73	4173407.24	2189.68315	2490.1661	512.98978	2947.53893	543.35922	2898.50306	2214.48272	1495.56594	292.87023	2644.13184	1436.30022	3512.57777	0.36748	0.36825	3.48E-03	2.80E-03	5.78E-04	2.54E-03	4.72E-04	2.52E-03	3.19E-03	1.53E-03	2.99E-04	3.21E-03	1.17E-03	2.86E-03	1.72E-04	1.75E-04	2.4997E-02
551440.99	4173361.27	2105.3236	2498.16355	510.90519	3100.56525	553.53519	2796.50246	2124.30454	1502.68681	291.60852	2707.01325	1582.83157	3400.84921	0.31871	0.32011	3.35E-03	2.81E-03	5.75E-04	2.67E-03	4.81E-04	2.43E-03	3.06E-03	1.53E-03	2.98E-04	3.29E-03	1.29E-03	2.77E-03	1.49E-04	1.52E-04	2.4857E-02
551450.72	4173370.43	2117.98374	2484.08004	508.57271	3069.6482	550.25931	2813.11557	2138.10084	1492.5318	290.18348	2687.84049	1561.86632	3417.94537	0.32446	0.32543	3.37E-03	2.80E-03	5.73E-04	2.65E-03	4.78E-04	2.44E-03	3.08E-03	1.52E-03	2.96E-04	3.26E-03	1.27E-03	2.78E-03	1.52E-04	1.54E-04	2.4830E-02
551715.36	4173425.16	3080.38232	2246.16207	505.59108	2190.50961	461.2744	3026.28438	3131.12517	1314.56549	293.58468	2038.85142	1109.30648	3729.11701	1.77243	1.57329	4.90E-03	2.53E-03	5.69E-04	1.89E-03	4.01E-04	2.63E-03	4.51E-03	1.34E-03	3.00E-04	2.48E-03	9.03E-04	3.03E-03	8.31E-04	7.46E-04	2.7059E-02
551361.76	4173270.8	1921.87517	2538.47766	548.89819	3411.62473	603.05345	2514.42939	1934.75014	1521.79555	311.30455	2957.19269	1772.02532	3077.38732	0.28041	0.28196	3.06E-03	2.86E-03	6.18E-04	2.94E-03	5.24E-04	2.18E-03	2.79E-03	1.55E-03	3.18E-04	3.59E-03	1.44E-03	2.50E-03	1.31E-04	1.34E-04	2.4644E-02
551279.88	4172699.34	1736.53657	2151.81078	652.08465	4620.75501	873.69518	1527.36206	1733.85878	1242.72304	361.69223	3457.90369	2789.08945	1941.82722	0.20863	0.21211	2.76E-03	2.42E-03	7.34E-04	3.99E-03	7.59E-04	1.33E-03	2.50E-03	1.27E-03	3.69E-04	4.20E-03	2.27E-03	1.58E-03	9.78E-05	1.01E-04	2.4373E-02
551317.55	4173208.93	1852.41534	2464.94474	537.75865	3578.15234	628.2163	2462.15606	1865.8922	1462.62318	303.19341	3022.30125	1885.9873	3013.55219	0.26163	0.26352	2.95E-03	2.78E-03	6.06E-04	3.09E-03	5.45E-04	2.14E-03	2.69E-03	1.49E-03	3.10E-04	3.67E-03	1.53E-03	2.45E-03	1.23E-04	1.25E-04	2.4493E-02
551243.27	4172818.3	1755.54099	2205.98554	634.8877	4583.81422	799.20177	1568.54865	1753.86967	1274.32776	354.68702	3510.54129	2619.56129	1991.99355	0.21681	0.22018	2.79E-03	2.48E-03	7.15E-04	3.95E-03	6.94E-04	1.36E-03	2.53E-03	1.30E-03	3.62E-04	4.26E-03	2.13E-03	1.62E-03	1.02E-04	1.04E-04	2.4412E-02
551339.18	4173239.94	1871.81086	2487.16026	545.45009	3496.84905	618.67854	2469.52415	1884.86796	1480.72088	308.0169	3000.2871	1830.34025	3021.5476	0.27052	0.27257	2.98E-03	2.80E-03	6.14E-04	3.02E-03	5.37E-04	2.14E-03	2.71E-03	1.51E-03	3.14E-04	3.64E-03	1.49E-03	2.46E-03	1.27E-04	1.29E-04	2.4479E-02
551257.87	4172776.78	1745.67732	2161.65423	644.25496	4596.38436	829.29327	1548.37514	1743.246	1249.2993	358.93335	3472.60349	2699.52295	1965.16657	0.21401	0.21743	2.78E-03	2.43E-03	7.26E-04	3.96E-03	7.20E-04	1.34E-03	2.51E-03	1.28E-03	3.66E-04	4.22E-03	2.20E-03	1.60E-03	1.00E-04	1.03E-04	2.4335E-02
551225.24	4172908.54	1785.40446	2353.12401	609.42374	4347.46617	716.81142	1696.81534	1786.3279	1363.04058	342.55977	3501.23693	2345.92169	2150.7474	0.21901	0.22197	2.84E-03	2.65E-03	6.86E-04	3.75E-03	6.22E-04	1.47E-03	2.57E-03	1.39E-03	3.50E-04	4.25E-03	1.91E-03	1.75E-03	1.03E-04	1.05E-04	2.4455E-02
551693.86	4173437.25	2918.40571	2263.57303	507.28186	2210.66226	461.33616	3028.83157	2963.30677	1329.69284	294.18378	2073.47649	1117.04466	3724.89623	1.13313	1.07066	4.64E-03	2.55E-03	5.71E-04	1.91E-03	4.01E-04	2.63E-03	4.27E-03	1.36E-03	3.00E-04	2.52E-03	9.09E-04	3.03E-03	5.31E-04	5.07E-04	2.6124E-02
551512.4	4173416.34	2177.53735	2460.05059	509.15286	2883.94682	536.42747	2868.47882	2202.52381	1477.7154	290.77024	2599.65348	1400.56063	3476.62029	0.37064	0.37117	3.47E-03	2.77E-03	5.73E-04	2.49E-03	4.66E-04	2.49E-03	3.17E-03	1.51E-03	2.97E-04	3.16E-03	1.14E-03	2.83E-03	1.74E-04	1.76E-04	2.4705E-02
551320.64	4173217.52	1841.85194	2444.82906	536.05836	3534.40275	622.62815	2436.30194	1855.0735	1451.30367	302.27352	2995.83266	1860.09282	2982.06279	0.26096	0.26279	2.93E-03	2.75E-03	6.04E-04	3.05E-03	5.41E-04	2.12E-03	2.67E-03	1.48E-03	3.09E-04	3.64E-03	1.51E-03	2.43E-03	1.22E-04	1.25E-04	2.4279E-02
551272.1	4172735.57	1728.18125	2133.17613	643.80221	4542.6743	847.56589	1533.97284	1725.5928	1233.114	357.78644	3414.09754	2720.08907	1946.63897	0.20855	0.21193	2.75E-03	2.40E-03	7.25E-04	3.92E-03	7.36E-04	1.33E-03	2.49E-03	1.26E-03	3.65E-04	4.14E-03	2.21E-03	1.58E-03	9.77E-05	1.00E-04	2.4113E-02
551229.47	4172874.14	1758.25911	2274.32664	613.48398	4418.22101	741.5261	1622.7524	1758.21609	1315.29285	343.68067	3483.2709	2429.61562	2059.71031	0.21519	0.21819	2.80E-03	2.56E-03	6.91E-04	3.81E-03	6.44E-04	1.41E-03	2.53E-03	1.34E-03	3.51E-04	4.23E-03	1.98E-03	1.68E-03	1.01E-04	1.03E-04	2.4226E-02
551223.55	4172898.18	1765.17288	2310.05209	607.02548	4336.69112	720.98215	1660.4507	1765.78963	1337.40442	340.77821	3468.53687	2359.34551	2105.68993	0.21632	0.21927	2.81E-03	2.60E-03	6.84E-04	3.74E-03	6.26E-04	1.44E-03	2.54E-03	1.37E-03	3.48E-04	4.21E-03	1.92E-03	1.71E-03	1.01E-04	1.04E-04	2.4208E-02
551243.97	4172808.86	1737.11926	2168.37307	630.31621	4528.4629	796.69399	1545.59154	1735.29591	1252.82341	351.95469	3458.50796	2603.22695	1962.68439	0.21334	0.21667	2.76E-03	2.44E-03	7.10E-04	3.91E-03	6.92E-04	1.34E-03	2.50E-03	1.28E-03	3.59E-04	4.20E-03	2.12E-03	1.60E-03	1.00E-04	1.03E-04	2.4110E-02
551259.79	4172767.85	1730.08313	2134.98157	639.26248	4537.16326	826.35398	1533.63507	1727.63131	1234.24086	355.97632	3424.80013	2677.74274	1946.1268	0.21066	0.21402	2.75E-03	2.40E-03	7.20E-04	3.91E-03	7.18E-04	1.33E-03	2.49E-03	1.26E-03	3.63E-04	4.16E-03	2.18E-03	1.58E-03	9.87E-05	1.01E-04	2.4072E-02
551275.58	4172707.71	1718.24625	2123.33119	643.24065	4539.64996	857.88879	1515.83586	1715.63185	1226.71233	356.96496	3403.06381	2736.29527	1925.85625	0.20602	0.20942	2.73E-03	2.39E-03	7.24E-04	3.92E-03	7.45E-04	1.32E-03	2.47E-03	1.25E-03	3.64E-04	4.13E-03	2.23E-03	1.57E-03	9.66E-05	9.92E-05	2.4035E-02
551267.81	4172743.92	1724.27904	2125.85615	641.24807	4527.99652	840.40405	1529.51701	1721.6986	1228.92357	356.53746	3405.49334	2703.09204	1940.81227	0.20858	0.21195	2.74E-03	2.39E-03	7.22E-04	3.91E-03	7.30E-04	1.33E-03	2.48E-03	1.25E-03	3.64E-04	4.13E-03	2.20E-03	1.58E-03	9.78E-05	1.00E-04	2.4033E-02
551479.92	4173397.94	2127.34939	2431.76949	502.08211	2952.90003	538.2553	2800.12204	2150.1898	1459.55487	286.42077	2616.52526	1461.80069	3397.03118	0.33879	0.33969	3.39E-03	2.74E-03	5.65E-04	2.55E-03	4.67E-04	2.43E-03	3.10E-03	1.49E-03	2.92E-04	3.18E-03	1.19E-03	2.76E-03	1.59E-04	1.61E-04	2.4465E-02
551645.56	4173453.23	2617.19783	2338.70322	513.14422	2300.41806	468.36909	3053.56538	2652.36538	1385.89421	296.44352	2199.38348	1153.68942	3735.47403	0.61511	0.605	4.16E-03	2.63E-03	5.78E-04	1.98E-03	4.07E-04	2.65E-03	3.82E-03	1.41E-03	3.03E-04	2.67E-03	9.39E-04	3.04E-03	2.88E-04	2.87E-04	2.5180E-02
551658.79	4173451.31	2691.65451	2312.17411	510.39986	2264.13224	464.50599	3041.62095	2729.09297	1366.07097	295.24796	2155.73505	1137.60953	3727.93422	0.69349	0.67826	4.28E-03	2.60E-03	5.75E-04	1.95E-03	4.03E-04	2.64E-03	3.93E-03	1.39E-03	3.01E-04	2.62E-03	9.26E-04	3.03E-03	3.25E-04	3.21E-04	2.5309E-02
551728.4	4173423.26	3095.09012	2180.45283	494.14426	2136.88821	452.96262	2926.63388	3147.56687	1274.00401	287.0083	1979.76985	1085.68779	3611.60968	1.70948	1.47538	4.93E-03	2.46E-03	5.57E-04	1.84E-03	3.93E-04	2.54E-03	4.53E-03	1.30E-03	2.93E-04	2.40E-03	8.84E-04	2.94E-03	8.01E-04	6.99E-04	2.6568E-02
551365.63	4173279.9	1901.70842	2491.3354	538.09528	3319.82762	589.3905	2472.93564	1914.39958	1496.80081	305.51537	2877.1859	1730.92777	3026.98767	0.27818	0.27975	3.03E-03	2.81E-03	6.06E-04	2.86E-03	5.12E-04	2.15E-03	2.76E-03	1.53E-03	3.12E-04	3.49E-03	1.41E-03	2.46E-03	1.30E-04	1.33E-04	2.4185E-02
551632.33	4173455.16	2534.77326	2352.36779	513.42989	2364.35676	471.25119	3039.79961	2567.72012	1398.18129	296.18362	2235.90155	1168.0275	3711.93733	0.55011	0.5431	4.03E-03	2.65E-03	5.78E-04	2.04E-03	4.09E-04	2.64E-03	3.70E-03	1.43E-03	3.02E-04	2.71E-03	9.51E-04	3.02E-03	2.58E-04	2.57E-04	2.4978E-02
551343.41	4173251.51	1857.06569	2456.03109	539.72005	3416.56644	606.66643	2428.91453	1869.74965	1464.59053	305.07764	2941.11016	1788.24865	2973.00133	0.26855	0.27051	2.96E-03	2.77E-03	6.08E-04	2.95E-03	5.27E-04	2.11E-03	2.69E-03	1.50E-03	3.11E-04	3.57E-03	1.46E-03	2.42E-03	1.26E-04	1.28E-04	2.4110E-02
551323.73	4173226.11	1830.0425	2422.71989	533.56298	3484.58853	616.01656	2407.50325	1843.00119	1438.95803	300.92815	2963.61094	1832.30601	2947.25602	0.25996	0.26173	2.91E-03	2.73E-03	6.01E-04	3.01E-03	5.35E-04	2.09E-03	2.65E-03	1.47E-03	3.07E-04	3.60E-03	1.49E-03	2.40E-03	1.22E-04	1.24E-04	2.4036E-02
551244.68	4172799.41	1724.5604	2142.18555	628.3463	4498.62829	797.92461	1529.55785	1722.57917	1237.74136	350.64368	3425.08442	2601.95781	1942.21337	0.21118	0.21449	2.74E-03	2.41E-03	7.08E-04	3.88E-03	6.93E-04	1.33E-03	2.48E-03	1.26E-03	3.58E-04	4.16E-03	2.12E-03	1.58E-03	9.90E-05	1.02E-04	2.3925E-02
551489.66	4173407.11	2127.64974	2418.27676	500.66923	2909.376	533.93685	2789.76571	2151.09194	1451.46244	285.68641	2592.08708	1430.07875	3384.13015	0.34344	0.34388	3.39E-03	2.72E-03	5.64E-04	2.51E-03	4.64E-04	2.42E-03	3.10E-03	1.48E-03	2.92E-04	3.15E-03	1.16E-03	2.75E-03	1.61E-04	1.63E-04	2.4328E-02
551749.44	4173411.24	3183.08773	2136.22797	487.21106	2105.41454	449.70161	2872.28563	3239.90117	1246.84064	283.11122	1935.96538	1074.10211	3546.69672	1.57921	1.35386	5.07E-03	2.41E-03	5.49E-04	1.82E-03	3.90E-04	2.49E-03	4.67E-03	1.27E-03	2.89E-04	2.35E-03	8.74E-04	2.89E-03	7.40E-04	6.42E-04	2.6441E-02
551263.52	4172752.26	1714.39286	2109.77098	635.32743	4483.70629	828.07173	1519.39742	1711.88817	1219.80416	353.45194	3378.25236	2666.46469	1927.86406	0.20718	0.21048	2.73E-03	2.38E-03	7.16E-04	3.87E-03	7.19E-04	1.32E-03	2.47E-03	1.25E-03	3.61E-04	4.10E-03	2.17E-03	1.57E-03	9.71E-05	9.98E-05	2.3834E-02
551411.18	4173345.38	2013.5855	2459.16436	508.7017	3093.57518	549.76112	2624.15779	2029.2702	1482.97812	290.47742	2691.85489	1588.94723	3204.10693	0.29161	0.29304	3.20E-03	2.77E-03	5.73E-04	2.67E-03	4.77E-04	2.28E-03	2.92E-03	1.51E-03	2.97E-04	3.27E-03	1.29E-03	2.61E-03	1.37E-04	1.39E-04	2.4148E-02
551672.03	4173449.39	2746.90487	2269.11737	505.23327	2222.78655	459.48533	2999.33809	2786.3703	1337.8097	292.52156	2103.9108	1120.40018	3681.86464	0.77332	0.75022	4.37E-03	2.56E-03	5.69E-04	1.92E-03	3.99E-04	2.60E-03	4.01E-03	1.37E-03	2.99E-04	2.55E-03	9.12E-04	3.00E-03	3.62E-04	3.56E-04	2.5274E-02
551707	4173435.34	2949.67917	2201.95486	497.67657	2160.67682	454.14612	2942.81234	2996.52298	1291.14232	288.74595	2014.02453	1095.8451	3624.74523	1.24985	1.15173	4.69E-03	2.48E-03	5.61E-04	1.86E-03	3.94E-04	2.56E-03	4.32E-03	1.32E-03	2.95E-04	2.45E-03	8.92E-04	2.95E-03	5.86E-04	5.46E-04	2.5894E-02
551619.1	4173457.08	2455.2207	2358.10852	511.72374	2403.51715	473.27349	3008.55591	2486.20111	1404.83003	294.76838	2267.00473	1180.12654	3668.7113	0.49963	0.49444	3.91E-03	2.66E-03	5.76E-04	2.07E-03	4.11E-04	2.61E-03	3.58E-03	1.43E-03	3.01E-04	2.75E-03	9.60E-04	2.99E-03	2.34E-04	2.34E-04	2.4718E-02
551420.75	4173354.39	2025.3588	2436.50443	502.81271	3055.13453	544.70118	2647.86849	2041.95332	1467.83076	287.0883	2658.41359	1569.18062	3228.84144	0.29585	0.29721	3.22E-03	2.74E-03	5.66E-04	2.63E-03	4.73E-04	2.30E-03	2.94E-03	1.50E-03	2.93E-04	3.23E-03	1.28E-03	2.63E-03	1.39E-04	1.41E-04	2.4084E-02
551382.58	4173306.25	1932.30779	2475.34291	524.79649	3204.82492	568.97679	2501.58401	1945.43655	1494.96991	299.02082	2779.33049	1665.82096	3061.5044	0.2817	0.28302	3.07E-03	2.79E-03	5.91E-04	2.76E-03	4.94E-04	2.17E-03	2.80E-03	1.53E-03	3.05E-04	3.37E-03	1.36E-03	2.49E-03	1.32E-04	1.34E-04	2.4005E-02
551219.29	4172932.41	1765.16466	2337.17435	587.95354	4145.79576	680.1236	1710.57521	1766.90666	1356.57473	331.48662	3389.89325	2209.51494	2164.97876	0.21415	0.21693	2.81E-03	2.63E-03	6.62E-04	3.58E-03	5.91E-04	1.49E-03	2.54E-03	1.38E-03	3.38E-04	4.12E-03	1.80E-03	1.76E-03	1.00E-04	1.03E-04	2.3901E-02
551221.86	4172887.82	1736.73895	2254.2362	600.04584	4286.87864	718.15071	1617.44887	1737.11714	1304.64432	336.50932	3409.26252	2346.18293	2052.03292	0.2116	0.21449	2.76E-03	2.54E-03	6.76E-04	3.70E-03	6.24E-04	1.40E-03	2.50E-03	1.33E-03	3.44E-04	4.14E-03	1.91E-03	1.67E-03	9.92E-05	1.02E-04	2.3800E-02
551227.78	4172863.74	1728.7786	2214.7245	605.26314	4351.48357	738.1995	1580.18062	1728.51008	1280.51291	338.86688	3412.11361	2410.37882	2006.37389	0.21034	0.21329	2.75E-03	2.49E-03	6.82E-04	3.75E-03	6.41E-04	1.37E-03	2.49E-03	1.31E-03	3.46E-04	4.14E-03	1.96E-03	1.63E-03	9.86E-05	1.01E-04	2.3772E-02
551326.82	4173234.69	1818.82469	2401.46707	530.80525	3433.2575	608.89905	2378.82779	1831.51746	1427.34699	299.46721	2929.45664	1804.05076	2912.69556	0.25886	0.26056	2.89E-03	2.70E-03	5.98E-04	2.96E-03	5.29E-04	2.07E-03	2.64E-03	1.46E-03	3.06E-04	3.56E-03	1.47E-03	2.37E-03	1.21E-04	1.23E-04	2.3792E-02
551283.46	4172671.28	1696.51949	2086.19731	632.65381	4460.69057	850.02028	1470.14048	1694.2133	1204.81202	350.7662	3347.59281	2691.9492	1872.61573	0.1981	0.20132	2.70E-03	2.35E-03	7.13E-04	3.85E-03	7.38E-04	1.28E-03	2.44E-03	1.23E-03	3.58E-04	4.06E-03	2.19E-03	1.52E-03	9.28E-05	9.54E-05	2.3619E-02
551430.32	4173363.41	2029.55635	2405.37192	496.4179	3010.97263	539.13718	2657.55797	2047.16538	1447.45178	283.32813	2620.29833	1547.23067	3236.50492	0.29984	0.30077	3.23E-03	2.71E-03	5.59E-04	2.60E-03	4.68E-04	2.31E-03	2.95E-03	1.48E-03	2.89E-04	3.18E-03	1.26E-03	2.63E-03	1.41E-04	1.43E-04	2.3943E-02
551279.14	4172679.69	1691.65219	2082.42795	631.47064	4446.89257	847.4088	1474.29908	1689.26888	1202.78826	350.15708	3336.99187	2684.51671	1876.34267	0.19881	0.20205	2.69E-03	2.35E-03	7.11E-04	3.84E-03	7.36E-04	1.28E-03	2.43E-03	1.23E-03	3.57E-04	4.05E-03	2.18E-03	1.53E-03	9.32E-05	9.58E-05	2.3570E-02
551685.26	4173447.46	2798.86157	2221.71017	498.4557	2178.89828	453.73782	2943.56125	2840.48455	1306.67168	288.8427	2050.65586	1101.56386	3619.80005	0.86904	0.83169	4.45E-03	2.50E-03	5.61E-04	1.88E-03	3.94E-04	2.56E-03	4.09E-03	1.33E-03	2.95E-04	2.49E-03	8.96E-04	2.95E-03	4.07E-04	3.94E-04	2.5200E-02
551499.39	4173416.28	2114.14845	2388.30162	496.75007	2851.53906	527.64334	2758.57425	2137.88321	1433.90813	283.51328	2551.3555	1396.29819	3346.1258	0.34608	0.34634	3.36E-03	2.69E-03	5.59E-04	2.46E-03	4.58E-04	2.40E-03	3.08E-03	1.46E-03	2.89E-04	3.10E-03	1.14E-03	2.72E-03	1.62E-04	1.64E-04	2.4042E-02
551439.9	4173372.42	2039.49153	2387.11029	493.01957	2979.44086	535.49393	2672.15982	2058.11964	1434.72735	281.28128	2597.51846	1527.95092	3250.94452	0.30413	0.30531	3.25E-03	2.69E-03	5.55E-04	2.57E-03	4.65E-04	2.32E-03	2.96E-03	1.46E-03	2.87E-04	3.15E-03	1.24E-03	2.65E-03	1.43E-04	1.45E-04	2.3890E-02
551401.61	4173336.36	1971.4244	2435.66932	507.67256	3089.07377	549.41648	2554.00575	1986.0048	1471.05085	289.83074	2681.33842	1595.84269	3121.50505	0.28449	0.28595	3.14E-03	2.74E-03	5.72E-04	2.66E-03	4.77E-04	2.22E-03	2.86E-03	1.50E-03	2.96E-04	3.26E-03	1.30E-03	2.54E-03	1.33E-04	1.36E-04	2.3832E-02
551349.04	4173265.94	1843.48452	2422.02595	532.097	3320.63906	591.63739	2387.00212	1855.79241	1447.95638	301.21887	2867.71961	1737.94373	2923.07761	0.26639	0.26824	2.93E-03	2.73E-03	5.99E-04	2.86E-03	5.14E-04	2.07E-03	2.67E-03	1.48E-03	3.08E-04	3.48E-03	1.41E-03	2.38E-03	1.25E-04	1.27E-04	2.3696E-02
551274.82	4172688.09	1682.5607	2070.28154	627.91387	4412.39343	840.63406	1473.01131	1680.14341	1196.00174	348.27929	3312.41454	2663.13476	1873.27215	0.19847	0.2017	2.68E-03	2.33E-03	7.07E-04	3.81E-03	7.30E-04	1.28E-03	2.42E-03	1.22E-03	3.56E-04	4.02E-03	2.17E-03	1.52E-03	9.30E-05	9.56E-05	2.3429E-02
551459.04	4173390.45	2060.56961	2367.35909	490.51716	2926.06558	530.11621	2692.48214	2081.21792	1420.53124	279.75055	2568.97759	1488.64013	3271.41354	0.31387	0.31483	3.28E-03	2.67E-03	5.52E-04	2.52E-03	4.60E-04	2.34E-03	3.00E-03	1.45E-03	2.86E-04	3.12E-03	1.21E-03	2.66E-03	1.47E-04	1.49E-04	2.3842E-02
551232.71	4172827.79	1704.59814	2137.09292	609.19774	4368.80642	761.58918	1523.56244	1703.36952	1235.00186	340.56395	3368.68764	2480.80156	1935.15771	0.20754	0.21064	2.71E-03	2.41E-03	6.86E-04	3.77E-03	6.61E-04	1.32E-03	2.45E-03	1.26E-03	3.48E-04	4.09E-03	2.02E-03	1.57E-03	9.73E-05	9.98E-05	2.3500E-02
551449.47	4173381.44	2044.94421	2367.38331	489.98444	2945.72814	531.76005	2676.16461	2064.59496	1421.63416	279.45691	2574.16872	1507.25735	3253.13125	0.30847	0.30953	3.25E-03	2.67E-03	5.52E-04	2.54E-03	4.62E-04	2.32E-03	2.97E-03	1.45E-03	2.85E-04	3.13E-03	1.23E-03	2.65E-03	1.45E-04	1.47E-04	2.3799E-02
552008.68	4173253.38	2972.51992	2120.22545	415.97942	1833.09603	373.47122	3252.47476	3039.37939	1241.42147	242.16354	1780.25006	899.81286	3980.02923	0.29282	0.28724	4.73E-03	2.39E-03	4.69E-04	1.58E-03	3.24E-04	2.82E-03	4.38E-03	1.27E-03	2.47E-04	2.16E-03	7.32E-04	3.24E-03	1.37E-04	1.36E-04	2.4614E-02
551329.91	4173243.28	1808.3768	2381.14531	527.76069	3380.92624	601.34738	2350.82362	1820.79892	1416.48434	297.88537	2893.60714	1775.50478	2879.09263	0.25766	0.2593	2.88E-03	2.68E-03	5.94E-04	2.92E-03	5.22E-04	2.04E-03	2.62E-03	1.45E-03	3.04E-04	3.51E-03	1.44E-03	2.34E-03	1.21E-04	1.23E-04	2.3550E-02
551720.14	4173433.43	2974.92192	2141.8216	487.20479	2109.82332	446.48168	2854.25382	3023.66666	1253.30996	282.78627	1957.29302	1073.28493	3521.53046	1.31232	1.17908	4.73E-03	2.41E-03	5.49E-04	1.82E-03	3.88E-04	2.48E-03	4.35E-03	1.28E-03	2.89E-04	2.38E-03	8.73E-04	2.87E-03	6.15E-04	5.59E-04	2.5593E-02
551372.85	4173297.09	1887.61033	2435.37536	522.93561	3196.61073	569.49595	2432.60359	1900.1791	1468.10592	297.51322	2769.95875	1669.35996	2978.45228	0.27489	0.27658	3.00E-03	2.74E-03	5.89E-04	2.76E-03	4.94E-04	2.11E-03	2.74E-03	1.50E-03	3.04E-04	3.36E-03	1.36E-03	2.42E-03	1.29E-04	1.31E-04	2.3644E-02
551245.96	4172785.4	1693.86891	2086.42039	618.95105	4391.53661	790.46509	1496.79005	1691.77165	1206.02833	345.13259	3335.75357	2562.27492	1900.19898	0.20516	0.20836	2.70E-03	2.35E-03	6.97E-04	3.79E-03	6.86E-04	1.30E-03	2.44E-03	1.23E-03	3.52E-04	4.05E-03	2.09E-03	1.55E-03	9.62E-05	9.87E-05	2.3412E-02
551741.45	4173421.37	3079.47462	2105.19004	481.41646	2081.10948	443.982	2812.32355	3132.83515	1229.47648	279.62042	1916.74355	1062.17212	3473.41348	1.45237	1.25672	4.90E-03	2.37E-03	5.42E-04	1.79E-03	3.86E-04	2.44E-03	4.51E-03	1.26E-03	2.85E-04	2.33E-03	8.64E-04	2.83E-03	6.81E-04	5.96E-04	2.5783E-02
551782.37	4173397.49	3184.70534	2029.00743	475.64608	2016.90522	434.93361	2816.83373	3244.42909	1229.59217	276.41252	1917.69393	1034.93797	3353.89943	0.9467	0.86945	5.07E-03	2.29E-03	5.36E-04	1.74E-03	3.78E-04	2.45E-03	4.67E-03	1.26E-03	2.82E-04	2.33E-03	8.42E-04	2.73E-03	4.44E-04	4.12E-04	2.5417E-02
551352.69	4173274.61	1838.29484	2404.0921	527.25349	3266.05195	582.76266	2367.51527	1850.38483	1439.74791	298.77422	2824.46165	1709.27474	2899.98756	0.26535	0.26712	2.93E-03	2.71E-03	5.94E-04	2.82E-03	5.06E-04	2.06E-03	2.66E-03	1.47E-03	3.05E-04	3.43E-03	1.39E-03	2.36E-03	1.24E-04	1.27E-04	2.3476E-02
551270.49	4172696.5	1671.41919	2053.44475	623.06778	4367.48948	831.49142	1468.0274	1668.99581	1186.52767	345.71792	3280.91926	2634.26836	1865.69991	0.19752	0.20072	2.66E-03	2.31E-03	7.02E-04	3.77E-03	7.22E-04	1.27E-03	2.40E-03	1.21E-03	3.53E-04	3.98E-03	2.14E-03	1.52E-03	9.26E-05	9.51E-05	2.3238E-02
551698.49	4173445.54	2833.91328	2164.70399	489.93281	2131.79486	447.18672	2868.52532	2877.41462	1270.81233	284.05491	1993.52624	1081.75598	3532.87031	0.9501	0.89433	4.51E-03	2.44E-03	5.52E-04	1.84E-03	3.88E-04	2.49E-03	4.14E-03	1.30E-03	2.90E-04	2.42E-03	8.80E-04	2.88E-03	4.45E-04	4.24E-04	2.4993E-02
551215.92	4172911.75	1722.41828	2251.81929	583.36729	4119.5032	684.01474	1634.44278	1723.53091	1305.17074	328.04168	3328.17326	2222.62659	2071.3675	0.2079	0.21063	2.74E-03	2.54E-03	6.57E-04	3.55E-03	5.94E-04	1.42E-03	2.48E-03	1.33E-03	3.35E-04	4.04E-03	1.81E-03	1.69E-03	9.74E-05	9.98E-05	2.3382E-02
551762.38	4173409.36	3149.85481	2065.65302	479.32012	2048.73017	439.82875	2761.82792	3206.99681	1205.17201	275.32919	1878.24869	1048.68602	3412.73039	1.19818	1.06185	5.01E-03	2.33E-03	5.40E-04	1.77E-03	3.82E-04	2.40E-03	4.62E-03	1.23E-03	2.81E-04	2.28E-03	8.53E-04	2.78E-03	5.62E-04	5.03E-04	2.5531E-02
551233.4	4172818.53	1689.98618	2105.37169	606.37692	4332.41846	761.20491	1503.42136	1688.57968	1216.79886	338.84913	3330.33009	2474.12457	1909.50825	0.20499	0.20808	2.69E-03	2.37E-03	6.83E-04	3.74E-03	6.61E-04	1.31E-03	2.43E-03	1.24E-03	3.46E-04	4.04E-03	2.01E-03	1.55E-03	9.61E-05	9.86E-05	2.3272E-02
551641.05	4173462.85	2513.24705	2264.08272	499.54587	2270.20246	457.58709	2921.50201	2546.24285	1342.65346	288.3608	2147.63617	1129.41721	3575.3077	0.53355	0.52565	4.00E-03	2.55E-03	5.63E-04	1.96E-03	3.97E-04	2.54E-03	3.67E-03	1.37E-03	2.94E-04	2.61E-03	9.19E-04	2.91E-03	2.50E-04	2.49E-04	2.4271E-02

551654.06	4173460.96	2584.06851	2242.0662	497.57697	2212.91421	454.14088	2916.37905	2619.13653	1325.866	287.58817	2108.07573	1114.70181	3575.40257	0.58903	0.57659	4.11E-03	2.53E-03	5.60E-04	1.91E-03	3.94E-04	2.53E-03	3.77E-03	1.35E-03	2.94E-04	2.56E-03	9.07E-04	2.91E-03	2.76E-04	2.73E-04	2.4377E-02
551220.17	4172877.45	1702.84125	2189.2495	589.96616	4209.75292	711.02319	1569.95547	1703.01831	1266.78249	330.59709	3330.43761	2314.46572	1992.54893	0.20557	0.20837	2.71E-03	2.47E-03	6.64E-04	3.63E-03	6.17E-04	1.36E-03	2.45E-03	1.29E-03	3.38E-04	4.04E-03	1.88E-03	1.62E-03	9.63E-05	9.88E-05	2.3278E-02
551214.23	4172901.42	1708.35787	2219.58635	583.60302	4130.22948	691.80313	1604.75013	1709.14679	1285.79591	327.71088	3312.37604	2249.03353	2034.77332	0.20656	0.2093	2.72E-03	2.50E-03	6.57E-04	3.56E-03	6.01E-04	1.39E-03	2.46E-03	1.31E-03	3.35E-04	4.02E-03	1.83E-03	1.66E-03	9.68E-05	9.92E-05	2.3244E-02
551628.04	4173464.74	2433.43828	2272.69882	499.10221	2310.35725	460.02191	2901.52264	2464.37021	1351.71128	287.69462	2179.51486	1142.53536	3544.68152	0.48521	0.47979	3.87E-03	2.56E-03	5.62E-04	1.99E-03	3.99E-04	2.52E-03	3.55E-03	1.38E-03	2.94E-04	2.65E-03	9.30E-04	2.88E-03	2.27E-04	2.27E-04	2.4044E-02
551392.04	4173327.34	1918.36694	2393.60548	504.13062	3065.4982	546.93534	2468.20654	1931.96584	1447.19682	287.66843	2654.40171	1595.7288	3019.28543	0.27762	0.27876	3.05E-03	2.70E-03	5.68E-04	2.64E-03	4.75E-04	2.14E-03	2.78E-03	1.48E-03	2.94E-04	3.22E-03	1.30E-03	2.46E-03	1.30E-04	1.32E-04	2.3372E-02
551667.07	4173459.07	2641.39182	2206.62931	493.37431	2175.46053	449.71247	2886.05436	2678.42532	1301.91153	285.45529	2061.65185	1098.73288	3543.9573	0.64695	0.62939	4.20E-03	2.49E-03	5.56E-04	1.88E-03	3.90E-04	2.51E-03	3.86E-03	1.33E-03	2.91E-04	2.50E-03	8.94E-04	2.88E-03	3.03E-04	2.98E-04	2.4377E-02
551334.21	4173255.03	1795.17474	2354.08095	522.94085	3307.53214	590.38106	2314.20783	1807.24429	1402.44179	295.42484	2841.26896	1736.17071	2835.31603	0.2559	0.25772	2.86E-03	2.65E-03	5.89E-04	2.85E-03	5.13E-04	2.01E-03	2.60E-03	1.43E-03	3.02E-04	3.45E-03	1.41E-03	2.31E-03	1.20E-04	1.22E-04	2.3219E-02
551356.69	4173284.01	1832.82247	2382.83614	521.21457	3206.0382	572.92414	2347.9288	1844.82463	1429.8332	295.69772	2775.15212	1678.2035	2876.69156	0.26408	0.26578	2.92E-03	2.68E-03	5.87E-04	2.76E-03	4.97E-04	2.04E-03	2.66E-03	1.46E-03	3.02E-04	3.37E-03	1.37E-03	2.34E-03	1.24E-04	1.26E-04	2.3233E-02
551248.06	4172775.64	1672.05639	2048.31538	611.38606	4306.5618	783.73724	1475.73033	1669.94714	1184.57489	340.7435	3268.83276	2526.66349	1872.99351	0.20058	0.20367	2.66E-03	2.31E-03	6.89E-04	3.71E-03	6.81E-04	1.28E-03	2.40E-03	1.21E-03	3.48E-04	3.97E-03	2.06E-03	1.52E-03	9.40E-05	9.65E-05	2.3034E-02
551234.09	4172809.28	1676.0252	2075.81922	603.63812	4296.31509	760.8186	1484.99963	1674.45315	1199.79647	337.15019	3292.91503	2467.43052	1886.02472	0.20251	0.20559	2.67E-03	2.34E-03	6.80E-04	3.71E-03	6.61E-04	1.29E-03	2.41E-03	1.22E-03	3.44E-04	4.00E-03	2.01E-03	1.53E-03	9.49E-05	9.74E-05	2.3054E-02
551615.03	4173466.64	2368.05946	2281.76451	497.63047	2347.03281	461.89159	2877.03464	2397.3864	1359.12164	286.48017	2210.30862	1153.30966	3511.26929	0.44927	0.44439	3.77E-03	2.57E-03	5.60E-04	2.02E-03	4.01E-04	2.50E-03	3.45E-03	1.39E-03	2.92E-04	2.68E-03	9.39E-04	2.86E-03	2.11E-04	2.11E-04	2.3855E-02
551266.17	4172704.9	1655.89127	2028.83641	615.70288	4301.23039	818.20433	1457.54249	1653.51029	1172.65963	341.78612	3235.5256	2591.02473	1851.29948	0.19548	0.19862	2.64E-03	2.28E-03	6.93E-04	3.71E-03	7.10E-04	1.27E-03	2.38E-03	1.20E-03	3.49E-04	3.93E-03	2.11E-03	1.51E-03	9.16E-05	9.41E-05	2.2955E-02
551733.28	4173431.52	2980.54123	2077.53701	475.77625	2057.60104	438.19829	2757.51604	3030.67734	1213.98497	276.22856	1900.10166	1050.11175	3406.63146	1.23495	1.09529	4.74E-03	2.34E-03	5.36E-04	1.77E-03	3.80E-04	2.39E-03	4.36E-03	1.24E-03	2.82E-04	2.31E-03	8.55E-04	2.77E-03	5.79E-04	5.19E-04	2.5086E-02
551487.75	4173417.5	2051.82006	2313.47954	483.9996	2804.28504	517.38145	2650.52821	2074.34153	1388.25997	276.09723	2493.24921	1385.16194	3217.96478	0.32424	0.32474	3.27E-03	2.61E-03	5.45E-04	2.42E-03	4.49E-04	2.30E-03	2.99E-03	1.42E-03	2.82E-04	3.03E-03	1.13E-03	2.62E-03	1.52E-04	1.54E-04	2.3350E-02
551234.78	4172800.03	1666.93937	2055.67499	603.08755	4281.22702	763.57637	1472.41063	1665.1994	1188.14515	336.64504	3270.83462	2473.13103	1869.94619	0.20111	0.20418	2.65E-03	2.32E-03	6.79E-04	3.69E-03	6.63E-04	1.28E-03	2.40E-03	1.21E-03	3.44E-04	3.97E-03	2.01E-03	1.52E-03	9.43E-05	9.68E-05	2.2932E-02
551680.09	4173457.18	2690.69718	2163.45734	487.44803	2134.88304	444.5163	2838.44599	2729.6557	1273.60253	282.26271	2011.73018	1081.35766	3491.19839	0.70859	0.6821	4.28E-03	2.44E-03	5.49E-04	1.84E-03	3.86E-04	2.46E-03	3.93E-03	1.30E-03	2.88E-04	2.44E-03	8.80E-04	2.84E-03	3.32E-04	3.23E-04	2.4298E-02
551711.73	4173443.61	2854.7847	2102.34274	480.05901	2082.68923	439.90769	2781.17922	2899.93237	1232.38388	278.43427	1934.85237	1060.9569	3429.90883	0.9981	0.92192	4.54E-03	2.37E-03	5.41E-04	1.80E-03	3.82E-04	2.41E-03	4.18E-03	1.26E-03	2.84E-04	2.35E-03	8.63E-04	2.79E-03	4.68E-04	4.37E-04	2.4672E-02
551382.47	4173318.33	1877.90221	2367.34773	503.9672	3061.80775	547.47038	2402.43359	1890.71395	1430.82801	287.30214	2649.71513	1600.64496	2941.22137	0.27155	0.2728	2.99E-03	2.67E-03	5.68E-04	2.64E-03	4.75E-04	2.09E-03	2.72E-03	1.46E-03	2.93E-04	3.22E-03	1.30E-03	2.39E-03	1.27E-04	1.29E-04	2.3071E-02
551754.49	4173419.47	3051.8487	2033.30322	468.39181	2025.73585	434.58827	2702.03652	3105.72558	1187.15046	272.02623	1857.32677	1037.97215	3339.703	1.17051	1.0339	4.86E-03	2.29E-03	5.28E-04	1.75E-03	3.77E-04	2.35E-03	4.47E-03	1.21E-03	2.78E-04	2.25E-03	8.45E-04	2.72E-03	5.49E-04	4.90E-04	2.4963E-02
551602.02	4173468.53	2291.13419	2272.74206	493.43103	2376.22243	462.65566	2824.4241	2318.79162	1356.27249	283.6678	2229.48748	1161.98138	3443.4738	0.41562	0.41166	3.65E-03	2.56E-03	5.56E-04	2.05E-03	4.02E-04	2.45E-03	3.34E-03	1.38E-03	2.90E-04	2.71E-03	9.46E-04	2.80E-03	1.95E-04	1.95E-04	2.3523E-02
551212.54	4172891.09	1681.89356	2168.59983	577.26016	4085.99095	689.31473	1564.54236	1682.45764	1255.79132	323.82088	3259.20024	2237.54349	1984.68253	0.20224	0.20494	2.68E-03	2.44E-03	6.50E-04	3.52E-03	5.99E-04	1.36E-03	2.42E-03	1.28E-03	3.31E-04	3.96E-03	1.82E-03	1.62E-03	9.48E-05	9.71E-05	2.2870E-02
551250.16	4172765.88	1655.81806	2020.81514	606.11786	4245.91239	780.45694	1460.63702	1653.68757	1168.96198	337.6388	3219.77618	2504.18752	1853.49396	0.19721	0.20023	2.63E-03	2.28E-03	6.83E-04	3.66E-03	6.78E-04	1.27E-03	2.38E-03	1.19E-03	3.45E-04	3.91E-03	2.04E-03	1.51E-03	9.24E-05	9.49E-05	2.2764E-02
551218.48	4172867.09	1672.29014	2129.39341	580.97393	4137.86972	706.01543	1526.7657	1672.25933	1231.82247	325.35437	3257.04852	2289.34822	1938.49946	0.2004	0.20314	2.66E-03	2.40E-03	6.54E-04	3.57E-03	6.13E-04	1.33E-03	2.41E-03	1.26E-03	3.32E-04	3.95E-03	1.86E-03	1.58E-03	9.39E-05	9.63E-05	2.2804E-02
551372.9	4173309.31	1851.40049	2358.0755	507.2719	3083.90341	551.76992	2359.48442	1863.66495	1422.84845	288.80582	2670.45935	1613.39628	2890.47576	0.26651	0.26778	2.95E-03	2.66E-03	5.71E-04	2.66E-03	4.79E-04	2.05E-03	2.68E-03	1.45E-03	2.95E-04	3.24E-03	1.31E-03	2.35E-03	1.25E-04	1.27E-04	2.2951E-02
551497.32	4173426.51	2044.90639	2294.51456	481.63661	2756.26321	512.30048	2631.43023	2067.70903	1377.03918	274.8249	2462.75894	1354.20028	3194.96292	0.3269	0.32695	3.25E-03	2.58E-03	5.42E-04	2.38E-03	4.45E-04	2.28E-03	2.98E-03	1.41E-03	2.81E-04	2.99E-03	1.10E-03	2.60E-03	1.53E-04	1.55E-04	2.3152E-02
551258.35	4172741.22	1647.90257	2008.99061	606.87643	4227.45633	791.76761	1455.99245	1645.66281	1162.20361	337.55976	3195.3279	2521.66604	1847.19636	0.19488	0.1979	2.62E-03	2.26E-03	6.84E-04	3.65E-03	6.87E-04	1.26E-03	2.37E-03	1.19E-03	3.45E-04	3.88E-03	2.05E-03	1.50E-03	9.13E-05	9.38E-05	2.2687E-02
551775.31	4173407.48	3094.4606	1993.11405	468.315	1992.13699	429.71599	2649.3897	3151.18665	1163.08238	267.23885	1892.88776	1023.66026	3275.24267	0.95395	0.86776	4.92E-03	2.24E-03	5.27E-04	1.72E-03	3.73E-04	2.30E-03	4.54E-03	1.19E-03	2.73E-04	2.30E-03	8.33E-04	2.67E-03	4.47E-04	4.11E-04	2.4741E-02
551261.85	4172713.31	1637.69313	1999.51398	606.7249	4222.25136	802.25963	1443.14191	1635.3852	1156.11537	336.97873	3181.96781	2538.78509	1832.13091	0.19274	0.19578	2.61E-03	2.25E-03	6.83E-04	3.64E-03	6.97E-04	1.25E-03	2.36E-03	1.18E-03	3.44E-04	3.86E-03	2.07E-03	1.49E-03	9.03E-05	9.28E-05	2.2615E-02
551339.92	4173269.66	1779.66951	2319.09395	515.39538	3211.5255	575.58742	2271.59199	1791.36505	1384.87338	291.57607	2768.58751	1686.56868	2784.30482	0.25388	0.25523	2.83E-03	2.61E-03	5.80E-04	2.77E-03	5.00E-04	1.97E-03	2.58E-03	1.41E-03	2.98E-04	3.36E-03	1.37E-03	2.27E-03	1.19E-04	1.21E-04	2.2797E-02
551693.1	4173455.28	2727.8958	2112.70945	479.92369	2091.57565	438.59073	2774.714	2768.66435	1241.38811	278.07727	1958.83854	1062.93997	3417.97142	0.76399	0.72635	4.34E-03	2.38E-03	5.41E-04	1.80E-03	3.81E-04	2.41E-03	3.99E-03	1.27E-03	2.84E-04	2.38E-03	8.65E-04	2.78E-03	3.58E-04	3.44E-04	2.4120E-02
551795.55	4173395.58	3106.3324	1958.72274	463.45844	1959.04176	423.98359	2700.36148	3164.75311	1187.31616	269.28961	1859.89438	1008.36434	3218.88403	0.79623	0.74334	4.94E-03	2.21E-03	5.22E-04	1.69E-03	3.68E-04	2.34E-03	4.56E-03	1.21E-03	2.75E-04	2.26E-03	8.21E-04	2.62E-03	3.73E-04	3.52E-04	2.4542E-02
551363.32	4173300.3	1822.46347	2339.22428	508.84387	3100.73101	555.55016	2315.26109	1834.31897	1408.11685	289.25965	2685.11642	1624.20995	2837.56309	0.26123	0.26279	2.90E-03	2.63E-03	5.73E-04	2.67E-03	4.82E-04	2.01E-03	2.64E-03	1.44E-03	2.95E-04	3.26E-03	1.32E-03	2.31E-03	1.22E-04	1.25E-04	2.2787E-02
551222.87	4172827.71	1649.62031	2053.91543	586.19526	4170.21265	731.91215	1468.9447	1648.57254	1187.31413	327.74432	3223.40913	2368.97522	1866.0003	0.19822	0.20112	2.63E-03	2.31E-03	6.60E-04	3.60E-03	6.36E-04	1.28E-03	2.37E-03	1.21E-03	3.35E-04	3.91E-03	1.93E-03	1.52E-03	9.29E-05	9.53E-05	2.2575E-02
551254.04	4172749.6	1637.90799	1992.83016	601.04256	4183.81249	780.00679	1445.35483	1635.74496	1153.01993	334.50366	3168.0338	2486.53396	1833.68812	0.19344	0.1964	2.61E-03	2.24E-03	6.77E-04	3.61E-03	6.77E-04	1.26E-03	2.36E-03	1.18E-03	3.42E-04	3.85E-03	2.02E-03	1.49E-03	9.07E-05	9.31E-05	2.2488E-02
551589	4173470.42	2217.40594	2255.03882	487.6711	2398.80083	462.57036	2759.20227	2243.55678	1347.46944	279.97898	2241.23214	1168.33819	3361.60462	0.38674	0.38374	3.53E-03	2.54E-03	5.49E-04	2.07E-03	4.02E-04	2.40E-03	3.23E-03	1.38E-03	2.86E-04	2.72E-03	9.51E-04	2.74E-03	1.81E-04	1.82E-04	2.3147E-02
551724.96	4173441.69	2876.45371	2046.44173	469.73962	2033.51262	432.40601	2698.5008	2923.33497	1197.042	272.56285	1881.7697	1038.51369	3333.63657	1.01538	0.92394	4.58E-03	2.30E-03	5.29E-04	1.75E-03	3.75E-04	2.34E-03	4.21E-03	1.22E-03	2.78E-04	2.28E-03	8.45E-04	2.71E-03	4.76E-04	4.38E-04	2.4350E-02
551343.62	4173278.43	1773.51354	2301.17369	510.72663	3157.32116	566.88279	2251.77575	1785.02494	1376.47939	289.21225	2726.21356	1658.42993	2760.69282	0.25272	0.25401	2.82E-03	2.59E-03	5.75E-04	2.72E-03	4.92E-04	1.96E-03	2.57E-03	1.41E-03	2.95E-04	3.31E-03	1.35E-03	2.25E-03	1.18E-04	1.20E-04	2.2576E-02
551746.42	4173429.61	2961.85765	2007.70202	463.3996	2004.04131	429.34709	2652.08022	3012.73033	1172.60868	269.038	1841.17815	1026.92274	3279.10089	1.07894	0.96066	4.71E-03	2.26E-03	5.22E-04	1.73E-03	3.73E-04	2.30E-03	4.34E-03	1.20E-03	2.75E-04	2.24E-03	8.36E-04	2.67E-03	5.06E-04	4.55E-04	2.4411E-02
551236.23	4172783.93	1632.15862	1992.97511	592.3297	4161.40115	754.44185	1435.40703	1630.29529	1152.48835	330.35914	3171.32689	2427.11197	1822.46494	0.19443	0.19738	2.60E-03	2.24E-03	6.67E-04	3.59E-03	6.55E-04	1.25E-03	2.35E-03	1.18E-03	3.37E-04	3.85E-03	1.98E-03	1.48E-03	9.11E-05	9.35E-05	2.2354E-02
551210.86	4172880.75	1650.69754	2109.69627	568.19839	4018.65254	683.03085	1520.49257	1651.07033	1221.38913	318.4761	3189.30917	2209.91487	1929.58709	0.19681	0.19942	2.63E-03	2.38E-03	6.40E-04	3.47E-03	5.93E-04	1.32E-03	2.38E-03	1.25E-03	3.25E-04	3.87E-03	1.80E-03	1.57E-03	9.22E-05	9.45E-05	2.2399E-02
551257.53	4172721.71	1619.82481	1970.45695	597.6925	4144.90211	786.12805	1427.60475	1617.60368	1139.71006	332.14677	3129.82987	2486.48377	1811.77236	0.18995	0.19291	2.58E-03	2.22E-03	6.73E-04	3.57E-03	6.83E-04	1.24E-03	2.33E-03	1.16E-03	3.39E-04	3.80E-03	2.02E-03	1.47E-03	8.90E-05	9.14E-05	2.2277E-02
551767.53	4173417.57	3015.46905	1968.14933	461.67087	1971.51985	424.87603	2601.03781	3069.47404	1148.59762	264.56649	1871.89692	1013.03474	3217.19184	0.94961	0.8582	4.80E-03	2.22E-03	5.20E-04	1.70E-03	3.69E-04	2.26E-03	4.42E-03	1.17E-03	2.70E-04	2.27E-03	8.24E-04	2.62E-03	4.45E-04	4.07E-04	2.4293E-02
551706.11	4173453.39	2752.5703	2056.52005	471.07594	2045.93695	431.96773	2698.61136	2794.9598	1206.4478	273.06638	1904.22126	1043.50744	3328.79516	0.8031	0.75317	4.38E-03	2.32E-03	5.31E-04	1.76E-03	3.75E-04	2.34E-03	4.03E-03	1.23E-03	2.79E-04	2.31E-03	8.49E-04	2.71E-03	3.76E-04	3.57E-04	2.3849E-02
551223.58	4172818.15	1631.01266	2016.008	581.38347	4116.05641	728.3969	1444.86224	1629.80983	1165.5989	324.94258	3173.26133	2350.38014	1835.36455	0.19479	0.19766	2.60E-03	2.27E-03	6.55E-04	3.55E-03	6.32E-04	1.25E-03	2.35E-03	1.19E-03	3.32E-04	3.85E-03	1.91E-03	1.49E-03	9.13E-05	9.37E-05	2.2270E-02
551807.69	4173390.87	3066.12743	1921.41115	456.30252	1924.8462	417.30154	2634.90097	3124.0842	1162.48417	265.12161	1825.11159	991.98057	3149.70221	0.71409	0.67207	4.88E-03	2.16E-03	5.14E-04	1.66E-03	3.62E-04	2.29E-03	4.50E-03	1.19E-03	2.71E-04	2.22E-03	8.07E-04	2.56E-03	3.35E-04	3.19E-04	2.4064E-02
551347.74	4173288.12	1768.98777	2282.99182	505.37951	3100.69478	557.48398	2234.15858	1780.36025	1368.25936	286.51588	2680.7527	1628.61114	2739.79406	0.25153	0.25275	2.81E-03	2.57E-03	5.69E-04	2.67E-03	4.84E-04	1.94E-03	2.56E-03	1.40E-03	2.93E-04	3.25E-03	1.33E-03	2.23E-03	1.18E-04	1.20E-04	2.2354E-02
551788.25	4173405.6	3030.64433	1927.46873	457.05402	1937.12047	419.36939	2644.99692	3086.5184	1169.43969	265.4682	1838.25688	998.19405	3150.43741	0.79828	0.74096	4.82E-03	2.17E-03	5.15E-04	1.67E-03	3.64E-04	2.30E-03	4.45E-03	1.19E-03	2.71E-04	2.23E-03	8.12E-04	2.56E-03	3.74E-04	3.51E-04	2.4083E-02
551215.09	4172846.36	1631.35984	2044.59955	571.92373	4060.05842	706.4581	1465.1935	1630.8577	1182.40161	320.00759	3166.14295	2281.16719	1861.10442	0.19468	0.19741	2.60E-03	2.30E-03	6.44E-04	3.50E-03	6.13E-04	1.27E-03	2.35E-03	1.21E-03	3.27E-04	3.84E-03	1.86E-03	1.51E-03	9.12E-05	9.36E-05	2.2212E-02
552013.69	4173261.9	2796.96324	1993.34402	399.12022	1755.5292	360.25004	3024.71566	2857.50043	1170.72064	232.163	1699.6603	867.69782	3703.69108	0.2821	0.27663	4.45E-03	2.25E-03	4.50E-04	1.51E-03	3.13E-04	2.63E-03	4.12E-03	1.20E-03	2.37E-04	2.06E-03	7.06E-04	3.01E-03	1.32E-04	1.31E-04	2.3193E-02
551269.43	4172677.46	1605.56586	1955.51678	591.91481	4102.56158	788.56986	1401.17459	1603.61058	1130.65106	328.44187	3099.2036	2471.32215	1781.82828	0.18395	0.18681	2.55E-03	2.20E-03	6.67E-04	3.54E-03	6.85E-04	1.22E-03	2.31E-03	1.15E-03	3.35E-04	3.76E-03	2.01E-03	1.45E-03	8.62E-05	8.85E-05	2.2061E-02
551265.14	4172685.82	1602.76873	1951.51122	591.53834	4096.15811	786.85879	1403.28405	1600.72589	1128.40907	328.29726	3093.2307	2468.18566	1783.41752	0.1847	0.18758	2.55E-03	2.20E-03	6.66E-04	3.53E-03	6.83E-04	1.22E-03	2.31E-03	1.15E-03	3.35E-04	3.76E-03	2.01E-03	1.45E-03	8.66E-05	8.89E-05	2.2032E-02
551260.84	4172694.17	1598.57153	1944.30452	590.2151	4083.14676	783.35069	1402.44153	1596.46482	1124.2978	327.64796	3082.8277	2459.77963	1781.47762	0.18505	0.18793	2.54E-03	2.19E-03	6.65E-04	3.52E-03	6.80E-04	1.22E-03	2.30E-03	1.15E-03	3.35E-04	3.74E-03	2.00E-03	1.45E-03	8.67E-05	8.91E-05	2.1969E-02
551738.19	4173439.76	2873.6732	1983.90516	458.39254	1982.78276	424.1322	2605.09762	2921.65174	1159.10704	266.02263	1826.64258	1015.85461	3222.0113	0.94859	0.85808	4.57E-03	2.23E-03	5.16E-04	1.71E-03	3.68E-04	2.26E-03	4.21E-03	1.18E-03	2.72E-04	2.22E-03	8.27E-04	2.62E-03	4.45E-04	4.07E-04	2.3844E-02
551224.3	4172808.59	1612.35089	1979.20165	576.29886	4058.35834	724.41962	1422.00797	1611.01308	1144.43643	321.96425	3121.54405	2330.29695	1806.27132	0.19131	0.19414	2.57E-03	2.23E-03	6.49E-04	3.50E-03	6.29E-04	1.23E-03	2.32E-03	1.17E-03	3.29E-04	3.79E-03	1.90E-03	1.47E-03	8.97E-05	9.20E-05	2.1963E-02
551238.33	4172774.14	1604.81955	1946.40695	581.89313	4051.77152	743.36817	1409.48046	1602.985	1126.22022	324.40566	3087.84001	2375.73346	1789.02489	0.18878	0.1916	2.55E-03	2.19E-03	6.55E-04	3.49E-03	6.45E-04	1.22E-03	2.31E-03	1.15E-03	3.31E-04	3.75E-03	1.93E-03	1.46E-03	8.85E-05	9.08E-05	2.1872E-02
551209.17	4172870.42	1620.76977	2052.31804	559.23659	3948.94613	677.51234	1478.42233	1620.94974	1187.82257	313.25378	3118.87046	2183.52412	1876.98471	0.19171	0.19426	2.58E-03	2.31E-03	6.30E-04	3.41E-03	5.88E-04	1.28E-03	2.33E-03	1.21E-03	3.20E-04	3.79E-03	1.78E-03	1.53E-03	8.99E-05	9.21E-05	2.1938E-02
551719.12	4173451.5	2768.04448	1999.14718	461.28758	1999.30449	424.81893	2617.01572	2811.89827	1170.95679	267.49475	1850.43495	1023.0958	3232.61731	0.82286	0.7621	4.40E-03	2.25E-03	5.20E-04	1.72E-03	3.69E-04	2.27E-03	4.05E-03	1.20E-03	2.73E-04	2.25E-03	8.33E-04	2.63E-03	3.86E-04	3.61E-04	2.3516E-02
551256.55	4172702.52	1588.21325	1927.18467	585.50573	4041.89059	774.3973	1394.95692	1586.10437	1114.59469	325.15785	3053.78257	2432.44599	1771.21136	0.18402	0.18687	2.53E-03	2.17E-03	6.59E-04	3.49E-03	6.72E-04	1.21E-03	2.28E-03	1.14E-03	3.32E-04	3.71E-03	1.98E-03	1.44E-03	8.62E-05	8.86E-05	2.1784E-02
551759.56	4173427.69	2930.25007	1940.51023	450.82693	1950.80378	420.16418	2549.97894	2981.41175	1133.00815	261.69617	1785.37049	1003.2371	3155.09024	0.91421	0.82555	4.66E-03	2.19E-03	5.08E-04	1.68E-03	3.65E-04	2.21E-03	4.29E-03	1.16E-03	2.67E-04	2.17E-03	8.16E-04	2.57E-03	4.28E-04	3.91E-04	2.3707E-02
551213.01	4172827.76	1601.14739	1981.75228	566.20847	4000.64218	706.5013	1421.12236	1600.24753	1145.88376	316.5936	3098.50665	2274.41861	1805.44843	0.19035	0.1931	2.55E-03	2.23E-03	6.38E-04	3.45E-03	6.13E-04	1.23E-03	2.30E-03	1.17E-03	3.23E-04	3.76E-03	1.85E-03	1.47E-03	8.92E-05	9.15E-05	2.1776E-02
551225.01	4172799.02	1596.82484	1949.00622	572.59045	4013.36609	722.33588	1403.55333	1595.3625	1127.15626	319.72755	3079.89377	2317.7268	1782.63354	0.18853	0.19132	2.54E-03	2.20E-03	6.45E-04	3.46E-03	6.27E-04	1.22E-03	2.30E-03	1.15E-03	3.26E-04	3.74E-03	1.89E-03	1.45E-03	8.84E-05	9.07E-05	2.1718E-02
551780.57	4173415.68	2956.25344	1899.46957	450.87875	1917.05312	414.98985	2496.21608	3009.62744	1108.8734	261.73618	1818.26486	988.68426	3088.63083	0.79417	0.73244	4.70E-03	2.14E-03	5.08E-04	1.65E-03	3.60E-04	2.17E-03	4.33E-03	1.13E-03	2.67E-04	2.21E-03	8.05E-04	2.51E-03	3.72E-04	3.47E-04	2.3511E-02
551240.43	4172764.35	1587.70014	1918.00573	576.11509	3988.10393	738.97333	1393.98692	1585.85701	1110.1281	321.03474	3037.34025	2350.50365	1768.91569	0.18536	0.18811	2.53E-03	2.16E-03	6.49E-04	3.44E-03	6.42E-04	1.21E-03	2.28E-03	1.13E-03	3.28E-04	3.69E-03	1.91E-03	1.44E-03	8.69E-05	8.92E-05	2.1588E-02
551252.25	4172710.87	1574.19909	1904.21033	578.71557	3983.88479	762.09153	1383.08011	1572.13803	1101.59958	321.53539	3013.88447	2393.56957	1755.50408	0.18213	0.18491	2.51E-03	2.14E-03	6.52E-04	3.44E-03	6.62E-04	1.20E-03	2.26E-03	1.12E-03	3.28E-04	3.66E-03	1.95E-03	1.43E-03	8.54E-05	8.76E-05	2.1526E-02
551207.49	4172860.09	1598.35534	2007.40639	553.59836	3903.36065	676.34802	1445.26977	1598.31799	1161.62844	309.94674	3068.6753	2174.11765	1835.4129	0.18838	0.19091	2.54E-03	2.26E-03	6.23E-04	3.37E-03	5.87E-04	1.25E-03	2.30E-03	1.19E-03	3.16E-04	3.73E-03	1.77E-03	1.49E-03	8.83E-05	9.05E-05	2.1608E-02
551801.19	4173403.72	2954.28328	1864.33653	445.51213	1883.4989	409.00615	2539.75992	3008.79188	1130.60255	258.74626	1784.70092	973.04582	3030.67084	0.69372	0.65046	4.70E-03	2.10E-03	5.02E-04	1.62E-03	3.55E-04	2.21E-03	4.33E-03	1.15E-03	2.64E-04	2.17E-03	7.92E-04	2.47E-03	3.25E-04	3.08E-04	2.3297E-02
551732.13	4173449.61	2780.11147	1946.689	451.15709	1952.54256	417.41156	2539.04953	2825.35271	1138.03513	261.7072	1801.30128	1001.28214	3141.18476	0.8067	0.74161	4.42E-03	2.19E-03	5.08E-04	1.68E-03	3.62E-04	2.20E-03	4.07E-03	1.16E-03	2.67E-04	2.19E-03	8.15E-04	2.56E-03	3.78E-04	3.51E-04	2.3161E-02
551751.43	4173437.84	2848.81634	1916.94596	446.27566	1930.93485	415.35096	2505.08617	2897.27576	1119.60867	258.95829	1770.22716	993.1077	3100.54608	0.84673	0.76918	4.53E-03	2.16E-03	5.03E-04	1.67E-03	3.61E-04	2.18E-03	4.17E-03	1.14E-03	2.64E-04	2.15E-03	8.08E-04	2.52E-03	3.97E-04	3.65E-04	2.3218E-02
551995.03	4173278.23	2733.08052	1898.99782	395.73346	1721.7806	359.06082	2882.39075	2788.52982	1123.34527	230.04477	1659.61323	861.9242	3502.559	0.29721	0.29097	4.35E-03	2.14E-03	4.46E-04	1.48E-03	3.12E-04	2.50E-03	4.02E-03	1.15E-03	2.35E-04	2.01E-03	7.01E-04	2.85E-03	1.39E-04	1.38E-04	2.2475E-02
551213.72	4172818.38	1577.29072	1936.29295	558.70864	3923.46015	698.60881	1392.21839	1576.28178	1119.88619	312.32873	3033.34392	2239.75407	1768.70915	0.18577	0.18845	2.51E-03	2.18E-03	6.29E-04	3.38E-03	6.07E-04	1.21E-03	2.27E-03	1.14E-03	3.19E-04	3.68E-03	1.82E-03	1.44E-03	8.71E-05	8.93E-05	2.1373E-02
551244.56	4172746.93	1569.91404	1890.68156	571.17142	3929.31045	738.5467	1379.34169	1568.03167	1094.56762	317.98292	2987.62936	2333.99392	1749.83194	0.18181	0.1845	2.50E-03	2.13E-03	6.43E-04	3.39E-03	6.41E-04	1.20E-03	2.26E-03	1.12E-03	3.25E-04	3.63E-03	1.90E-03	1.42E-03	8.52E-05	8.74E-05	2.1322E-02
551772.7	4173425.78	2886.93779	1877.32504	444.87191	1898.39516	410.61238	2453.67822	2937.92992	1095.92486	258.16066	1799.29989	979.06756	3037.73386	0.77774	0.71428	4.59E-03	2.11E-03	5.01E-04	1.64E-03	3.57E-04	2.13E-03	4.23E-03	1.12E-03	2.64E-04	2.18E-03	7.97E-04	2.47E-03	3.65E-04	3.39E-04	2.3104E-02
551247.96	4172719.22	1559.57103	1880.2565	571.38288	3922.88835	748.85115	1369.59868	1557.57498	1088.04695	317.62358	2972.41682	2351.78778	1737.95294	0.18	0.18271	2.48E-03	2.12E-03	6.44E-04	3.38E-03	6.50E-04	1.19E-03	2.24E-03	1.11E-03	3.24E-04	3.61E-03	1.91E-03	1.41E-03	8.44E-05	8.66E-05	2.1252E-02
551205.8	4172849.76	1577.09882	1964.96021	548.37161	3857.72097	674.76114	1414.55831	1576.85099	1136.95082	306.91184	3020.69747	2163.65879	1796.78856	0.18525	0.18777	2.51E-03	2.21E-03	6.18E-04	3.33E-03	5.86E-04	1.23E-03	2.27E-03	1.16E-03	3.13E-04	3.67E-03	1.76E-03	1.46E-03	8.68E-05	8.90E-05	2.1293E-02
551226.49	4172782.46	1565.20079	1892.15167	563.2375	3910.41096	714.92014	1369.89513	1563.61035	1094.84723	314.22615	2992.2827	2279.55692	1739.37653	0.18274	0.18541	2.49E-03	2.13E-03	6.34E-04	3.37E-03	6.21E-04	1.19E-03	2.25E-03	1.12E-03	3.21E-04	3.63E-03	1.86E-03	1.42E-03	8.56E-05	8.79E-05	2.1206E-02
551793.61	4173413.78	2887.5907	1835.79448	439.87473	1864.0151	404.97127	2492.0603	2939.91195	1114.94686	255.3573	1765.67727	964.23249	2969.30776	0.68838	0.64341	4.59E-03	2.07E-03	4.95E-04	1.61E-03	3.52E-04	2.16E-03	4.23E-03	1.14E-03	2.61E-04	2.14E-03	7.85E-04	2.42E-03	3.23E-04	3.05E-04	2.2886E-02
551813.21	4173399.03	2910.89677	1828.68037	438.646	1851.10343	402.65069	2479.13359	2964.76393	1107.33902	254.73229	1751.94468	957.62427	2965.53703	0.63274	0.59721	4.63E-03	2.06E-03	4.94E-04	1.60E-03	3.50E-04	2.15E-03	4.27E-03	1.13E-03	2.60E-04	2.13E-03	7.79E-04	2.41E-03	2.97E-04	2.83E-04	2.2844E-02
551825.61	4173390.64	2902.88586	1818.96119	436.01764	1837.97937	399.84734	2459.14226	2956.99252	1097.964	253.22219	1737.51174	950.6317	3053.19849	0.5937	0.56343	4.62E-03	2.05E-03	4.91E-04	1.59E-03	3.47E-04	2.14E-03	4.26E-03	1.12E-03	2.59E-04	2.11E-03	7.74E-04	2.48E-03	2.78E-04	2.67E-04	2.2778E-02
551214.42	4172809	1558.58167	1900.06612	553.38568	3865.00373	693.90113	1369.4931	1557.45498	1099.04986	309.23875	2982.10616	2217.71359	1739.81114	0.1823	0.18493	2.48E-03	2.14E-03	6.23E-04	3.33E-03	6.03E-04	1.19E-03	2.24E-03	1.12E-03	3.16E-04	3.62E-03	1.80E-03	1.42E-03	8.54E-05	8.76E-05	2.1063E-02
551833.7	4173385.11	2893.69797	1812.99298	434.21867	1829.90821	397.93722	2447.06018	2947.8227	1091.89384	252.1595	1728.31982	946.11592	3037.08091	0.56985	0.54248	4.60E-03	2.04E-03	4.89E-04	1.58E-03	3.46E-04	2.12E-03	4.25E-03	1.11E-03	2.57E-04	2.10E-03	7.70E-04	2.47E-03	2.67E-04	2.57E-04	2.2666E-02
551841.8	4173379.57	2885.72649	1872.25132	432.30952	1822.47712	395.959	2438.69052	2939.831	1086.48944	251.08795	1719.65711	941.35611	3024.23308	0.54756	0.52276	4.59E-03	2.11E-03	4.87E-04	1.57E-03	3.44E-04	2.12E-03	4.23E-03	1.11E-03	2.56E-04	2.09E-03	7.66E-04	2.46E-03	2.57E-04	2.48E-04	2.2639E-02
551204.11	4172839.43	1557.59429	1926.11998	543.85917	3815.66834	673.16938	1386.85561	1557.1368	1114.3823	304.29487	2976.81239	2153.93205	1761.8656	0.18242	0.18494	2.48E-03	2.17E-03	6.13E-04	3.29E-03	5.85E-04	1.20E-03	2.24E-03	1.14E-03	3.11E-04	3.61E-03	1.75E-03	1.43E-03	8.55E-05	8.76E-05	2.1005E-02
551745.15	4173447.71	2762.60759	1883.88446	439.90057	1903.7624	409.31958	2446.74306	2808.46981	1100.77323	255.16613	1747.3945	979.92873	3029.362	0.75066	0.68925	4.40E-03	2.12E-03	4.95E-04	1.64E-03	3.55E-04	2.12E-03	4.04E-03	1.12E-03	2.61E-04	2.12E-03	7.98E-04	2.47E-03	3.52E-04	3.27E-04	2.2627E-02
551243.66	4172727.57	1542.05776	1852.17871	562.39022	3849.03311	733.10039	1352.89308	1540.16444	1072.16591	312.80834	2922.74874	2301.08583	1716.43872	0.1772	0.17983	2.45E-03	2.09E-03	6.33E-04	3.32E-03	6.37E-04	1.17E-03	2.22E-03	1.09E-03	3.19E-04	3.55E-03	1.87E-03	1.40E-03	8.31E-05	8.52E-05	2.0922E-02
551849.9	4173374.03	2872.06478	1861.3058	430.22238	1813.97623	393.98067	2429.86456	2926.02069	1080.66727	249.88913	1710.64205	936.68317	3010.61606	0.52644	0.50387	4.57E-03	2.10E-03	4.85E-04	1.56E-03	3.42E-04	2.11E-03	4.21E-03	1.10E-03	2.55E-04	2.08E-03	7.62E-04	2.45E-03	2.47E-04	2.39E-04	2.2515E-02
551228.6	4172772.64	1544.16406	1856.09038	555.75886	3830.54403	707.84236	1349.90919	1542.56655	1074.42383	309.91778	2929.56888	2245.08422	1713.55492	0.17856	0.18114	2.46E-03	2.09E-03	6.26E-04	3.30E-03	6.15E-04	1.17E-03	2.22E-03	1.10E-03	3.16E-04	3.56E-03	1.83E-03	1.39E-03	8.37E-05	8.58E-05	2.0847E-02
551764.66	4173435.92	2810.12238	1851.62486	438.69301	1879.40987	406.3261	2407.27526	2858.59137	1081.35429	251.76096	1716.13523	970.141	2981.21234	0.74248	0.68165	4.47E-03	2.09E-03	4.94E-04	1.62E-03	3.53E-04	2.09E-03	4.12E-03	1.10E-03	2.57E-04	2.08E-03	7.90E-04	2.43E-03	3.48E-04	3.23E-04	2.2563E-02
551203.17	4172827.68	1546.64493	1900.32547	543.54216	3807.38763	677.0367	1367.77533	1545.92686	1099.23818	303.96975	2956.79989	2164.95622	1737.81756	0.18122	0.18377	2.46E-03	2.14E-03	6.12E-04	3.28E-03	5.88E-04	1.19E-03	2.23E-03	1.12E-03	3.10E-04	3.59E-03	1.76E-03	1.41E-03	8.49E-05	8.71E-05	2.0870E-02
552019.6	4173271.82	2610.15946	1856.71477	380.72619	1671.47853	345.71457	2784.48419	2664.27281	1095.53064	221.27233	1612.62168	832.46858	3398.16991	0.26971	0.2644	4.15E-03	2.09E-03	4.29E-04	1.44E-03	3.00E-04	2.42E-03	3.84E-03	1.12E-03	2.26E-04	1.96E-03	6.77E-04	2.77E-03	1.26E-04	1.25E-04	2.1667E-02
551785.84	4173423.87	2821.80937	1810.11306	434.23518	1845.72265	401.02263	2353.04162	2871.94409	1057.22767	251.93742	1747.50466	955.65259	2913.63582	0.67554	0.62926	4.49E-03	2.04E-03	4.89E-04	1.59E-03	3.48E-04	2.04E-03	4.14E-03	1.08E-03	2.57E-04	2.12E-03	7.78E-04	2.37E-03	3.17E-04	2.98E-04	2.2359E-02
551251.45	4172691.34	1519.09755	1826.73626	554.14947	3776.96829	730.69937	1331.09203	1517.37042	1057.25265	307.81929	2868.95587	2271.34801	1689.9706	0.17156	0.1741	2.42E-03	2.06E-03	6.24E-04	3.26E-03	6.34E-04	1.16E-03	2.19E-03	1.08E-03	3.14E-04	3.48E-03	1.85E-03	1.38E-03	8.04E-05	8.25E-05	2.0595E-02
551215.12	4172799.63	1532.40187	1853.42676	544.45099	3772.81522	683.98775	1341.29645	1531.2252	1072.54769	304.13181	2908.54451	2176.07121	1703.7022	0.17735	0.17988	2.44E-03	2.09E-03	6.13E-04	3.25E-03	5.94E-04	1.16E-03	2.21E-03	1.09E-03	3.10E-04	3.53E-03	1.77E-03	1.39E-03	8.31E-05	8.52E-05	2.0619E-02
551230.7	4172762.82	1527.54394	1828.8091	550.15645	3770.35425	703.40538	1335.02113	1525.93057	1058.97532	306.6543	2881.68005	2220.85451	1694.19178	0.17536	0.17788	2.43E-03	2.06E-03	6.20E-04	3.25E-03	6.11E-04	1.16E-03	2.20E-03	1.08E-03	3.13E-04	3.50E-03	1.81E-03	1.38E-03	8.22E-05	8.43E-05	2.0575E-02
551247.14	4172699.71	1514.72197	1818.19407	552.4743	3762.37022	726.61131	1327.54717	1512.94985	1052.37151	306.97723	2857.72944	2261.11743	1684.98211	0.17162	0.17415	2.41E-03	2.05E-03	6.22E-04	3.24E-03	6.31E-04	1.15E-03	2.18E-03	1.07E-03	3.13E-04	3.47E-03	1.84E-03	1.37E-03	8.04E-05	8.25E-05	2.0519E-02
551806.66	4173411.88	2811.09958	1776.61583	428.6624	1812.70844	394.94141	2393.84843	2861.96416	1078.18094	248.80985	1714.29296	939.93352	2858.56962	0.60935	0.57363	4.47E-03	2.00E-03	4.83E-04	1.56E-03	3.43E-04	2.08E-03	4.12E-03	1.10E-03	2.54E-04	2.08E-03	7.65E-04	2.33E-03	2.86E-04	2.72E-04	2.2148E-02
551203.89	4172818.01	1523.82478	1857.07042	536.44681	3735.38567	669.54246	1339.87138	1522.98998	1074.44087	299.93464	2895.68313	2132.42539	1702.40107	0.17691	0.1794	2.42E-03	2.09E-03	6.04E-04	3.22E-03	5.81E-04	1.16E-03	2.19E-03	1.10E-03	3.06E-04	3.52E-03	1.74E-03	1.39E-03	8.29E-05	8.50E-05	2.0488E-02
551242.83	4172708.09	1508.72598	1807.13959	549.75533	3740.57071	720.71857	1321.58402	1506.93733	1046.07878	305.56956	2842.05317	2245.23646	1677.07634	0.17126	0.17379	2.40E-03	2.04E-03	6.19E-04	3.23E-03	6.26E-04	1.15E-03	2.17E-03	1.07E-03	3.12E-04	3.45E-03	1.83E-03	1.36E-03	8.03E-05	8.24E-05	2.0410E-02
551758.16	4173445.82	2731.04592	1821.31371	428.24659	1854.80443	400.87014	2354.19003	2777.09556	1064.02341	248.38598	1694.8514	958.23468	2916.55157	0.68173	0.62899	4.35E-03	2.05E-03	4.82E-04	1.60E-03	3.48E-04	2.04E-03	4.00E-03	1.09E-03	2.54E-04	2.06E-03	7.80E-04	2.37E-03	3.20E-04	2.98E-04	2.2039E-02
551232.81	4172753.01	1515.04732	1809.31433	546.23892	3727.95736	701.31562	1324.43198	1513.41664	1047.89566	304.32324	2847.00527	2205.59706	1680.38788	0.173	0.17548	2.41E-03	2.04E-03	6.15E-04	3.22E-03	6.09E-04	1.15E-03	2.18E-03	1.07E-03	3.11E-04	3.46E-03	1.80E-03	1.37E-03	8.11E-05	8.32E-05	2.0381E-02
551777.89	4173433.99	2760.67644	1790.04304	428.80798	1828.72152	397.02712	2315.01092	2808.74555	1045.44168	248.69512	1730.33516	946.86236	2868.19547	0.65414	0.60786	4.39E-03	2.02E-03	4.83E-04	1.58E-03	3.45E-04	2.01E-03	4.05E-03	1.07E-03	2.54E-04	2.10E-03	7.71E-04	2.33E-03	3.07E-04	2.88E-04	2.1990E-02
551215.82	4172790.25	1515.1741	1822.11459	539.44702	3718.79799	679.92644	1322.49131	1513.91172	1054.70623	301.18946	2861.89257	2156.01454	1679.55117	0.17428	0.17676	2.41E-03	2.05E-03	6.08E-04	3.21E-03	5.90E-04	1.15E-03	2.18E-03	1.08E-03	3.07E-04	3.47E-03	1.75E-03	1.37E-03	8.17E-05	8.38E-05	2.0343E-02
551238.52	4172716.47	1498.3295	1789.66594	544.60374	3699.44383	711.02902	1311.12704	1496.57057	1036.16472	302.8404	2813.76891	2216.21229	1663.56148	0.16996	0.17244	2.38E-03	2.02E-03	6.13E-04	3.19E-03	6.17E-04	1.14E-03	2.16E-03	1.06E-03	3.09E-04	3.42E-03	1.80E-03	1.35E-03	7.97E-05	8.17E-05	2.0217E-02
551818.72	4173407.19	2768.39667	1744.60619	422.01162	1782.13617	388.68971	2337.76921	2818.56146	1056.29892	244.92546	1683.45903	924.75623	2905.54245	0.56325	0.53306	4.41E-03	1.96E-03	4.75E-04	1.54E-03	3.38E-04	2.03E-03	4.06E-03	1.08E-03	2.50E-04	2.04E-03	7.53E-04	2.36E-03	2.64E-04	2.53E-04	2.1815E-02
551798.98	4173421.96	2754.50412	1752.00338	423.61628	1795.17636	391.21039	2352.32182	2803.52349	1064.28586	245.76186	1697.43491	931.72125	2805.89924	0.59982	0.56337	4.38E-03	1.97E-03	4.77E-04	1.55E-03	3.40E-04	2.04E-03	4.04E-03	1.09E-03	2.51E-04	2.06E-03	7.58E-04	2.28E-03	2.81E-04	2.67E-04	2.1790E-02
551204.62	4172808.34	1502.92663	1817.88835	530.07737	3667.95331	663.09917	1315.21219	1501.98607	1051.94587	296.27588	2838.83154	2104.52684	1671.01846	0.17304	0.17546	2.39E-03	2.05E-03	5.97E-04	3.16E-03	5.76E-04	1.14E-03	2.16E-03	1.07E-03	3.02E-04	3.45E-03	1.71E-03	1.36E-03	8.11E-05	8.32E-05	2.0140E-02
551216.75	4172780.99	1500.05858	1795.25144	535.09976	3671.16046	676.87542	1306.69805	1498.72625	1039.3568	298.62088	2820.75312	2139.37815	1659.23374	0.17161	0.17404	2.39E-03	2.02E-03	6.03E-04	3.17E-03	5.88E-04	1.13E-03	2.16E-03	1.06E-03	3.05E-04	3.42E-03	1.74E-03	1.35E-03	8.04E-05	8.25E-05	2.0103E-02
551831.17	4173398.77	2753.81547	1732.8465	419.30035	1768.62287	385.96749	2316.99458	2804.01114	1046.85124	243.35439	1669.01599	918.21603	2879.03018	0.53414	0.50789	4.38E-03	1.95E-03	4.72E-04	1.53E-03	3.35E-04	2.01E-03	4.04E-03	1.07E-03	2.48E-04	2.03E-03	7.47E-04	2.34E-03	2.50E-04	2.41E-04	2.1641E-02
551839.26	4173393.23	2743.86495	1727.66683	417.49153	1760.99094	384.12294	2305.58783	2794.00628	1041.09245	242.34298	1660.28107	913.78976	2863.79908	0.5161	0.49204	4.37E-03	1.95E-03	4.70E-04	1.52E-03	3.34E-04	2.00E-03	4.02E-03	1.06E-03	2.47E-04	2.02E-03	7.44E-04	2.33E-03	2.42E-04	2.33E-04	2.1536E-02
551847.36	4173387.7	2732.94545	1783.55246	415.57735	1753.80919	382.23156	2295.89654	2782.9767	1035.54151	241.2098	1651.59674	909.31473	2849.89002	0.49868	0.47664	4.35E-03	2.01E-03	4.68E-04	1.51E-03	3.32E-04	1.99E-03	4.01E-03	1.06E-03	2.46E-04	2.01E-03	7.40E-04	2.32E-03	2.34E-04	2.26E-04	2.1499E-02
551771.17	4173443.93	2690.38098	1762.61231	422.24406	1806.65745	392.15037	2267.14661	2736.26443	1029.64624	241.59905	1708.11921	936.14479	2810.16682	0.61489	0.57183	4.28E-03	1.99E-03	4.76E-04	1.56E-03	3.41E-04	1.97E-03	3.94E-03	1.05E-03	2.47E-04	2.07E-03	7.62E-04	2.29E-03	2.88E-04	2.71E-04	2.1529E-02
551234.21	4172724.85	1481.82571	1763.45457	536.21008	3631.88662	696.47415	1294.98242	1480.1633	1021.31124	298.34113	2768.00482	2169.91799	1642.86668	0.1674	0.1698	2.36E-03	1.99E-03	6.04E-04	3.13E-03	6.05E-04	1.12E-03	2.13E-03	1.04E-03	3.05E-04	3.36E-03	1.77E-03	1.34E-03	7.85E-05	8.05E-05	1.9911E-02
551218.86	4172771.15	1487.27743	1772.5937	531.52967	3628.73825	675.05495	1294.36164	1485.88823	1026.50647	296.48203	2784.40615	2126.02208	1643.17096	0.16924	0.17161	2.37E-03	2.00E-03	5.99E-04	3.13E-03	5.86E-04	1.12E-03	2.14E-03	1.05E-03	3.03E-04	3.38E-03	1.73E-03	1.34E-03	7.93E-05	8.13E-05	1.9900E-02
551855.46	4173382.16	2720.0424	1773.40407	413.56385	1745.74396	380.3017	2287.71664	2769.93185	1030.17957	240.06991	1643.09904	904.73158	2837.25851	0.48203	0.46175	4.33E-03	2.00E-03	4.66E-04	1.51E-03	3.30E-04	1.99E-03	3.99E-03	1.05E-03	2.45E-04	1.99E-03	7.36E-04	2.31E-03	2.26E-04	2.19E-04	2.1385E-02
551863.55	4173376.62	2712.94678	1765.48995	411.68779	1737.52904	378.23091	2288.55528	2762.81231	1026.55073	238.90296	1636.53535	899.82473	2832.94316	0.46652	0.44788	4.32E-03	1.99E-03	4.64E-04	1.50E-03	3.28E-04	1.99E-03	3.98E-03	1.05E-03	2.44E-04	1.99E-03	7.32E-04	2.31E-03	2.19E-04	2.12E-04	2.1310E-02
551229.9	4172733.23	1475.19364	1752.35607	532.52088	3606.18098	688.79068	1286.90696	1473.56901	1014.97263	296.4187	2751.37382	2148.58065	1632.70829	0.16665	0.16903	2.35E-03	1.97E-03	6.00E-04	3.11E-03	5.98E-04	1.12E-03	2.12E-03	1.04E-03	3.03E-04	3.34E-03	1.75E-03	1.33E-03	7.81E-05	8.01E-05	1.9783E-02
551791.13	4173432.07	2697.00573	1728.88274	418.49482	1778.51072	387.60324	2224.28608	2744.16382	1050.7802	242.72183	1680.93074	923.83048	2756.3379	0.58379	0.54723	4.29E-03	1.95E-03	4.71E-04	1.53E-03	3.37E-04	1.93E-03	3.95E-03	1.07E-03	2.48E-04	2.04E-03	7.52E-04	2.24E-03	2.74E-04	2.59E-04	2.1353E-02
551871.65	4173371.08	2696.75752	1755.41142	409.53724	1729.76062	376.31775	2284.13998	2746.34507	1021.53829	237.68623	1628.18373	895.49792	2823.79848	0.45126	0.43406	4.29E-03	1.98E-03	4.61E-04	1.49E-03	3.27E-04	1.98E-03	3.96E-03	1.04E-03	2.43E-04	1.98E-03	7.29E-04	2.30E-03	2.11E-04	2.06E-04	2.1193E-02
551879.75	4173365.54	2683.94236	1747.08515	407.52125	1722.07198	374.37507	2287.17565	2733.37341	1017.93734	236.4777	1621.2972	891.10884	2821.87594	0.43694	0.42103	4.27E-03	1.97E-03	4.59E-04	1.49E-03	3.25E-04	1.99E-03	3.94E-03	1.04E-03	2.41E-04	1.97E-03	7.25E-04	2.30E-03	2.05E-04	2.00E-04	2.1105E-02
551205.34	4172798.67	1476.25929	1770.94028	520.88523	3575.54693	652.74448	1286.63152	1475.27565	1025.26795	291.02957	2765.06624	2061.82382	1634.43844	0.1681	0.17043	2.35E-03	1.99E-03	5.87E-04	3.08E-03	5.67E-04	1.12E-03	2.12E-03	1.05E-03	2.97E-04	3.36E-03	1.68E-03	1.33E-03	7.88E-05	8.08E-05	1.9691E-02
551220.98	4172761.3	1472.80588	1748.82468	526.8807	3578.71627	671.75002	1281.43685	1471.3951	1013.04119	293.75214	2743.69486	2106.87269	1626.31763	0.16656	0.16889	2.34E-03	1.97E-03	5.93E-04	3.09E-03	5.83E-04	1.11E-03	2.12E-03	1.03E-03	3.00E-04	3.33E-03	1.71E-03	1.32E-03	7.81E-05	8.00E-05	1.9669E-02
551812.12	4173420.05	2679.85514	1697.60135	412.78988	1746.35886	381.47817	2261.0957	2727.42266	1029.51615	239.45839	1648.65436	908.15195	2705.10554	0.53878	0.50921	4.26E-03	1.91E-03	4.65E-04	1.51E-03	3.31E-04	1.96E-03	3.93E-03	1.05E-03	2.44E-04	2.00E-03	7.39E-04	2.20E-03	2.53E-04	2.41E-04	2.1101E-02
551223.09	4172751.46	1463.06435	1733.53654	524.22116	3548.28322	671.22101	1273.26315	1461.61752	1004.321	292.12574	2717.45937	2098.15422	1615.62437	0.1648	0.1671	2.33E-03	1.95E-03	5.90E-04	3.06E-03	5.83E-04	1.11E-03	2.10E-03	1.03E-03	2.98E-04	3.30E-03	1.71E-03	1.31E-03	7.72E-05	7.92E-05	1.9526E-02
551784.18	4173442.04	2638.13474	1705.75371	412.78845	1759.05318	383.24547	2183.10746	2683.41844	1035.22809	239.28021	1661.51762	914.08142	2706.85441	0.55678	0.52171	4.20E-03	1.92E-03	4.65E-04	1.52E-03	3.33E-04	1.90E-03	3.86E-03	1.06E-03	2.44E-04	2.02E-03	7.44E-04	2.20E-03	2.61E-04	2.47E-04	2.0967E-02
551206.06	4172789	1460.36547	1742.02538	516.42937	3527.53436	649.32016	1269.12348	1459.29	1008.71307	288.39857	2722.92015	2044.79872	1611.97684	0.16535	0.16763	2.32E-03	1.96E-03	5.82E-04	3.04E-03	5.64E-04	1.10E-03	2.10E-03	1.03E-03	2.94E-04	3.31E-03	1.66E-03	1.31E-03	7.75E-05	7.94E-05	1.9440E-02
551824.24	4173415.35	2631.70495	1663.88756	406.18409	1716.24692	375.49695	2206.89142	2678.41768	1008.25915	235.58343	1618.46334	893.81769	2744.94281	0.50287	0.47743	4.19E-03	1.87E-03	4.57E-04	1.48E-03	3.26E-04	1.92E-03	3.86E-03	1.03E-03	2.41E-04	1.96E-03	7.27E-04	2.23E-03	2.36E-04	2.26E-04	2.0757E-02
551804.36	4173430.14	2629.57876	1674.55105	408.17926	1730.18475	378.10956	2224.02055	2675.53922	1016.9626	236.69583	1633.11623	900.64002	2656.72449	0.52691	0.49701	4.18E-03	1.89E-03	4.60E-04	1.49E-03	3.28E-04	1.93E-03	3.85E-03	1.04E-03	2.42E-04	1.98E-03	7.33E-04	2.16E-03	2.47E-04	2.36E-04	2.0775E-02
551207.01	4172779.52	1444.38309	1714.15586	511.62869	3476.51825	645.43831	1252.72972	1443.24619	992.80888	285.59002	2679.92476	2025.64718	1590.84993	0.16257	0.1648	2.30E-03	1.93E-03	5.76E-04	3.00E-03	5.60E-04	1.09E-03	2.08E-03	1.01E-03	2.92E-04	3.25E-03	1.65E-03	1.29E-03	7.62E-05	7.81E-05	1.9186E-02
551836.73	4173406.9	2617.76062	1654.79322	403.56972	1703.81218	372.75378	2188.05256	2664.43893	999.4994	234.09078	1604.90656	887.15226	2720.75181	0.48196	0.45918	4.17E-03	1.86E-03	4.55E-04	1.47E-03	3.24E-04	1.90E-03	3.84E-03	1.02E-03	2.39E-04	1.95E-03	7.22E-04	2.21E-03	2.26E-04	2.18E-04	2.0602E-02
551224.76	4172722.14	1431.04835	1689.67266	514.7297	3457.43738	666.7805	1245.56429	1429.55156	978.91534	286.45393	2642.29743	2065.02715	1580.21154	0.15952	0.16175	2.28E-03	1.90E-03	5.80E-04	2.98E-03	5.79E-04	1.08E-03	2.06E-03	9.99E-04	2.92E-04	3.21E-03	1.68E-03	1.29E-03	7.48E-05	7.67E-05	1.9079E-02
551229.08	4172713.73	1430.02638	1690.00637	514.44329	3450.74596	668.25052	1247.19952	1428.56446	979.15916	286.20919	2637.48721	2064.97431	1582.1203	0.15882	0.16104	2.28E-03	1.90E-03	5.79E-04	2.98E-03	5.80E-04	1.08E-03	2.06E-03	1.00E-03	2.92E-04	3.20E-03	1.68E-03	1.29E-03	7.44E-05	7.63E-05	1.9068E-02
551844.82	4173401.36	2605.88803	1649.19223	401.7271	1696.26553	370.9546	2176.71465	2652.43348	993.88851	233.04827	1596.33355	882.97551	2705.67458	0.46831	0.4472	4.15E-03	1.86E-03	4.52E-04	1.46E-03	3.22E-04	1.89E-03	3.82E-03	1.01E-03	2.38E-04	1.94E-03	7.19E-04	2.20E-03	2.19E-04	2.12E-04	2.0494E-02
551852.92	4173395.82	2594.79076	1701.88111	399.84995	1689.18845	369.11673	2167.62034	2641.22678	988.66764	231.94433	1588.16326	878.59389	2692.56497	0.45493	0.43537	4.13E-03	1.92E-03	4.50E-04	1.46E-03	3.21E-04	1.88E-03	3.80E-03	1.01E-03	2.37E-04	1.93E-03	7.15E-04	2.19E-03	2.13E-04	2.06E-04	2.0460E-02
551209.13	4172769.65	1433.22123	1694.26983	508.72049	3441.48026	644.32015	1241.91743	1432.02216	981.52493	283.82672	2649.02068	2015.59415	1576.72487	0.16059	0.16278	2.28E-03	1.91E-03	5.73E-04	2.97E-03	5.59E-04	1.08E-03	2.06E-03	1.00E-03	2.90E-04	3.22E-03	1.64E-03	1.28E-03	7.53E-05	7.71E-05	1.9014E-02
551220.44	4172730.54	1426.6508	1682.05796	512.17807	3441.58162	660.96979	1239.32686	1425.17976	974.53522	285.14811	2632.26781	2050.08569	1572.45383	0.15917	0.16138	2.27E-03	1.89E-03	5.77E-04	2.97E-03	5.74E-04	1.08E-03	2.05E-03	9.95E-04	2.91E-04	3.20E-03	1.67E-03	1.28E-03	7.46E-05	7.65E-05	1.8993E-02
551797.19	4173440.15	2573.39543	1648.8596	402.9379	1711.98556	374.31645	2182.89582	2617.64864	1002.77556	233.59683	1615.21058	892.3642	2604.11213	0.50707	0.478	4.10E-03	1.86E-03	4.54E-04	1.48E-03	3.25E-04	1.90E-03	3.77E-03	1.02E-03	2.38E-04	1.96E-03	7.26E-04	2.12E-03	2.38E-04	2.27E-04	2.0405E-02
551861.02	4173390.29	2581.22517	1692.03766	397.88706	1681.32757	367.27151	2159.21023	2627.48817	983.45889	230.81732	1579.89737	874.25106	2679.92456	0.44178	0.42362	4.11E-03	1.91E-03	4.48E-04	1.45E-03	3.19E-04	1.87E-03	3.78E-03	1.00E-03	2.36E-04	1.92E-03	7.11E-04	2.18E-03	2.07E-04	2.01E-04	2.0347E-02
551903.63	4173360.99	2631.35392	1652.11392	387.68875	1643.84926	357.48723	2173.85995	2678.4919	966.27418	224.79748	1546.11807	852.01379	2671.20638	0.38036	0.3679	4.19E-03	1.86E-03	4.37E-04	1.42E-03	3.10E-04	1.89E-03	3.86E-03	9.86E-04	2.30E-04	1.88E-03	6.93E-04	2.17E-03	1.78E-04	1.74E-04	2.0271E-02
551869.11	4173384.75	2570.35309	1683.43816	395.95445	1673.54748	365.32047	2155.79194	2616.4748	979.16385	229.6426	1572.66781	869.73432	2671.95754	0.42923	0.41238	4.09E-03	1.90E-03	4.46E-04	1.44E-03	3.17E-04	1.87E-03	3.77E-03	1.00E-03	2.34E-04	1.91E-03	7.08E-04	2.17E-03	2.01E-04	1.95E-04	2.0255E-02
551918.16	4173350.8	2607.22241	1644.43773	384.56505	1634.35967	354.56547	2200.49807	2653.83634	964.71988	222.90631	1538.32625	845.60588	2692.13379	0.36223	0.35118	4.15E-03	1.85E-03	4.33E-04	1.41E-03	3.08E-04	1.91E-03	3.82E-03	9.85E-04	2.28E-04	1.87E-03	6.88E-04	2.19E-03	1.70E-04	1.66E-04	2.0179E-02
551211.25	4172759.78	1420.40188	1673.17561	504.75727	3398.91767	641.78805	1230.44998	1419.17321	969.55807	281.48633	2613.70887	2000.04935	1561.74812	0.1583	0.16045	2.26E-03	1.88E-03	5.68E-04	2.93E-03	5.57E-04	1.07E-03	2.04E-03	9.90E-04	2.87E-04	3.17E-03	1.63E-03	1.27E-03	7.42E-05	7.60E-05	1.8813E-02
551216.11	4172738.95	1416.19164	1666.20445	506.50561	3400.0969	650.55262	1228.05455	1414.80447	965.48563	282.13461	2605.2615	2018.71216	1558.27238	0.15762	0.15979	2.25E-03	1.88E-03	5.70E-04	2.93E-03	5.65E-04	1.07E-03	2.04E-03	9.86E-04	2.88E-04	3.16E-03	1.64E-03	1.27E-03	7.39E-05	7.57E-05	1.8799E-02
551877.21	4173379.21	2557.18343	1674.5194	393.96197	1665.9934	363.48623	2153.43598	2603.10885	974.90206	228.50862	1565.31985	865.41873	2664.96456	0.41696	0.40131	4.07E-03	1.89E-03	4.44E-04	1.44E-03	3.16E-04	1.87E-03	3.75E-03	9.95E-04	2.33E-04	1.90E-03	7.04E-04	2.17E-03	1.95E-04	1.90E-04	2.0158E-02
551885.31	4173373.67	2542.77819	1665.70249	391.94972	1658.69321	361.59319	2152.15293	2588.50184	970.70644	227.33515	1557.90322	861.31272	2659.22818	0.40506	0.39048	4.05E-03	1.88E-03	4.41E-04	1.43E-03	3.14E-04	1.87E-03	3.73E-03	9.91E-04	2.32E-04	1.89E-03	7.01E-04	2.16E-03	1.90E-04	1.85E-04	2.0059E-02
551817.59	4173428.22	2552.30819	1620.75929	397.6239	1682.89238	368.69548	2137.67891	2596.75638	983.68226	230.56878	1586.01296	878.13476	2558.70691	0.4789	0.45411	4.06E-03	1.83E-03	4.48E-04	1.45E-03	3.20E-04	1.86E-03	3.74E-03	1.00E-03	2.35E-04	1.93E-03	7.15E-04	2.08E-03	2.24E-04	2.15E-04	2.0104E-02
551893.41	4173368.13	2529.8865	1657.80712	389.89583	1651.71098	359.77923	2155.43538	2575.4191	967.36634	226.0993	1551.23948	857.11022	2658.04803	0.39366	0.38006	4.03E-03	1.87E-03	4.39E-04	1.42E-03	3.12E-04	1.87E-03	3.71E-03	9.88E-04	2.31E-04	1.88E-03	6.98E-04	2.16E-03	1.85E-04	1.80E-04	1.9977E-02
551829.75	4173423.51	2508.05229	1591.90785	391.2829	1654.84508	362.84471	2088.22751	2551.68363	963.85411	226.83082	1557.6457	864.03612	2599.12901	0.45163	0.42981	3.99E-03	1.79E-03	4.41E-04	1.43E-03	3.15E-04	1.81E-03	3.67E-03	9.84E-04	2.32E-04	1.89E-03	7.03E-04	2.12E-03	2.12E-04	2.04E-04	1.9795E-02
551810.2	4173438.25	2506.33823	1598.3101	393.09056	1666.73315	365.34451	2102.25287	2549.3685	971.35043	227.81014	1570.49094	870.55018	2512.60919	0.46475	0.44026	3.99E-03	1.80E-03	4.43E-04	1.44E-03	3.17E-04	1.83E-03	3.67E-03	9.92E-04	2.33E-04	1.91E-03	7.08E-04	2.04E-03	2.18E-04	2.09E-04	1.9793E-02
551842.29	4173415.03	2490.5768	1581.9	388.63135	1642.48972	360.16065	2069.52846	2534.03449	955.27378	225.31285	1544.39748	857.62991	2575.09456	0.4361	0.41632	3.96E-03	1.78E-03	4.38E-04	1.42E-03	3.13E-04	1.80E-03	3.65E-03	9.75E-04	2.30E-04	1.87E-03	6.98E-04	2.10E-03	2.04E-04	1.97E-04	1.9634E-02
551850.38	4173409.49	2478.81689	1635.13932	386.85167	1635.45293	358.45451	2059.06658	2522.154	950.04116	224.29761	1536.25669	853.57007	2561.02408	0.42592	0.40741	3.94E-03	1.84E-03	4.36E-04	1.41E-03	3.11E-04	1.79E-03	3.63E-03	9.70E-04	2.29E-04	1.87E-03	6.95E-04	2.08E-03	2.00E-04	1.93E-04	1.9599E-02
551858.48	4173403.95	2466.65059	1625.80691	384.98843	1627.99997	356.65009	2049.98489	2509.82341	944.95774	223.20755	1528.32703	849.34945	2548.09035	0.41566	0.39831	3.93E-03	1.83E-03	4.34E-04	1.40E-03	3.10E-04	1.78E-03	3.61E-03	9.65E-04	2.28E-04	1.86E-03	6.91E-04	2.07E-03	1.95E-04	1.89E-04	1.9495E-02
551866.58	4173398.41	2453.91379	1616.61031	383.1169	1620.47741	354.85604	2042.42461	2496.88147	940.13093	222.09801	1520.64418	845.1776	2536.46184	0.40542	0.38921	3.90E-03	1.82E-03	4.31E-04	1.40E-03	3.08E-04	1.77E-03	3.60E-03	9.60E-04	2.27E-04	1.85E-03	6.88E-04	2.06E-03	1.90E-04	1.84E-04	1.9391E-02
551956.27	4173335.84	2427.61282	1578.70681	365.49128	1560.05481	336.88662	2194.19435	2470.20337	935.59146	211.59771	1480.38868	805.05389	2655.49307	0.30924	0.30111	3.86E-03	1.78E-03	4.12E-04	1.35E-03	2.93E-04	1.91E-03	3.56E-03	9.55E-04	2.16E-04	1.80E-03	6.55E-04	2.16E-03	1.45E-04	1.43E-04	1.9226E-02
551874.68	4173392.88	2442.2053	1608.12876	381.1987	1612.86342	352.98891	2038.07	2485.00261	935.8365	220.96123	1513.45597	840.8059	2527.88399	0.39539	0.3802	3.89E-03	1.81E-03	4.29E-04	1.39E-03	3.07E-04	1.77E-03	3.58E-03	9.55E-04	2.26E-04	1.84E-03	6.84E-04	2.06E-03	1.85E-04	1.80E-04	1.9298E-02
551909.29	4173369.05	2499.72506	1577.79102	373.23709	1584.22834	345.47886	2050.80663	2543.47999	923.10658	216.27747	1487.73661	823.75467	2523.01362	0.35513	0.3436	3.98E-03	1.78E-03	4.20E-04	1.37E-03	3.00E-04	1.78E-03	3.66E-03	9.42E-04	2.21E-04	1.81E-03	6.70E-04	2.05E-03	1.66E-04	1.63E-04	1.9308E-02
551945.6	4173343.57	2440.55317	1568.83944	366.37431	1563.46881	338.60044	2136.79781	2483.18012	925.84815	212.20669	1475.05312	808.81092	2598.32084	0.31857	0.3098	3.88E-03	1.77E-03	4.13E-04	1.35E-03	2.94E-04	1.86E-03	3.58E-03	9.45E-04	2.17E-04	1.79E-03	6.58E-04	2.11E-03	1.49E-04	1.47E-04	1.9159E-02
551823.22	4173436.36	2433.43078	1549.86031	383.16483	1622.66244	356.41552	2023.70877	2474.97897	940.60635	222.04587	1526.62158	849.13674	2520.19581	0.4277	0.40693	3.87E-03	1.75E-03	4.32E-04	1.40E-03	3.09E-04	1.76E-03	3.56E-03	9.60E-04	2.27E-04	1.85E-03	6.91E-04	2.05E-03	2.00E-04	1.93E-04	1.9256E-02
551938.34	4173348.67	2451.96456	1566.95858	367.52558	1566.94585	339.94961	2109.2856	2494.75934	922.63227	212.86019	1475.13604	811.73584	2572.11979	0.32538	0.31613	3.90E-03	1.76E-03	4.14E-04	1.35E-03	2.95E-04	1.83E-03	3.59E-03	9.42E-04	2.17E-04	1.79E-03	6.61E-04	2.09E-03	1.53E-04	1.50E-04	1.9158E-02
551882.77	4173387.34	2428.22664	1599.2292	379.28662	1605.74247	351.23888	2033.95317	2470.81221	931.45532	219.83304	1506.12801	836.84079	2519.53492	0.38544	0.37122	3.86E-03	1.80E-03	4.27E-04	1.38E-03	3.05E-04	1.77E-03	3.56E-03	9.51E-04	2.24E-04	1.83E-03	6.81E-04	2.05E-03	1.81E-04	1.76E-04	1.9199E-02
551923.81	4173358.86	2475.36095	1567.51291	370.04873	1575.20338	342.74747	2064.31129	2518.5461	919.11653	214.3785	1477.78048	817.92357	2531.49404	0.33961	0.32928	3.94E-03	1.77E-03	4.17E-04	1.36E-03	2.98E-04	1.79E-03	3.63E-03	9.38E-04	2.19E-04	1.79E-03	6.66E-04	2.06E-03	1.59E-04	1.56E-04	1.9189E-02
551890.87	4173381.8	2415.08432	1590.96613	377.29662	1598.67743	349.40538	2032.62252	2457.50172	927.51188	218.71357	1499.15713	832.75548	2514.04848	0.37573	0.36241	3.84E-03	1.79E-03	4.25E-04	1.38E-03	3.03E-04	1.76E-03	3.54E-03	9.47E-04	2.23E-04	1.82E-03	6.78E-04	2.05E-03	1.76E-04	1.72E-04	1.9108E-02
551898.97	4173376.26	2400.31033	1582.33506	375.29718	1592.06224	347.72297	2031.08784	2442.53228	923.4135	217.52611	1491.80459	828.9626	2508.5464	0.36615	0.35366	3.82E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551835.27	4173431.67	2388.15479	1521.54944	377.07686	1595.785	350.86896	1977.39872	2428.83989	921.88532	218.47002	1499.60277	836.00225	2462.84826	0.4067	0.3881	3.80E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551847.85	4173423.16	2372.22905	1572.72181	374.47187	1584.59821	348.17096	1960.56438	2412.77014	913.94269	216.97695	1487.27912	829.50303	2440.98542	0.3958	0.3786	3.77E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551855.94	4173417.62	2359.79631	1563.61871	372.72562	1577.586	346.55481	1950.42475	2400.1676	908.92954	215.98963	1479.44437	825.64137	2427.34996	0.38824	0.37197	3.76E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551989.41	4173325.24	2270.29688	1527.57165	347.46045	1494.20232	320.9952	2172.4306	2310.02905	911.25997	201.38698	1421.80129	768.82517	2614.75269	0.27136	0.26495	3.61E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551864.04	4173412.08	2346.84227	1554.56054	370.92265	1570.12467	344.82781	1941.31408	2387.01915	903.96807	214.93981	1471.73206	821.59581	2414.61751	0.38042	0.36504	3.73E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551981.43	4173330.65	2279.36006	1518.05145	348.73255	1496.37479	322.36457	2134.88777	2318.92982	904.20633	202.13725	1422.39659	771.62305	2574.86744	0.2773	0.27055	3.63E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551872.14	4173406.54	2335.92674	1546.22403	369.124	1562.87036	343.01597	1935.24066	2375.95886	899.68701	213.85214	1464.74485	817.42871	2404.63335	0.37258	0.35808	3.72E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551973.46	4173336.05	2288.76593	1507.44883	350.05316	1499.22003	323.83805	2090.35767	2328.13868	894.92261	202.50236	1420.74513	774.77959	2529.03392	0.28331	0.2762	3.64E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551880.24	4173401	2324.26082	1538.07034	367.30992	1555.51481	341.28478	1930.7565	2364.13767	895.57015	212.8042	1457.85182	813.29838	2396.17324	0.36466	0.35099	3.70E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551914.94	4173377.11	2377.94767	1508.83126	359.62394	1527.84873	334.03705	1939.41663	2418.5781	883.06842	208.29156	1432.97892	796.90831	2388.38244	0.33167	0.32104	3.78E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551962.09	4173343.78	2305.77727	1499.97534	351.41793	1504.11779	325.88517	2042.57043	2345.24663	887.14307	203.37454	1418.03449	779.24112	2480.98608	0.29212	0.28447	3.67E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551888.33	4173395.47	2313.03744	1530.38782	365.49195	1548.52363	339.49802	1929.01421	2352.74745	891.99182	211.74948	1451.49409	809.24327	2390.38468	0.35679	0.34391	3.68E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551951.26	4173351.64	2320.70977	1498.04859	352.95492	1507.31558	327.43043	2010.86563	2360.32467	883.92025	204.32337	1419.34836	782.48043	2449.46113	0.30055	0.29231	3.69E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551936.73	4173361.83	2343.59103	1498.66323	355.39446	1514.62629	330.04102	1971.9703	2383.57132	880.94474	205.76825	1422.49772	788.10258	2413.63133	0.31254	0.30342	3.73E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551896.43	4173389.93	2296.12277	1521.02192	363.46404	1541.91208	337.86885	1922.1198	2335.57961	887.01504	210.55309	1443.4737	805.68705	2379.86925	0.34864	0.3365	3.65E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551904.53	4173384.39	2283.96011	1513.38417	361.58572	1535.48377	336.17582	1922.22828	2323.26934	883.53859	209.46729	1437.01755	801.9063	2376.10869	0.34085	0.32939	3.63E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551929.47	4173366.92	2255.31943	1496.56178	356.37688	1519.14763	331.4751	1942.81084	2294.38248	877.26282	206.36724	1421.36251	791.51177	2387.20641	0.31837	0.30878	3.59E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CONCUNIT ug/	m^3																													
DEPUNIT g/m^2	2																													

Midway Village Project—All Off-site Receptors Scenario

All Off-site Receptors: Exposed to Phases 1+2+3+4 Demolition and Phases 1+2+3+4 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

Mitigated Concentrations

Annual Average Onsite DPM Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	6.24E-08
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	5.78E-08
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	5.78E-08
Annual Average Onsite DPM Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	4.96E-08
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	6.25E-08
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	6.25E-08
Annual Average Onsite DPM Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	9.83E-08
Annual Average Onsite DPM Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	2.05E-07
Annual Average Onsite DPM Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	2.05E-07
Annual Average Onsite DPM Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	6.84E-08
Annual Average Onsite DPM Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	4.70E-08
Annual Average Onsite DPM Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	4.70E-08
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	1.40E-05
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	1.69E-05

Mitigated DPM Concentrations		
Maximum DPM (ug/m3)	MIR UTM X	Y
3.7368E-02	551568.65	4173003.88
3.5914E-02	551763.51	4172840.85

UTM	551568.65	4173003.88
Latitude, Longitude	37°42'10.1"N 122°24'54.0"W	
UTM	551763.51	4172840.85
Latitude, Longitude	37°42'04.8"N 122°24'46.1"W	

X	Y	Unit Emissions Demolition Area 1A (Phase 1) AREA8	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) AREA9	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) AREA10	Unit Emissions Demolition Area 3A (Phase 3) AREA11	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Construction Area 1B (Phase 1) AREA2	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) AREA3	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) AREA4	Unit Emissions Construction Area 3B (Phase 3) AREA5	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Road Segment 1 LINE1	Unit Emissions Road Segment 2 LINE2	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Total DPM (ug/m3)
551763.51	4172840.85	64602.40637	13983.34295	65769.74448	58987.55675	40337.01297	5357.08967	61830.48958	8101.26788	27676.37478	52416.22872	87627.14487	7526.48473	0.87588	0.86566	4.03E-03	8.08E-04	3.80E-03	2.92E-03	2.52E-03	3.35E-04	6.08E-03	1.66E-03	5.67E-03	3.58E-03	4.12E-03	3.54E-04	1.23E-05	1.47E-05	3.5914E-02
551760.24	4172831.56	53670.68708	12353.06854	56620.45345	57660.10853	50770.23164	4979.1095	51644.11565	6940.80097	21234.25424	48622.61948	99583.36673	6983.56985	0.89425	0.88382	3.35E-03	7.14E-04	3.27E-03	2.86E-03	3.17E-03	3.11E-04	5.08E-03	1.42E-03	4.35E-03	3.33E-03	4.68E-03	3.28E-04	1.25E-05	1.50E-05	3.2888E-02
551785.57	4172857.1	84715.16033	17456.05793	45188.73925	50959.76905	20261.38392	6226.90249	80196.12675	10544.76826	26589.68961	49102.60533	46279.46112	8691.89029	0.76041	0.7526	5.29E-03	1.01E-03	2.61E-03	2.53E-03	1.27E-03	3.89E-04	7.88E-03	2.16E-03	5.45E-03	3.36E-03	2.17E-03	4.08E-04	1.06E-05	1.28E-05	3.4550E-02
551568.65	4173003.88	14589.91369	113158.5989	4489.87338	48624.12408	3752.77982	38156.84601	14676.38996	69908.17452	2570.385	74494.21139	11031.91488	49344.55997	12.06746	13.52869	9.11E-04	6.54E-03	2.60E-04	2.41E-03	2.34E-04	2.38E-03	1.44E-03	1.43E-02	5.27E-04	5.09E-03	5.18E-04	2.32E-03	1.69E-04	2.29E-04	3.7368E-02
551565.43	4172994.93	14467.87805	108774.6102	4613.40206	56349.10018	3969.76135	33720.81783	14536.9892	62431.58858	2638.7479	83877.88486	12040.77064	43646.06742	12.05368	13.54158	9.03E-04	6.29E-03	2.67E-04	2.79E-03	2.48E-04	2.11E-03	1.43E-03	1.28E-02	5.41E-04	5.74E-03	5.66E-04	2.05E-03	1.69E-04	2.29E-04	3.6123E-02
551562.21	4172985.98	14066.59961	102795.9946	4741.13472	65921.19248	4191.96335	29989.06749	14117.10949	54700.12339	2709.35668	92519.68259	13184.76867	38843.05428	11.99866	13.47263	8.78E-04	5.94E-03	2.74E-04	3.27E-03	2.62E-04	1.87E-03	1.39E-03	1.12E-02	5.55E-04	6.33E-03	6.19E-04	1.82E-03	1.68E-04	2.28E-04	3.4820E-02
551756.98	4172822.27	42121.234	10375.77459	38914.57823	55270.30929	61363.46572	4451.6105	40794.006	5741.86225	14494.50852	42766.24139	113485.7243	6228.55513	0.92281	0.91182	2.63E-03	6.00E-04	2.25E-03	2.74E-03	3.83E-03	2.78E-04	4.01E-03	1.18E-03	2.97E-03	2.92E-03	5.33E-03	2.93E-04	1.29E-05	1.55E-05	2.9064E-02
551558.98	4172977.03	13841.71438	95047.52039	4868.99275	77587.17648	4419.02431	26809.85554	13876.38617	47457.36852	2779.76878	99560.97041	14498.51234	34750.67984	11.92408	13.3595	8.64E-04	5.50E-03	2.81E-04	3.85E-03	2.76E-04	1.67E-03	1.36E-03	9.73E-03	5.70E-04	6.81E-03	6.81E-04	1.63E-03	1.67E-04	2.26E-04	3.3614E-02
551555.76	4172968.07	13572.44385	83764.12702	4992.92204	89279.52393	4652.18449	24072.07486	13591.84775	41103.93444	2848.07336	104513.4984	16036.98576	31220.24591	11.88962	13.30544	8.47E-04	4.84E-03	2.89E-04	4.43E-03	2.91E-04	1.50E-03	1.34E-03	8.43E-03	5.84E-04	7.15E-03	7.53E-04	1.47E-03	1.66E-04	2.25E-04	3.2302E-02
551552.53	4172959.12	13261.72429	73400.10118	5113.134	99370.84802	4887.46591	21703.38888	13266.81246	35703.70907	2913.8782	107586.6156	17848.0931	27901.4077	11.85687	13.24135	8.28E-04	4.24E-03	2.96E-04	4.93E-03	3.05E-04	1.36E-03	1.30E-03	7.32E-03	5.97E-04	7.36E-03	8.38E-04	1.31E-03	1.66E-04	2.24E-04	3.1070E-02
551782.31	4172847.81	67443.38143	15538.32949	47264.15042	50617.80712	24626.85985	5659.13668	64373.25066	9199.19041	25333.88133	47485.85795	53930.07467	7894.99939	0.77392	0.76597	4.21E-03	8.98E-04	2.73E-03	2.51E-03	1.54E-03	3.53E-04	6.33E-03	1.89E-03	5.19E-03	3.25E-03	2.53E-03	3.71E-04	1.08E-05	1.30E-05	3.1824E-02
551753.71	4172812.98	36018.56154	9159.85729	27632.38664	52318.79664	69380.53949	4158.98699	34987.66964	5089.38488	11137.84419	37957.97187	118267.5784	5803.01847	0.9526	0.93975	2.25E-03	5.30E-04	1.60E-03	2.59E-03	4.33E-03	2.60E-04	3.44E-03	1.04E-03	2.28E-03	2.60E-03	5.55E-03	2.73E-04	1.33E-05	1.59E-05	2.6780E-02
551572.47	4173027.61	13973.10185	96793.41386	3899.35237	34418.80583	3195.81892	49021.33777	14095.4356	65291.25079	2250.28627	47914.38351	8958.03968	62632.09772	9.93891	10.86632	8.72E-04	5.60E-03	2.25E-04	1.71E-03	2.00E-04	3.06E-03	1.39E-03	1.34E-02	4.61E-04	3.28E-03	4.21E-04	2.94E-03	1.39E-04	1.84E-04	3.3854E-02
551779.04	4172838.52	53879.43835	13365.9277	46661.53071	50279.81348	29930.58086	5099.40256	51794.98055	7869.97528	22327.28324	45319.01746	62323.64113	6989.5063	0.78825	0.78042	3.36E-03	7.73E-04	2.70E-03	2.49E-03	1.87E-03	3.18E-04	5.09E-03	1.61E-03	4.58E-03	3.10E-03	2.93E-03	3.28E-04	1.10E-05	1.32E-05	2.9175E-02
551750.44	4172803.69	32224.16239	8361.49007	20981.58636	49604.30544	75141.35912	3975.87284	31349.38408	4682.86528	9191.22965	34012.30132	119594.9011	5537.76763	0.97683	0.96346	2.01E-03	4.83E-04	1.21E-03	2.46E-03	4.69E-03	2.48E-04	3.08E-03	9.60E-04	1.88E-03	2.33E-03	5.62E-03	2.60E-04	1.37E-05	1.63E-05	2.5267E-02
551539.63	4172923.29	11848.7015	42652.36809	5414.50489	125369.9494	5651.08092	14865.25896	11808.20916	21352.69272	3064.05936	101686.2379	29248.70821	19263.40143	11.66643	12.89334	7.40E-04	2.47E-03	3.13E-04	6.21E-03	3.53E-04	9.28E-04	1.16E-03	4.38E-03	6.28E-04	6.95E-03	1.37E-03	9.05E-04	1.63E-04	2.18E-04	2.6794E-02
551541.27	4172931.47	12043.53645	46799.73111	5262.7598	117757.9058	5430.91084	15912.50431	12012.11485	23259.16713	2983.74615	100347.7183	25681.4551	20598.52733	11.0365	12.16801	7.52E-04	2.71E-03	3.04E-04	5.84E-03	3.39E-04	9.94E-04	1.18E-03	4.77E-03	6.12E-04	6.86E-03	1.21E-03	9.67E-04	1.54E-04	2.06E-04	2.6889E-02
551545.34	4172947.53	12474.89444	57300.20375	5010.50622	103351.2644	5062.159	18450.14811	12463.57799	28111.6998	2847.81739	97761.12853	20464.43357	23846.20381	10.28102	11.35393	7.79E-04	3.31E-03	2.90E-04	5.12E-03	3.16E-04	1.15E-03	1.23E-03	5.76E-03	5.84E-04	6.69E-03	9.61E-04	1.12E-03	1.44E-04	1.92E-04	2.7647E-02
551575.74	4173040.12	13644.33551	85993.53081	3643.22171	29697.18131	2968.52463	56216.1521	13783.90755	58168.15213	2103.60535	39292.01809	8152.40756	71026.55249	9.5404	10.34131	8.52E-04	4.97E-03	2.11E-04	1.47E-03	1.85E-04	3.51E-03	1.35E-03	1.19E-02	4.31E-04	2.69E-03	3.83E-04	3.34E-03	1.33E-04	1.75E-04	3.1627E-02
551536.4	4172914.33	11438.45559	37619.93679	5460.65545	127371.921	5807.16458	13648.66664	11390.81039	19079.22923	3082.86495	97723.36737	33916.95135	17692.80005	11.63266	12.82194	7.14E-04	2.17E-03	3.16E-04	6.31E-03	3.63E-04	8.52E-04	1.12E-03	3.91E-03	6.32E-04	6.68E-03	1.59E-03	8.31E-04	1.63E-04	2.17E-04	2.5883E-02
551542.38	4172939.89	12168.6601	51042.58679	5079.24934	108168.9525	5199.21687	17030.57916	12147.67025	25257.52197	2883.821	97076.18142	22605.63651	22016.18077	10.17198	11.1793	7.60E-04	2.95E-03	2.94E-04	5.36E-03	3.25E-04	1.06E-03	1.19E-03	5.18E-03	5.91E-04	6.64E-03	1.06E-03	1.03E-03	1.42E-04	1.89E-04	2.6783E-02
551775.78	4172829.23	44723.61502	11713.0739	42491.11998	49508.32417	35734.96967	4589.32296	43219.75223	6655.02738	18277.7983	42486.65568	70001.17261	6385.84206	0.79942	0.79165	2.79E-03	6.77E-04	2.46E-03	2.45E-03	2.23E-03	2.87E-04	4.25E-03	1.36E-03	3.75E-03	2.91E-03	3.29E-03	3.00E-04	1.12E-05	1.34E-05	2.6776E-02
551747.18	4172794.4	29122.03358	7714.44912	16720.32448	46615.5826	75814.58099	3819.66092	28365.1022	4359.86092	7761.86684	30291.22737	116699.2714	5311.45782	0.99253	0.98113	1.82E-03	4.46E-04	9.67E-04	2.31E-03	4.74E-03	2.39E-04	2.79E-03	8.94E-04	1.59E-03	2.07E-03	5.48E-03	2.49E-04	1.39E-05	1.66E-05	2.3621E-02

551715	4172753.51	19749.94235	6118.97361	10836.84028	32775.35942	35368.66486	3492.36629	19308.26449	3643.18558	5134.7141	16974.07369	67860.29679	4833.95208	1.29964	1.29859	1.23E-03	3.54E-04	6.27E-04	1.62E-03	2.21E-03	2.18E-04	1.90E-03	7.47E-04	1.05E-03	1.16E-03	3.19E-03	2.27E-04	1.82E-05	2.20E-05	1.4578E-02
551505.38	4172915.37	8740.21615	24039.815	3893.55462	62457.34516	4296.32993	10723.999	8712.17865	12878.31553	2200.15373	49510.68885	24242.73326	13729.92996	4.21032	4.4209	5.46E-04	1.39E-03	2.25E-04	3.10E-03	2.68E-04	6.70E-04	8.56E-04	2.64E-03	4.51E-04	3.39E-03	1.14E-03	6.45E-04	5.89E-05	7.49E-05	1.5445E-02
551668.12	4172745.39	16636.59623	7208.8456	12329.82452	31707.82735	36442.77016	4072.02882	16298.57228	4395.42632	6087.30295	17927.0401	65334.29581	5609.12507	1.89405	1.95931	1.04E-03	4.17E-04	7.13E-04	1.57E-03	2.28E-03	2.54E-04	1.60E-03	9.01E-04	1.25E-03	1.23E-03	3.07E-03	2.63E-04	2.65E-05	3.32E-05	1.4639E-02
551793.14	4172793.87	20238.08094	7330.38237	16833.22194	34870.73047	30176.11736	3169.36176	19799.50216	4109.20334	7380.26947	26245.94215	49536.26112	4345.34711	0.68914	0.68498	1.26E-03	4.24E-04	9.73E-04	1.73E-03	1.88E-03	1.98E-04	1.95E-03	8.42E-04	1.51E-03	1.79E-03	2.33E-03	2.04E-04	9.64E-06	1.16E-05	1.5120E-02
551525.14	4172999.33	9831.1499	39839.36006	3178.05312	37606.42911	3118.86749	20114.08565	9874.36697	22996.78809	1812.80744	39496.73749	10648.48631	25395.84294	3.49638	3.65366	6.14E-04	2.30E-03	1.84E-04	1.86E-03	1.95E-04	1.26E-03	9.71E-04	4.71E-03	3.72E-04	2.70E-03	5.00E-04	1.19E-03	4.89E-05	6.19E-05	1.6977E-02
551567.75	4173089.8	10194.56776	32460.2978	2490.88209	17429.25109	2130.2843	46859.10094	10328.70356	20307.97024	1440.14695	19607.63064	5749.47184	54747.54854	4.41425	4.57489	6.37E-04	1.88E-03	1.44E-04	8.64E-04	1.33E-04	2.93E-03	1.02E-03	4.16E-03	2.95E-04	1.34E-03	2.70E-04	2.57E-03	6.18E-05	7.75E-05	1.6376E-02
551528.37	4173008.28	9903.18838	40655.64831	3111.38982	34820.35709	3008.84584	21768.96616	9955.57152	23957.73972	1775.65646	37356.37935	9937.77111	27393.66961	3.51311	3.66885	6.18E-04	2.35E-03	1.80E-04	1.73E-03	1.88E-04	1.36E-03	9.79E-04	4.91E-03	3.64E-04	2.55E-03	4.67E-04	1.29E-03	4.92E-05	6.22E-05	1.7095E-02
551695.88	4172749.8	18504.81565	6413.51454	11720.6252	31476.03045	35621.15847	3686.53632	18102.66994	3872.94767	5566.14455	16171.38242	67221.44197	5101.43258	1.64785	1.68457	1.16E-03	3.71E-04	6.78E-04	1.56E-03	2.22E-03	2.30E-04	1.78E-03	7.94E-04	1.14E-03	1.11E-03	3.16E-03	2.40E-04	2.31E-05	2.85E-05	1.4488E-02
551527.61	4172782.74	7844.2331	11403.07825	4672.44247	70299.22278	8338.75559	5577.35774	7779.41389	6408.63489	2542.17051	32214.64283	58770.40892	7321.58155	5.12239	5.50009	4.90E-04	6.59E-04	2.70E-04	3.48E-03	5.21E-04	3.48E-04	7.65E-04	1.31E-03	5.21E-04	2.20E-03	2.76E-03	3.44E-04	7.17E-05	9.32E-05	1.3845E-02
551531.59	4173017.23	9956.93442	41039.20559	3045.06035	32103.08438	2897.75441	23577.72728	10018.37734	24633.93949	1738.96637	35159.81292	9283.4164	29551.77691	3.52999	3.68271	6.22E-04	2.37E-03	1.76E-04	1.59E-03	1.81E-04	1.47E-03	9.85E-04	5.05E-03	3.56E-04	2.40E-03	4.36E-04	1.39E-03	4.94E-05	6.24E-05	1.7146E-02
551521.92	4172990.38	9738.63007	37797.96829	3244.54872	40256.72362	3228.40706	18603.77807	9772.70523	21829.1439	1850.00046	41481.52304	11425.98907	23550.67767	3.4809	3.63842	6.08E-04	2.19E-03	1.88E-04	2.00E-03	2.02E-04	1.16E-03	9.61E-04	4.47E-03	3.79E-04	2.84E-03	5.37E-04	1.11E-03	4.87E-05	6.17E-05	1.6744E-02
551734.11	4172757.23	19903.88901	5832.76033	9341.08603	32737.3487	36437.62426	3260.65184	19467.35855	3408.004	4558.41445	17972.37776	65028.76662	4502.40171	1.01849	1.01386	1.24E-03	3.37E-04	5.40E-04	1.62E-03	2.28E-03	2.04E-04	1.91E-03	6.99E-04	9.34E-04	1.23E-03	3.05E-03	2.11E-04	1.43E-05	1.72E-05	1.4295E-02
551518.69	4172981.42	9622.7141	36203.81406	3310.34643	42849.68589	3337.31231	17220.62002	9647.70453	20528.98571	1886.91889	43210.97724	12279.52047	21573.36677	3.46522	3.62211	6.01E-04	2.09E-03	1.91E-04	2.12E-03	2.08E-04	1.08E-03	9.48E-04	4.21E-03	3.87E-04	2.95E-03	5.77E-04	1.01E-03	4.85E-05	6.14E-05	1.6491E-02
551515.47	4172972.47	9465.1816	34182.33092	3368.67125	45206.16603	3447.98726	15919.88638	9481.58015	19124.1612	1919.1978	44459.57304	13244.7049	19973.61316	3.4464	3.60493	5.91E-04	1.98E-03	1.95E-04	2.24E-03	2.15E-04	9.94E-04	9.32E-04	3.92E-03	3.93E-04	3.04E-03	6.22E-04	9.38E-04	4.82E-05	6.11E-05	1.6168E-02
551502.15	4172906.4	8444.1288	21985.15045	3886.32122	62099.50058	4374.96698	9976.13987	8412.60292	11830.37128	2190.18284	47545.87341	25702.29809	12779.79086	4.18436	4.39752	5.27E-04	1.27E-03	2.25E-04	3.08E-03	2.73E-04	6.23E-04	8.27E-04	2.42E-03	4.49E-04	3.25E-03	1.21E-03	6.00E-04	5.85E-05	7.45E-05	1.4890E-02
551498.51	4172867.21	7753.63061	16886.42191	4011.0997	67647.35659	5020.96594	7917.5985	7711.33121	9188.72298	2229.36447	42588.4936	37974.15362	10198.38875	5.24083	5.5538	4.84E-04	9.76E-04	2.32E-04	3.35E-03	3.14E-04	4.95E-04	7.58E-04	1.88E-03	4.57E-04	2.91E-03	1.78E-03	4.79E-04	7.33E-05	9.41E-05	1.4295E-02
551592.46	4173129.39	10002.92381	22956.32664	2121.22262	12600.56585	1752.16004	58526.94575	10162.4658	14157.16516	1236.91742	13748.57278	4483.87105	65721.37347	5.87395	6.15755	6.25E-04	1.33E-03	1.23E-04	6.25E-04	1.09E-04	3.66E-03	9.99E-04	2.90E-03	2.54E-04	9.40E-04	2.11E-04	3.09E-03	8.22E-05	1.04E-04	1.5042E-02
551540.62	4173042.59	9909.39199	39150.86853	2825.04292	25569.84395	2596.70028	29016.14517	9994.93374	24246.58961	1617.6213	28623.75589	7764.20941	35830.4815	3.54542	3.68495	6.19E-04	2.26E-03	1.63E-04	1.27E-03	1.62E-04	1.81E-03	9.82E-04	4.97E-03	3.32E-04	1.96E-03	3.65E-04	1.68E-03	4.96E-05	6.24E-05	1.6689E-02
551499.47	4172838.8	7352.12576	14222.07702	3978.82193	69638.18631	5633.73716	6818.82179	7306.70422	7811.38305	2193.38636	37188.45489	46060.00525	8822.88704	6.5143	7.20839	4.59E-04	8.22E-04	2.30E-04	3.45E-03	3.52E-04	4.26E-04	7.18E-04	1.60E-03	4.50E-04	2.54E-03	2.16E-03	4.14E-04	9.12E-05	1.22E-04	1.3844E-02
551773.67	4172774.52	18595.96842	5959.648	10517.63372	32914.52147	36339.32727	2945.34172	18240.42495	3346.48692	4833.78684	21685.65806	57446.00652	4035.98124	0.76764	0.76199	1.16E-03	3.45E-04	6.08E-04	1.63E-03	2.27E-03	1.84E-04	1.79E-03	6.86E-04	9.91E-04	1.48E-03	2.70E-03	1.90E-04	1.07E-05	1.29E-05	1.4063E-02
551570.84	4173098.38	10006.60046	29657.82193	2389.80896	16225.1879	2040.06777	47706.17374	10143.55891	18509.97552	1383.74094	18041.13614	5453.60175	55200.35043	4.4119	4.57152	6.25E-04	1.71E-03	1.38E-04	8.04E-04	1.27E-04	2.98E-03	9.97E-04	3.79E-03	2.84E-04	1.23E-03	2.56E-04	2.59E-03	6.17E-05	7.75E-05	1.5686E-02
551512.24	4172963.52	9298.18744	32048.81357	3381.70832	47548.37754	3554.86347	14600.89578	9306.18858	17438.9269	1923.64121	44172.93861	14282.67749	18539.76468	3.42189	3.57492	5.81E-04	1.85E-03	1.96E-04	2.36E-03	2.22E-04	9.12E-04	9.15E-04	3.57E-03	3.94E-04	3.02E-03	6.71E-04	8.71E-04	4.79E-05	6.06E-05	1.5674E-02
551505.44	4172809.34	7193.29349	12293.92935	4022.39127	69666.61402	6402.31527	5997.2811	7144.12712	6821.26881	2201.96572	32995.11639	52392.17824	7802.76281	7.19873	8.17425	4.49E-04	7.11E-04	2.33E-04	3.45E-03	4.00E-04	3.75E-04	7.02E-04	1.40E-03	4.51E-04	2.26E-03	2.46E-03	3.66E-04	1.01E-04	1.39E-04	1.3495E-02
551498.93	4172897.44	8154.02856	20170.15904	3862.73638	61423.42825	4379.97839	9305.86037	8119.97999	10901.1873	2170.33115	45351.58035	27191.76424	11928.10522	4.15616	4.36876	5.09E-04	1.17E-03	2.23E-04	3.04E-03	2.74E-04	5.81E-04	7.98E-04	2.23E-03	4.45E-04	3.10E-03	1.28E-03	5.60E-04	5.82E-05	7.40E-05	1.4347E-02
551509.02	4172954.57	9085.99007	29688.87665	3415.52102	49430.55954	3633.33968	13503.39992	9086.40909	16068.13261	1941.87258	44282.60255	15462.61675	17167.59107	3.40459	3.55639	5.67E-04	1.72E-03	1.97E-04	2.45E-03	2.27E-04	8.43E-04	8.93E-04	3.29E-03	3.98E-04	3.03E-03	7.26E-04	8.06E-04	4.76E-05	6.03E-05	1.5255E-02
551500.57	4172818.79	7133.93626	12737.30985	3932.99147	68527.65484	6033.54935	6204.0396	7087.26861	7043.95316	2157.92477	33672.83585	49264.63896	8051.87943	6.71979	7.59086	4.45E-04	7.36E-04	2.27E-04	3.40E-03	3.77E-04	3.87E-04	6.97E-04	1.44E-03	4.42E-04	2.30E-03	2.31E-03	3.78E-04	9.40E-05	1.29E-04	1.3371E-02
551789.87	4172784.58	18577.42735	6650.98411	13913.40487	33182.06955	30862.67595	3006.42019	18207.25809	3723.80343	6133.90005	23952.60308	49510.48585	4115.02367	0.69322	0.68949	1.16E-03	3.85E-04	8.04E-04	1.64E-03	1.93E-03	1.88E-04	1.79E-03	7.63E-04	1.26E-03	1.64E-03	2.33E-03	1.93E-04	9.70E-06	1.17E-05	1.4097E-02
551546.53	4173059.33	9892.24749	36171.39922	2673.67507	22056.77068	2403.35895	32743.8617	9993.32822	22502.65757	1534.29881	24818.61441	6933.66195	39856.49057	3.54197	3.67057	6.18E-04	2.09E-03	1.55E-04	1.09E-03	1.50E-04	2.05E-03	9.82E-04	4.61E-03	3.14E-04	1.70E-03	3.26E-04	1.87E-03	4.96E-05	6.22E-05	1.6068E-02
551811.62	4172804.06	21030.3943	8422.74618	18567.19601	33073.36332	21442.18218	3366.40464	20417.38919	4827.71061	8781.08577	27145.29854	38737.29162	4619.07577	0.62385	0.62013	1.31E-03	4.87E-04	1.07E-03	1.64E-03	1.34E-03	2.10E-04	2.01E-03	9.90E-04	1.80E-03	1.86E-03	1.82E-03	2.17E-04	8.73E-06	1.05E-05	1.4771E-02
551505.79	4172945.6	8884.19154	27541.46375	3461.0709	51302.96936	3707.04952	12554.62524	8877.46197	14860.96009	1966.19362	44323.88199	16690.1723	15980.61366	3.39281	3.54237	5.55E-04	1.59E-03	2.00E-04	2.54E-03	2.32E-04	7.84E-04	8.73E-04	3.05E-03	4.03E-04	3.03E-03	7.84E-04	7.51E-04	4.75E-05	6.00E-05	1.4901E-02
551573.93	4173106.97	9822.29203	27168.97488	2294.50712	15109.91061	1951.53829	48083.12978	9961.11514	16916.55164	1330.32112	16660.79409	5169.98963	55233.0191	4.41806	4.57925	6.13E-04	1.57E-03	1.33E-04	7.49E-04	1.22E-04	3.00E-03	9.79E-04	3.47E-03	2.73E-04	1.14E-03	2.43E-04	2.59E-03	6.18E-05	7.76E-05	1.5026E-02
551495.29	4172858.24	7426.71734	15469.64606	3870.92106	64171.5317	5029.88275	7390.89243	7385.19662	8457.259	2145.95239	38763.40943	37220.63708	9524.36041	5.0457	5.36077	4.64E-04	8.94E-04	2.24E-04	3.18E-03	3.14E-04	4.62E-04	7.26E-04	1.73E-03	4.40E-04	2.65E-03	1.75E-03	4.47E-04	7.06E-05	9.08E-05	1.3446E-02
551502.56	4172936.63	8652.84685	25419.80023	3493.06294	52680.07146	3772.98431	11668.76827	8639.91489	13709.26809	1982.25618	43823.21505	18033.12605	14869.82475	3.37864	3.52699	5.40E-04	1.47E-03	2.02E-04	2.61E-03	2.36E-04	7.29E-04	8.49E-04	2.81E-03	4.06E-04	3.00E-03	8.47E-04	6.98E-04	4.73E-05	5.98E-05	1.4503E-02
551595.55	4173137.97	9784.99444	20914.40886	2030.08863	11747.22545	1671.29233	56349.90045	9943.59951	12852.82327	1184.76205	12759.32096	4250.62552	63203.27295	5.89893	6.19123	6.11E-04	1.21E-03	1.17E-04	5.82E-04	1.04E-04	3.52E-03	9.77E-04	2.63E-03	2.43E-04	8.73E-04	2.00E-04	2.97E-03	8.25E-05	1.05E-04	1.4227E-02
551537.55	4172769.12	8063.62114	10638.77988	4922.17386	61712.56354	9200.44182	5276.55903	7990.71256	6032.47111	2674.91408	29992.96073	52214.1845	6952.1324	3.5356	3.74798	5.03E-04	6.15E-04	2.85E-04	3.06E-03	5.75E-04	3.30E-04	7.85E-04	1.24E-03	5.48E-04	2.05E-03	2.45E-03	3.27E-04	4.95E-05	6.35E-05	1.2880E-02
551495.7	4172888.47	7849.25785	18473.86154	3805.92691	59995.10646	4424.44233	8673.83754	7813.72134	10031.11818	2131.73929	42638.16862	28479.21121	11123.72048	4.10316	4.31838	4.90E-04	1.07E-03	2.20E-04	2.97E-03	2.76E-04	5.42E-04	7.68E-04	2.06E-03	4.37E-04	2.92E-03	1.34E-03	5.22E-04	5.74E-05	7.32E-05	1.3738E-02
551613.53	4173158.15	9968.69783	17477.32964	1842.21087	9838.75629	1490.2956	59233.3244	10148.28636	10419.42326	1082.42073	10593.37103	3695.5933	68525.7845	8.26894	8.82829	6.22E-04	1.01E-03	1.07E-04	4.88E-04	9.31E-05	3.70E-03	9.98E-04	2.14E-03	2.22E-04	7.24E-04	1.74E-04	3.22E-03	1.16E-04	1.50E-04	1.3757E-02
551552.45	4173076.07	9684.8966	32300.81577	2515.28399	19121.26354	2219.60173	36043.85293	9796.44964	20088.50059	1447.13293	21436.25803	6219.53422	43106.39204	3.53498	3.65436	6.05E-04	1.87E-03	1.45E-04	9.48E-04	1.39E-04	2.25E-03	9.63E-04	4.12E-03	2.97E-04	1.47E-03	2.92E-04	2.02E-03	4.95E-05	6.19E-05	1.5227E-02
551824.24	4172810.26	23345.14786	9411.89775	17738.80982	30914.94092	16923.03174	3767.80454	22508.76345	5663.07475	9016.30936	26857.02891	32431.67655	5070.75707	0.58993	0.58656	1.46E-03	5.44E-04	1.03E-03	1.53E-03	1.06E-03	2.35E-04	2.21E-03	1.16E-03	1.85E-03	1.84E-03	1.52E-03	2.38E-04	8.25E-06	9.94E-06	1.4690E-02
551657.73	4172738.09	15134.01181	7184.40506	11165.14372	29396.35563	31556.75471	4051.11675	14843.43876	4376.27229	5616.34758	17818.62158	55962.48633	5558.06502	1.77898	1.84391	9.45E-04	4.15E-04	6.46E-04	1.46E-03	1.97E-03	2.53E-04	1.46E-03	8.97E-04	1.15E-03	1.22E-03	2.63E-03	2.61E-04	2.49E-05	3.12E-05	1.3358E-02
551577.02	4173115.55	9503.24686	24785.05525	2196.10853	14107.02255	1869.04751	47641.45309	9751.55038	15376.64183	1274.83989	15376.99718	4913.78544	54431.67488	4.41003	4.57453	5.93E-04	1.43E-03	1.27E-04	6.99E-04	1.17E-04	2.98E-03	9.59E-04	3.15E-03	2.61E-04	1.05E-03	2.31E-04	2.56E-03	6.17E-05	7.75E-05	1.4295E-02
551499.34	4172927.67	8400.14499	23394.18612	3511.68304	51939.45607	3834.26189	10851.18304	8381.94922	12639.45154	1989.91098	42882.48548	19469.19459	13838.9198	3.36221	3.50977	5.24E-04	1.35E-03	2.03E-04	2.57E-03	2.39E-04	6.78E-04	8.24E-04	2.59E-03	4.08E-04	2.93E-03	9.14E-04	6.50E-04	4.70E-05	5.95E-05	1.3998E-02
551858.63	4172835.89	34644.64367	12314.09168	12587.00952	26062.00595	9734.4578	5326.86204	33575.58957	7551.13371	7148.76417	23967.06254	20204.3409	7315.76109	0.50992	0.50683	2.16E-03	7.12E-04	7.28E-04	1.29E-03	6.08E-04	3.33E-04	3.30E-03	1.55E-03	1.47E-03	1.64E-03	9.49E-04	3.44E-04	7.14E-06	8.59E-06	1.5096E-02
551683.56	4172741.04	16687.4594	6386.69684	10999.49244	28125.37277	30883.15308	3687.83671	16343.7305	3876.69033	5335.12915	15327.90469	57329.22414	5086.88794	1.52852	1.57552	1.04E-03	3.69E-04	6.36E-04	1.39E-03	1.93E-03	2.30E-04	1.61E-03	7.95E-04	1.09E-03	1.05E-03	2.69E-03	2.39E-04	2.14E-05	2.67E-05	1.3123E-02
551808.36	4172794.77	18265.34501	7450.06217	16099.78653	32056.84823	23377.81017	3090.93071	17815.47503	4221.47193	7390.52862	25045.43292	39855.32701	4230.3617	0.62777	0.62435	1.14E-03	4.31E-04	9.31E-04	1.59E-03	1.46E-03	1.93E-04	1.75E-03	8.65E-04	1.51E-03	1.71E-03	1.87E-03	1.99E-04	8.78E-06	1.06E-05	1.3678E-02
551555.41	4173084.44	9530.49111	29998.22369	2423.95445	17878.96364	2136.36427	37147.54858	9645.76443	18616.61545	1396.68263	19804.53456	5918.17176	44000.79954	3.51084	3.62659	5.95E-04	1.73E-03	1.40E-04	8.86E-04	1.33E-04	2.32E-03	9.48E-04	3.82E-03	2.86E-04	1.35E-03	2.78E-04	2.07E-03	4.91E-05	6.15E-05	1.4669E-02
551770.2	4172765.21	17264.3788	5501.84013	8624.35861	30630.75022	32986.01596	2828.53907	16944.56134	3108.48764	4107.80119	19344.02341	53001.23332	3871.72254	0.77112	0.7663	1.08E-03	3.18E-04	4.99E-04	1.52E-03	2.06E-03	1.77E-04	1.67E-03	6.37E-04	8.42E-04	1.32E-03	2.49E-03	1.82E-04	1.08E-05	1.30E-05	1.2813E-02
551492.47	4172879.51	7550.04859	16960.89016	3728.40098	58231.26774	4462.65674	8098.95975	7513.82712	9249.0817	2081.82372	39760.28879	29614.71718	10392.22839	4.03691	4.24222	4.71E-04	9.81E-04	2.16E-04	2.89E-03	2.79E-04	5.06E-04	7.39E-04	1.90E-03	4.27E-04	2.72E-03	1.39E-03	4.88E-04	5.65E-05	7.19E-05	1.3126E-02
551496.11	4172918.7	8147.41151	21563.96539	3524.77136	52206.45718	3901.32293	10117.96664	8124.8422	11680.31021	1993.21523	41778.80469	20884.65431	12913.07058	3.34385	3.49053	5.09E-04	1.25E-03	2.04E-04	2.59E-03	2.44E-04	6.32E-04	7.99E-04	2.39E-03	4.09E-04	2.86E-03	9.81E-04	6.07E-04	4.68E-05	5.91E-05	1.3574E-02
551598.64	4173146.56	9584.69222	19157.58733	1940.60902	10951.638	1592.5009	53912.54609	9742.58284	11738.36378	1135.91436	11864.86868	4025.6418	60427.08046	5.89714	6.19006	5.98E-04	1.11E-03	1.12E-04	5.43E-04	9.95E-05	3.37E-03	9.58E-04	2.41E-03	2.33E-04	8.11E-04	1.89E-04	2.84E-03	8.25E-05	1.05E-04	1.3450E-02
551848.61	4172824.4	29595.14358	11150.8227	14142.62041	27233.3471	11626.94934	4564.27255	28535.77907	6801.56882	7838.09392	24825.67947	23485.91171	6266.58914	0.52975	0.52664	1.85E-03	6.45E-04	8.18E-04	1.35E-03	7.26E-04	2.85E-04	2.81E-03	1.39E-03	1.61E-03	1.70E-03	1.10E-03	2.94E-04	7.41E-06	8.92E-06	1.4589E-02
551526.49	4172772.86	7521.44747	10495.15185	4422.51487	59635.77778	7925.90979	5228.94276	7459.45373	5922.05091	2406.63713	28807.69362	48744.33526	6864.91474	3.57168	3.7841	4.70E-04	6.07E-04	2.56E-04	2.96E-03	4.95E-04	3.27E-04	7.33E-04	1.21E-03	4.93E-04	1.97E-03	2.29E-03	3.22E-04	5.00E-05	6.41E-05	1.2246E-02
551519.1	4173011.62	9105.89423	33668.30366	2844.67451	31043.10753	2813.57948	19411.29217	9155.17428	19883.49724	1622.58842	31909.49265	9418.55466	24349.40999	2.86164	2.97576	5.69E-04	1.95E-03	1.64E-04	1.54E-03	1.76E-04	1.21E-03	9.00E-04	4.08E-03	3.33E-04	2.18E-03	4.42E-04	1.14E-03	4.00E-05	5.04E-05	1.4773E-02
551522.33	4173020.57	9153.9089	33915.34155	2790.19537	28971.8288	2718.31048	20872.08714	9211.02289	20306.68582	1592.38191	30291.32386	8835.50402	26076.35866	2.87265	2.98645	5.72E-04	1.96E-03	1.61E-04	1.44E-03	1.70E-04	1.30E-03	9.05E-04	4.16E-03	3.26E-04	2.07E-03	4.15E-04	1.22E-03	4.02E-05	5.06E-05	1.4799E-02
551711.73	4172744.22	17970.74875	5768.00277	9666.26096	28863.53188	27897.66005	3344.17802	17587.10817	3445.55085	4630.93115	14979.71723	55600.19572	4618.74937	1.26248	1.27219	1.12E-03	3.33E-04	5.59E-04	1.43E-03	1.74E-03	2.09E-04	1.73E-03	7.06E-04	9.49E-04	1.02E-03	2.61E-03	2.17E-04	1.77E-05	2.16E-05	1.2673E-02
551515.88	4173002.66	9029.77741	32310.2506	2895.91116	32832.19119	2909.69043	18027.13008	9071.0596	19216.83113	1651.2558	33420.80992	10061.21468	22684.83294	2.84923	2.96377	5.64E-04	1.87E-03	1.67E-04	1.63E-03	1.82E-04	1.13E-03	8.92E-04	3.94E-03	3.38E-04	2.29E-03	4.73E-04	1.07E-03	3.99E-05	5.02E-05	1.4617E-02
551790.41	4172775.51	16897.98297	6146.21613	11688.17155	30925.34376	28661.04021	2859.65013	16578.11404	3448.83017	5246.34616	21752.03977	45492.01376	3906.8914	0.67803	0.67515	1.06E-03	3.55E-04	6.76E-04	1.53E-03	1.79E-03	1.79E-04	1.63E-03	7.07E-04	1.08E-03	1.49E-03	2.14E-03	1.84E-04	9.49E-06	1.14E-05	1.2828E-02
551623.11	4172746.07	12633.05063	8344.09091	9481.24206	34089.6476	25177.23028	4508.24953	12430.25974	5032.82369	5007.106	22194.7157	48527.74332	6127.7898	2.08394	2.18707	7.89E-04	4.82E-04	5.48E-04	1.69E-03	1.57E-03	2.82E-04	1.22E-03	1.03E-03	1.03E-03	1.52E-03	2.28E-03	2.88E-04	2.92E-05	3.71E-05	1.2794E-02
551512.65	4172993.71	8951.85324	31472.73112	2951.71999	34784.60334	3001.96645	16782.86679	8985.17666	18413.99402	1682.53772	34916.9649	10735.28759	20865.92729	2.84173	2.95606	5.59E-04	1.82E-03	1.71E-04	1.72E-03	1.87E-04	1.05E-03	8.83E-04	3.77E-03	3.45E-04	2.39E-03	5.04E-04	9.80E-04	3.98E-05	5.01E-05	1.4474E-02
551580.11	4173124.14	9426.25281	22757.60071	2108.24592	13162.99777	1786.67232	46976.01526	9565.95017	14078.68953	1225.11682	14269.85449	4660.73626	53484.18703	4.42553	4.59451	5.89E-04	1.32E-03	1.22E-04	6.52E-04	1.12E-04	2.93E-03	9.40E-04	2.89E-03	2.51E-04	9.76E-04	2.19E-04	2.51E-03	6.19E-05	7.79E-05	1.3648E-02
551558.48	4173093.13	9270.78192	27779.79836	2334.31048	16674.66634	2050.25666	38019.36548	9489.84979	17224.75003	1346.99556	18307.61532	5616.35129	44610.89281	3.49519	3.60905	5.79E-04	1.61E-03	1.35E-04	8.27E-04	1.28E-04	2.37E-03	9.33E-04	3.53E-03	2.76E-04	1.25E-03	2.64E-04	2.10E-03	4.89E-05	6.12E-05	1.4110E-02
551509.43	4172984.76	8848.74461	30322.7167	3005.33103	36701.94275	3094.15945	15424.20798	8874.03692	17476.31653	1712.42477	36192.24459	11471.97047	19459.68743	2.82735	2.94028	5.52E-04	1.75E-03	1.74E-04	1.82E-03	1.93E-04	9.63E-04	8.72E-04	3.58E-03	3.51E-04	2.47E-03	5.39E-04	9.14E-04	3.96E-05	4.98E-05	1.4278E-02
551663.04	4172734.21	15050.791	6820.7199	10699.35322	27439.62863	29578.835	3886.82248	14760.1463	4151.93503	5345.62651	16534.89876	52528.00661	5334.98319	1.59227	1.64401	9.40E-04	3.94E-04	6.19E-04	1.36E-03	1.85E-03	2.43E-04	1.45E-03	8.51E-04	1.10E-03	1.13E-03	2.47E-03	2.51E-04	2.23E-05	2.79E-05	1.2699E-02
551492.89	4172909.74	7887.34342	19881.21862	3521.95384	52036.95792	3967.3766	9446.39101	7861.34209	10801.9912	1986.65655	40372.35141	21908.28584	12063.90571	3.31662	3.46667	4.92E-04	1.15E-03	2.04E-04	2.58E-03	2.48E-04	5.90E-04	7.73E-04	2.21E-03	4.07E-04	2.76E-03	1.03E-03	5.67E-04	4.64E-05	5.87E-05	1.3119E-02
551506.2	4172975.81	8744.18316	29046.35745	3064.02636	38723.78223	3183.00171	14403.32655	8761.73438	16204.6665	1722.58733	37341.96725	12240.13359	18203.7512	2.81683	2.9302	5.46E-04	1.68E-03	1.77E-04	1.92E-03	1.99E-04	9.00E-04	8.61E-04	3.32E-03	3.53E-04	2.55E-03	5.75E-04	8.55E-04	3.94E-05	4.97E-05	1.4029E-02
551692.61	4172740.5	16813.18279	6039.22163	10302.92773	27230.28001	28281.59022	3515.13459	16464.94838	3651.36256	4967.05212	14492.06224	54088.15412	4851.20849	1.42287	1.46569	1.05E-03	3.49E-04	5.96E-04	1.35E-03	1.77E-03	2.20E-04	1.62E-03	7.48E-04	1.02E-03	9.91E-04	2.54E-03	2.28E-04	1.99E-05	2.48E-05	1.2519E-02
551623.16	4173169.15	9901.04794	15513.7239	1736.82994	8969.31172	1402.96359	55213.42521	10088.35436	9188.55517	1021.79335	9565.9151	3445.94193	64481.49556	10.42052	11.31665	6.18E-04	8.97E-04	1.00E-04	4.45E-04	8.76E-05	3.45E-03	9.92E-04	1.88E-03	2.09E-04	6.54E-04	1.62E-04	3.03E-03	1.46E-04	1.92E-04	1.2863E-02
551805.09	4172785.48	16980.8339	6843.76353	14079.21269	30805.27623	23961.105	2952.4505	16607.21075	3865.33149	6383.79873	23296.09611	40062.38628	4033.95867	0.63021	0.62713	1.06E-03	3.96E-04	8.14E-04	1.53E-03	1.50E-03	1.84E-04	1.63E-03	7.92E-04	1.31E-03	1.59E-03	1.88E-03	1.89E-04	8.82E-06	1.06E-05	1.2895E-02
551531.33	4173045.88	9103.38891	32387.63987	2605.67121	23644.6111	2457.7154	25070.8129	9181.12886	19844.00161	1490.6023	25347.38943	7466.88693	30872.16522	2.86697	2.97248	5.68E-04	1.87E-03	1.51E-04	1.17E-03	1.54E-04	1.57E-03	9.02E-04	4.07E-03	3.06E-04	1.73E-03	3.51E-04	1.45E-03	4.01E-05	5.04E-05	1.4383E-02
551489.25	4172870.54	7253.82547	15601.11967	3630.2191	56062.86165	4489.36361	7570.55036	7217.51149	8538.98369	2021.11914	36796.96519	30441.96412	9720.67565	3.92448	4.15152	4.53E-04	9.02E-04	2.10E-04	2.78E-03	2.80E-04	4.73E-04	7.09E-04	1.75E-03	4.14E-04	2.52E-03	1.43E-03	4.57E-04	5.49E-05	7.03E-05	1.2499E-02
551739.25	4172750.61	17941.92082	5341.81371	7797.43096	29301.43343	28561.12928	3021.49075	17574.25296	3114.68321	3870.28329	16083.99431	52569.9405	4158.68298	0.96586	0.96299	1.12E-03	3.09E-04	4.51E-04	1.45E-03	1.78E-03	1.89E-04	1.73E-03	6.38E-04	7.93E-04	1.10E-03	2.47E-03	1.95E-04	1.35E-05	1.63E-05	1.2258E-02
551502.98	4172966.86	8598.36636	27470.43471	3069.36165	40474.59804	3270.12206	13414.98657	8608.49707	15173.44178	1745.85072	37056.22418	13098.78846	16980.70551	2.79998	2.91284	5.37E-04	1.59E-03	1.77E-04	2.01E-03	2.04E-04	8.38E-04	8.46E-04	3.11E-03	3.58E-04	2.53E-03	6.15E-04	7.98E-04	3.92E-05	4.94E-05	1.3701E-02
551535.53	4173055.24	9105.192	31644.95043	2547.73371	22014.97382	2370.567	27009.2787	9190.44892	19454.35695	1459.26192	23798.57347	7041.39657	33023.62904	2.91127	3.01574	5.68E-04	1.83E-03	1.47E-04	1.09E-03	1.48E-04	1.69E-03	9.03E-04	3.99E-03	2.99E-04	1.63E-03	3.31E-04	1.55E-03	4.07E-05	5.11E-05	1.4263E-02
551561.57	4173101.72	9114.74353	25759.50618	2249.09031	15575.5188	1967.1912	38559.16359	9234.18045	15964.89646	1299.57265	16979.47019	5333.24282	44894.43636	3.49007	3.60306	5.69E-04	1.49E-03	1.30E-04	7.72E-04	1.23E-04	2.41E-03	9.08E-04	3.27E-03	2.66E-04	1.16E-03	2.50E-04	2.11E-03	4.88E-05	6.11E-05	1.3568E-02
551499.75	4172957.9	8427.31403	25768.52903	3104.98755	42019.00863	3329.11024	12491.72986	8430.49223	14140.97125	1765.40642	37316.84896	14027.92824	15834.11227	2.78691	2.89892	5.26E-04	1.49E-03	1.80E-04	2.08E-03	2.08E-04	7.80E-04	8.29E-04	2.90E-03	3.62E-04	2.55E-03	6.59E-04	7.44E-04	3.90E-05	4.91E-05	1.3398E-02
551730.84	4172747.94	17945.0581	5401.86065	8172.57024	28917.58797	26744.40013	3097.06492	17571.52782	3175.92408	4012.36941	15440.88067	51848.32876	4268.17511	1.05242	1.05222	1.12E-03	3.12E-04	4.72E-04	1.43E-03	1.67E-03	1.93E-04	1.73E-03	6.51E-04	8.22E-04	1.06E-03	2.44E-03	2.00E-04	1.47E-05	1.78E-05	1.2127E-02
551872.38	4172837.31	32946.10034	12047.37778	10769.39368	23716.9527	8383.05429	5453.66064	32069.48572	7353.91059	6155.90272	21902.61649	17546.31228	7511.49743	0.47979	0.47704	2.06E-03	6.97E-04	6.23E-04	1.18E-03	5.24E-04	3.41E-04	3.15E-03	1.51E-03	1.26E-03	1.50E-03	8.24E-04	3.53E-04	6.71E-06	8.08E-06	1.4027E-02
551583.2	4173132.72	9254.18879	20976.9362	2027.26359	12285.25343	1706.35633	46027.04119	9393.88328	12943.63004	1179.20223	13292.00176	4417.28157	52274.67407	4.45854	4.63353	5.78E-04	1.21E-03	1.17E-04	6.09E-04	1.07E-04	2.87E-03	9.23E-04	2.65E-03	2.42E-04	9.09E-04	2.07E-04	2.46E-03	6.24E-05	7.85E-05	1.3029E-02
551490.13	4172841.93	6871.21281	13282.83653	3599.36575	57146.67171	4980.61587	6546.56076	6831.81839	7320.7554	1988.12673	32683.0828	35872.7662	8443.12872	4.49948	4.8268	4.29E-04	7.68E-04	2.08E-04	2.83E-03	3.11E-04	4.09E-04	6.72E-04	1.50E-03	4.08E-04	2.24E-03	1.68E-03	3.97E-04	6.30E-05	8.18E-05	1.1999E-02
551489.66	4172900.77	7605.63047	18270.05386	3489.76548	51150.59195	3951.35076	8806.08185	7577.31275	9963.69838	1963.09471	38478.40252	22772.4998	11252.53659	3.27883	3.42646	4.75E-04	1.06E-03	2.02E-04	2.54E-03	2.47E-04	5.50E-04	7.45E-04	2.04E-03	4.02E-04	2.63E-03	1.07E-03	5.29E-04	4.59E-05	5.81E-05	1.2588E-02
551496.52	4172948.93	8257.20972	24147.06863	3147.256	43505.20153	3394.3219	11675.17041	8253.89877	13197.12245	1788.19481	37460.03865	14986.03615	14818.09393	2.78048	2.88877	5.16E-04	1.40E-03	1.82E-04	2.16E-03	2.12E-04	7.29E-04	8.11E-04	2.71E-03	3.67E-04	2.56E-03	7.04E-04	6.96E-04	3.89E-05	4.90E-05	1.3124E-02
551617.39	4173167.49	9662.82795	15739.83811	1747.35462	9164.55695	1418.83911	52408.74739	9839.39458	9373.72388	1026.84841	9786.397	3504.29971	60816.946	8.42393	9.02303	6.03E-04	9.10E-04	1.01E-04	4.54E-04	8.86E-05	3.27E-03	9.67E-04	1.92E-03	2.10E-04	6.69E-04	1.65E-04	2.86E-03	1.18E-04	1.53E-04	1.2491E-02
551537.25	4173062.62	8992.68155	30163.79085	2477.67399	20662.47341	2287.82756	27823.7362	9081.79796	18544.59951	1420.23317	22371.80346	6705.20665	33813.0592	2.86289	2.96138	5.61E-04	1.74E-03	1.43E-04	1.02E-03	1.43E-04	1.74E-03	8.93E-04	3.80E-03	2.91E-04	1.53E-03	3.15E-04	1.59E-03	4.01E-05	5.02E-05	1.3862E-02
551862.97	4172827.05	29697.47676	11275.16139	11772.23807	24807.55291	9749.82262	4897.56743	28777.20771	6896.92832	6626.81732	22521.96056	19955.75645	6707.68883	0.49597	0.49317	1.85E-03	6.52E-04	6.81E-04	1.23E-03	6.09E-04	3.06E-04	2.83E-03	1.41E-03	1.36E-03	1.54E-03	9.37E-04	3.15E-04	6.94E-06	8.36E-06	1.3740E-02
551656.64	4172729.8	14278.01475	6827.75731	10144.66563	26540.30634	27538.13267	3883.29706	14010.95777	4152.46322	5117.30098	16592.8643	48513.28178	5317.84168	1.54604	1.59778	8.91E-04	3.95E-04	5.87E-04	1.32E-03	1.72E-03	2.43E-04	1.38E-03	8.51E-04	1.05E-03	1.13E-03	2.28E-03	2.50E-04	2.16E-05	2.71E-05	1.2140E-02
551627.68	4172740.32	12563.06547	7860.30402	9261.86939	30689.898	24267.47591	4306.87742	12358.10378	4750.01244	4864.70773	20332.25928	45386.50514	5858.88402	1.83371	1.9199	7.84E-04	4.54E-04	5.35E-04	1.52E-03	1.52E-03	2.69E-04	1.21E-03	9.74E-04	9.97E-04	1.39E-03	2.13E-03	2.75E-04	2.57E-05	3.25E-05	1.2121E-02
551493.3	4172939.97	8059.6395	22502.10095	3177.77584	44624.28249	3452.06619	10904.78813	8050.58522	12277.84871	1803.7908	37187.00986	16014.58415	13856.9388	2.7665	2.8743	5.03E-04	1.30E-03	1.84E-04	2.21E-03	2.16E-04	6.81E-04	7.91E-04	2.52E-03	3.70E-04	2.54E-03	7.52E-04	6.51E-04	3.87E-05	4.87E-05	1.2808E-02
551498.98	4172801.72	6680.34654	11085.77081	3642.46149	56603.05909	5809.61066	5545.96666	6636.58024	6172.61655	1994.23876	28403.15496	41360.55534	7209.63813	4.62473	5.20252	4.17E-04	6.41E-04	2.11E-04	2.81E-03	3.63E-04	3.46E-04	6.52E-04	1.27E-03	4.09E-04	1.94E-03	1.94E-03	3.39E-04	6.47E-05	8.82E-05	1.1487E-02
551564.66	4173110.3	8964.0975	23911.44005	2167.39823	14557.83038	1886.03761	38752.50874	9085.12744	14811.3364	1253.92313	15786.28615	5063.7761	44853.34103	3.4938	3.60656	5.60E-04	1.38E-03	1.25E-04	7.22E-04	1.18E-04	2.42E-03	8.93E-04	3.04E-03	2.57E-04	1.08E-03	2.38E-04	2.11E-03	4.89E-05	6.11E-05	1.3047E-02
551486.02	4172861.58	6983.20298	14437.6116	3530.42941	54045.92431	4521.63229	7109.0708	6947.08699	7929.91306	1960.34615	34122.18863	30142.9911	9133.05721	3.79865	4.00635	4.36E-04	8.35E-04	2.04E-04	2.68E-03	2.82E-04	4.44E-04	6.83E-04	1.63E-03	4.02E-04	2.33E-03	1.42E-03	4.29E-04	5.32E-05	6.79E-05	1.1890E-02
551548.16	4173085.55	8883.84039	26937.25288	2316.36783	17416.57757	2085.66179	32241.47598	8987.73337	16588.22066	1332.9124	18875.95812	5853.41199	38293.33405	2.99395	3.08948	5.55E-04	1.56E-03	1.34E-04	8.63E-04	1.30E-04	2.01E-03	8.83E-04	3.40E-03	2.73E-04	1.29E-03	2.75E-04	1.80E-03	4.19E-05	5.24E-05	1.3269E-02
551786.8	4172766.2	15465.75081	5543.08776	9378.65226	28945.92151	27593.1578	2700.41799	15194.17118	3114.94054	4311.01583	19452.74007	44346.60653	3682.97233	0.67895	0.67688	9.66E-04	3.20E-04	5.42E-04	1.43E-03	1.72E-03	1.69E-04	1.49E-03	6.38E-04	8.84E-04	1.33E-03	2.08E-03	1.73E-04	9.50E-06	1.15E-05	1.1778E-02
551530.62	4172762.55	7478.66971	9844.79915	4417.71095	52992.95513	8053.7585	4970.05539	7414.52584	5584.51142	2403.53593	26704.8475	43306.83354	6535.41093	2.82839	2.97067	4.67E-04	5.69E-04	2.55E-04	2.63E-03	5.03E-04	3.10E-04	7.29E-04	1.14E-03	4.93E-04	1.83E-03	2.03E-03	3.07E-04	3.96E-05	5.03E-05	1.1355E-02
551486.43	4172891.81	7342.57372	16873.02797	3449.75787	50292.25932	3994.11814	8242.09909	7312.55462	9232.39193	1934.78569	36563.54515	23713.26369	10538.48685	3.23023	3.3831	4.58E-04	9.76E-04	1.99E-04	2.49E-03	2.49E-04	5.15E-04	7.19E-04	1.89E-03	3.97E-04	2.50E-03	1.11E-03	4.95E-04	4.52E-05	5.73E-05	1.2110E-02
551620.75	4172739.13	12024.1283	7991.67274	8787.95648	31596.6985	22655.02034	4346.90745	11834.97551	4811.19615	4639.93063	20913.78224	43624.24966	5898.86311	1.82108	1.9061	7.51E-04	4.62E-04	5.08E-04	1.57E-03	1.41E-03	2.71E-04	1.16E-03	9.86E-04	9.51E-04	1.43E-03	2.05E-03	2.77E-04	2.55E-05	3.23E-05	1.1888E-02
551586.29	4173141.31	9086.77517	19375.47134	1950.77857	11470.82861	1628.67231	44760.53184	9226.22718	11926.21511	1135.69619	12412.08841	4185.80472	50716.53121	4.49735	4.6754	5.67E-04	1.12E-03	1.13E-04	5.69E-04	1.02E-04	2.80E-03	9.07E-04	2.44E-03	2.33E-04	8.49E-04	1.97E-04	2.38E-03	6.29E-05	7.92E-05	1.2420E-02
551491.07	4172816.18	6583.95665	11594.6691	3521.37562	55235.24134	5346.51671	5807.99326	6543.50994	6434.31555	1934.00611	29007.50936	38195.91811	7519.78434	4.5379	4.94444	4.11E-04	6.70E-04	2.04E-04	2.74E-03	3.34E-04	3.63E-04	6.43E-04	1.32E-03	3.96E-04	1.98E-03	1.79E-03	3.53E-04	6.35E-05	8.38E-05	1.1356E-02
551852.96	4172815.56	24303.84394	10062.41411	13233.08326	25773.39571	11513.69751	4084.58896	23433.19547	6086.35341	7199.77951	23327.01242	22982.39246	5616.98212	0.51448	0.51174	1.52E-03	5.82E-04	7.65E-04	1.28E-03	7.19E-04	2.55E-04	2.30E-03	1.25E-03	1.48E-03	1.60E-03	1.08E-03	2.64E-04	7.20E-06	8.67E-06	1.3097E-02
551543.16	4173079.36	8814.02084	27289.06279	2341.29191	18109.81643	2124.9733	30118.10514	8911.99766	16781.05951	1345.17481	19628.00337	6046.61535	36042.88688	2.85539	2.94616	5.50E-04	1.58E-03	1.35E-04	8.98E-04	1.33E-04	1.88E-03	8.76E-04	3.44E-03	2.76E-04	1.34E-03	2.84E-04	1.69E-03	4.00E-05	4.99E-05	1.3175E-02
551490.07	4172931	7829.60512	20843.3573	3190.54656	43976.37434	3499.56849	10167.88284	7815.76244	11381.29438	1808.68733	36449.56463	17111.01745	12931.4288	2.74285	2.85113	4.89E-04	1.21E-03	1.84E-04	2.18E-03	2.19E-04	6.35E-04	7.68E-04	2.33E-03	3.71E-04	2.49E-03	8.04E-04	6.07E-04	3.84E-05	4.83E-05	1.2374E-02
551720.75	4172740.44	17144.72361	5374.49924	8328.10847	26960.73112	23590.18084	3130.61336	16790.76538	3190.71546	4050.70675	14167.88434	47887.84685	4314.29873	1.09527	1.10144	1.07E-03	3.11E-04	4.81E-04	1.34E-03	1.47E-03	1.96E-04	1.65E-03	6.54E-04	8.30E-04	9.69E-04	2.25E-03	2.03E-04	1.53E-05	1.87E-05	1.1458E-02
551567.75	4173118.89	8789.52143	22116.97429	2083.36896	13629.9647	1809.26087	38422.73345	8911.15152	13675.07241	1206.71961	14666.18006	4816.62133	44276.38535	3.48829	3.60244	5.49E-04	1.28E-03	1.20E-04	6.76E-04	1.13E-04	2.40E-03	8.76E-04	2.80E-03	2.47E-04	1.00E-03	2.26E-04	2.08E-03	4.88E-05	6.10E-05	1.2481E-02
551604.41	4173161.87	9225.10839	16440.07422	1781.95623	9703.31422	1463.88954	46898.60949	9381.48738	9898.87569	1044.52751	10398.80419	3665.32618	54029.5569	5.87257	6.16948	5.76E-04	9.50E-04	1.03E-04	4.81E-04	9.14E-05	2.93E-03	9.22E-04	2.03E-03	2.14E-04	7.11E-04	1.72E-04	2.54E-03	8.22E-05	1.05E-04	1.1904E-02
551483.21	4172882.84	7086.31146	15622.78475	3394.82327	49227.80274	4036.73991	7730.55105	7055.27785	8574.43563	1898.14855	34530.62394	24590.62109	9890.87572	3.17218	3.32217	4.42E-04	9.03E-04	1.96E-04	2.44E-03	2.52E-04	4.83E-04	6.94E-04	1.76E-03	3.89E-04	2.36E-03	1.15E-03	4.65E-04	4.44E-05	5.63E-05	1.1639E-02
551486.84	4172922.04	7609.61045	19366.89074	3204.83662	44259.05355	3557.09154	9519.35068	7591.60153	10589.98824	1813.34029	35683.4315	18153.51421	12116.04684	2.72284	2.8311	4.75E-04	1.12E-03	1.85E-04	2.19E-03	2.22E-04	5.95E-04	7.46E-04	2.17E-03	3.72E-04	2.44E-03	8.53E-04	5.69E-04	3.81E-05	4.80E-05	1.2027E-02
551807.15	4172776.5	15239.02172	6305.42457	12024.15267	28629.17816	22230.03578	2789.63683	14923.65009	3564.16031	5493.06374	21234.99067	37185.9357	3803.07398	0.6121	0.60964	9.51E-04	3.65E-04	6.95E-04	1.42E-03	1.39E-03	1.74E-04	1.47E-03	7.31E-04	1.13E-03	1.45E-03	1.75E-03	1.79E-04	8.56E-06	1.03E-05	1.1713E-02
551881.84	4172834.87	30437.37456	11514.91153	9710.79758	22150.21239	7750.45771	5335.26955	29685.32792	7001.31533	5545.95889	20407.56106	16223.35125	7392.23677	0.45952	0.45704	1.90E-03	6.66E-04	5.61E-04	1.10E-03	4.84E-04	3.33E-04	2.92E-03	1.44E-03	1.14E-03	1.40E-03	7.62E-04	3.47E-04	6.43E-06	7.74E-06	1.3052E-02
551842.94	4172804.07	20041.44537	8771.51226	13834.38541	26683.42567	13441.86207	3571.78557	19328.77549	5313.35643	7204.07369	23213.16073	26048.59745	4794.36644	0.53186	0.52921	1.25E-03	5.07E-04	8.00E-04	1.32E-03	8.40E-04	2.23E-04	1.90E-03	1.09E-03	1.48E-03	1.59E-03	1.22E-03	2.25E-04	7.44E-06	8.97E-06	1.2462E-02
551820.31	4172786.38	15558.96109	6930.39345	13342.95396	28458.60829	19232.27642	2890.16857	15160.18314	3955.55701	6290.86972	22234.57403	33322.61173	3944.9408	0.57809	0.57563	9.71E-04	4.01E-04	7.71E-04	1.41E-03	1.20E-03	1.81E-04	1.49E-03	8.11E-04	1.29E-03	1.52E-03	1.57E-03	1.85E-04	8.09E-06	9.75E-06	1.1815E-02
551521.88	4172765.52	7072.40935	9697.07417	4058.51012	50939.9418	7170.6506	4919.17653	7016.15079	5482.98192	2210.30761	25714.80624	40450.5959	6451.28382	2.80582	2.95018	4.42E-04	5.61E-04	2.35E-04	2.53E-03	4.48E-04	3.07E-04	6.90E-04	1.12E-03	4.53E-04	1.76E-03	1.90E-03	3.03E-04	3.93E-05	5.00E-05	1.0834E-02
551870.82	4172822.23	27019.1247	10683.99968	10685.79054	23267.10409	9167.33431	4771.55436	26229.29444	6522.62453	5967.42432	21006.44609	18696.9898	6515.8572	0.4761	0.47363	1.69E-03	6.18E-04	6.18E-04	1.15E-03	5.73E-04	2.98E-04	2.58E-03	1.34E-03	1.22E-03	1.44E-03	8.78E-04	3.06E-04	6.66E-06	8.03E-06	1.2720E-02
551589.38	4173149.9	8921.25565	17918.34056	1866.21332	10719.25411	1554.39303	43016.22831	9060.40197	10976.18458	1090.10433	11563.18671	3968.31211	48813.36576	4.49025	4.66755	5.57E-04	1.04E-03	1.08E-04	5.31E-04	9.71E-05	2.69E-03	8.91E-04	2.25E-03	2.23E-04	7.91E-04	1.86E-04	2.29E-03	6.28E-05	7.91E-05	1.1792E-02
551708.46	4172734.93	16425.73378	5457.33377	8680.79797	25386.89453	22760.482	3206.80953	16090.29633	3268.13118	4203.11602	13387.59143	45717.8736	4419.35655	1.18234	1.20114	1.03E-03	3.16E-04	5.02E-04	1.26E-03	1.42E-03	2.00E-04	1.58E-03	6.70E-04	8.62E-04	9.15E-04	2.15E-03	2.08E-04	1.65E-05	2.04E-05	1.1144E-02
551483.62	4172913.07	7372.8676	17952.50893	3200.84575	44086.19048	3609.50103	8908.02984	7351.6413	9838.38872	1806.98807	34585.99498	18846.67088	11345.77554	2.69158	2.8033	4.60E-04	1.04E-03	1.85E-04	2.19E-03	2.25E-04	5.56E-04	7.23E-04	2.02E-03	3.70E-04	2.37E-03	8.85E-04	5.33E-04	3.77E-05	4.75E-05	1.1629E-02
551549.08	4173096.1	8552.59374	24098.699	2193.14117	15952.0876	1973.39562	31455.38238	8656.33585	14813.53974	1263.30491	17106.23282	5484.82514	37062.64944	2.82351	2.90926	5.34E-04	1.39E-03	1.27E-04	7.91E-04	1.23E-04	1.96E-03	8.51E-04	3.04E-03	2.59E-04	1.17E-03	2.58E-04	1.74E-03	3.95E-05	4.93E-05	1.2336E-02
551696.47	4172733.59	15869.90275	5623.35828	9082.90918	24470.99505	23317.40688	3310.01982	15550.59092	3391.54856	4409.30413	13200.78344	45638.34613	4560.5566	1.24498	1.28127	9.91E-04	3.25E-04	5.25E-04	1.21E-03	1.46E-03	2.07E-04	1.53E-03	6.95E-04	9.04E-04	9.03E-04	2.14E-03	2.14E-04	1.74E-05	2.17E-05	1.1144E-02
551570.84	4173127.47	8734.75678	20559.25265	2007.80947	12756.44097	1732.74541	37936.70454	8857.75667	12694.60935	1164.14295	13690.24021	4573.62166	43585.64847	3.50641	3.62231	5.45E-04	1.19E-03	1.16E-04	6.32E-04	1.08E-04	2.37E-03	8.71E-04	2.60E-03	2.39E-04	9.36E-04	2.15E-04	2.05E-03	4.91E-05	6.14E-05	1.1980E-02
551500.22	4172787.09	6507.76286	10196.36892	3550.87442	51242.14843	5835.93151	5171.55601	6464.14661	5705.67934	1940.48103	25953.68168	38018.1001	6734.52834	3.47365	3.75095	4.06E-04	5.90E-04	2.05E-04	2.54E-03	3.64E-04	3.23E-04	6.35E-04	1.17E-03	3.98E-04	1.77E-03	1.79E-03	3.16E-04	4.86E-05	6.36E-05	1.0620E-02
551479.98	4172873.88	6815.1555	14431.97622	3310.26619	47509.18584	4054.08928	7238.57424	6783.82427	7943.67381	1845.65709	32200.18764	25154.59557	9268.13822	3.07813	3.22649	4.26E-04	8.34E-04	1.91E-04	2.36E-03	2.53E-04	4.52E-04	6.67E-04	1.63E-03	3.78E-04	2.20E-03	1.18E-03	4.35E-04	4.31E-05	5.47E-05	1.1102E-02
551727.58	4172738.65	16550.52043	5129.50601	7504.40244	25923.41672	21577.9817	2990.5091	16218.43895	3030.32566	3694.28631	13755.87857	43928.82277	4114.43452	1.00776	1.01233	1.03E-03	2.97E-04	4.34E-04	1.29E-03	1.35E-03	1.87E-04	1.59E-03	6.21E-04	7.57E-04	9.41E-04	2.06E-03	1.93E-04	1.41E-05	1.72E-05	1.0784E-02
551480.39	4172904.11	7129.14137	16631.93657	3179.81378	43562.4429	3598.7691	8340.35648	7105.48645	9138.4035	1790.4263	33236.41933	19497.53396	10629.58824	2.65334	2.76304	4.45E-04	9.62E-04	1.84E-04	2.16E-03	2.25E-04	5.21E-04	6.98E-04	1.87E-03	3.67E-04	2.27E-03	9.16E-04	4.99E-04	3.71E-05	4.68E-05	1.1206E-02
551552.3	4173105.05	8419.99272	22547.89612	2118.05679	14914.04674	1894.11657	31826.65987	8525.78135	13872.10663	1221.61739	15939.27038	5204.26313	37253.06948	2.82214	2.9065	5.26E-04	1.30E-03	1.22E-04	7.39E-04	1.18E-04	1.99E-03	8.38E-04	2.84E-03	2.50E-04	1.09E-03	2.44E-04	1.75E-03	3.95E-05	4.93E-05	1.1902E-02
551620.13	4173176.71	9308.39194	14248.71324	1657.36705	8570.52854	1352.59535	44908.26578	9479.61984	8473.18342	973.80368	9083.79845	3331.76334	52233.96054	8.22267	8.8034	5.81E-04	8.24E-04	9.58E-05	4.25E-04	8.45E-05	2.80E-03	9.32E-04	1.74E-03	2.00E-04	6.21E-04	1.56E-04	2.45E-03	1.15E-04	1.49E-04	1.1178E-02
551859.8	4172809.59	21353.30453	9232.10154	12077.22353	24353.27337	10886.53926	3814.34155	20611.6492	5635.69985	6522.83547	21810.64622	21671.5982	5249.35925	0.49493	0.49269	1.33E-03	5.34E-04	6.98E-04	1.21E-03	6.80E-04	2.38E-04	2.03E-03	1.16E-03	1.34E-03	1.49E-03	1.02E-03	2.47E-04	6.93E-06	8.35E-06	1.1980E-02
551736.87	4172740.92	16362.97633	4995.69373	6954.39147	26085.53137	22029.25776	2886.08197	16042.15485	2927.9817	3466.17177	14084.17691	43384.66497	3965.03665	0.94016	0.94137	1.02E-03	2.89E-04	4.02E-04	1.29E-03	1.38E-03	1.80E-04	1.58E-03	6.00E-04	7.10E-04	9.63E-04	2.04E-03	1.86E-04	1.32E-05	1.60E-05	1.0666E-02
551803.4	4172767.18	14028.04949	5710.83181	10063.21708	27249.55078	22270.72178	2635.05746	13768.16901	3219.23915	4616.03655	19372.52011	36562.10736	3586.07038	0.61303	0.61123	8.76E-04	3.30E-04	5.82E-04	1.35E-03	1.39E-03	1.65E-04	1.35E-03	6.60E-04	9.46E-04	1.32E-03	1.72E-03	1.68E-04	8.58E-06	1.04E-05	1.0883E-02
551783.24	4172756.89	14075.35375	4970.71361	7404.27432	26686.09883	25054.04012	2537.97415	13844.94451	2802.98304	3509.20244	17090.10687	41589.39539	3455.24559	0.69195	0.68877	8.79E-04	2.87E-04	4.28E-04	1.32E-03	1.56E-03	1.59E-04	1.36E-03	5.75E-04	7.19E-04	1.17E-03	1.95E-03	1.62E-04	9.68E-06	1.17E-05	1.0601E-02
551480.79	4172845.06	6463.69555	12444.53415	3289.67733	48407.55979	4468.65122	6299.10935	6429.17937	6883.10111	1820.03145	29095.7756	29223.99716	8100.15427	3.34179	3.58585	4.04E-04	7.19E-04	1.90E-04	2.40E-03	2.79E-04	3.93E-04	6.32E-04	1.41E-03	3.73E-04	1.99E-03	1.37E-03	3.80E-04	4.68E-05	6.08E-05	1.0652E-02
551573.93	4173136.06	8599.1679	19188.06673	1939.46733	11932.44019	1656.82417	37339.18907	8722.39051	11834.00491	1125.5535	12829.04703	4336.13345	42785.65019	3.54908	3.66739	5.37E-04	1.11E-03	1.12E-04	5.91E-04	1.03E-04	2.33E-03	8.57E-04	2.43E-03	2.31E-04	8.77E-04	2.04E-04	2.01E-03	4.97E-05	6.21E-05	1.1502E-02
551885.77	4172825.56	26631.79185	10611.63572	9233.82016	21258.90052	7801.657	4927.41346	25958.13235	6442.41461	5215.47638	19347.69897	16138.76576	6799.2046	0.44781	0.4456	1.66E-03	6.14E-04	5.34E-04	1.05E-03	4.87E-04	3.08E-04	2.55E-03	1.32E-03	1.07E-03	1.32E-03	7.58E-04	3.19E-04	6.27E-06	7.55E-06	1.2014E-02
551555.39	4173113.64	8300.54928	21170.88283	2048.92792	13984.55235	1819.22938	31944.2457	8407.65412	13037.2502	1183.10282	14923.28466	4946.38131	37209.06658	2.83151	2.91575	5.18E-04	1.22E-03	1.18E-04	6.93E-04	1.14E-04	2.00E-03	8.26E-04	2.67E-03	2.43E-04	1.02E-03	2.32E-04	1.75E-03	3.96E-05	4.94E-05	1.1494E-02
551608.48	4173171.67	8964.71412	14869.31677	1690.06085	9022.73776	1391.96701	42119.31788	9118.92532	8918.19454	990.98664	9594.22499	3467.98214	48726.43166	5.95123	6.26052	5.60E-04	8.60E-04	9.77E-05	4.47E-04	8.69E-05	2.63E-03	8.96E-04	1.83E-03	2.03E-04	6.56E-04	1.63E-04	2.29E-03	8.33E-05	1.06E-04	1.0906E-02
551476.76	4172864.91	6556.12648	13372.10517	3217.00561	45675.31934	4066.42622	6794.77129	6524.87936	7382.73969	1789.12062	29958.5596	24786.50569	8704.62295	2.95457	3.11704	4.09E-04	7.73E-04	1.86E-04	2.26E-03	2.54E-04	4.24E-04	6.41E-04	1.51E-03	3.67E-04	2.05E-03	1.16E-03	4.09E-04	4.13E-05	5.28E-05	1.0548E-02
551477.17	4172895.14	6881.60327	15403.4789	3140.2904	42743.09401	3624.05975	7811.66459	6856.30403	8486.66732	1763.23769	31660.79846	20104.41757	9962.13244	2.60058	2.71219	4.30E-04	8.91E-04	1.82E-04	2.12E-03	2.26E-04	4.88E-04	6.74E-04	1.74E-03	3.61E-04	2.17E-03	9.44E-04	4.68E-04	3.64E-05	4.60E-05	1.0769E-02
551626.73	4173182.05	9336.31384	13456.12491	1612.3228	8183.522	1313.66579	43334.79294	9513.96332	7988.64651	948.08973	8634.792	3218.02768	50339.35131	9.93073	10.73483	5.83E-04	7.78E-04	9.32E-05	4.06E-04	8.20E-05	2.71E-03	9.35E-04	1.64E-03	1.94E-04	5.90E-04	1.51E-04	2.36E-03	1.39E-04	1.82E-04	1.0842E-02
551848.78	4172796.95	17316.77432	8007.13939	12456.14297	25255.38386	12686.68955	3215.65648	16725.12991	4740.01197	6413.75628	21555.79205	24539.86098	4398.82202	0.50895	0.50674	1.08E-03	4.63E-04	7.20E-04	1.25E-03	7.92E-04	2.01E-04	1.64E-03	9.72E-04	1.31E-03	1.47E-03	1.15E-03	2.07E-04	7.12E-06	8.59E-06	1.1289E-02
551530.59	4172750.69	7146.34396	8960.95524	4160.37837	44476.22507	7557.44627	4616.18085	7084.85081	5105.90294	2265.20396	23576.15076	35822.99762	6071.87254	2.14589	2.23443	4.46E-04	5.18E-04	2.41E-04	2.20E-03	4.72E-04	2.88E-04	6.96E-04	1.05E-03	4.64E-04	1.61E-03	1.68E-03	2.85E-04	3.00E-05	3.79E-05	1.0025E-02
551874.84	4172813.02	22928.46045	9673.14884	10211.95052	22207.78446	9141.3682	4199.82881	22237.99211	5881.00222	5660.98154	20024.95831	18471.0984	5751.73829	0.46411	0.46197	1.43E-03	5.59E-04	5.90E-04	1.10E-03	5.71E-04	2.62E-04	2.19E-03	1.21E-03	1.16E-03	1.37E-03	8.68E-04	2.70E-04	6.49E-06	7.83E-06	1.1589E-02
551577.02	4173144.64	8461.13903	17904.89838	1869.02304	11170.64273	1584.12219	36493.89565	8584.4053	11027.10647	1087.89559	12025.74479	4113.57721	41696.04156	3.58086	3.69957	5.28E-04	1.04E-03	1.08E-04	5.54E-04	9.89E-05	2.28E-03	8.44E-04	2.26E-03	2.23E-04	8.22E-04	1.93E-04	1.96E-03	5.01E-05	6.27E-05	1.1017E-02
551491.32	4172795.53	6210.81079	10102.43376	3303.62783	47008.666	5240.23234	5173.56074	6172.10771	5642.47402	1809.56656	24825.88285	33401.78112	6716.28065	3.17147	3.42701	3.88E-04	5.84E-04	1.91E-04	2.33E-03	3.27E-04	3.23E-04	6.07E-04	1.16E-03	3.71E-04	1.70E-03	1.57E-03	3.15E-04	4.44E-05	5.81E-05	9.9621E-03
551558.48	4173122.22	8258.3078	19866.0633	1980.89761	13123.13901	1746.68411	31791.7502	8367.08925	12237.93342	1145.03709	13983.25255	4703.46874	36896.86493	2.84457	2.92925	5.16E-04	1.15E-03	1.15E-04	6.51E-04	1.09E-04	1.99E-03	8.22E-04	2.51E-03	2.35E-04	9.56E-04	2.21E-04	1.73E-03	3.98E-05	4.96E-05	1.1089E-02
551479.3	4172822.77	6137.83058	10971.60802	3168.32854	45840.06416	4635.20419	5637.27826	6103.28196	6098.19109	1744.87408	25894.45873	29903.59367	7270.14586	3.22407	3.44547	3.83E-04	6.34E-04	1.83E-04	2.27E-03	2.90E-04	3.52E-04	6.00E-04	1.25E-03	3.58E-04	1.77E-03	1.40E-03	3.41E-04	4.51E-05	5.84E-05	9.9425E-03
551485.84	4172805.25	6124.29524	10322.64697	3213.84551	45942.93435	4950.48751	5300.42394	6087.73736	5753.31982	1764.02185	24893.13779	31668.25119	6864.02124	3.11028	3.35776	3.82E-04	5.97E-04	1.86E-04	2.28E-03	3.09E-04	3.31E-04	5.98E-04	1.18E-03	3.62E-04	1.70E-03	1.49E-03	3.22E-04	4.35E-05	5.69E-05	9.8344E-03
551473.94	4172886.18	6636.59288	14287.54425	3085.57572	41691.76835	3645.65978	7326.61095	6610.27637	7890.66312	1727.53509	29955.65474	20662.38853	9350.18247	2.53509	2.65158	4.14E-04	8.26E-04	1.78E-04	2.07E-03	2.28E-04	4.58E-04	6.50E-04	1.62E-03	3.54E-04	2.05E-03	9.70E-04	4.39E-04	3.55E-05	4.49E-05	1.0331E-02
551837.77	4172784.31	14460.99887	6926.66968	11821.12341	25440.13236	14983.46987	2847.60189	14035.93309	4012.8669	5807.90929	20533.45033	27170.76443	3883.58434	0.52539	0.52347	9.03E-04	4.00E-04	6.83E-04	1.26E-03	9.36E-04	1.78E-04	1.38E-03	8.23E-04	1.19E-03	1.40E-03	1.28E-03	1.82E-04	7.35E-06	8.87E-06	1.0633E-02
551595.29	4173165.58	8587.12973	15474.86282	1719.08361	9527.15567	1432.68413	37954.30209	8724.63711	9337.20356	1005.44188	10161.11804	3620.54739	43954.6201	4.4795	4.65891	5.36E-04	8.95E-04	9.94E-05	4.72E-04	8.95E-05	2.37E-03	8.58E-04	1.91E-03	2.06E-04	6.95E-04	1.70E-04	2.06E-03	6.27E-05	7.89E-05	1.0511E-02
551481.6	4172813.49	6079.95536	10535.97275	3157.28836	45166.3	4742.88386	5423.34197	6044.86814	5864.06143	1735.90823	25034.4505	30304.10979	7008.49091	3.18386	3.44899	3.80E-04	6.09E-04	1.83E-04	2.24E-03	2.96E-04	3.39E-04	5.94E-04	1.20E-03	3.56E-04	1.71E-03	1.42E-03	3.29E-04	4.46E-05	5.84E-05	9.7646E-03
551799.73	4172757.87	12571.90076	5038.04279	8014.90898	25374.15445	21614.6433	2441.05915	12365.90894	2834.94288	3723.93498	17181.6708	35971.87728	3313.9495	0.61065	0.60928	7.85E-04	2.91E-04	4.63E-04	1.26E-03	1.35E-03	1.52E-04	1.22E-03	5.81E-04	7.63E-04	1.17E-03	1.69E-03	1.56E-04	8.54E-06	1.03E-05	9.8988E-03
551539.8	4173099.38	7951.30268	21183.47408	2068.21677	15159.77213	1890.52562	26619.38399	8043.77241	12941.87976	1189.34209	16003.696	5317.19668	31486.2621	2.36567	2.42667	4.96E-04	1.22E-03	1.20E-04	7.51E-04	1.18E-04	1.66E-03	7.91E-04	2.65E-03	2.44E-04	1.09E-03	2.50E-04	1.48E-03	3.31E-05	4.11E-05	1.0957E-02
551863.91	4172800.49	18319.86912	8396.57281	11053.22309	23162.13299	10632.68487	3506.91899	17703.01399	5113.37772	5893.31805	20318.64036	20969.84234	4702.59165	0.47946	0.47731	1.14E-03	4.85E-04	6.39E-04	1.15E-03	6.64E-04	2.19E-04	1.74E-03	1.05E-03	1.21E-03	1.39E-03	9.85E-04	2.21E-04	6.71E-06	8.09E-06	1.0906E-02
551520.05	4172754.25	6707.38893	8835.06297	3780.46463	42980.63204	6635.89028	4571.93348	6654.66609	5014.75516	2060.28519	22724.61278	33523.84568	5995.16436	2.15133	2.24409	4.19E-04	5.11E-04	2.19E-04	2.13E-03	4.14E-04	2.86E-04	6.54E-04	1.03E-03	4.22E-04	1.55E-03	1.57E-03	2.82E-04	3.01E-05	3.80E-05	9.5614E-03
551580.11	4173153.23	8315.32648	16679.19342	1791.97833	10471.03692	1515.32755	35063.20678	8438.3926	10201.11065	1044.71087	11224.85109	3907.56218	40266.55601	3.57815	3.69629	5.19E-04	9.64E-04	1.04E-04	5.19E-04	9.46E-05	2.19E-03	8.29E-04	2.09E-03	2.14E-04	7.68E-04	1.84E-04	1.89E-03	5.01E-05	6.26E-05	1.0480E-02
551561.57	4173130.81	8125.27571	18625.56944	1913.80719	12322.79757	1676.5403	31376.57023	8234.30048	11469.60812	1107.34699	13110.76796	4474.38966	36317.74695	2.86021	2.94597	5.07E-04	1.08E-03	1.11E-04	6.11E-04	1.05E-04	1.96E-03	8.09E-04	2.35E-03	2.27E-04	8.97E-04	2.10E-04	1.71E-03	4.00E-05	4.99E-05	1.0660E-02
551889.77	4172816.33	23250.13241	9762.30179	8728.66783	20375.82791	7793.36044	4530.9086	22645.90813	5931.50658	4880.26924	18313.6756	15966.9205	6185.59808	0.43632	0.43436	1.45E-03	5.64E-04	5.05E-04	1.01E-03	4.87E-04	2.83E-04	2.23E-03	1.22E-03	1.00E-03	1.25E-03	7.50E-04	2.91E-04	6.11E-06	7.36E-06	1.1049E-02
551470.71	4172877.21	6393.95416	13268.9073	3016.15307	40406.04502	3661.25832	6879.66107	6367.11984	7344.54304	1684.03015	28163.84517	20571.59405	8786.19834	2.45332	2.57078	3.99E-04	7.67E-04	1.74E-04	2.00E-03	2.29E-04	4.30E-04	6.26E-04	1.51E-03	3.45E-04	1.93E-03	9.66E-04	4.13E-04	3.43E-05	4.36E-05	9.8613E-03
551543.04	4173108.39	7842.00583	20003.45653	2003.87775	14221.72633	1817.87436	26876.41827	7936.42084	12240.53316	1153.71954	15009.46274	5051.44049	31612.96355	2.36915	2.42984	4.90E-04	1.16E-03	1.16E-04	7.05E-04	1.14E-04	1.68E-03	7.80E-04	2.51E-03	2.36E-04	1.03E-03	2.37E-04	1.48E-03	3.32E-05	4.12E-05	1.0608E-02
551779.73	4172747.59	12958.79857	4520.83073	5982.26564	24416.33257	21553.74317	2404.83025	12757.174	2559.27801	2920.89747	14969.76356	37376.20335	3270.66519	0.71323	0.71154	8.09E-04	2.61E-04	3.46E-04	1.21E-03	1.35E-03	1.50E-04	1.25E-03	5.25E-04	5.99E-04	1.02E-03	1.76E-03	1.54E-04	9.98E-06	1.21E-05	9.4552E-03
551852.99	4172787.95	14812.30901	7228.93655	11076.41163	23804.7101	12482.42047	2933.94888	14333.1092	4242.86783	5635.92939	19822.37585	23374.23545	4008.47115	0.49094	0.48916	9.25E-04	4.18E-04	6.40E-04	1.18E-03	7.80E-04	1.83E-04	1.41E-03	8.70E-04	1.16E-03	1.36E-03	1.10E-03	1.88E-04	6.87E-06	8.29E-06	1.0217E-02
551471.45	4172848.19	6071.73357	11571.48471	3002.54341	41130.11844	4008.44914	6023.96784	6041.63195	6426.46694	1663.83671	25796.35917	24098.80217	7725.48166	2.60836	2.74691	3.79E-04	6.69E-04	1.74E-04	2.04E-03	2.50E-04	3.76E-04	5.94E-04	1.32E-03	3.41E-04	1.76E-03	1.13E-03	3.63E-04	3.65E-05	4.65E-05	9.4812E-03
551564.66	4173139.39	8000.99945	17497.92549	1851.23354	11570.98038	1607.58337	30835.83996	8110.12731	10770.22153	1072.10648	12324.84739	4253.54938	35605.67712	2.89409	2.9811	5.00E-04	1.01E-03	1.07E-04	5.74E-04	1.00E-04	1.93E-03	7.97E-04	2.21E-03	2.20E-04	8.43E-04	2.00E-04	1.67E-03	4.05E-05	5.05E-05	1.0249E-02
551493.38	4172780.05	6031.44588	9255.4272	3202.87613	42324.55324	5200.81126	4802.91133	5993.17868	5195.31786	1751.39765	22596.9331	30476.61262	6247.09472	2.55835	2.72774	3.77E-04	5.35E-04	1.85E-04	2.10E-03	3.25E-04	3.00E-04	5.89E-04	1.06E-03	3.59E-04	1.55E-03	1.43E-03	2.93E-04	3.58E-05	4.62E-05	9.1849E-03
551878.92	4172803.88	19175.79928	8763.25741	9719.44582	21144.67265	9023.98621	3735.28373	18580.16548	5292.57069	5305.54281	19013.23373	18104.23137	5131.14545	0.45137	0.44952	1.20E-03	5.07E-04	5.62E-04	1.05E-03	5.64E-04	2.33E-04	1.83E-03	1.08E-03	1.09E-03	1.30E-03	8.50E-04	2.41E-04	6.32E-06	7.62E-06	1.0515E-02
551546.13	4173116.97	7809.2096	18934.45247	1943.76759	13385.80242	1749.94707	26925.76177	7905.6555	11604.23424	1120.30663	14130.14124	4810.67223	31538.62255	2.37868	2.43925	4.88E-04	1.09E-03	1.12E-04	6.64E-04	1.09E-04	1.68E-03	7.77E-04	2.38E-03	2.30E-04	9.66E-04	2.26E-04	1.48E-03	3.33E-05	4.13E-05	1.0283E-02
551615.09	4173184.14	8679.3056	13129.78588	1582.41595	8233.1862	1306.9637	36619.69685	8832.8352	7849.9887	928.28549	8672.80824	3234.49309	42323.98901	6.31626	6.66483	5.42E-04	7.59E-04	9.15E-05	4.08E-04	8.16E-05	2.29E-03	8.68E-04	1.61E-03	1.90E-04	5.93E-04	1.52E-04	1.99E-03	8.84E-05	1.13E-04	9.7712E-03
551904.61	4172819.53	23225.73577	9693.01564	7652.80029	18693.58131	6715.80293	4683.47374	22718.86357	5836.23216	4318.47781	16939.94073	13921.81656	6517.88851	0.41146	0.40967	1.45E-03	5.60E-04	4.42E-04	9.27E-04	4.19E-04	2.93E-04	2.23E-03	1.20E-03	8.85E-04	1.16E-03	6.54E-04	3.06E-04	5.76E-06	6.94E-06	1.0537E-02
551528.21	4172741.1	6798.62492	8289.13614	3885.67792	38732.85494	6989.35036	4341.18648	6740.92851	4734.56975	2117.35853	21227.7281	30759.06596	5707.71646	1.76992	1.83458	4.24E-04	4.79E-04	2.25E-04	1.92E-03	4.37E-04	2.71E-04	6.63E-04	9.70E-04	4.34E-04	1.45E-03	1.44E-03	2.68E-04	2.48E-05	3.11E-05	9.0434E-03
551468.4	4172859.62	6079.76322	11902.38803	2942.21021	39338.98897	3777.14972	6235.3672	6051.7282	6610.1788	1635.11217	25849.26799	21827.46188	7978.34973	2.41345	2.54977	3.80E-04	6.88E-04	1.70E-04	1.95E-03	2.36E-04	3.89E-04	5.95E-04	1.35E-03	3.35E-04	1.77E-03	1.03E-03	3.75E-04	3.38E-05	4.32E-05	9.3428E-03
551467.49	4172868.25	6149.57039	12317.96734	2930.80976	38810.36498	3660.0788	6459.9417	6122.70055	6836.61682	1632.42576	26308.49147	20661.90765	8254.55916	2.34972	2.46419	3.84E-04	7.12E-04	1.69E-04	1.92E-03	2.29E-04	4.03E-04	6.02E-04	1.40E-03	3.35E-04	1.80E-03	9.70E-04	3.88E-04	3.29E-05	4.18E-05	9.3912E-03
551599.56	4173175.85	8356.41776	14044.84951	1631.04652	8850.89644	1361.50533	34526.22193	8492.55621	8436.27934	954.38238	9370.15523	3420.8517	40126.90056	4.5262	4.71126	5.22E-04	8.12E-04	9.43E-05	4.39E-04	8.50E-05	2.16E-03	8.35E-04	1.73E-03	1.96E-04	6.41E-04	1.61E-04	1.88E-03	6.33E-05	7.98E-05	9.6972E-03
551581.69	4173161.5	8090.18944	15445.21983	1715.121	9864.4843	1452.61387	32495.6195	8210.51902	9384.21431	1000.17626	10510.24501	3730.30024	37632.65565	3.47037	3.58243	5.05E-04	8.93E-04	9.92E-05	4.89E-04	9.07E-05	2.03E-03	8.07E-04	1.92E-03	2.05E-04	7.19E-04	1.75E-04	1.77E-03	4.86E-05	6.07E-05	9.8130E-03
551567.75	4173147.98	7885.51442	16471.76637	1788.46528	10860.7737	1539.65612	30239.57242	7994.79601	10134.7458	1039.09407	11598.39312	4040.02324	34813.82163	2.93183	3.01748	4.92E-04	9.52E-04	1.03E-04	5.38E-04	9.62E-05	1.89E-03	7.86E-04	2.08E-03	2.13E-04	7.93E-04	1.90E-04	1.64E-03	4.10E-05	5.11E-05	9.8577E-03
551842.06	4172775.42	12374.74111	6227.77012	10197.27351	23801.14151	14426.55646	2604.79772	12034.90028	3588.73389	4987.75421	18649.40157	25422.83106	3544.53302	0.50528	0.5038	7.73E-04	3.60E-04	5.90E-04	1.18E-03	9.01E-04	1.63E-04	1.18E-03	7.36E-04	1.02E-03	1.28E-03	1.19E-03	1.66E-04	7.07E-06	8.54E-06	9.5583E-03
551549.22	4173125.56	7700.45558	17923.51794	1885.25354	12599.84263	1683.16988	26801.18916	7797.51511	10999.41375	1087.6869	13314.95091	4580.34093	31291.35029	2.39604	2.45753	4.81E-04	1.04E-03	1.09E-04	6.25E-04	1.05E-04	1.67E-03	7.66E-04	2.25E-03	2.23E-04	9.11E-04	2.15E-04	1.47E-03	3.35E-05	4.16E-05	9.9443E-03
551868.07	4172791.43	15799.20428	7627.7129	10074.30936	22021.06195	10297.8299	3142.867	15284.42244	4552.00297	5330.5113	18978.81549	20176.55081	4296.13372	0.46283	0.46107	9.86E-04	4.41E-04	5.82E-04	1.09E-03	6.43E-04	1.96E-04	1.50E-03	9.33E-04	1.09E-03	1.30E-03	9.48E-04	2.02E-04	6.48E-06	7.81E-06	9.9307E-03
551708.36	4173184.48	12985.76307	10561.60716	1454.27455	6334.66034	1140.29412	35053.93881	13399.5424	5963.74815	863.04532	6532.42544	2679.72099	40571.93148	2.87781	2.7824	8.11E-04	6.11E-04	8.41E-05	3.14E-04	7.12E-05	2.19E-03	1.32E-03	1.22E-03	1.77E-04	4.47E-04	1.26E-04	1.91E-03	4.03E-05	4.71E-05	9.3622E-03
551893.82	4172807.15	20309.26191	8968.18342	8294.38753	19500.13424	7726.11165	4107.97555	19770.21242	5440.25753	4619.49496	17438.29204	15706.3408	5608.01561	0.42502	0.4233	1.27E-03	5.18E-04	4.80E-04	9.67E-04	4.83E-04	2.57E-04	1.94E-03	1.12E-03	9.47E-04	1.19E-03	7.38E-04	2.63E-04	5.95E-06	7.17E-06	1.0184E-02
551483.66	4172789.35	5812.49326	9285.7868	3026.57649	40183.70261	4775.96436	4854.51351	5777.91319	5200.35204	1658.32065	22060.37103	27973.83654	6294.30126	2.46933	2.63844	3.63E-04	5.37E-04	1.75E-04	1.99E-03	2.98E-04	3.03E-04	5.68E-04	1.07E-03	3.40E-04	1.51E-03	1.31E-03	2.96E-04	3.46E-05	4.47E-05	8.8393E-03
551468.9	4172830.1	5805.31277	10482.49432	2907.81564	39514.4661	4116.67881	5514.73016	5775.15379	5839.1772	1605.33953	23585.16196	24593.18339	7087.16274	2.49852	2.6434	3.62E-04	6.06E-04	1.68E-04	1.96E-03	2.57E-04	3.44E-04	5.68E-04	1.20E-03	3.29E-04	1.61E-03	1.16E-03	3.33E-04	3.50E-05	4.48E-05	8.9711E-03
551494.53	4173030.58	7271.34708	20660.1088	2198.04797	21373.2778	2248.71391	14885.44314	7317.64033	12549.48601	1252.19442	20657.14876	7493.51784	18496.05227	1.77901	1.82466	4.54E-04	1.19E-03	1.27E-04	1.06E-03	1.40E-04	9.30E-04	7.19E-04	2.57E-03	2.57E-04	1.41E-03	3.52E-04	8.69E-04	2.49E-05	3.09E-05	1.0143E-02
551491.3	4173021.63	7238.8688	20576.86387	2230.00758	22263.43039	2309.67071	14080.01298	7279.90187	12440.76425	1270.08432	21398.29118	7888.01767	17243.07624	1.77194	1.81874	4.52E-04	1.19E-03	1.29E-04	1.10E-03	1.44E-04	8.79E-04	7.16E-04	2.55E-03	2.60E-04	1.46E-03	3.70E-04	8.10E-04	2.48E-05	3.08E-05	1.0123E-02
551488.08	4173012.68	7197.69081	20371.60552	2262.58785	23183.03727	2369.06324	13306.71034	7233.22931	12234.84428	1288.30714	22122.63236	8298.06468	16336.46991	1.76485	1.81146	4.49E-04	1.18E-03	1.31E-04	1.15E-03	1.48E-04	8.31E-04	7.11E-04	2.51E-03	2.64E-04	1.51E-03	3.90E-04	7.67E-04	2.47E-05	3.07E-05	1.0094E-02
551782.91	4172743.95	12116.1019	4338.95022	5580.51263	23218.61717	19678.98461	2316.49925	11934.87757	2455.66209	2731.13673	14212.33016	34476.28585	3145.58762	0.69424	0.69325	7.56E-04	2.51E-04	3.23E-04	1.15E-03	1.23E-03	1.45E-04	1.17E-03	5.03E-04	5.60E-04	9.72E-04	1.62E-03	1.48E-04	9.71E-06	1.17E-05	8.8515E-03

551796.12	4172748.56	11410.01835	4480.53486	6323.51587	23330.88291	19501.32215	2276.42885	11240.43277	2521.19152	3003.70136	15059.24111	33643.63677	3085.6668	0.63834	0.63661	7.12E-04	2.59E-04	3.66E-04	1.16E-03	1.22E-03	1.42E-04	1.10E-03	5.17E-04	6.16E-04	1.03E-03	1.58E-03	1.45E-04	8.93E-06	1.08E-05	8.8658E-03
551558.96	4172725.14	7705.21744	7711.8707	4693.29938	33037.97201	9265.86134	4110.78139	7623.49596	4481.68205	2543.69524	19778.78525	28857.00423	5457.52142	1.35502	1.39737	4.81E-04	4.46E-04	2.71E-04	1.64E-03	5.79E-04	2.57E-04	7.49E-04	9.19E-04	5.21E-04	1.35E-03	1.36E-03	2.56E-04	1.90E-05	2.37E-05	8.8678E-03
551484.85	4173003.72	7141.49558	20018.86254	2271.02509	24097.1281	2426.9358	12343.76109	7171.56101	11705.08806	1291.231	22311.30589	8727.42672	15452.90116	1.7497	1.79712	4.46E-04	1.16E-03	1.31E-04	1.19E-03	1.52E-04	7.71E-04	7.05E-04	2.40E-03	2.65E-04	1.53E-03	4.10E-04	7.26E-04	2.45E-05	3.05E-05	9.9369E-03
551753.61	4173170.73	16050.15999	9688.2295	1366.30491	5713.5122	1060.11176	32261.97732	16742.46957	5476.54626	813.78814	5902.80569	2478.786	37167.70285	1.47536	1.44443	1.00E-03	5.60E-04	7.90E-05	2.83E-04	6.62E-05	2.01E-03	1.65E-03	1.12E-03	1.67E-04	4.04E-04	1.16E-04	1.75E-03	2.06E-05	2.45E-05	9.2517E-03
551476.45	4172802.4	5720.48149	9540.1581	2932.69081	39255.06774	4474.30962	5009.23202	5688.1718	5330.37981	1610.93768	22140.12645	26402.36314	6474.37845	2.43219	2.59596	3.57E-04	5.52E-04	1.70E-04	1.95E-03	2.79E-04	3.13E-04	5.59E-04	1.09E-03	3.30E-04	1.51E-03	1.24E-03	3.04E-04	3.40E-05	4.40E-05	8.7346E-03
551631.49	4173193.36	8892.90741	11899.7259	1513.58047	7564.89216	1243.07789	35173.292	9064.27906	7078.53531	889.1821	7898.14574	3037.53078	40280.35398	10.23233	11.05907	5.55E-04	6.88E-04	8.75E-05	3.75E-04	7.76E-05	2.20E-03	8.91E-04	1.45E-03	1.82E-04	5.40E-04	1.43E-04	1.89E-03	1.43E-04	1.87E-04	9.4097E-03
551481.63	4172994.77	7067.84829	19517.14436	2294.53131	24978.77974	2477.3617	11635.20425	7092.40839	11299.96153	1304.64198	22807.31984	9177.68056	14596.68289	1.73696	1.78496	4.41E-04	1.13E-03	1.33E-04	1.24E-03	1.55E-04	7.27E-04	6.97E-04	2.32E-03	2.67E-04	1.56E-03	4.31E-04	6.86E-04	2.43E-05	3.02E-05	9.8336E-03
551469.73	4172820.18	5715.48533	10031.78686	2880.42611	38838.41007	4191.73177	5288.58478	5685.05785	5593.60729	1587.38125	22718.68173	24872.97878	6808.57788	2.46529	2.61582	3.57E-04	5.80E-04	1.67E-04	1.93E-03	2.62E-04	3.30E-04	5.59E-04	1.15E-03	3.25E-04	1.55E-03	1.17E-03	3.20E-04	3.45E-05	4.43E-05	8.7719E-03
551586.17	4173169.3	8006.84939	14506.77635	1656.22023	9334.10045	1400.15193	31411.70237	8128.28909	8770.63314	966.61651	9898.89149	3571.49434	36548.47463	3.5755	3.69474	5.00E-04	8.39E-04	9.58E-05	4.63E-04	8.74E-05	1.96E-03	7.99E-04	1.80E-03	1.98E-04	6.77E-04	1.68E-04	1.72E-03	5.00E-05	6.26E-05	9.4153E-03
551478.41	4172985.82	7002.45737	18987.19608	2327.62986	25945.43416	2524.03852	11010.37922	7021.39932	10882.23403	1323.49558	23351.52674	9621.34223	13837.13663	1.73632	1.78439	4.37E-04	1.10E-03	1.35E-04	1.29E-03	1.58E-04	6.88E-04	6.90E-04	2.23E-03	2.71E-04	1.60E-03	4.52E-04	6.50E-04	2.43E-05	3.02E-05	9.7463E-03
551516.83	4172744.94	6363.03726	8166.41935	3516.49904	37405.04494	6111.31629	4297.20438	6314.07506	4646.22385	1918.0462	20445.29059	28707.23385	5631.92141	1.77137	1.83981	3.97E-04	4.72E-04	2.03E-04	1.85E-03	3.82E-04	2.68E-04	6.21E-04	9.52E-04	3.93E-04	1.40E-03	1.35E-03	2.65E-04	2.48E-05	3.12E-05	8.6101E-03
551552.31	4173134.14	7586.29717	16938.74983	1826.4473	11869.71012	1618.88369	26476.27386	7683.58078	10400.82023	1054.77865	12544.2553	4364.74306	30830.53587	2.41193	2.47447	4.74E-04	9.79E-04	1.06E-04	5.88E-04	1.01E-04	1.65E-03	7.55E-04	2.13E-03	2.16E-04	8.58E-04	2.05E-04	1.45E-03	3.37E-05	4.19E-05	9.5917E-03
551475.18	4172976.87	6917.69732	18330.99751	2358.49788	26841.29703	2567.50157	10409.4036	6931.27648	10414.50297	1341.05244	23757.18711	10082.02277	13102.36223	1.7315	1.78071	4.32E-04	1.06E-03	1.36E-04	1.33E-03	1.60E-04	6.50E-04	6.81E-04	2.13E-03	2.75E-04	1.62E-03	4.74E-04	6.15E-04	2.42E-05	3.02E-05	9.6280E-03
551623.41	4173191.97	8635.00418	12116.8852	1522.2861	7741.19128	1256.53734	34320.37238	8793.94353	7242.29948	893.3251	8100.10113	3089.25115	39186.40403	7.54986	8.02847	5.39E-04	7.01E-04	8.80E-05	3.84E-04	7.85E-05	2.14E-03	8.64E-04	1.48E-03	1.83E-04	5.54E-04	1.45E-04	1.84E-03	1.06E-04	1.36E-04	9.2467E-03
551472.13	4172810.81	5675.03556	9697.25016	2879.32257	38517.71947	4292.97717	5111.70702	5644.03496	5412.89875	1584.28334	22155.50907	25288.16479	6593.20672	2.36559	2.56046	3.54E-04	5.61E-04	1.66E-04	1.91E-03	2.68E-04	3.19E-04	5.55E-04	1.11E-03	3.25E-04	1.52E-03	1.19E-03	3.10E-04	3.31E-05	4.34E-05	8.6562E-03
551503.47	4173055.72	7197.11283	19729.17556	2081.21381	18514.07667	2081.56632	16922.41587	7256.61305	12110.25715	1187.52168	18210.17016	6549.89265	20765.01786	1.75904	1.80091	4.49E-04	1.14E-03	1.20E-04	9.18E-04	1.30E-04	1.06E-03	7.13E-04	2.48E-03	2.43E-04	1.25E-03	3.08E-04	9.75E-04	2.46E-05	3.05E-05	9.8374E-03
551570.84	4173156.57	7750.55226	15427.82767	1719.62225	10217.29276	1476.8118	29155.29461	7859.48607	9445.05402	1000.23131	10868.73436	3847.72194	33643.86411	2.93393	3.01947	4.84E-04	8.92E-04	9.94E-05	5.06E-04	9.22E-05	1.82E-03	7.73E-04	1.94E-03	2.05E-04	7.43E-04	1.81E-04	1.58E-03	4.11E-05	5.12E-05	9.4050E-03
551883.03	4172794.78	16630.62076	7915.22379	9025.73037	20261.20416	8814.87396	3427.72203	16120.13171	4824.36055	4871.37704	17850.81511	17567.97665	4700.05849	0.43756	0.436	1.04E-03	4.58E-04	5.22E-04	1.00E-03	5.51E-04	2.14E-04	1.58E-03	9.89E-04	9.99E-04	1.22E-03	8.25E-04	2.21E-04	6.12E-06	7.39E-06	9.6389E-03
551471.96	4172967.92	6810.68486	17565.07729	2384.54701	27628.45899	2606.15348	9827.58911	6819.14448	9909.80802	1355.65105	23982.32918	10564.06311	12388.09945	1.72225	1.77178	4.25E-04	1.02E-03	1.38E-04	1.37E-03	1.63E-04	6.14E-04	6.70E-04	2.03E-03	2.78E-04	1.64E-03	4.96E-04	5.82E-04	2.41E-05	3.00E-05	9.4764E-03
551857.22	4172778.98	12921.07496	6591.84677	9823.32121	22338.56261	12017.03879	2716.74339	12525.18207	3850.92631	4963.67452	18233.61062	22115.85676	3705.29793	0.47344	0.47196	8.07E-04	3.81E-04	5.68E-04	1.11E-03	7.51E-04	1.70E-04	1.23E-03	7.89E-04	1.02E-03	1.25E-03	1.04E-03	1.74E-04	6.62E-06	8.00E-06	9.2956E-03
551908.65	4172810.34	20666.45576	9000.35325	7268.62197	17965.34546	6678.93662	4352.79386	20204.34146	5413.19905	4068.77789	16103.20747	13738.96464	6043.0416	0.40086	0.39929	1.29E-03	5.20E-04	4.20E-04	8.91E-04	4.17E-04	2.72E-04	1.99E-03	1.11E-03	8.34E-04	1.10E-03	6.45E-04	2.84E-04	5.61E-06	6.77E-06	9.7828E-03
551700.26	4173190.02	12089.54011	10356.45271	1434.81416	6315.80548	1132.84164	32711.60593	12449.50285	5881.37528	850.26142	6509.14673	2668.99495	37957.5176	3.50942	3.37213	7.55E-04	5.99E-04	8.30E-05	3.13E-04	7.08E-05	2.04E-03	1.22E-03	1.21E-03	1.74E-04	4.45E-04	1.25E-04	1.78E-03	4.91E-05	5.71E-05	8.9266E-03
551468.72	4172958.94	6686.18998	16731.52892	2407.24982	28298.60558	2642.25973	9272.98775	6689.84045	9392.19899	1368.08859	24047.44562	11059.26411	11704.17506	1.71102	1.75946	4.17E-04	9.67E-04	1.39E-04	1.40E-03	1.65E-04	5.79E-04	6.58E-04	1.93E-03	2.80E-04	1.64E-03	5.19E-04	5.50E-04	2.39E-05	2.98E-05	9.3015E-03
551509.39	4173072.46	7121.48889	19130.56567	2003.37588	16805.94655	1965.47213	18167.32457	7187.88773	11506.93539	1144.89221	16704.51695	5976.45743	22062.31044	1.755	1.79435	4.45E-04	1.11E-03	1.16E-04	8.33E-04	1.23E-04	1.13E-03	7.07E-04	2.36E-03	2.35E-04	1.14E-03	2.81E-04	1.04E-03	2.46E-05	3.04E-05	9.5711E-03
551590.14	4172713.71	8772.48294	7004.26204	5612.89165	26437.99422	12181.86169	3846.07296	8660.62657	4146.20686	3002.88287	17494.70084	27444.57043	5156.75791	1.11444	1.14938	5.48E-04	4.05E-04	3.25E-04	1.31E-03	7.61E-04	2.40E-04	8.51E-04	8.50E-04	6.16E-04	1.20E-03	1.29E-03	2.42E-04	1.56E-05	1.95E-05	8.6682E-03
551533.23	4172729.4	6727.83619	7711.55968	3845.59206	34133.98053	6995.48705	4098.53647	6668.17962	4426.77818	2095.51456	19424.81254	27352.66766	5398.02745	1.46132	1.50777	4.20E-04	4.46E-04	2.22E-04	1.69E-03	4.37E-04	2.56E-04	6.55E-04	9.07E-04	4.30E-04	1.33E-03	1.28E-03	2.54E-04	2.04E-05	2.56E-05	8.3782E-03
551555.4	4173142.73	7477.42967	16025.56292	1770.83644	11179.15557	1555.45174	26055.77835	7574.81662	9844.00125	1023.55573	11839.91592	4156.59752	30263.52164	2.442	2.50577	4.67E-04	9.27E-04	1.02E-04	5.54E-04	9.71E-05	1.63E-03	7.45E-04	2.02E-03	2.10E-04	8.10E-04	1.95E-04	1.42E-03	3.42E-05	4.25E-05	9.2496E-03
551465.5	4172949.97	6550.96124	15880.9465	2427.93407	28214.22717	2677.86702	8756.31926	6550.23245	8887.43755	1378.93911	23988.49012	11559.70106	11063.17175	1.69707	1.74603	4.09E-04	9.18E-04	1.40E-04	1.40E-03	1.67E-04	5.47E-04	6.44E-04	1.82E-03	2.83E-04	1.64E-03	5.43E-04	5.20E-04	2.37E-05	2.96E-05	9.0849E-03
551897.91	4172798.03	17964.88285	8286.56305	7792.82773	18623.38255	7590.41629	3802.66888	17488.4533	5017.43121	4302.49715	16488.28297	15324.156	5180.28366	0.4131	0.41161	1.12E-03	4.79E-04	4.51E-04	9.23E-04	4.74E-04	2.38E-04	1.72E-03	1.03E-03	8.82E-04	1.13E-03	7.20E-04	2.43E-04	5.78E-06	6.97E-06	9.4189E-03
551497.82	4173052.15	7004.2312	18874.48905	2043.2726	18387.11572	2065.14556	15751.80734	7059.47315	11554.03524	1165.01877	17895.14273	6587.15531	19377.48175	1.66839	1.7071	4.37E-04	1.09E-03	1.18E-04	9.11E-04	1.29E-04	9.84E-04	6.94E-04	2.37E-03	2.39E-04	1.22E-03	3.09E-04	9.10E-04	2.33E-05	2.89E-05	9.4675E-03
551462.12	4172851.33	5706.71623	10721.39054	2744.05678	35244.71264	3605.54972	5740.25935	5680.53262	5979.0141	1522.91347	22903.70101	20175.10378	7344.0995	2.06352	2.1756	3.56E-04	6.20E-04	1.59E-04	1.75E-03	2.25E-04	3.59E-04	5.58E-04	1.23E-03	3.12E-04	1.57E-03	9.48E-04	3.45E-04	2.89E-05	3.69E-05	8.4862E-03
551832.7	4172759.82	10290.6358	5168.78622	8265.43338	22421.94246	15431.75951	2298.28583	10073.97165	2937.19011	3936.90967	16459.24322	26860.33406	3111.93651	0.51122	0.51009	6.43E-04	2.99E-04	4.78E-04	1.11E-03	9.64E-04	1.44E-04	9.90E-04	6.02E-04	8.07E-04	1.13E-03	1.26E-03	1.46E-04	7.15E-06	8.64E-06	8.5864E-03
551812.51	4172749.53	10182.51194	4527.89582	6741.01526	22263.4848	17245.53918	2191.94765	10022.52659	2547.64151	3171.28973	15080.99288	29938.2473	2964.25383	0.57366	0.57195	6.36E-04	2.62E-04	3.90E-04	1.10E-03	1.08E-03	1.37E-04	9.85E-04	5.22E-04	6.50E-04	1.03E-03	1.41E-03	1.39E-04	8.03E-06	9.69E-06	8.3567E-03
551872.25	4172782.41	13676.1116	6922.14729	9184.14481	20899.81751	10039.68358	2870.38281	13246.38836	4102.23134	4779.74175	17607.99851	19323.076	3918.12872	0.44601	0.4447	8.54E-04	4.00E-04	5.31E-04	1.04E-03	6.27E-04	1.79E-04	1.30E-03	8.41E-04	9.80E-04	1.20E-03	9.08E-04	1.84E-04	6.24E-06	7.54E-06	9.0596E-03
551462.27	4172941.01	6414.3551	15061.26705	2449.56586	28607.69064	2717.02608	8286.15166	6409.64387	8413.92617	1389.65808	23864.8544	12048.99931	10478.43359	1.68501	1.73549	4.00E-04	8.71E-04	1.42E-04	1.42E-03	1.70E-04	5.18E-04	6.30E-04	1.72E-03	2.85E-04	1.63E-03	5.66E-04	4.92E-04	2.36E-05	2.94E-05	8.9008E-03
551546.17	4172723.81	7040.75549	7477.68989	4105.92368	31801.24978	7698.75751	4004.72409	6972.97935	4321.75355	2233.75895	18770.70026	26350.3886	5295.25539	1.29016	1.32704	4.40E-04	4.32E-04	2.37E-04	1.58E-03	4.81E-04	2.50E-04	6.85E-04	8.86E-04	4.58E-04	1.28E-03	1.24E-03	2.49E-04	1.81E-05	2.25E-05	8.2563E-03
551524.15	4172732.07	6422.72576	7688.66028	3589.20698	34027.33834	6365.36963	4090.19883	6369.61741	4397.69358	1957.60957	19160.26155	26590.95709	5373.21725	1.49901	1.54894	4.01E-04	4.45E-04	2.08E-04	1.69E-03	3.98E-04	2.55E-04	6.26E-04	9.01E-04	4.01E-04	1.31E-03	1.25E-03	2.52E-04	2.10E-05	2.62E-05	8.1804E-03
551486.25	4172773.19	5638.48355	8503.67304	2926.00186	36238.04402	4706.06795	4500.54105	5604.47416	4785.26945	1600.81631	20090.79186	25545.0848	5847.34423	2.03386	2.15107	3.52E-04	4.92E-04	1.69E-04	1.80E-03	2.94E-04	2.81E-04	5.51E-04	9.81E-04	3.28E-04	1.37E-03	1.20E-03	2.75E-04	2.85E-05	3.65E-05	8.1574E-03
551573.81	4173165.07	7591.69382	14386.96079	1653.50146	9642.3901	1419.51762	27737.34508	7699.57611	8779.80591	962.44222	10201.65629	3676.98863	32048.36778	2.9232	3.00972	4.74E-04	8.32E-04	9.56E-05	4.78E-04	8.87E-05	1.73E-03	7.57E-04	1.80E-03	1.97E-04	6.98E-04	1.73E-04	1.51E-03	4.09E-05	5.10E-05	8.9217E-03
551846.37	4172766.54	10761.17503	5640.50921	8836.26894	22100.38695	13561.38473	2404.26398	10484.05445	3241.25388	4316.7074	16967.2871	24097.51527	3262.84309	0.48547	0.4845	6.72E-04	3.26E-04	5.11E-04	1.10E-03	8.47E-04	1.50E-04	1.03E-03	6.64E-04	8.85E-04	1.16E-03	1.13E-03	1.53E-04	6.79E-06	8.21E-06	8.6417E-03
551576.1	4172714.44	8067.94768	7076.33159	4994.3991	27555.37751	10298.92326	3857.53701	7973.76972	4157.13938	2687.90668	17668.7533	26080.81547	5149.77757	1.10505	1.13658	5.04E-04	4.09E-04	2.89E-04	1.37E-03	6.43E-04	2.41E-04	7.84E-04	8.52E-04	5.51E-04	1.21E-03	1.22E-03	2.42E-04	1.55E-05	1.93E-05	8.3484E-03
551515.31	4173089.2	7003.80721	17863.8459	1918.93805	15164.20177	1850.70484	19095.359	7075.26159	10751.70029	1098.62542	15230.37965	5463.99636	22941.09779	1.74884	1.78653	4.37E-04	1.03E-03	1.11E-04	7.52E-04	1.16E-04	1.19E-03	6.95E-04	2.20E-03	2.25E-04	1.04E-03	2.57E-04	1.08E-03	2.45E-05	3.03E-05	9.1959E-03
551923.41	4172813.46	20408.85679	8828.12361	6455.11749	16577.14998	5841.8226	4448.75437	20019.52302	5301.98634	3640.05118	14962.26382	12153.5363	6160.67047	0.3796	0.37815	1.27E-03	5.10E-04	3.73E-04	8.22E-04	3.65E-04	2.78E-04	1.97E-03	1.09E-03	7.46E-04	1.02E-03	5.71E-04	2.89E-04	5.31E-06	6.41E-06	9.3182E-03
551590.64	4173180.04	7784.57775	13177.68603	1573.35247	8678.32435	1331.89181	28942.2665	7904.81196	7962.43386	918.75406	9135.29139	3376.48899	33526.78078	3.60714	3.72957	4.86E-04	7.62E-04	9.10E-05	4.30E-04	8.32E-05	1.81E-03	7.77E-04	1.63E-03	1.88E-04	6.25E-04	1.59E-04	1.57E-03	5.05E-05	6.32E-05	8.7291E-03
551555.88	4172718.22	7307.483	7270.14041	4341.08573	29938.4808	8392.77784	3920.81143	7232.13864	4225.02235	2354.10368	18200.61691	25746.98626	5200.54597	1.19076	1.22369	4.56E-04	4.20E-04	2.51E-04	1.48E-03	5.24E-04	2.45E-04	7.11E-04	8.66E-04	4.83E-04	1.24E-03	1.21E-03	2.44E-04	1.67E-05	2.07E-05	8.1757E-03
551459.04	4172932.04	6265.85705	14246.42731	2464.17443	28835.50564	2755.07237	7840.80059	6257.68374	7953.59569	1395.87403	23591.73287	12493.34108	9923.16459	1.66895	1.71979	3.91E-04	8.24E-04	1.42E-04	1.43E-03	1.72E-04	4.90E-04	6.15E-04	1.63E-03	2.86E-04	1.61E-03	5.87E-04	4.66E-04	2.34E-05	2.91E-05	8.6987E-03
551558.49	4173151.31	7360.61299	15122.04275	1710.1155	10541.51972	1495.19175	25441.76975	7457.80455	9284.13026	991.52924	11153.77962	3963.8482	29490.92355	2.45144	2.51496	4.60E-04	8.74E-04	9.89E-05	5.23E-04	9.34E-05	1.59E-03	7.33E-04	1.90E-03	2.03E-04	7.63E-04	1.86E-04	1.39E-03	3.43E-05	4.26E-05	8.8880E-03
551610.65	4173192.13	8101.93163	12047.30929	1508.72107	7886.01997	1260.88601	30416.24798	8240.24551	7242.34871	883.38987	8248.11804	3134.07496	34781.05268	5.11589	5.34833	5.06E-04	6.97E-04	8.72E-05	3.91E-04	7.88E-05	1.90E-03	8.10E-04	1.48E-03	1.81E-04	5.64E-04	1.47E-04	1.63E-03	7.16E-05	9.06E-05	8.6417E-03
551804.98	4173151.99	17154.63132	9269.36688	1231.33209	5221.2193	961.3863	26641.83023	18021.92012	5183.57646	732.72414	5426.18301	2264.76668	31615.23526	0.92159	0.90722	1.07E-03	5.36E-04	7.12E-05	2.59E-04	6.00E-05	1.66E-03	1.77E-03	1.06E-03	1.50E-04	3.71E-04	1.06E-04	1.48E-03	1.29E-05	1.54E-05	8.6359E-03
551692.16	4173195.55	11265.80913	10134.79255	1412.73226	6291.13015	1124.14856	30403.48855	11580.14281	5789.18646	835.95376	6476.48011	2656.80984	35376.12527	4.48839	4.27975	7.03E-04	5.86E-04	8.17E-05	3.12E-04	7.02E-05	1.90E-03	1.14E-03	1.19E-03	1.71E-04	4.43E-04	1.25E-04	1.66E-03	6.28E-05	7.25E-05	8.5129E-03
551792.56	4172739.25	10692.05224	4115.57908	5233.20266	21523.3204	17194.08349	2174.1166	10541.36634	2324.5916	2544.96929	13390.90001	30481.98146	2943.5386	0.64068	0.64034	6.68E-04	2.38E-04	3.03E-04	1.07E-03	1.07E-03	1.36E-04	1.04E-03	4.76E-04	5.22E-04	9.16E-04	1.43E-03	1.38E-04	8.96E-06	1.09E-05	8.0245E-03
551912.73	4172801.2	18416.94916	8358.50694	6876.18014	17240.20221	6599.40069	4054.06794	17997.1388	5027.52565	3821.47427	15289.9661	13489.29889	5614.96142	0.39026	0.3889	1.15E-03	4.83E-04	3.98E-04	8.55E-04	4.12E-04	2.53E-04	1.77E-03	1.03E-03	7.83E-04	1.05E-03	6.34E-04	2.64E-04	5.46E-06	6.59E-06	9.0885E-03
551565.07	4172715.1	7577.0052	7106.32863	4568.11145	28307.48644	9060.61716	3858.72072	7494.52678	4151.14483	2469.13078	17699.5161	25288.73419	5133.07067	1.1149	1.1451	4.73E-04	4.11E-04	2.64E-04	1.40E-03	5.66E-04	2.41E-04	7.37E-04	8.51E-04	5.06E-04	1.21E-03	1.19E-03	2.41E-04	1.56E-05	1.94E-05	8.1261E-03
551887.18	4172785.72	14712.95862	7300.23536	8298.60002	19223.94145	8540.38772	3197.9677	14272.98009	4441.74542	4444.81025	16702.29127	16922.48574	4373.30917	0.42399	0.42271	9.19E-04	4.22E-04	4.80E-04	9.53E-04	5.33E-04	2.00E-04	1.40E-03	9.10E-04	9.11E-04	1.14E-03	7.95E-04	2.05E-04	5.93E-06	7.16E-06	8.8866E-03
551485.26	4173033.92	6760.17257	17998.35767	2039.29815	19359.23131	2115.90902	13389.84248	6803.43161	10925.91722	1161.16768	18421.97201	7081.1605	16318.95181	1.55682	1.59386	4.22E-04	1.04E-03	1.18E-04	9.60E-04	1.32E-04	8.36E-04	6.69E-04	2.24E-03	2.38E-04	1.26E-03	3.33E-04	7.66E-04	2.18E-05	2.70E-05	9.0626E-03
551499.06	4173063.6	6818.07819	17676.71924	1958.83017	16943.30744	1969.03536	15960.35852	6876.48219	10827.34676	1117.60092	16528.54942	6159.54375	19515.01131	1.60184	1.63761	4.26E-04	1.02E-03	1.13E-04	8.40E-04	1.23E-04	9.97E-04	6.76E-04	2.22E-03	2.29E-04	1.13E-03	2.89E-04	9.17E-04	2.24E-05	2.78E-05	9.0314E-03
551631.72	4173199.8	8544.39581	11139.69863	1456.30164	7276.55502	1207.33516	30636.45534	8707.82939	6616.42749	853.96731	7532.47388	2952.44351	35249.72819	9.32537	10.01996	5.33E-04	6.44E-04	8.42E-05	3.61E-04	7.54E-05	1.91E-03	8.56E-04	1.36E-03	1.75E-04	5.15E-04	1.39E-04	1.66E-03	1.30E-04	1.70E-04	8.6082E-03
551482.04	4173024.97	6726.10832	17921.20746	2064.89498	20057.22608	2169.17954	12477.46815	6764.76713	10668.32939	1175.39336	18988.76592	7429.62538	15523.88312	1.54564	1.58254	4.20E-04	1.04E-03	1.19E-04	9.94E-04	1.35E-04	7.79E-04	6.65E-04	2.19E-03	2.41E-04	1.30E-03	3.49E-04	7.29E-04	2.16E-05	2.68E-05	9.0022E-03
551478.81	4173016.01	6690.78845	17774.24414	2072.89323	20803.59856	2219.72098	11833.38932	6724.61084	10512.48887	1178.15767	19175.60155	7782.32674	14764.6959	1.53512	1.57188	4.18E-04	1.03E-03	1.20E-04	1.03E-03	1.39E-04	7.39E-04	6.61E-04	2.15E-03	2.41E-04	1.31E-03	3.66E-04	6.93E-04	2.15E-05	2.66E-05	8.9499E-03
551475.59	4173007.06	6648.10144	17534.11892	2096.45755	21565.06057	2267.17695	11222.17824	6677.00887	10287.09972	1191.51836	19671.93177	8142.72801	14036.10653	1.52674	1.56452	4.15E-04	1.01E-03	1.21E-04	1.07E-03	1.42E-04	7.01E-04	6.56E-04	2.11E-03	2.44E-04	1.35E-03	3.82E-04	6.59E-04	2.14E-05	2.65E-05	8.9055E-03
551455.82	4172923.08	6093.70602	13405.60052	2462.34904	28752.30494	2785.06218	7399.73046	6082.75535	7486.98267	1392.36394	23075.46981	12760.63585	9371.57539	1.64338	1.69319	3.80E-04	7.75E-04	1.42E-04	1.43E-03	1.74E-04	4.62E-04	5.98E-04	1.53E-03	2.85E-04	1.58E-03	5.99E-04	4.40E-04	2.30E-05	2.87E-05	8.4464E-03
551861.46	4172770.03	11312.95407	6010.00684	8695.09598	21039.02248	11494.78198	2516.68857	10984.53584	3498.99926	4373.99513	16756.88867	20848.09825	3424.02987	0.45611	0.45504	7.06E-04	3.47E-04	5.03E-04	1.04E-03	7.18E-04	1.57E-04	1.08E-03	7.17E-04	8.97E-04	1.15E-03	9.79E-04	1.61E-04	6.38E-06	7.71E-06	8.4681E-03
551475.99	4172783.17	5434.21197	8526.21373	2769.12784	34493.58686	4336.96338	4548.53929	5403.46986	4787.74961	1517.84776	19608.32812	23580.4653	5890.88842	1.96946	2.08587	3.39E-04	4.93E-04	1.60E-04	1.71E-03	2.71E-04	2.84E-04	5.31E-04	9.81E-04	3.11E-04	1.34E-03	1.11E-03	2.77E-04	2.76E-05	3.53E-05	7.8688E-03
551472.36	4172998.11	6589.84033	17172.3598	2118.50349	22300.91343	2303.03653	10629.69175	6613.82071	9987.07788	1204.20647	20097.98082	8515.1982	13322.93322	1.52074	1.55854	4.11E-04	9.93E-04	1.22E-04	1.11E-03	1.44E-04	6.64E-04	6.50E-04	2.05E-03	2.47E-04	1.37E-03	4.00E-04	6.26E-04	2.13E-05	2.64E-05	8.8318E-03
551513.61	4172735.63	6056.94349	7590.18787	3287.31892	33021.30692	5661.30864	4054.48302	6011.1917	4326.26057	1794.56536	18552.37476	25036.04848	5311.6238	1.50035	1.5534	3.78E-04	4.39E-04	1.90E-04	1.64E-03	3.54E-04	2.53E-04	5.91E-04	8.87E-04	3.68E-04	1.27E-03	1.18E-03	2.49E-04	2.10E-05	2.63E-05	7.8377E-03
551469.14	4172989.16	6526.92193	16741.49945	2144.10352	23049.37749	2340.75309	10080.92878	6545.91839	9649.43856	1218.87834	20501.46432	8890.24763	12657.7726	1.51611	1.55459	4.08E-04	9.68E-04	1.24E-04	1.14E-03	1.46E-04	6.30E-04	6.43E-04	1.98E-03	2.50E-04	1.40E-03	4.18E-04	5.95E-04	2.12E-05	2.63E-05	8.7506E-03
551521.23	4173105.94	6857.93819	16507.76315	1829.78911	13672.00347	1738.10867	19593.9957	6932.59878	9957.4338	1049.56697	13824.02416	5002.70957	23317.04283	1.74302	1.77957	4.28E-04	9.54E-04	1.06E-04	6.78E-04	1.09E-04	1.22E-03	6.81E-04	2.04E-03	2.15E-04	9.45E-04	2.35E-04	1.10E-03	2.44E-05	3.02E-05	8.7661E-03
551459.2	4172828.05	5403.60327	9545.09021	2643.12431	33645.01127	3723.59083	5156.36013	5377.082	5335.03786	1460.25322	20659.70764	20691.79225	6616.26021	1.96583	2.07126	3.37E-04	5.52E-04	1.53E-04	1.67E-03	2.33E-04	3.22E-04	5.29E-04	1.09E-03	2.99E-04	1.41E-03	9.72E-04	3.11E-04	2.75E-05	3.51E-05	7.9439E-03
551471.04	4172791.83	5386.18704	8685.34978	2722.19744	34215.99754	4186.42088	4645.74309	5356.62403	4869.7331	1494.31373	19707.7022	22957.31266	6004.60714	1.97851	2.09639	3.36E-04	5.02E-04	1.57E-04	1.70E-03	2.61E-04	2.90E-04	5.27E-04	9.98E-04	3.06E-04	1.35E-03	1.08E-03	2.82E-04	2.77E-05	3.55E-05	7.8458E-03
551781.43	4172734.69	11079.47243	3975.12299	4656.69453	20983.01557	16361.1833	2189.86595	10922.03821	2260.92803	2327.48406	12467.92325	29811.7529	2968.4649	0.68643	0.68746	6.92E-04	2.30E-04	2.69E-04	1.04E-03	1.02E-03	1.37E-04	1.07E-03	4.63E-04	4.77E-04	8.53E-04	1.40E-03	1.39E-04	9.60E-06	1.16E-05	7.8172E-03
551465.92	4172980.21	6452.24981	16226.32632	2170.22883	23767.09538	2377.70563	9561.4819	6466.44081	9276.19736	1233.83645	20829.81724	9271.50715	12024.42221	1.51079	1.5503	4.03E-04	9.38E-04	1.25E-04	1.18E-03	1.49E-04	5.97E-04	6.36E-04	1.90E-03	2.53E-04	1.42E-03	4.35E-04	5.65E-04	2.11E-05	2.63E-05	8.6523E-03
551494.19	4173059.01	6693.95562	17237.72754	1940.82133	17027.84381	1970.0111	15048.73174	6748.69299	10543.37953	1106.56577	16473.49997	6246.01185	18457.50757	1.54241	1.57639	4.18E-04	9.97E-04	1.12E-04	8.44E-04	1.23E-04	9.40E-04	6.63E-04	2.16E-03	2.27E-04	1.13E-03	2.93E-04	8.67E-04	2.16E-05	2.67E-05	8.8202E-03
551828.89	4172750.5	9403.39603	4658.49007	7068.76734	21224.88395	15038.31591	2154.99968	9231.64131	2636.18644	3355.35118	15034.43795	26366.0574	2911.43564	0.51615	0.51475	5.87E-04	2.69E-04	4.09E-04	1.05E-03	9.39E-04	1.35E-04	9.07E-04	5.40E-04	6.88E-04	1.03E-03	1.24E-03	1.37E-04	7.22E-06	8.72E-06	7.9459E-03
551466.83	4172800.01	5342.64757	8811.78205	2676.72588	33723.1006	4038.65077	4730.83312	5314.15862	4935.82724	1471.57409	19713.13478	22200.29035	6102.99779	1.95425	2.06815	3.34E-04	5.09E-04	1.55E-04	1.67E-03	2.52E-04	2.95E-04	5.22E-04	1.01E-03	3.02E-04	1.35E-03	1.04E-03	2.87E-04	2.73E-05	3.50E-05	7.7927E-03
551902.04	4172788.94	15969.23785	7669.65386	7290.22821	17764.24662	7408.48419	3530.98977	15548.57479	4635.06681	3994.24373	15566.8263	14875.09268	4800.25427	0.40111	0.39987	9.97E-04	4.43E-04	4.21E-04	8.81E-04	4.63E-04	2.21E-04	1.53E-03	9.50E-04	8.19E-04	1.06E-03	6.99E-04	2.25E-04	5.61E-06	6.78E-06	8.7240E-03
551561.58	4173159.9	7231.11791	14216.67783	1648.93702	9955.82028	1438.51351	24587.71696	7327.75378	8714.74111	956.87622	10491.65393	3786.94151	28470.1412	2.44724	2.51157	4.51E-04	8.22E-04	9.53E-05	4.94E-04	8.98E-05	1.54E-03	7.20E-04	1.79E-03	1.96E-04	7.17E-04	1.78E-04	1.34E-03	3.42E-05	4.26E-05	8.4999E-03
551462.69	4172971.25	6364.23703	15636.53495	2195.80432	24425.78291	2413.40167	9067.34984	6373.76421	8878.48546	1248.24758	21060.35218	9658.87331	11418.94259	1.50443	1.54384	3.97E-04	9.04E-04	1.27E-04	1.21E-03	1.51E-04	5.66E-04	6.27E-04	1.82E-03	2.56E-04	1.44E-03	4.54E-04	5.36E-04	2.11E-05	2.62E-05	8.5359E-03
551503.82	4173080.79	6698.5677	16904.41032	1875.7888	15366.40972	1848.52237	16717.16561	6761.90214	10134.97452	1071.76244	15117.56836	5600.02378	20240.56593	1.58119	1.61387	4.18E-04	9.77E-04	1.08E-04	7.62E-04	1.15E-04	1.04E-03	6.65E-04	2.08E-03	2.20E-04	1.03E-03	2.63E-04	9.51E-04	2.21E-05	2.73E-05	8.6841E-03
551713.92	4173192.61	12249.89884	9505.0987	1366.54315	5910.51968	1081.45472	28071.46691	12640.51226	5370.42431	810.15692	6052.57057	2540.97676	32691.62403	2.71773	2.62719	7.65E-04	5.50E-04	7.90E-05	2.93E-04	6.75E-05	1.75E-03	1.24E-03	1.10E-03	1.66E-04	4.14E-04	1.19E-04	1.54E-03	3.80E-05	4.45E-05	8.1679E-03
551488.95	4172759.84	5533.93124	7950.21809	2864.28748	33409.34871	4664.79854	4248.51557	5499.91159	4490.74737	1565.99224	18716.91837	23758.02612	5528.53593	1.74548	1.83196	3.46E-04	4.60E-04	1.66E-04	1.66E-03	2.91E-04	2.65E-04	5.41E-04	9.21E-04	3.21E-04	1.28E-03	1.12E-03	2.60E-04	2.44E-05	3.10E-05	7.6766E-03
551460.21	4172817.67	5321.91494	9161.33013	2619.86198	33082.15739	3786.76279	4952.76207	5295.12618	5124.88491	1445.00686	19966.90817	20875.2403	6365.66584	1.90348	2.02578	3.32E-04	5.30E-04	1.51E-04	1.64E-03	2.37E-04	3.09E-04	5.21E-04	1.05E-03	2.96E-04	1.37E-03	9.80E-04	2.99E-04	2.66E-05	3.43E-05	7.7722E-03
551452.59	4172914.11	5917.05605	12602.27809	2451.5091	28523.8924	2772.93532	6986.56694	5903.87443	7044.26469	1383.26655	22437.87404	13033.51551	8854.20168	1.61149	1.66319	3.69E-04	7.29E-04	1.42E-04	1.41E-03	1.73E-04	4.36E-04	5.80E-04	1.44E-03	2.84E-04	1.53E-03	6.12E-04	4.16E-04	2.25E-05	2.82E-05	8.1842E-03
551462.63	4172808.18	5303.99703	8928.44074	2632.57998	33153.07047	3893.97305	4815.94201	5276.54768	4998.13029	1449.56161	19685.86853	21386.92287	6200.77002	1.91214	2.0192	3.31E-04	5.16E-04	1.52E-04	1.64E-03	2.43E-04	3.01E-04	5.19E-04	1.02E-03	2.97E-04	1.35E-03	1.00E-03	2.91E-04	2.68E-05	3.42E-05	7.7302E-03
551459.46	4172962.27	6261.75253	14988.05889	2219.31148	24999.35312	2447.32554	8595.88151	6266.85072	8466.9078	1261.24352	21175.21908	10053.78705	10837.82209	1.49506	1.53577	3.91E-04	8.67E-04	1.28E-04	1.24E-03	1.53E-04	5.37E-04	6.16E-04	1.74E-03	2.59E-04	1.45E-03	4.72E-04	5.09E-04	2.09E-05	2.60E-05	8.4011E-03
551524.5	4173115.06	6790.10772	15822.33511	1783.47716	12910.41554	1676.67979	19724.4036	6865.92077	9567.03287	1023.98904	13131.87521	4763.08275	23377.70297	1.7506	1.787	4.24E-04	9.15E-04	1.03E-04	6.40E-04	1.05E-04	1.23E-03	6.75E-04	1.96E-03	2.10E-04	8.98E-04	2.24E-04	1.10E-03	2.45E-05	3.03E-05	8.5388E-03
551500.11	4173075.75	6645.10467	16847.92069	1877.74932	15665.00117	1865.96793	16067.03669	6705.72964	10093.2025	1072.10287	15294.83887	5718.87053	19520.33492	1.547	1.57905	4.15E-04	9.74E-04	1.09E-04	7.77E-04	1.17E-04	1.00E-03	6.59E-04	2.07E-03	2.20E-04	1.05E-03	2.69E-04	9.17E-04	2.16E-05	2.68E-05	8.6217E-03
551927.48	4172804.31	18365.67199	8247.97269	6156.67535	15975.92656	5796.86771	4149.05832	18003.87561	4944.77684	3448.59832	14276.35716	11988.14881	5734.38852	0.37001	0.36874	1.15E-03	4.77E-04	3.56E-04	7.92E-04	3.62E-04	2.59E-04	1.77E-03	1.01E-03	7.07E-04	9.76E-04	5.63E-04	2.69E-04	5.18E-06	6.25E-06	8.7029E-03
551578.62	4173177.16	7388.60465	13064.97425	1564.8227	8891.39764	1342.66202	25735.87603	7495.50847	7933.70758	911.62112	9340.59409	3449.45191	29829.11664	2.93531	3.02322	4.61E-04	7.55E-04	9.05E-05	4.41E-04	8.39E-05	1.61E-03	7.37E-04	1.63E-03	1.87E-04	6.39E-04	1.62E-04	1.40E-03	4.11E-05	5.12E-05	8.2831E-03
551598.32	4172703.94	8618.81065	6355.37216	5382.83242	22111.21491	11561.3289	3569.96096	8507.06212	3780.2601	2870.5301	15248.27045	24039.7029	4795.70234	0.91167	0.93703	5.38E-04	3.67E-04	3.11E-04	1.10E-03	7.22E-04	2.23E-04	8.36E-04	7.75E-04	5.88E-04	1.04E-03	1.13E-03	2.25E-04	1.28E-05	1.59E-05	7.8831E-03
551876.45	4172773.41	11921.2741	6305.13427	8275.44866	19748.63928	9801.44826	2636.77241	11560.9277	3712.28941	4271.50966	16299.24086	18414.33474	3595.79795	0.43011	0.42913	7.44E-04	3.65E-04	4.78E-04	9.79E-04	6.12E-04	1.65E-04	1.14E-03	7.61E-04	8.76E-04	1.11E-03	8.65E-04	1.69E-04	6.02E-06	7.27E-06	8.2777E-03
551608.3	4172701.76	8997.75633	6148.48902	5648.43699	20674.10707	12345.00655	3490.99158	8875.27488	3674.91543	2997.15322	14556.17533	24178.20624	4701.4649	0.88251	0.90811	5.62E-04	3.55E-04	3.27E-04	1.02E-03	7.71E-04	2.18E-04	8.72E-04	7.53E-04	6.14E-04	9.95E-04	1.14E-03	2.21E-04	1.23E-05	1.54E-05	7.8773E-03
551808.86	4172740.22	9467.32044	4111.0358	5550.62148	20674.14223	15741.1979	2075.1207	9332.39106	2312.94172	2649.97427	13479.2799	27933.00885	2802.53059	0.58127	0.58063	5.91E-04	2.38E-04	3.21E-04	1.02E-03	9.83E-04	1.30E-04	9.17E-04	4.74E-04	5.43E-04	9.22E-04	1.31E-03	1.32E-04	8.13E-06	9.84E-06	7.6053E-03
551839.82	4172752.89	9181.91784	4813.61354	7294.9998	20709.89553	13795.59798	2159.77763	8990.72833	2738.10142	3504.3846	15100.21587	24441.35394	2918.95734	0.48951	0.48811	5.73E-04	2.78E-04	4.22E-04	1.03E-03	8.62E-04	1.35E-04	8.84E-04	5.61E-04	7.18E-04	1.03E-03	1.15E-03	1.37E-04	6.85E-06	8.27E-06	7.7926E-03
551542.2	4172716.64	6661.68092	7037.8873	3792.95004	28772.82559	6972.94567	3815.97675	6599.55765	4068.62917	2065.09624	17253.60204	23489.17757	5039.72039	1.1424	1.17207	4.16E-04	4.07E-04	2.19E-04	1.43E-03	4.36E-04	2.38E-04	6.49E-04	8.34E-04	4.23E-04	1.18E-03	1.10E-03	2.37E-04	1.60E-05	1.99E-05	7.6039E-03
551530.53	4172719.95	6358.83376	7131.10748	3549.03748	29827.14654	6355.44008	3851.90462	6303.73457	4100.25507	1935.77128	17449.48147	23603.43379	5070.47659	1.23088	1.26566	3.97E-04	4.12E-04	2.05E-04	1.48E-03	3.97E-04	2.41E-04	6.20E-04	8.40E-04	3.97E-04	1.19E-03	1.11E-03	2.38E-04	1.72E-05	2.14E-05	7.5662E-03
551456.23	4172953.31	6140.31517	14286.06404	2236.8677	24885.84821	2477.22386	8139.3843	6141.43504	8043.52716	1270.46635	21136.82991	10455.09369	10272.22652	1.48255	1.52264	3.83E-04	8.26E-04	1.29E-04	1.23E-03	1.55E-04	5.08E-04	6.04E-04	1.65E-03	2.60E-04	1.45E-03	4.91E-04	4.82E-04	2.07E-05	2.58E-05	8.2137E-03
551619.55	4173200.53	8018.79132	11060.333	1441.6903	7416.34319	1213.78473	27716.88012	8161.36254	6608.34254	843.43928	7647.30003	2999.0757	31890.78505	5.93372	6.24099	5.01E-04	6.39E-04	8.34E-05	3.68E-04	7.58E-05	1.73E-03	8.02E-04	1.35E-03	1.73E-04	5.23E-04	1.41E-04	1.50E-03	8.30E-05	1.06E-04	8.0782E-03
551586.71	4172703.96	8097.20161	6463.1462	4970.38915	23215.34918	10358.06549	3601.12334	7998.51914	3822.11837	2662.78823	15613.57051	23341.94413	4821.32371	0.9205	0.94434	5.06E-04	3.74E-04	2.87E-04	1.15E-03	6.47E-04	2.25E-04	7.86E-04	7.83E-04	5.46E-04	1.07E-03	1.10E-03	2.26E-04	1.29E-05	1.60E-05	7.7241E-03
551850.67	4172757.66	9505.77994	5148.68385	7703.33768	20510.97253	12706.41027	2237.21763	9275.19707	2953.34187	3765.43962	15479.85525	22636.21787	3028.90133	0.4652	0.46445	5.94E-04	2.98E-04	4.45E-04	1.02E-03	7.94E-04	1.40E-04	9.12E-04	6.05E-04	7.72E-04	1.06E-03	1.06E-03	1.42E-04	6.51E-06	7.87E-06	7.8540E-03
551527.59	4173123.64	6731.63667	15208.89401	1741.27205	12227.47296	1619.11231	19754.09953	6808.25387	9221.35737	1000.60305	12520.78741	4545.77482	23342.523	1.76458	1.80159	4.20E-04	8.79E-04	1.01E-04	6.06E-04	1.01E-04	1.23E-03	6.69E-04	1.89E-03	2.05E-04	8.56E-04	2.14E-04	1.10E-03	2.47E-05	3.05E-05	8.3271E-03
551916.84	4172792.1	16391.42887	7751.28749	6485.1355	16527.91099	6486.28482	3782.94046	16009.94033	4675.05734	3580.93414	14505.76215	13193.42039	5141.99739	0.37972	0.37856	1.02E-03	4.48E-04	3.75E-04	8.19E-04	4.05E-04	2.36E-04	1.57E-03	9.58E-04	7.34E-04	9.92E-04	6.20E-04	2.42E-04	5.31E-06	6.41E-06	8.4381E-03
551449.37	4172905.15	5732.97486	11826.37466	2427.25337	28104.86566	2784.32738	6592.90192	5718.12255	6618.06069	1366.36754	21651.0807	13278.60897	8360.85859	1.57306	1.6245	3.58E-04	6.84E-04	1.40E-04	1.39E-03	1.74E-04	4.12E-04	5.62E-04	1.36E-03	2.80E-04	1.48E-03	6.24E-04	3.93E-04	2.20E-05	2.75E-05	7.9061E-03
551597.22	4173191.67	7579.53861	11878.87731	1491.68228	8035.71879	1265.08353	26472.03817	7699.41578	7180.4332	871.23143	8383.77173	3184.98154	30386.66647	3.75766	3.89179	4.73E-04	6.87E-04	8.62E-05	3.98E-04	7.90E-05	1.65E-03	7.57E-04	1.47E-03	1.79E-04	5.73E-04	1.50E-04	1.43E-03	5.26E-05	6.59E-05	8.0529E-03
551453	4172944.34	6018.17457	13604.39509	2255.82578	25201.96453	2510.70421	7722.75999	6015.61147	7643.35115	1279.93958	21050.85993	10839.70397	9754.81219	1.47051	1.51071	3.76E-04	7.87E-04	1.30E-04	1.25E-03	1.57E-04	4.82E-04	5.91E-04	1.57E-03	2.62E-04	1.44E-03	5.09E-04	4.58E-04	2.06E-05	2.56E-05	8.0545E-03
551575.53	4172704.61	7647.46648	6559.81476	4608.22859	24308.48756	9310.44965	3629.84272	7559.80337	3857.59192	2478.6551	15921.85313	22901.31615	4843.56123	0.94192	0.96522	4.77E-04	3.79E-04	2.66E-04	1.20E-03	5.82E-04	2.27E-04	7.43E-04	7.91E-04	5.08E-04	1.09E-03	1.08E-03	2.27E-04	1.32E-05	1.64E-05	7.5997E-03
551891.36	4172776.69	13065.68828	6736.8733	7620.35292	18246.53143	8227.18157	2983.50784	12685.58633	4092.93506	4054.72872	15627.06299	16236.76087	3974.69925	0.41038	0.40947	8.16E-04	3.89E-04	4.41E-04	9.04E-04	5.14E-04	1.86E-04	1.25E-03	8.39E-04	8.31E-04	1.07E-03	7.63E-04	1.87E-04	5.74E-06	6.94E-06	8.1982E-03
551506.02	4173092.49	6532.25351	15819.54962	1803.38563	14250.15895	1764.78967	16752.98183	6597.1199	9480.75402	1031.39543	14053.95607	5257.78067	20158.62699	1.53826	1.56874	4.08E-04	9.15E-04	1.04E-04	7.06E-04	1.10E-04	1.05E-03	6.48E-04	1.94E-03	2.11E-04	9.61E-04	2.47E-04	9.47E-04	2.15E-05	2.66E-05	8.2959E-03
551564.69	4173168.79	7094.96466	13333.97221	1586.40004	9387.73259	1381.62726	23536.42569	7190.93634	8142.81103	921.37507	9854.4232	3612.86027	27292.60258	2.4395	2.50411	4.43E-04	7.71E-04	9.17E-05	4.65E-04	8.63E-05	1.47E-03	7.07E-04	1.67E-03	1.89E-04	6.74E-04	1.70E-04	1.28E-03	3.41E-05	4.24E-05	8.0941E-03
551520.93	4172722.76	6076.17887	7121.70268	3320.31732	29839.36276	5805.08812	3848.98587	6027.15102	4080.01327	1812.95269	17265.9327	23018.32738	5053.45403	1.26852	1.30674	3.79E-04	4.12E-04	1.92E-04	1.48E-03	3.63E-04	2.40E-04	5.92E-04	8.36E-04	3.72E-04	1.18E-03	1.08E-03	2.37E-04	1.77E-05	2.21E-05	7.4047E-03
551705.82	4173198.14	11462.79386	9355.05562	1350.81287	5901.13395	1075.93164	26479.82306	11805.67915	5310.278	799.8016	6038.1506	2533.93784	30928.85805	3.28918	3.16416	7.16E-04	5.41E-04	7.81E-05	2.93E-04	6.72E-05	1.65E-03	1.16E-03	1.09E-03	1.64E-04	4.13E-04	1.19E-04	1.45E-03	4.60E-05	5.36E-05	7.8454E-03
551479.37	4172766.17	5295.66019	7849.39243	2690.17208	31538.27857	4292.04152	4229.53024	5265.21963	4427.06984	1472.51197	18024.99705	21859.95211	5490.20676	1.67446	1.7605	3.31E-04	4.54E-04	1.56E-04	1.56E-03	2.68E-04	2.64E-04	5.18E-04	9.07E-04	3.02E-04	1.23E-03	1.03E-03	2.58E-04	2.34E-05	2.98E-05	7.3329E-03
551449.78	4172935.38	5894.127	12948.41641	2273.39136	25459.96972	2546.88964	7340.3775	5888.24928	7266.07054	1288.10279	20898.57531	11182.84408	9279.01701	1.45823	1.49959	3.68E-04	7.49E-04	1.31E-04	1.26E-03	1.59E-04	4.58E-04	5.79E-04	1.49E-03	2.64E-04	1.43E-03	5.25E-04	4.36E-04	2.04E-05	2.54E-05	7.8959E-03
551584.14	4173185.33	7309.55351	12258.81387	1514.0967	8434.77844	1297.61253	24897.46449	7417.88548	7449.61346	882.35933	8814.62867	3311.52532	28656.51288	3.05742	3.15346	4.56E-04	7.09E-04	8.75E-05	4.18E-04	8.10E-05	1.56E-03	7.29E-04	1.53E-03	1.81E-04	6.03E-04	1.56E-04	1.35E-03	4.28E-05	5.34E-05	7.9444E-03
551530.68	4173132.23	6708.01857	14581.66885	1697.08806	11585.31993	1563.40103	19645.79779	6785.81177	8860.82756	976.06501	11915.61891	4342.82355	23158.04929	1.77558	1.8129	4.19E-04	8.43E-04	9.81E-05	5.74E-04	9.76E-05	1.23E-03	6.67E-04	1.82E-03	2.00E-04	8.15E-04	2.04E-04	1.09E-03	2.48E-05	3.07E-05	8.1044E-03
551564.48	4172705.27	7219.1494	6609.72871	4257.30914	25118.98067	8321.98321	3640.8632	7141.52303	3866.301	2298.9203	16049.12259	22398.39169	4841.83324	0.9627	0.98575	4.51E-04	3.82E-04	2.46E-04	1.25E-03	5.20E-04	2.27E-04	7.02E-04	7.93E-04	4.71E-04	1.10E-03	1.05E-03	2.27E-04	1.35E-05	1.67E-05	7.4442E-03
551554.81	4172708.45	6905.87167	6708.28483	3996.61682	26096.28167	7580.11957	3678.71765	6836.12366	3905.6666	2166.65661	16291.70494	22278.41592	4877.26411	1.00162	1.02552	4.31E-04	3.88E-04	2.31E-04	1.29E-03	4.73E-04	2.30E-04	6.72E-04	8.01E-04	4.44E-04	1.11E-03	1.05E-03	2.29E-04	1.40E-05	1.74E-05	7.3845E-03
551942.19	4172807.36	18015.23634	8062.87239	5525.84549	14812.80942	5130.69542	4224.02587	17709.48499	4832.48879	3114.33138	13319.45425	10722.33163	5821.4132	0.35169	0.35051	1.12E-03	4.66E-04	3.19E-04	7.34E-04	3.20E-04	2.64E-04	1.74E-03	9.91E-04	6.38E-04	9.11E-04	5.04E-04	2.73E-04	4.92E-06	5.94E-06	8.2974E-03
551865.72	4172761.1	9931.60823	5476.21551	7688.05404	19673.12772	10902.0235	2330.04472	9658.38109	3178.38624	3855.27776	15382.78947	19739.08273	3162.13816	0.43889	0.43808	6.20E-04	3.17E-04	4.44E-04	9.75E-04	6.81E-04	1.46E-04	9.49E-04	6.52E-04	7.90E-04	1.05E-03	9.27E-04	1.49E-04	6.14E-06	7.42E-06	7.7151E-03
551906.2	4172779.89	14203.85124	7092.36731	6826.92602	16932.1035	7193.87368	3263.54989	13832.10855	4275.62118	3712.25066	14712.56693	14388.99096	4431.95753	0.38921	0.3882	8.87E-04	4.10E-04	3.95E-04	8.39E-04	4.49E-04	2.04E-04	1.36E-03	8.76E-04	7.61E-04	1.01E-03	6.76E-04	2.08E-04	5.45E-06	6.58E-06	8.0832E-03
551446.14	4172896.18	5545.55049	11094.4449	2391.13578	27523.45113	2791.15208	6222.30967	5529.51653	6214.22182	1342.70458	20755.17623	13499.40986	7897.18507	1.52764	1.57845	3.46E-04	6.41E-04	1.38E-04	1.36E-03	1.74E-04	3.89E-04	5.44E-04	1.27E-03	2.75E-04	1.42E-03	6.34E-04	3.71E-04	2.14E-05	2.67E-05	7.6182E-03
551789.04	4172729.94	9998.78237	3785.81455	4366.88043	19645.35298	14675.11617	2074.15554	9864.26104	2149.78725	2173.08987	11817.60038	26952.37221	2804.73947	0.63823	0.63945	6.24E-04	2.19E-04	2.52E-04	9.74E-04	9.17E-04	1.30E-04	9.70E-04	4.41E-04	4.45E-04	8.08E-04	1.27E-03	1.32E-04	8.93E-06	1.08E-05	7.1969E-03
551476	4173037.26	6290.69977	15784.96449	1894.92147	17570.94366	1993.79769	11853.70974	6331.19835	9585.87258	1078.27489	16503.09804	6692.89516	14689.86809	1.37193	1.40208	3.93E-04	9.13E-04	1.10E-04	8.71E-04	1.25E-04	7.40E-04	6.22E-04	1.96E-03	2.21E-04	1.13E-03	3.14E-04	6.90E-04	1.92E-05	2.38E-05	8.1349E-03
551825.17	4172741.18	8612.60302	4189.42896	5905.8853	19862.12291	14166.21579	2018.80397	8475.43343	2360.10526	2812.00875	13547.2721	25332.67873	2723.33855	0.52637	0.52554	5.38E-04	2.42E-04	3.41E-04	9.85E-04	8.85E-04	1.26E-04	8.33E-04	4.84E-04	5.76E-04	9.26E-04	1.19E-03	1.28E-04	7.37E-06	8.91E-06	7.2706E-03
551931.58	4172795.19	16545.4777	7711.64915	5851.53961	15373.52973	5720.21521	3876.00541	16211.21989	4615.59927	3257.89759	13605.54916	11771.32332	5346.82061	0.36041	0.35932	1.03E-03	4.46E-04	3.38E-04	7.62E-04	3.57E-04	2.42E-04	1.59E-03	9.46E-04	6.68E-04	9.30E-04	5.53E-04	2.51E-04	5.04E-06	6.09E-06	8.1316E-03
551472.77	4173028.3	6260.41537	15730.66516	1899.27818	18144.80618	2038.77874	11277.82741	6296.88748	9369.18953	1079.03695	16630.31607	6994.98073	14022.75577	1.35489	1.3848	3.91E-04	9.09E-04	1.10E-04	8.99E-04	1.27E-04	7.04E-04	6.19E-04	1.92E-03	2.21E-04	1.14E-03	3.29E-04	6.59E-04	1.90E-05	2.35E-05	8.0688E-03
551469.55	4173019.35	6232.26241	15634.86996	1918.29207	18762.24152	2077.82561	10738.49877	6264.47467	9262.11669	1089.76063	17043.13763	7296.02109	13390.26236	1.35004	1.38029	3.89E-04	9.04E-04	1.11E-04	9.30E-04	1.30E-04	6.71E-04	6.16E-04	1.90E-03	2.23E-04	1.17E-03	3.43E-04	6.29E-04	1.89E-05	2.34E-05	8.0515E-03
551446.55	4172926.41	5735.82913	12223.75561	2270.58405	25368.60118	2543.43058	6940.70995	5727.35703	6859.26383	1284.40936	20469.46586	11380.33229	8779.86234	1.43366	1.47437	3.58E-04	7.07E-04	1.31E-04	1.26E-03	1.59E-04	4.33E-04	5.63E-04	1.41E-03	2.63E-04	1.40E-03	5.35E-04	4.12E-04	2.01E-05	2.50E-05	7.6700E-03
551466.32	4173010.4	6196.95977	15461.72395	1938.42712	19388.22243	2111.52477	10220.81511	6224.78584	9096.11215	1101.29424	17445.64295	7600.50252	12775.85222	1.34598	1.37651	3.87E-04	8.94E-04	1.12E-04	9.61E-04	1.32E-04	6.38E-04	6.12E-04	1.86E-03	2.26E-04	1.19E-03	3.57E-04	6.00E-04	1.88E-05	2.33E-05	8.0186E-03
551463.1	4173001.45	6153.31282	15209.50894	1959.8453	20014.17516	2145.02622	9726.80387	6176.63519	8877.29737	1113.68548	17823.50802	7909.18364	12183.70591	1.34196	1.37297	3.84E-04	8.79E-04	1.13E-04	9.92E-04	1.34E-04	6.08E-04	6.07E-04	1.82E-03	2.28E-04	1.22E-03	3.71E-04	5.72E-04	1.88E-05	2.33E-05	7.9701E-03
551606.57	4173200.48	7569.15441	11033.3003	1433.2616	7545.67082	1216.17121	25213.29155	7694.37459	6629.19495	836.66852	7802.52767	3036.20585	29034.09409	4.25094	4.42001	4.73E-04	6.38E-04	8.29E-05	3.74E-04	7.60E-05	1.57E-03	7.56E-04	1.36E-03	1.71E-04	5.34E-04	1.43E-04	1.36E-03	5.95E-05	7.49E-05	7.6790E-03
551459.87	4172992.5	6106.72505	14900.56677	1985.60413	20653.80414	2180.29987	9268.34079	6125.58524	8625.77903	1128.53236	18198.1691	8214.90428	11629.71612	1.34011	1.37188	3.81E-04	8.61E-04	1.15E-04	1.02E-03	1.36E-04	5.79E-04	6.02E-04	1.77E-03	2.31E-04	1.24E-03	3.86E-04	5.46E-04	1.88E-05	2.32E-05	7.9165E-03
551618.37	4172695.61	9058.75706	5691.5286	5557.51478	18043.59579	12020.0516	3293.64914	8932.24921	3415.74609	2933.48949	13029.11028	22435.74455	4444.73399	0.77442	0.79597	5.66E-04	3.29E-04	3.21E-04	8.94E-04	7.51E-04	2.06E-04	8.78E-04	7.00E-04	6.01E-04	8.91E-04	1.05E-03	2.09E-04	1.08E-05	1.35E-05	7.4242E-03
551511.94	4173109.23	6389.47271	14708.29246	1723.54552	12945.42574	1665.23261	17070.93342	6456.85044	8829.93078	987.54533	12844.26581	4841.15555	20369.52461	1.52646	1.5557	3.99E-04	8.50E-04	9.96E-05	6.42E-04	1.04E-04	1.07E-03	6.35E-04	1.81E-03	2.02E-04	8.78E-04	2.27E-04	9.57E-04	2.14E-05	2.64E-05	7.9181E-03
551533.77	4173140.81	6626.57339	13967.52022	1653.0081	10978.72355	1508.95873	19442.368	6704.5375	8504.20401	951.50691	11336.79984	4150.2628	22869.38221	1.78828	1.82626	4.14E-04	8.08E-04	9.56E-05	5.44E-04	9.42E-05	1.21E-03	6.59E-04	1.74E-03	1.95E-04	7.75E-04	1.95E-04	1.07E-03	2.50E-05	3.09E-05	7.8672E-03
551510.39	4172726.32	5739.81104	7029.76198	3051.07644	28974.90711	5186.56649	3815.70004	5697.5349	4014.91592	1667.56714	16738.93152	21705.59974	4995.92984	1.26688	1.3075	3.58E-04	4.06E-04	1.76E-04	1.44E-03	3.24E-04	2.38E-04	5.60E-04	8.23E-04	3.42E-04	1.14E-03	1.02E-03	2.35E-04	1.77E-05	2.22E-05	7.1033E-03
551456.65	4172983.54	6032.2384	14461.5899	2004.15699	21199.84502	2208.99508	8800.95447	6046.809	8310.17283	1139.25382	18421.24194	8537.81698	11061.25513	1.33176	1.36383	3.77E-04	8.36E-04	1.16E-04	1.05E-03	1.38E-04	5.50E-04	5.94E-04	1.70E-03	2.34E-04	1.26E-03	4.01E-04	5.20E-04	1.86E-05	2.31E-05	7.8204E-03
551697.72	4173203.68	10737.73029	9193.43565	1332.89925	5884.27679	1068.76896	25012.83388	11039.69585	5245.97422	788.12695	6018.61822	2523.95575	29279.75516	4.14918	3.96345	6.70E-04	5.32E-04	7.71E-05	2.92E-04	6.68E-05	1.56E-03	1.09E-03	1.08E-03	1.62E-04	4.12E-04	1.19E-04	1.38E-03	5.81E-05	6.72E-05	7.5523E-03
551484.9	4173062.29	6247.10577	15216.01935	1814.81875	15712.10132	1864.83981	13468.62917	6297.61219	9275.73185	1033.96041	14979.47367	5945.08957	16220.16096	1.36763	1.39593	3.90E-04	8.80E-04	1.05E-04	7.79E-04	1.16E-04	8.41E-04	6.19E-04	1.90E-03	2.12E-04	1.02E-03	2.79E-04	7.62E-04	1.91E-05	2.37E-05	7.9517E-03
551468.32	4172777	5094.68497	7857.48589	2543.63704	29999.63387	3954.97588	4271.38682	5067.25233	4422.95416	1394.80247	17554.46512	20200.10523	5526.32441	1.62182	1.7067	3.18E-04	4.54E-04	1.47E-04	1.49E-03	2.47E-04	2.67E-04	4.98E-04	9.07E-04	2.86E-04	1.20E-03	9.49E-04	2.60E-04	2.27E-05	2.89E-05	7.0713E-03
551880.67	4172764.43	10630.38096	5813.541	7459.58627	18595.60176	9335.3453	2467.7033	10322.49341	3413.93986	3833.94613	15116.14761	17458.28381	3357.53119	0.4149	0.41425	6.64E-04	3.36E-04	4.31E-04	9.22E-04	5.83E-04	1.54E-04	1.01E-03	7.00E-04	7.86E-04	1.03E-03	8.20E-04	1.58E-04	5.81E-06	7.02E-06	7.6146E-03
551453.43	4172974.59	5961.18719	14008.13098	2029.43773	21757.57555	2241.84635	8381.59929	5971.50993	7997.32277	1153.54318	18654.0044	8851.35981	10547.71805	1.32755	1.35968	3.72E-04	8.10E-04	1.17E-04	1.08E-03	1.40E-04	5.23E-04	5.87E-04	1.64E-03	2.36E-04	1.28E-03	4.16E-04	4.95E-04	1.86E-05	2.30E-05	7.7325E-03
551461.7	4172788.9	5043.7565	8048.44665	2494.97635	29765.85921	3794.79168	4392.91511	5017.57749	4522.60162	1370.62558	17679.20689	19611.70265	5668.38	1.63625	1.72246	3.15E-04	4.65E-04	1.44E-04	1.48E-03	2.37E-04	2.74E-04	4.93E-04	9.27E-04	2.81E-04	1.21E-03	9.21E-04	2.66E-04	2.29E-05	2.92E-05	7.0610E-03
551487.86	4173070.66	6221.64384	14928.96639	1787.11194	15119.62087	1819.87541	13884.56409	6274.82815	9094.3546	1018.84019	14478.91534	5708.45165	16952.03773	1.36723	1.39473	3.88E-04	8.63E-04	1.03E-04	7.49E-04	1.14E-04	8.67E-04	6.17E-04	1.86E-03	2.09E-04	9.90E-04	2.68E-04	7.96E-04	1.91E-05	2.36E-05	7.8722E-03
551449.38	4172827.76	5055.43101	8770.82781	2416.22981	29056.67502	3372.43962	4858.54367	5032.0837	4918.43079	1336.29653	18331.85288	17629.48692	6222.90575	1.60295	1.67677	3.16E-04	5.07E-04	1.40E-04	1.44E-03	2.11E-04	3.03E-04	4.95E-04	1.01E-03	2.74E-04	1.25E-03	8.28E-04	2.92E-04	2.24E-05	2.84E-05	7.1183E-03
551443.33	4172917.45	5578.138	11541.21237	2262.52751	25201.64848	2559.39299	6572.24105	5567.49348	6478.86164	1277.307	19969.74599	11598.80162	8319.1897	1.4058	1.44766	3.48E-04	6.67E-04	1.31E-04	1.25E-03	1.60E-04	4.10E-04	5.47E-04	1.33E-03	2.62E-04	1.37E-03	5.45E-04	3.91E-04	1.97E-05	2.45E-05	7.4484E-03
551920.98	4172783.03	14600.19351	7179.89815	6114.02684	15827.64703	6342.17672	3470.43672	14254.69149	4330.64045	3371.37341	13785.52458	12854.04557	4702.96703	0.36935	0.36839	9.12E-04	4.15E-04	3.53E-04	7.85E-04	3.96E-04	2.17E-04	1.40E-03	8.88E-04	6.91E-04	9.43E-04	6.04E-04	2.21E-04	5.17E-06	6.24E-06	7.8363E-03
551442.91	4172887.22	5357.95707	10408.22635	2344.55563	26804.20089	2793.00795	5876.88569	5341.15418	5837.70739	1313.41529	19788.19369	13364.12555	7463.23949	1.47439	1.52494	3.35E-04	6.02E-04	1.36E-04	1.33E-03	1.74E-04	3.67E-04	5.25E-04	1.20E-03	2.69E-04	1.35E-03	6.28E-04	3.51E-04	2.06E-05	2.58E-05	7.3108E-03
551515.24	4173118.39	6338.75432	14184.4071	1684.33748	12277.11682	1609.10681	17171.40271	6407.10498	8534.75605	965.94689	12270.10839	4615.46301	20417.77068	1.53431	1.56383	3.96E-04	8.20E-04	9.74E-05	6.09E-04	1.00E-04	1.07E-03	6.30E-04	1.75E-03	1.98E-04	8.39E-04	2.17E-04	9.59E-04	2.15E-05	2.65E-05	7.7348E-03
551457.43	4172797.2	4998.7499	8135.14991	2451.66888	29245.48679	3662.69448	4461.66763	4973.5167	4568.46959	1348.82273	17612.36056	18942.04237	5746.31793	1.61124	1.69423	3.12E-04	4.70E-04	1.42E-04	1.45E-03	2.29E-04	2.79E-04	4.89E-04	9.36E-04	2.76E-04	1.20E-03	8.90E-04	2.70E-04	2.25E-05	2.87E-05	6.9983E-03
551450.19	4172965.61	5868.91649	13473.95008	2049.36074	21794.96677	2270.41131	7965.6111	5875.20019	7653.98318	1164.62328	18752.09102	9173.7354	10035.18898	1.31815	1.35046	3.66E-04	7.79E-04	1.18E-04	1.08E-03	1.42E-04	4.98E-04	5.78E-04	1.57E-03	2.39E-04	1.28E-03	4.31E-04	4.71E-04	1.84E-05	2.29E-05	7.5946E-03
551569.42	4173180.69	6909.6376	12196.44165	1507.98805	8706.79599	1312.5436	22036.18849	7004.54157	7435.22186	876.39283	9077.1375	3404.55744	25517.98841	2.43693	2.50285	4.31E-04	7.05E-04	8.72E-05	4.32E-04	8.20E-05	1.38E-03	6.89E-04	1.52E-03	1.80E-04	6.21E-04	1.60E-04	1.20E-03	3.41E-05	4.24E-05	7.5616E-03
551482.36	4172752.63	5199.65395	7354.25814	2630.83171	29190.47732	4239.07476	3997.45691	5169.24686	4161.38952	1439.44653	16831.49293	20407.61224	5197.62888	1.45896	1.52466	3.25E-04	4.25E-04	1.52E-04	1.45E-03	2.65E-04	2.50E-04	5.08E-04	8.53E-04	2.95E-04	1.15E-03	9.59E-04	2.44E-04	2.04E-05	2.58E-05	6.9194E-03
551596.31	4172694.3	8071.55296	5920.78285	4873.46415	19816.87717	10143.34431	3368.0177	7970.32873	3519.58138	2601.46932	13837.68287	21079.59342	4518.77702	0.78171	0.80038	5.04E-04	3.42E-04	2.82E-04	9.82E-04	6.34E-04	2.10E-04	7.83E-04	7.21E-04	5.33E-04	9.46E-04	9.90E-04	2.12E-04	1.09E-05	1.36E-05	7.1655E-03
551583.34	4173190.78	7082.99793	11598.46002	1468.92782	8163.6528	1266.00781	22854.62015	7186.73458	7034.13931	854.21992	8477.53969	3232.59552	26405.58349	2.87704	2.9677	4.42E-04	6.71E-04	8.49E-05	4.05E-04	7.91E-05	1.43E-03	7.06E-04	1.44E-03	1.75E-04	5.80E-04	1.52E-04	1.24E-03	4.03E-05	5.03E-05	7.4946E-03
551895.55	4172767.68	11614.39717	6208.31896	6993.74259	17341.09525	7888.71236	2776.27739	11285.44293	3767.38969	3699.28053	14620.99069	15534.34851	3686.00574	0.39687	0.39612	7.25E-04	3.59E-04	4.04E-04	8.60E-04	4.93E-04	1.73E-04	1.11E-03	7.72E-04	7.58E-04	1.00E-03	7.30E-04	1.73E-04	5.55E-06	6.71E-06	7.5688E-03
551625.99	4172692.08	9170.78554	5424.1193	5537.53921	16659.95465	11900.27319	3176.45928	9039.8555	3263.3153	2908.78778	12162.71792	21686.50585	4292.69212	0.72359	0.74357	5.73E-04	3.14E-04	3.20E-04	8.26E-04	7.43E-04	1.98E-04	8.89E-04	6.69E-04	5.96E-04	8.32E-04	1.02E-03	2.02E-04	1.01E-05	1.26E-05	7.2022E-03
551777.98	4172725.38	10250.07148	3646.3354	3915.05899	18791.4448	13247.2002	2077.85586	10110.58769	2087.1964	1996.47938	10831.21013	25435.20422	2813.12332	0.68121	0.68486	6.40E-04	2.11E-04	2.26E-04	9.31E-04	8.27E-04	1.30E-04	9.94E-04	4.28E-04	4.09E-04	7.41E-04	1.19E-03	1.32E-04	9.53E-06	1.16E-05	6.8853E-03
551536.86	4173149.4	6528.83221	13308.32212	1604.30304	10419.60875	1457.91186	19057.84414	6606.58694	8107.27347	924.30848	10747.53524	3975.72159	22384.96395	1.78539	1.82341	4.08E-04	7.69E-04	9.28E-05	5.16E-04	9.11E-05	1.19E-03	6.49E-04	1.66E-03	1.89E-04	7.35E-04	1.87E-04	1.05E-03	2.50E-05	3.09E-05	7.5973E-03
551854.99	4172748.79	8471.74276	4717.61725	6741.94384	19031.885	11702.36146	2089.22009	8277.54587	2702.33905	3300.73189	14141.88859	21092.72007	2822.39689	0.44901	0.4481	5.29E-04	2.73E-04	3.90E-04	9.43E-04	7.31E-04	1.30E-04	8.14E-04	5.54E-04	6.77E-04	9.67E-04	9.91E-04	1.33E-04	6.28E-06	7.59E-06	7.1447E-03
551493.78	4173087.4	6155.90547	14520.94419	1729.17047	13974.96064	1728.3478	14576.05314	6213.41609	8669.37137	987.22665	13494.12559	5259.73555	17640.43079	1.3685	1.39441	3.84E-04	8.40E-04	1.00E-04	6.93E-04	1.08E-04	9.10E-04	6.11E-04	1.78E-03	2.02E-04	9.23E-04	2.47E-04	8.29E-04	1.91E-05	2.36E-05	7.6662E-03
551946.28	4172798.24	16378.15269	7566.70562	5288.40514	14308.1702	5082.00807	3952.18182	16089.92741	4528.48023	2963.60132	12748.85286	10570.56929	5438.00636	0.34293	0.34191	1.02E-03	4.37E-04	3.06E-04	7.09E-04	3.17E-04	2.47E-04	1.58E-03	9.28E-04	6.07E-04	8.72E-04	4.96E-04	2.55E-04	4.80E-06	5.79E-06	7.7910E-03
551446.96	4172956.64	5765.48951	12907.88212	2067.17323	22112.0713	2298.00547	7570.00564	5768.10118	7306.05712	1174.09455	18761.62912	9495.938	9545.84757	1.30708	1.3405	3.60E-04	7.46E-04	1.20E-04	1.10E-03	1.44E-04	4.73E-04	5.67E-04	1.50E-03	2.41E-04	1.28E-03	4.46E-04	4.48E-04	1.83E-05	2.27E-05	7.4618E-03
551450.48	4172816.19	4965.91976	8398.3541	2389.83474	28442.89353	3419.86014	4652.07318	4942.34838	4713.25418	1319.35342	17675.09931	17697.31005	5968.79491	1.56176	1.63599	3.10E-04	4.86E-04	1.38E-04	1.41E-03	2.14E-04	2.91E-04	4.86E-04	9.66E-04	2.70E-04	1.21E-03	8.31E-04	2.80E-04	2.19E-05	2.77E-05	6.9400E-03
551526.91	4172710.73	5997.76762	6620.76326	3269.98209	26355.02485	5755.4561	3631.13853	5947.23744	3811.82727	1785.04419	15777.51306	20607.11796	4775.53447	1.06086	1.08821	3.74E-04	3.83E-04	1.89E-04	1.31E-03	3.59E-04	2.27E-04	5.85E-04	7.81E-04	3.66E-04	1.08E-03	9.68E-04	2.24E-04	1.48E-05	1.84E-05	6.8752E-03
551453.16	4172805.5	4946.13902	8185.0271	2401.29153	28492.58361	3517.44419	4518.05658	4921.95956	4595.71434	1323.22455	17437.61442	18115.42466	5807.87554	1.56394	1.64118	3.09E-04	4.73E-04	1.39E-04	1.41E-03	2.20E-04	2.82E-04	4.84E-04	9.42E-04	2.71E-04	1.19E-03	8.51E-04	2.73E-04	2.19E-05	2.78E-05	6.8980E-03
551518.33	4173126.98	6298.93514	13719.17525	1649.25113	11661.21064	1555.95278	17202.56926	6367.98163	8279.89234	946.53671	11767.35055	4408.86552	20401.79005	1.54917	1.57923	3.93E-04	7.93E-04	9.54E-05	5.78E-04	9.72E-05	1.07E-03	6.26E-04	1.70E-03	1.94E-04	8.05E-04	2.07E-04	9.58E-04	2.17E-05	2.68E-05	7.5671E-03
551605.18	4172692.42	8322.45972	5722.79613	5020.48703	18490.23916	10542.14547	3289.39762	8214.29992	3415.75373	2670.4373	13175.7424	20813.06147	4422.84007	0.74355	0.76167	5.20E-04	3.31E-04	2.90E-04	9.17E-04	6.58E-04	2.05E-04	8.07E-04	7.00E-04	5.47E-04	9.01E-04	9.78E-04	2.08E-04	1.04E-05	1.29E-05	7.0858E-03
551586.14	4172694.13	7645.03361	5993.55071	4553.38025	20565.70695	9250.24996	3388.14136	7554.15288	3546.34513	2439.70917	14080.34987	20509.72715	4532.9642	0.78821	0.80588	4.77E-04	3.47E-04	2.63E-04	1.02E-03	5.78E-04	2.12E-04	7.43E-04	7.27E-04	5.00E-04	9.63E-04	9.63E-04	2.13E-04	1.10E-05	1.37E-05	7.0292E-03
551841.47	4172742.15	8023.92612	4283.57432	6083.76474	18958.34493	12546.68449	1982.14148	7874.00209	2425.20952	2927.28961	13437.4322	22759.44091	2673.25569	0.48333	0.48253	5.01E-04	2.48E-04	3.52E-04	9.40E-04	7.84E-04	1.24E-04	7.74E-04	4.97E-04	6.00E-04	9.19E-04	1.07E-03	1.26E-04	6.76E-06	8.18E-06	6.9471E-03
551440.1	4172908.48	5402.96566	10846.85743	2237.16202	24783.77405	2562.60432	6205.22293	5390.76298	6093.92451	1260.2119	19278.90118	11764.79105	7859.92509	1.36853	1.40909	3.37E-04	6.27E-04	1.29E-04	1.23E-03	1.60E-04	3.88E-04	5.30E-04	1.25E-03	2.58E-04	1.32E-03	5.53E-04	3.69E-04	1.91E-05	2.39E-05	7.1904E-03
551719.48	4173200.73	11537.44558	8596.59441	1285.90468	5524.39863	1026.09801	23092.64085	11903.9868	4864.19704	761.54894	5626.67021	2410.57351	27034.40015	2.55487	2.46848	7.20E-04	4.97E-04	7.43E-05	2.74E-04	6.41E-05	1.44E-03	1.17E-03	9.97E-04	1.56E-04	3.85E-04	1.13E-04	1.27E-03	3.57E-05	4.18E-05	7.2406E-03
551443.74	4172947.68	5652.95698	12328.39944	2082.17209	22343.51281	2325.5593	7195.74084	5652.20238	6961.47083	1181.55384	18683.76985	9785.99849	9081.45665	1.29422	1.32797	3.53E-04	7.13E-04	1.20E-04	1.11E-03	1.45E-04	4.49E-04	5.56E-04	1.43E-03	2.42E-04	1.28E-03	4.60E-04	4.27E-04	1.81E-05	2.25E-05	7.3175E-03
551615.92	4173209.29	7544.20726	10231.69395	1373.59005	7064.7792	1165.26859	23675.07265	7674.98891	6112.90517	802.67025	7257.24686	2886.12045	27366.37916	4.92358	5.14147	4.71E-04	5.92E-04	7.94E-05	3.50E-04	7.28E-05	1.48E-03	7.54E-04	1.25E-03	1.65E-04	4.96E-04	1.36E-04	1.29E-03	6.89E-05	8.71E-05	7.2888E-03
551935.71	4172786.11	14829.47101	7187.07719	5548.15167	14784.27912	5623.10629	3627.70712	14518.65477	4313.55044	3072.22108	12957.86151	11530.76643	4960.66391	0.35105	0.35014	9.26E-04	4.16E-04	3.21E-04	7.33E-04	3.51E-04	2.27E-04	1.43E-03	8.84E-04	6.30E-04	8.86E-04	5.42E-04	2.33E-04	4.91E-06	5.93E-06	7.5854E-03
551574.96	4172694.78	7232.31172	6079.30114	4238.82573	21474.52801	8376.0823	3414.57656	7151.241	3578.70086	2279.48066	14350.30074	20115.45664	4553.81176	0.80757	0.82494	4.52E-04	3.51E-04	2.45E-04	1.06E-03	5.23E-04	2.13E-04	7.03E-04	7.34E-04	4.67E-04	9.81E-04	9.45E-04	2.14E-04	1.13E-05	1.40E-05	6.9180E-03
551910.37	4172770.86	12329.85401	6526.83941	6415.88569	16131.50322	6959.64193	2977.26977	12002.41514	3917.29671	3458.42448	13929.69267	13893.92052	4048.59529	0.3774	0.37662	7.70E-04	3.77E-04	3.71E-04	8.00E-04	4.35E-04	1.86E-04	1.18E-03	8.03E-04	7.09E-04	9.53E-04	6.53E-04	1.90E-04	5.28E-06	6.38E-06	7.4370E-03
551517.71	4172713.46	5756.42796	6616.89123	3080.9825	26388.77302	5309.68712	3630.56577	5711.07298	3797.14707	1683.88743	15645.86741	20148.46046	4763.33283	1.09124	1.12139	3.59E-04	3.83E-04	1.78E-04	1.31E-03	3.32E-04	2.27E-04	5.61E-04	7.78E-04	3.45E-04	1.07E-03	9.46E-04	2.24E-04	1.53E-05	1.90E-05	6.7457E-03
551869.99	4172752.18	8809.36966	5012.67216	6811.9216	18369.80958	10337.06144	2168.60996	8579.54391	2902.31491	3410.17495	14135.26838	18760.56721	2936.15799	0.42162	0.42125	5.50E-04	2.90E-04	3.94E-04	9.11E-04	6.46E-04	1.35E-04	8.43E-04	5.95E-04	6.99E-04	9.67E-04	8.81E-04	1.38E-04	5.90E-06	7.14E-06	7.0613E-03
551593.04	4173199.92	7103.30151	10872.62938	1414.97413	7680.41221	1219.35458	22308.26665	7212.2713	6560.19087	823.9442	7911.6384	3083.0344	25800.65553	3.20072	3.30782	4.44E-04	6.29E-04	8.18E-05	3.81E-04	7.62E-05	1.39E-03	7.09E-04	1.34E-03	1.69E-04	5.41E-04	1.45E-04	1.21E-03	4.48E-05	5.61E-05	7.2251E-03
551439.69	4172878.25	5150.10556	9702.7703	2275.07371	25701.65184	2766.61106	5523.93335	5133.06683	5452.70546	1271.74766	18630.37033	13255.81442	7018.8119	1.39421	1.44435	3.22E-04	5.61E-04	1.32E-04	1.27E-03	1.73E-04	3.45E-04	5.05E-04	1.12E-03	2.61E-04	1.27E-03	6.23E-04	3.30E-04	1.95E-05	2.45E-05	6.9591E-03
551521.42	4173135.56	6285.50909	13235.35149	1612.15488	11080.03854	1504.58082	17125.58019	6355.66128	8008.89981	925.94087	11260.46447	4216.76281	20266.67528	1.5613	1.59167	3.92E-04	7.65E-04	9.32E-05	5.49E-04	9.40E-05	1.07E-03	6.25E-04	1.64E-03	1.90E-04	7.70E-04	1.98E-04	9.52E-04	2.18E-05	2.70E-05	7.3887E-03
551539.95	4173157.98	6432.04168	12675.52985	1556.65578	9890.41233	1408.00322	18602.79027	6509.45197	7723.56437	897.56671	10194.72266	3808.76187	21826.98364	1.78449	1.82275	4.02E-04	7.33E-04	9.00E-05	4.90E-04	8.79E-05	1.16E-03	6.40E-04	1.58E-03	1.84E-04	6.97E-04	1.79E-04	1.03E-03	2.50E-05	3.09E-05	7.3286E-03

551440.51	4172938.71	5525.09326	11725.6318	2089.48842	22427.46924	2349.94534	6830.60635	5521.38079	6612.57341	1184.27437	18475.36521	9975.19861	8627.11834	1.277	1.31087	3.45E-04	6.78E-04	1.21E-04	1.11E-03	1.47E-04	4.27E-04	5.43E-04	1.36E-03	2.43E-04	1.26E-03	4.69E-04	4.05E-04	1.79E-05	2.22E-05	7.1470E-03
551499.7	4173104.14	6038.53234	13646.44101	1661.81839	12798.02444	1638.97002	14948.83164	6098.78977	8153.75555	950.34975	12460.93139	4862.0977	17943.7938	1.35836	1.3831	3.77E-04	7.89E-04	9.61E-05	6.34E-04	1.02E-04	9.34E-04	6.00E-04	1.67E-03	1.95E-04	8.52E-04	2.28E-04	8.43E-04	1.90E-05	2.34E-05	7.3639E-03
551472.48	4172759.15	4980.86685	7260.74825	2477.50475	27658.95233	3919.87318	3979.17501	4953.62559	4102.98521	1356.89014	16233.25277	18889.59637	5161.35821	1.40479	1.47004	3.11E-04	4.20E-04	1.43E-04	1.37E-03	2.45E-04	2.49E-04	4.87E-04	8.41E-04	2.78E-04	1.11E-03	8.87E-04	2.42E-04	1.97E-05	2.49E-05	6.6288E-03
551821.5	4172731.87	7988.09805	3798.05011	4914.50193	18454.17687	12984.34105	1906.41267	7874.9066	2139.46615	2363.32765	12148.46744	23609.52765	2566.88924	0.53063	0.53056	4.99E-04	2.20E-04	2.84E-04	9.15E-04	8.11E-04	1.19E-04	7.74E-04	4.39E-04	4.84E-04	8.31E-04	1.11E-03	1.21E-04	7.42E-06	8.99E-06	6.6210E-03
551436.87	4172899.52	5230.61657	10206.34694	2204.78431	24286.21373	2565.81007	5867.78228	5217.24763	5737.39314	1239.1172	18535.69824	11725.63993	7438.4548	1.3274	1.36828	3.27E-04	5.90E-04	1.27E-04	1.20E-03	1.60E-04	3.66E-04	5.13E-04	1.18E-03	2.54E-04	1.27E-03	5.51E-04	3.49E-04	1.86E-05	2.32E-05	6.9270E-03
551466.73	4173040.59	5882.68122	14008.33013	1768.30531	16068.33825	1879.28219	10754.35743	5920.61732	8361.41145	997.80203	14908.14832	6310.32921	13321.3687	1.22304	1.24714	3.67E-04	8.10E-04	1.02E-04	7.96E-04	1.17E-04	6.72E-04	5.82E-04	1.71E-03	2.05E-04	1.02E-03	2.96E-04	6.26E-04	1.71E-05	2.11E-05	7.3452E-03
551463.51	4173031.64	5861.32406	13989.98599	1771.12064	16559.29882	1917.3876	10277.43638	5895.70057	8327.61577	1005.80047	15000.24152	6568.03973	12772.18193	1.21105	1.23558	3.66E-04	8.09E-04	1.02E-04	8.21E-04	1.20E-04	6.42E-04	5.80E-04	1.71E-03	2.06E-04	1.03E-03	3.08E-04	6.00E-04	1.69E-05	2.09E-05	7.3244E-03
551884.91	4172755.47	9530.13333	5370.41054	6725.41925	17589.50785	8847.68999	2313.6398	9265.70097	3146.65243	3446.21574	14022.20664	16507.36208	3140.92179	0.40002	0.39964	5.95E-04	3.10E-04	3.89E-04	8.72E-04	5.53E-04	1.45E-04	9.11E-04	6.45E-04	7.06E-04	9.59E-04	7.75E-04	1.48E-04	5.60E-06	6.77E-06	7.0197E-03
551960.95	4172801.24	15998.10519	7384.14283	4785.0156	13312.69937	4536.32122	4007.4093	15752.35937	4416.72488	2695.7939	11932.18852	9524.01437	5498.04021	0.32671	0.32574	9.99E-04	4.27E-04	2.77E-04	6.60E-04	2.83E-04	2.50E-04	1.55E-03	9.05E-04	5.53E-04	8.16E-04	4.47E-04	2.58E-04	4.57E-06	5.52E-06	7.4339E-03
551711.38	4173206.27	10853.64211	8488.52997	1273.35009	5520.82997	1021.93777	22001.58857	11178.43234	4821.01386	753.25886	5619.27346	2405.76833	25835.31522	3.07497	2.95679	6.78E-04	4.91E-04	7.36E-05	2.74E-04	6.38E-05	1.37E-03	1.10E-03	9.88E-04	1.54E-04	3.84E-04	1.13E-04	1.21E-03	4.30E-05	5.01E-05	6.9990E-03
551460.28	4173022.69	5829.37474	13896.08402	1784.15629	17043.13853	1945.61528	9801.47107	5859.96123	8237.53957	1013.18418	15298.11968	6830.57361	12215.71975	1.20356	1.2286	3.64E-04	8.03E-04	1.03E-04	8.45E-04	1.22E-04	6.12E-04	5.76E-04	1.69E-03	2.08E-04	1.05E-03	3.21E-04	5.74E-04	1.68E-05	2.08E-05	7.2996E-03
551457.06	4173013.74	5789.82533	13738.06066	1797.47236	17529.71607	1972.22426	9340.39759	5816.57592	8097.85215	1020.87161	15579.77605	7095.62897	11670.27232	1.19601	1.22177	3.61E-04	7.94E-04	1.04E-04	8.69E-04	1.23E-04	5.83E-04	5.72E-04	1.66E-03	2.09E-04	1.07E-03	3.33E-04	5.48E-04	1.67E-05	2.07E-05	7.2603E-03
551925.14	4172773.98	12815.14417	6635.55063	5834.75203	15143.69547	6174.23374	3159.01309	12502.57351	3993.25444	3190.34323	13172.10633	12485.86396	4286.37975	0.35895	0.35818	8.00E-04	3.84E-04	3.37E-04	7.51E-04	3.86E-04	1.97E-04	1.23E-03	8.19E-04	6.54E-04	9.01E-04	5.86E-04	2.01E-04	5.02E-06	6.07E-06	7.2558E-03
551453.83	4173004.78	5757.56916	13561.55827	1818.14836	18062.17512	2002.7935	8924.04199	5780.24256	7937.52767	1032.91861	15915.38474	7352.13814	11173.32755	1.19403	1.21967	3.59E-04	7.84E-04	1.05E-04	8.95E-04	1.25E-04	5.57E-04	5.68E-04	1.63E-03	2.12E-04	1.09E-03	3.45E-04	5.25E-04	1.67E-05	2.07E-05	7.2292E-03
551437.28	4172929.75	5390.6257	11131.93012	2091.10647	22410.76498	2344.92211	6485.42327	5384.41702	6274.29693	1183.36909	18176.78733	10164.49126	8196.76639	1.25613	1.28956	3.37E-04	6.44E-04	1.21E-04	1.11E-03	1.46E-04	4.05E-04	5.29E-04	1.29E-03	2.43E-04	1.24E-03	4.77E-04	3.85E-04	1.76E-05	2.19E-05	6.9662E-03
551502.88	4173113.14	5979.24961	13189.93137	1625.69049	12207.23014	1590.19313	15044.04964	6040.44248	7890.57961	930.54588	11937.72026	4656.52455	17992.98417	1.35634	1.3806	3.73E-04	7.63E-04	9.40E-05	6.05E-04	9.93E-05	9.40E-04	5.94E-04	1.62E-03	1.91E-04	8.16E-04	2.19E-04	8.45E-04	1.90E-05	2.34E-05	7.1984E-03
551524.51	4173144.15	6208.81439	12715.86598	1571.44614	10537.06403	1455.68374	16922.4555	6279.00785	7708.17078	903.31831	10740.15212	4040.40997	19989.85911	1.56519	1.59576	3.88E-04	7.35E-04	9.09E-05	5.22E-04	9.09E-05	1.06E-03	6.17E-04	1.58E-03	1.85E-04	7.34E-04	1.90E-04	9.39E-04	2.19E-05	2.70E-05	7.1783E-03
551484.22	4172739.84	5084.8246	6889.64383	2559.00749	26787.59244	4138.09616	3783.15185	5054.63164	3910.77231	1400.41769	15660.45603	18841.7108	4923.98008	1.26954	1.3198	3.17E-04	3.98E-04	1.48E-04	1.33E-03	2.58E-04	2.36E-04	4.97E-04	8.02E-04	2.87E-04	1.07E-03	8.85E-04	2.31E-04	1.78E-05	2.24E-05	6.4992E-03
551639.42	4172687.33	9330.02291	4987.68791	5423.92468	14613.4385	11414.42268	2979.31562	9192.65892	3009.60437	2825.62456	10770.15871	20347.01304	4036.07853	0.64579	0.66336	5.83E-04	2.88E-04	3.14E-04	7.24E-04	7.13E-04	1.86E-04	9.04E-04	6.17E-04	5.79E-04	7.37E-04	9.56E-04	1.90E-04	9.04E-06	1.12E-05	6.8096E-03
551450.61	4172995.83	5709.13075	13294.78591	1836.93574	18556.55259	2030.58851	8512.50025	5727.82447	7725.87231	1043.83556	16183.95964	7614.11349	10677.43259	1.18894	1.21537	3.56E-04	7.69E-04	1.06E-04	9.20E-04	1.27E-04	5.32E-04	5.63E-04	1.58E-03	2.14E-04	1.11E-03	3.58E-04	5.02E-04	1.66E-05	2.06E-05	7.1733E-03
551950.41	4172789.14	14819.18487	7103.84203	5048.23611	13809.41225	5015.96378	3703.89036	14545.29114	4247.25295	2814.34105	12192.4312	10396.48666	5087.95864	0.33444	0.33357	9.25E-04	4.11E-04	2.92E-04	6.85E-04	3.13E-04	2.31E-04	1.43E-03	8.71E-04	5.77E-04	8.34E-04	4.88E-04	2.39E-04	4.68E-06	5.65E-06	7.3056E-03
551616.47	4172686.42	8459.10969	5322.62775	5006.30897	16292.62897	10458.66486	3115.34303	8345.40791	3190.86677	2647.88512	11895.21523	19619.2464	4198.083	0.66498	0.68095	5.28E-04	3.08E-04	2.89E-04	8.08E-04	6.53E-04	1.95E-04	8.20E-04	6.54E-04	5.43E-04	8.13E-04	9.21E-04	1.97E-04	9.30E-06	1.15E-05	6.7509E-03
551507.17	4172717.02	5448.8946	6533.30209	2841.64766	25669.1706	4767.72421	3600.10426	5409.72409	3738.51797	1554.74671	15195.01132	19044.48258	4710.63114	1.08924	1.12133	3.40E-04	3.78E-04	1.64E-04	1.27E-03	2.98E-04	2.25E-04	5.32E-04	7.66E-04	3.19E-04	1.04E-03	8.94E-04	2.21E-04	1.52E-05	1.90E-05	6.4831E-03
551475.62	4173065.57	5843.83548	13534.97748	1700.32898	14526.67159	1766.51416	12118.36217	5890.52211	8228.16057	968.03492	13672.18787	5653.64343	14589.17805	1.22225	1.24522	3.65E-04	7.83E-04	9.83E-05	7.20E-04	1.10E-04	7.57E-04	5.79E-04	1.69E-03	1.98E-04	9.35E-04	2.66E-04	6.85E-04	1.71E-05	2.11E-05	7.2210E-03
551447.38	4172986.88	5648.87316	12958.53121	1855.43204	19017.12517	2056.96044	8115.18782	5663.67434	7479.36186	1054.57018	16397.99944	7877.15139	10194.35365	1.18249	1.2095	3.53E-04	7.49E-04	1.07E-04	9.43E-04	1.28E-04	5.07E-04	5.57E-04	1.53E-03	2.16E-04	1.12E-03	3.70E-04	4.79E-04	1.65E-05	2.05E-05	7.1004E-03
551785.55	4172720.64	9372.17226	3502.03898	3720.67751	17798.89623	12244.64722	1982.33885	9250.84428	2000.35423	1887.42276	10414.19234	23468.64481	2677.74639	0.62814	0.63115	5.85E-04	2.02E-04	2.15E-04	8.82E-04	7.65E-04	1.24E-04	9.09E-04	4.10E-04	3.87E-04	7.12E-04	1.10E-03	1.26E-04	8.79E-06	1.07E-05	6.4396E-03
551543.04	4173166.57	6339.59436	12080.71714	1511.32023	9384.79385	1358.57715	18122.99634	6416.73398	7362.35495	872.07427	9683.54887	3646.49169	21241.17396	1.78988	1.82801	3.96E-04	6.98E-04	8.74E-05	4.65E-04	8.49E-05	1.13E-03	6.31E-04	1.51E-03	1.79E-04	6.62E-04	1.71E-04	9.98E-04	2.50E-05	3.10E-05	7.0694E-03
551899.77	4172758.69	10302.22413	5695.04736	6436.20633	16506.06921	7532.35697	2500.84464	10017.68112	3384.22296	3374.73021	13697.68765	14831.22045	3393.13356	0.38136	0.38094	6.43E-04	3.29E-04	3.72E-04	8.18E-04	4.70E-04	1.56E-04	9.85E-04	6.94E-04	6.92E-04	9.37E-04	6.97E-04	1.59E-04	5.34E-06	6.46E-06	6.9641E-03
551602.74	4173209.05	7100.61183	10143.87172	1359.64835	7206.72322	1171.2149	21418.73257	7214.84601	6088.74858	792.72081	7373.3344	2934.85641	24819.13416	3.60857	3.73879	4.43E-04	5.86E-04	7.86E-05	3.57E-04	7.32E-05	1.34E-03	7.09E-04	1.25E-03	1.62E-04	5.04E-04	1.38E-04	1.17E-03	5.05E-05	6.34E-05	6.9179E-03
551436.46	4172869.29	4958.77896	9071.31456	2204.65551	24634.72382	2738.77354	5205.50382	4941.61165	5106.22059	1230.00814	17527.29716	13120.12609	6618.51497	1.31311	1.35863	3.10E-04	5.24E-04	1.27E-04	1.22E-03	1.71E-04	3.25E-04	4.86E-04	1.05E-03	2.52E-04	1.20E-03	6.16E-04	3.11E-04	1.84E-05	2.30E-05	6.6305E-03
551444.16	4172977.93	5584.12638	12584.80588	1876.55493	19116.48964	2084.36159	7744.38432	5595.08883	7219.61555	1066.60137	16586.50123	8137.76481	9740.60048	1.17718	1.20411	3.49E-04	7.28E-04	1.08E-04	9.48E-04	1.30E-04	4.84E-04	5.50E-04	1.48E-03	2.19E-04	1.13E-03	3.82E-04	4.58E-04	1.65E-05	2.04E-05	7.0055E-03
551649.03	4173219.73	8067.37501	9088.51102	1295.24785	6226.84092	1083.6585	22212.73882	8231.1134	5337.76289	760.08482	6335.25118	2623.81246	25923.78586	15.77533	13.10886	5.04E-04	5.25E-04	7.49E-05	3.09E-04	6.77E-05	1.39E-03	8.09E-04	1.09E-03	1.56E-04	4.33E-04	1.23E-04	1.22E-03	2.21E-04	2.22E-04	7.1437E-03
551505.97	4173121.73	5932.51294	12783.38216	1592.56727	11658.61533	1543.27971	15087.27923	5994.37476	7660.8778	912.33111	11470.22483	4464.47302	17992.94716	1.35937	1.38366	3.70E-04	7.39E-04	9.21E-05	5.78E-04	9.64E-05	9.42E-04	5.89E-04	1.57E-03	1.87E-04	7.84E-04	2.10E-04	8.45E-04	1.90E-05	2.34E-05	7.0464E-03
551434.06	4172920.78	5247.77813	10543.87594	2083.92624	22270.20223	2357.07065	6153.82633	5239.50759	5942.84579	1177.13028	17769.04379	10339.98095	7782.74351	1.23131	1.26561	3.28E-04	6.10E-04	1.20E-04	1.10E-03	1.47E-04	3.84E-04	5.15E-04	1.22E-03	2.41E-04	1.22E-03	4.86E-04	3.66E-04	1.72E-05	2.14E-05	6.7727E-03
551481.53	4173082.31	5797.85029	13055.68958	1652.74505	13549.40052	1686.18042	12758.42462	5848.86609	7917.05181	942.17332	12858.79799	5235.22987	15518.57993	1.22476	1.24762	3.62E-04	7.55E-04	9.56E-05	6.72E-04	1.05E-04	7.97E-04	5.75E-04	1.62E-03	1.93E-04	8.79E-04	2.46E-04	7.29E-04	1.71E-05	2.11E-05	7.0694E-03
551460.65	4172770.83	4780.95786	7249.51414	2338.77302	26253.09101	3610.00789	4012.5316	4756.51752	4090.01482	1283.04786	15761.01895	17438.141	5186.75236	1.35874	1.42269	2.99E-04	4.19E-04	1.35E-04	1.30E-03	2.25E-04	2.51E-04	4.68E-04	8.38E-04	2.63E-04	1.08E-03	8.19E-04	2.44E-04	1.90E-05	2.41E-05	6.3828E-03
551574.14	4173194.3	6651.80869	10945.27117	1417.56823	8012.70269	1239.35652	19806.2015	6744.59924	6638.80695	822.74455	8258.27468	3192.67289	23020.12207	2.38002	2.44564	4.15E-04	6.33E-04	8.20E-05	3.97E-04	7.74E-05	1.24E-03	6.63E-04	1.36E-03	1.69E-04	5.65E-04	1.50E-04	1.08E-03	3.33E-05	4.14E-05	6.9048E-03
551433.65	4172890.55	5050.78759	9581.30535	2159.08244	23602.02274	2558.43068	5542.48026	5036.66438	5393.14898	1210.69709	17687.36644	11747.51381	7029.70672	1.27628	1.31746	3.15E-04	5.54E-04	1.25E-04	1.17E-03	1.60E-04	3.46E-04	4.95E-04	1.11E-03	2.48E-04	1.21E-03	5.52E-04	3.30E-04	1.79E-05	2.23E-05	6.6504E-03
551440.92	4172968.94	5510.74462	12170.47834	1898.11186	19490.81297	2111.91955	7391.19632	5517.95567	6946.81096	1078.56157	16722.64861	8398.31911	9306.25716	1.1713	1.19863	3.44E-04	7.04E-04	1.10E-04	9.66E-04	1.32E-04	4.62E-04	5.42E-04	1.42E-03	2.21E-04	1.14E-03	3.94E-04	4.37E-04	1.64E-05	2.03E-05	6.9164E-03
551939.86	4172777.05	13285.17038	6681.9477	5260.87311	14201.26797	5503.1784	3342.3834	12998.15368	4018.62837	2910.31307	12363.12223	11257.35216	4524.13303	0.34176	0.34102	8.29E-04	3.86E-04	3.04E-04	7.04E-04	3.44E-04	2.09E-04	1.28E-03	8.24E-04	5.97E-04	8.45E-04	5.29E-04	2.12E-04	4.78E-06	5.78E-06	7.0716E-03
551703.28	4173211.81	10220.68921	8372.69735	1259.02113	5510.5656	1016.11959	21039.56482	10509.3288	4776.95537	743.87172	5609.77847	2397.75715	24750.72237	3.83807	3.66725	6.38E-04	4.84E-04	7.28E-05	2.73E-04	6.35E-05	1.31E-03	1.03E-03	9.79E-04	1.52E-04	3.84E-04	1.13E-04	1.16E-03	5.37E-05	6.21E-05	6.7850E-03
551524.13	4172701.31	5724.17628	6208.93029	3069.74309	23805.8665	5348.50139	3447.67841	5676.59561	3579.04453	1675.98199	14508.25419	18506.02025	4531.79402	0.94253	0.96533	3.57E-04	3.59E-04	1.77E-04	1.18E-03	3.34E-04	2.15E-04	5.58E-04	7.34E-04	3.44E-04	9.92E-04	8.69E-04	2.13E-04	1.32E-05	1.64E-05	6.3622E-03
551837.73	4172732.83	7357.38619	3869.15206	5159.78944	17765.00316	11808.90258	1861.00303	7237.72817	2183.77539	2485.27277	12170.52417	21666.6557	2504.22637	0.48784	0.48753	4.59E-04	2.24E-04	2.98E-04	8.81E-04	7.38E-04	1.16E-04	7.11E-04	4.48E-04	5.09E-04	8.32E-04	1.02E-03	1.18E-04	6.83E-06	8.26E-06	6.3669E-03
551527.6	4173152.73	6123.07036	12175.76763	1528.20261	10029.96494	1409.06697	16604.3595	6193.03545	7387.48853	879.20695	10220.59244	3877.40564	19590.0377	1.56153	1.59202	3.82E-04	7.04E-04	8.84E-05	4.97E-04	8.80E-05	1.04E-03	6.09E-04	1.51E-03	1.80E-04	6.99E-04	1.82E-04	9.20E-04	2.18E-05	2.70E-05	6.9501E-03
551859.31	4172739.92	7576.33696	4325.29464	5907.16897	17642.29523	10713.69648	1951.25665	7412.20652	2473.23526	2897.82711	12913.58649	19570.4491	2630.88488	0.43493	0.43432	4.73E-04	2.50E-04	3.42E-04	8.75E-04	6.69E-04	1.22E-04	7.29E-04	5.07E-04	5.94E-04	8.83E-04	9.19E-04	1.24E-04	6.09E-06	7.36E-06	6.4990E-03
551659.8	4172686.34	9858.81887	4585.38806	5414.67068	13239.09594	11129.50693	2791.90244	9705.60163	2770.42534	2784.46478	9522.3504	20014.48077	3796.70145	0.61431	0.63168	6.16E-04	2.65E-04	3.13E-04	6.56E-04	6.95E-04	1.74E-04	9.54E-04	5.68E-04	5.71E-04	6.51E-04	9.40E-04	1.78E-04	8.60E-06	1.07E-05	6.6010E-03
551452.33	4172786.01	4704.02056	7410.21562	2274.79879	25729.07967	3416.60825	4130.7924	4681.04027	4174.17607	1250.72264	15745.3106	16668.57961	5321.91351	1.35512	1.41854	2.94E-04	4.28E-04	1.32E-04	1.28E-03	2.13E-04	2.58E-04	4.60E-04	8.56E-04	2.56E-04	1.08E-03	7.83E-04	2.50E-04	1.90E-05	2.40E-05	6.3251E-03
551437.7	4172959.97	5420.53572	11705.47288	1914.76796	19761.49738	2136.56141	7044.19066	5424.38638	6656.51138	1087.50713	16751.11915	8655.52293	8877.61529	1.16158	1.18923	3.38E-04	6.77E-04	1.11E-04	9.80E-04	1.33E-04	4.40E-04	5.33E-04	1.36E-03	2.23E-04	1.15E-03	4.07E-04	4.17E-04	1.63E-05	2.02E-05	6.8049E-03
551914.57	4172761.85	10854.57147	5904.58505	5989.58919	15491.8632	6702.40052	2721.26439	10567.3198	3583.88485	3202.19767	13140.92971	13374.264	3609.32915	0.36503	0.36436	6.78E-04	3.41E-04	3.46E-04	7.68E-04	4.19E-04	1.70E-04	1.04E-03	7.35E-04	6.56E-04	8.99E-04	6.28E-04	1.70E-04	5.11E-06	6.17E-06	6.8592E-03
551509.06	4173130.31	5892.57774	12395.41068	1560.57983	11117.65672	1495.94402	15080.69694	5954.93701	7446.75512	894.6708	11029.10322	4276.73253	17943.57648	1.3672	1.39158	3.68E-04	7.17E-04	9.02E-05	5.51E-04	9.34E-05	9.42E-04	5.85E-04	1.53E-03	1.83E-04	7.54E-04	2.01E-04	8.43E-04	1.91E-05	2.36E-05	6.8970E-03
551474.81	4172746.05	4872.61996	6810.29515	2409.0887	25574.6721	3832.17068	3765.40428	4845.74348	3860.1497	1319.34485	15152.44082	17594.41698	4890.67159	1.23563	1.28681	3.04E-04	3.94E-04	1.39E-04	1.27E-03	2.39E-04	2.35E-04	4.76E-04	7.91E-04	2.70E-04	1.04E-03	8.26E-04	2.30E-04	1.73E-05	2.18E-05	6.2489E-03
551557.67	4172685.77	6456.89322	5834.8207	3639.13081	20885.97176	6869.35915	3284.51864	6390.68051	3411.49103	1964.62577	13621.37991	18207.82815	4358.8326	0.77628	0.79195	4.03E-04	3.37E-04	2.10E-04	1.04E-03	4.29E-04	2.05E-04	6.28E-04	6.99E-04	4.03E-04	9.31E-04	8.55E-04	2.05E-04	1.09E-05	1.34E-05	6.3662E-03
551636.31	4173221.58	7676.61709	9108.6633	1289.24916	6336.66208	1087.90305	21372.97101	7824.20274	5382.95046	755.122	6454.91898	2654.94846	24900.0491	8.22792	8.7747	4.79E-04	5.27E-04	7.45E-05	3.14E-04	6.79E-05	1.33E-03	7.69E-04	1.10E-03	1.55E-04	4.41E-04	1.25E-04	1.17E-03	1.15E-04	1.49E-04	6.8241E-03
551965.07	4172792.14	14688.10729	6958.24932	4594.33961	12889.20112	4490.45286	3761.73371	14457.39087	4157.34525	2575.62348	11454.79909	9393.8148	5154.0709	0.31884	0.318	9.17E-04	4.02E-04	2.66E-04	6.39E-04	2.80E-04	2.35E-04	1.42E-03	8.52E-04	5.28E-04	7.83E-04	4.41E-04	2.42E-04	4.46E-06	5.39E-06	7.0170E-03
551448	4172794.42	4662.00629	7470.96927	2236.67003	25267.82086	3302.75794	4187.91263	4639.83663	4206.91778	1231.51389	15654.41959	16128.90884	5385.54569	1.33529	1.39636	2.91E-04	4.32E-04	1.29E-04	1.25E-03	2.06E-04	2.62E-04	4.56E-04	8.62E-04	2.52E-04	1.07E-03	7.58E-04	2.53E-04	1.87E-05	2.37E-05	6.2669E-03
551434.47	4172951.01	5323.80597	11229.06908	1930.10105	19978.39256	2161.82814	6717.29458	5324.50329	6368.53896	1095.30601	16718.30962	8867.37965	8472.54072	1.1507	1.17837	3.32E-04	6.49E-04	1.12E-04	9.90E-04	1.35E-04	4.20E-04	5.23E-04	1.31E-03	2.25E-04	1.14E-03	4.16E-04	3.98E-04	1.61E-05	2.00E-05	6.6852E-03
551434.05	4172860.37	4811.5971	8592.21703	2153.48234	23915.8029	2735.30213	4954.46572	4794.21609	4839.40205	1199.34285	16688.65221	13106.15088	6305.39812	1.26307	1.30747	3.00E-04	4.97E-04	1.25E-04	1.19E-03	1.71E-04	3.09E-04	4.71E-04	9.92E-04	2.46E-04	1.14E-03	6.16E-04	2.96E-04	1.77E-05	2.22E-05	6.3893E-03
551874.27	4172743.26	7862.5137	4598.13073	6043.16055	17136.34208	9638.15029	2022.94242	7667.86448	2656.62573	3022.94486	12991.67271	17701.22432	2732.96997	0.40533	0.40484	4.91E-04	2.66E-04	3.49E-04	8.49E-04	6.02E-04	1.26E-04	7.54E-04	5.45E-04	6.20E-04	8.88E-04	8.31E-04	1.28E-04	5.67E-06	6.86E-06	6.4625E-03
551583.21	4173202.84	6673.31363	10368.80769	1371.88091	7599.13176	1200.42065	19487.27935	6770.26809	6262.92332	797.33401	7771.3106	3063.77236	22663.33343	2.5869	2.66575	4.17E-04	5.99E-04	7.93E-05	3.77E-04	7.50E-05	1.22E-03	6.66E-04	1.28E-03	1.63E-04	5.31E-04	1.44E-04	1.06E-03	3.62E-05	4.52E-05	6.6981E-03
551487.45	4173099.05	5710.32791	12411.04873	1597.61117	12537.60171	1606.10277	13167.67322	5764.30927	7521.80107	912.06632	12003.18805	4856.30612	15891.56289	1.21919	1.24044	3.57E-04	7.18E-04	9.24E-05	6.21E-04	1.00E-04	8.22E-04	5.67E-04	1.54E-03	1.87E-04	8.21E-04	2.28E-04	7.46E-04	1.71E-05	2.10E-05	6.8394E-03
551430.83	4172911.82	5083.40625	9931.05914	2058.52312	21870.79472	2354.38404	5816.28414	5073.66345	5598.8002	1160.41385	17169.46123	10461.24805	7361.62973	1.1954	1.22904	3.17E-04	5.74E-04	1.19E-04	1.08E-03	1.47E-04	3.63E-04	4.99E-04	1.15E-03	2.38E-04	1.17E-03	4.91E-04	3.46E-04	1.67E-05	2.08E-05	6.5380E-03
551546.45	4173176.22	6222.65924	11396.98894	1457.19014	8859.8113	1306.1526	17429.87915	6299.2234	6939.33739	841.75842	9120.81537	3479.08419	20422.37041	1.78124	1.8191	3.89E-04	6.59E-04	8.42E-05	4.39E-04	8.16E-05	1.09E-03	6.19E-04	1.42E-03	1.73E-04	6.24E-04	1.63E-04	9.59E-04	2.49E-05	3.08E-05	6.7573E-03
551974.56	4172799.99	15058.22563	7053.09209	4356.12058	12415.15547	4143.48368	3938.48001	14845.68691	4214.34322	2458.18549	11135.31742	8748.55701	5387.03703	0.31165	0.31077	9.40E-04	4.08E-04	2.52E-04	6.15E-04	2.59E-04	2.46E-04	1.46E-03	8.64E-04	5.04E-04	7.61E-04	4.11E-04	2.53E-04	4.36E-06	5.27E-06	6.9821E-03
551514.49	4172704.15	5452.88763	6154.69006	2859.34221	23445.91664	4855.81663	3427.22755	5410.98638	3537.61248	1564.05624	14209.90618	17729.36816	4493.23954	0.9474	0.97154	3.40E-04	3.56E-04	1.65E-04	1.16E-03	3.03E-04	2.14E-04	5.32E-04	7.25E-04	3.21E-04	9.72E-04	8.33E-04	2.11E-04	1.33E-05	1.65E-05	6.1640E-03
551626.93	4172681.43	8533.30395	4959.39648	4916.21508	14489.27582	10124.5336	2952.29594	8415.93528	2982.3455	2585.50145	10754.90493	18424.39583	3985.71486	0.59773	0.61183	5.33E-04	2.87E-04	2.84E-04	7.18E-04	6.32E-04	1.84E-04	8.27E-04	6.11E-04	5.30E-04	7.35E-04	8.65E-04	1.87E-04	8.36E-06	1.04E-05	6.4140E-03
551512.15	4173138.9	5891.55635	12017.65421	1529.07257	10592.70323	1448.57581	15021.66047	5954.87758	7240.00825	877.20316	10604.88813	4095.01195	17840.10444	1.3784	1.40318	3.68E-04	6.95E-04	8.84E-05	5.25E-04	9.05E-05	9.38E-04	5.85E-04	1.48E-03	1.80E-04	7.25E-04	1.92E-04	8.38E-04	1.93E-05	2.38E-05	6.7526E-03
551530.69	4173161.32	6034.55929	11640.36551	1484.52335	9549.38052	1363.65206	16210.54672	6104.15223	7065.69681	854.7798	9720.41214	3722.52787	19111.02818	1.55586	1.58624	3.77E-04	6.73E-04	8.58E-05	4.73E-04	8.52E-05	1.01E-03	6.00E-04	1.45E-03	1.75E-04	6.65E-04	1.75E-04	8.98E-04	2.18E-05	2.69E-05	6.7160E-03
551443.68	4172802.82	4613.97047	7499.77737	2192.57114	24640.15604	3178.80325	4233.83566	4592.68427	4223.46977	1209.10946	15480.79655	15478.3999	5434.53484	1.30097	1.35831	2.88E-04	4.34E-04	1.27E-04	1.22E-03	1.99E-04	2.64E-04	4.51E-04	8.66E-04	2.48E-04	1.06E-03	7.27E-04	2.55E-04	1.82E-05	2.30E-05	6.1799E-03
551431.24	4172942.04	5218.77508	10744.0576	1941.70175	20118.86464	2186.66122	6405.60464	5216.6416	6082.88973	1100.60884	16608.32884	9050.99485	8085.25558	1.13789	1.16636	3.26E-04	6.21E-04	1.12E-04	9.97E-04	1.37E-04	4.00E-04	5.13E-04	1.25E-03	2.26E-04	1.14E-03	4.25E-04	3.80E-04	1.59E-05	1.98E-05	6.5547E-03
551929.32	4172764.95	11402.93759	6140.62757	5516.85548	14471.30403	5982.04882	2896.18805	11123.1115	3683.84102	2994.05174	12522.27737	12081.25356	3934.1035	0.34832	0.34775	7.12E-04	3.55E-04	3.19E-04	7.17E-04	3.74E-04	1.81E-04	1.09E-03	7.55E-04	6.14E-04	8.56E-04	5.67E-04	1.85E-04	4.87E-06	5.89E-06	6.7393E-03
551954.55	4172780.08	13325.51094	6638.95263	4807.05191	13318.98528	4935.02868	3450.26205	13065.14636	3982.66206	2671.03589	11649.28904	10205.9592	4667.86309	0.32615	0.32542	8.32E-04	3.84E-04	2.78E-04	6.60E-04	3.08E-04	2.15E-04	1.28E-03	8.16E-04	5.48E-04	7.97E-04	4.79E-04	2.19E-04	4.56E-06	5.51E-06	6.8311E-03
551889.16	4172746.53	8544.11023	4954.02212	6059.37486	16539.68293	8378.67209	2164.06499	8316.8196	2895.79224	3097.5772	12997.96394	15580.23814	2931.61426	0.38523	0.38501	5.33E-04	2.86E-04	3.50E-04	8.20E-04	5.23E-04	1.35E-04	8.18E-04	5.94E-04	6.35E-04	8.89E-04	7.32E-04	1.38E-04	5.39E-06	6.52E-06	6.4648E-03
551430.42	4172881.59	4862.11395	8961.16446	2098.2357	22697.16516	2532.94926	5221.13426	4847.6295	5052.34954	1174.14413	16728.09677	11650.60027	6625.8158	1.2068	1.24639	3.04E-04	5.18E-04	1.21E-04	1.13E-03	1.58E-04	3.26E-04	4.77E-04	1.04E-03	2.41E-04	1.14E-03	5.47E-04	3.11E-04	1.69E-05	2.11E-05	6.3455E-03
551490.41	4173107.42	5661.14777	12074.86425	1568.66716	12048.41321	1565.74358	13284.5445	5716.1166	7318.65939	896.24557	11579.95409	4676.51082	15977.31717	1.21608	1.23692	3.53E-04	6.98E-04	9.07E-05	5.97E-04	9.78E-05	8.30E-04	5.62E-04	1.50E-03	1.84E-04	7.92E-04	2.20E-04	7.50E-04	1.70E-05	2.10E-05	6.7127E-03
551647.27	4172681.96	9184.29162	4639.00086	5122.42841	13143.78466	10470.84805	2811.49848	9048.83161	2800.24604	2659.38537	9725.66052	18637.95448	3812.33851	0.57763	0.59274	5.73E-04	2.68E-04	2.96E-04	6.52E-04	6.54E-04	1.76E-04	8.89E-04	5.74E-04	5.45E-04	6.65E-04	8.75E-04	1.79E-04	8.08E-06	1.00E-05	6.3652E-03
551725.04	4173208.86	10838.62271	7801.07971	1211.09144	5173.88517	974.45051	19306.86458	11179.75969	4420.99179	716.47567	5240.94745	2289.31084	22721.92659	2.4036	2.32247	6.77E-04	4.51E-04	7.00E-05	2.56E-04	6.09E-05	1.21E-03	1.10E-03	9.06E-04	1.47E-04	3.58E-04	1.08E-04	1.07E-03	3.36E-05	3.94E-05	6.4791E-03
551673.01	4172684.76	10017.53384	4295.99072	5185.77167	12514.26611	10355.57099	2646.63149	9859.06441	2591.73226	2650.24232	8721.32588	19179.81968	3604.96662	0.59215	0.60901	6.25E-04	2.48E-04	3.00E-04	6.20E-04	6.47E-04	1.65E-04	9.69E-04	5.31E-04	5.43E-04	5.96E-04	9.01E-04	1.69E-04	8.29E-06	1.03E-05	6.3349E-03
551817.89	4172722.56	7463.33608	3461.83923	4096.00944	17015.59658	11602.85311	1807.0699	7367.40222	1954.35737	1998.149	10847.06976	21544.57063	2429.25155	0.52932	0.53029	4.66E-04	2.00E-04	2.37E-04	8.43E-04	7.25E-04	1.13E-04	7.24E-04	4.01E-04	4.10E-04	7.42E-04	1.01E-03	1.14E-04	7.41E-06	8.99E-06	6.0025E-03
551451.02	4173026.03	5468.10641	12445.67401	1665.03838	15558.48063	1826.76376	8983.76181	5497.15332	7379.43876	945.2185	13826.94172	6395.27336	11191.96539	1.0815	1.10261	3.41E-04	7.20E-04	9.63E-05	7.71E-04	1.14E-04	5.61E-04	5.40E-04	1.51E-03	1.94E-04	9.46E-04	3.00E-04	5.26E-04	1.51E-05	1.87E-05	6.6558E-03
551427.61	4172902.85	4934.87256	9395.15517	2035.27029	21530.50199	2361.98498	5523.48718	4923.86603	5298.92482	1144.75398	16610.24392	10421.62217	6995.47343	1.16314	1.19683	3.08E-04	5.43E-04	1.18E-04	1.07E-03	1.48E-04	3.45E-04	4.84E-04	1.09E-03	2.35E-04	1.14E-03	4.89E-04	3.29E-04	1.63E-05	2.03E-05	6.3240E-03
551457.46	4173043.93	5501.30445	12478.68617	1637.93494	14706.69569	1772.87726	9772.26	5536.89586	7443.94155	929.86059	13272.81242	5955.58385	12100.93267	1.09102	1.11156	3.43E-04	7.21E-04	9.47E-05	7.29E-04	1.11E-04	6.10E-04	5.44E-04	1.53E-03	1.91E-04	9.08E-04	2.80E-04	5.68E-04	1.53E-05	1.88E-05	6.6603E-03
551454.24	4173034.98	5481.37212	12467.09742	1648.98123	15112.48317	1799.16104	9363.92674	5513.83379	7421.51107	935.98418	13525.73483	6178.78046	11632.7601	1.08408	1.1053	3.42E-04	7.21E-04	9.53E-05	7.49E-04	1.12E-04	5.85E-04	5.42E-04	1.52E-03	1.92E-04	9.25E-04	2.90E-04	5.46E-04	1.52E-05	1.87E-05	6.6552E-03
551465.4	4172752.27	4684.40326	6724.21852	2281.87632	24359.1625	3576.1706	3746.51343	4660.10955	3806.91027	1250.67511	14649.64205	16424.56408	4855.85284	1.19338	1.2439	2.92E-04	3.89E-04	1.32E-04	1.21E-03	2.23E-04	2.34E-04	4.58E-04	7.80E-04	2.56E-04	1.00E-03	7.71E-04	2.28E-04	1.67E-05	2.11E-05	6.0119E-03
551447.79	4173017.07	5437.48043	12335.89941	1677.95808	15974.57811	1851.01787	8592.08891	5463.05311	7278.48613	952.73247	14074.51876	6618.2809	10730.73235	1.07586	1.09735	3.39E-04	7.13E-04	9.70E-05	7.92E-04	1.16E-04	5.37E-04	5.37E-04	1.49E-03	1.95E-04	9.62E-04	3.11E-04	5.04E-04	1.51E-05	1.86E-05	6.6290E-03
551515.24	4173147.48	5827.88176	11606.04334	1494.20782	10100.67666	1403.56233	14861.80225	5891.26293	7006.40684	857.83181	10162.24093	3928.71649	17622.46967	1.38285	1.40787	3.64E-04	6.71E-04	8.64E-05	5.01E-04	8.77E-05	9.28E-04	5.79E-04	1.44E-03	1.76E-04	6.95E-04	1.85E-04	8.28E-04	1.93E-05	2.39E-05	6.5793E-03
551592.28	4173211.39	6609.16468	9780.39093	1325.24723	7186.67101	1159.49642	18963.36863	6709.61772	5882.43173	771.15983	7303.27959	2933.94071	22075.65297	2.85578	2.94866	4.13E-04	5.65E-04	7.66E-05	3.56E-04	7.24E-05	1.18E-03	6.60E-04	1.21E-03	1.58E-04	4.99E-04	1.38E-04	1.04E-03	4.00E-05	5.00E-05	6.4552E-03
551444.57	4173008.12	5400.69419	12172.92069	1692.20448	16386.80291	1874.94846	8215.34306	5422.66789	7140.2785	961.12716	14310.71652	6840.27213	10282.29606	1.07028	1.09241	3.37E-04	7.04E-04	9.78E-05	8.12E-04	1.17E-04	5.13E-04	5.33E-04	1.46E-03	1.97E-04	9.79E-04	3.21E-04	4.83E-04	1.50E-05	1.85E-05	6.5913E-03
551428.02	4172933.08	5088.35809	10209.97097	1938.8612	20042.95457	2176.81137	6082.87515	5083.95375	5776.26508	1097.50253	16319.55442	9178.57221	7683.16759	1.1156	1.1442	3.18E-04	5.90E-04	1.12E-04	9.94E-04	1.36E-04	3.80E-04	5.00E-04	1.18E-03	2.25E-04	1.12E-03	4.31E-04	3.61E-04	1.56E-05	1.94E-05	6.3812E-03
551493.61	4173116.48	5604.21866	11902.33235	1536.25832	11532.0362	1522.00968	13338.95981	5659.89374	7098.07598	878.50054	11125.43589	4489.34012	15991.09476	1.21253	1.23298	3.50E-04	6.88E-04	8.88E-05	5.72E-04	9.51E-05	8.33E-04	5.56E-04	1.45E-03	1.80E-04	7.61E-04	2.11E-04	7.51E-04	1.70E-05	2.09E-05	6.5787E-03
551772.98	4172714.29	9484.54022	3337.87004	3320.62417	16404.56866	10133.74152	1970.04483	9360.12721	1924.39274	1721.68479	9198.75858	21024.48152	2665.38571	0.65343	0.66091	5.92E-04	1.93E-04	1.92E-04	8.13E-04	6.33E-04	1.23E-04	9.20E-04	3.94E-04	3.53E-04	6.29E-04	9.87E-04	1.25E-04	9.14E-06	1.12E-05	5.9758E-03
551903.99	4172749.72	9128.98632	5215.50625	5872.4114	15680.0155	7316.12988	2297.87141	8883.55237	3080.17135	3060.28971	12762.88613	14129.40517	3115.85976	0.36726	0.36699	5.70E-04	3.02E-04	3.40E-04	7.77E-04	4.57E-04	1.44E-04	8.73E-04	6.31E-04	6.27E-04	8.73E-04	6.64E-04	1.46E-04	5.14E-06	6.22E-06	6.4148E-03
551944.03	4172768.01	12009.64058	6231.89346	5005.11107	13619.21744	5356.34422	3095.78995	11748.14795	3744.40252	2752.23212	11805.5698	10934.94347	4188.62743	0.33221	0.33162	7.50E-04	3.60E-04	2.89E-04	6.75E-04	3.35E-04	1.93E-04	1.15E-03	7.68E-04	5.64E-04	8.07E-04	5.14E-04	1.97E-04	4.65E-06	5.62E-06	6.6169E-03
551589.63	4172675.63	7158.25251	5298.05965	4102.90523	16993.47757	8139.47632	3065.01743	7073.94828	3141.36161	2194.79345	11970.22513	17238.67214	4100.55833	0.63513	0.64721	4.47E-04	3.06E-04	2.37E-04	8.42E-04	5.08E-04	1.91E-04	6.95E-04	6.44E-04	4.50E-04	8.19E-04	8.10E-04	1.93E-04	8.89E-06	1.10E-05	6.1625E-03
551441.34	4172999.17	5355.99817	11953.61987	1707.61603	16785.36005	1898.2653	7852.57935	5374.36875	6967.64286	970.17057	14524.06423	7060.80159	9845.82364	1.06462	1.08702	3.34E-04	6.91E-04	9.87E-05	8.32E-04	1.19E-04	4.90E-04	5.28E-04	1.43E-03	1.99E-04	9.93E-04	3.32E-04	4.62E-04	1.49E-05	1.84E-05	6.5413E-03
551430.64	4172839.5	4590.67254	7861.84823	2093.49106	23178.72118	2805.75272	4550.44524	4572.45705	4432.31974	1161.62015	15489.4611	13445.16998	5802.46046	1.21342	1.25848	2.87E-04	4.55E-04	1.21E-04	1.15E-03	1.75E-04	2.84E-04	4.49E-04	9.09E-04	2.38E-04	1.06E-03	6.32E-04	2.73E-04	1.70E-05	2.13E-05	6.0683E-03
551973.66	4172788.19	13847.06048	6663.31357	4316.05893	12295.35101	4264.59649	3650.12945	13635.63882	3978.09937	2418.33968	10901.31917	8940.24999	4991.46	0.3084	0.30766	8.65E-04	3.85E-04	2.50E-04	6.09E-04	2.66E-04	2.28E-04	1.34E-03	8.15E-04	4.96E-04	7.45E-04	4.20E-04	2.34E-04	4.32E-06	5.21E-06	6.6640E-03
551503.95	4172707.71	5177.94055	6085.77599	2651.07971	22897.71317	4392.71091	3402.13167	5141.58197	3488.49209	1451.86462	13847.22483	16841.54081	4448.72469	0.94833	0.9742	3.23E-04	3.52E-04	1.53E-04	1.14E-03	2.74E-04	2.12E-04	5.05E-04	7.15E-04	2.98E-04	9.47E-04	7.91E-04	2.09E-04	1.33E-05	1.65E-05	5.9450E-03
551533.78	4173169.91	5946.61761	11122.2535	1441.60943	9092.04869	1319.16014	15772.84752	6015.84671	6752.1875	830.67439	9247.76377	3573.87032	18586.24037	1.55122	1.5816	3.71E-04	6.43E-04	8.33E-05	4.51E-04	8.24E-05	9.85E-04	5.91E-04	1.38E-03	1.70E-04	6.32E-04	1.68E-04	8.73E-04	2.17E-05	2.68E-05	6.4833E-03
551477.82	4172732.5	4790.86519	6406.47824	2360.95101	23738.99196	3767.84456	3572.52432	4763.83037	3642.50931	1293.19303	14210.60433	16478.70736	4645.51148	1.09492	1.1352	2.99E-04	3.70E-04	1.36E-04	1.18E-03	2.35E-04	2.23E-04	4.68E-04	7.47E-04	2.65E-04	9.72E-04	7.74E-04	2.18E-04	1.53E-05	1.92E-05	5.9197E-03
551466.33	4173068.85	5467.3237	12083.01531	1593.97774	13426.73819	1675.21369	10740.71511	5510.58558	7224.08076	906.88709	12498.32026	5378.84001	13159.03805	1.0973	1.1178	3.41E-04	6.99E-04	9.22E-05	6.66E-04	1.05E-04	6.71E-04	5.42E-04	1.48E-03	1.86E-04	8.55E-04	2.53E-04	6.18E-04	1.54E-05	1.89E-05	6.5412E-03
551657.13	4172680.91	9349.68824	4425.13116	5043.8685	12416.18384	10134.35994	2708.63684	9208.95413	2671.93565	2604.83158	9089.27598	18169.28735	3678.89248	0.5571	0.572	5.84E-04	2.56E-04	2.92E-04	6.15E-04	6.33E-04	1.69E-04	9.05E-04	5.48E-04	5.34E-04	6.22E-04	8.53E-04	1.73E-04	7.80E-06	9.69E-06	6.2009E-03
551579.41	4172674.79	6817.17829	5355.01649	3869.88068	17608.59263	7542.13202	3079.93584	6740.52651	3161.78836	2076.09834	12169.95021	16931.00474	4110.07352	0.64896	0.66096	4.26E-04	3.10E-04	2.24E-04	8.73E-04	4.71E-04	1.92E-04	6.63E-04	6.48E-04	4.26E-04	8.32E-04	7.95E-04	1.93E-04	9.08E-06	1.12E-05	6.0723E-03
551438.12	4172990.22	5299.85581	11673.35521	1722.49617	16857.29682	1920.1087	7499.81456	5314.72835	6762.88207	978.84063	14691.40623	7282.33391	9417.44317	1.05772	1.08034	3.31E-04	6.75E-04	9.96E-05	8.36E-04	1.20E-04	4.68E-04	5.22E-04	1.39E-03	2.01E-04	1.00E-03	3.42E-04	4.42E-04	1.48E-05	1.83E-05	6.4608E-03
551469.29	4173077.22	5449.14551	11898.33958	1574.13726	13011.86212	1640.16844	11215.49903	5494.4257	7214.39647	896.10523	12164.03199	5189.88996	13457.57868	1.09744	1.11634	3.40E-04	6.88E-04	9.10E-05	6.45E-04	1.02E-04	7.00E-04	5.40E-04	1.48E-03	1.84E-04	8.32E-04	2.44E-04	6.32E-04	1.54E-05	1.89E-05	6.5116E-03
551496.7	4173125.06	5572.30589	11592.07917	1508.72636	11060.21576	1479.10548	13378.74221	5628.54388	6924.78754	863.39908	10742.68301	4309.34112	15999.06741	1.21718	1.2376	3.48E-04	6.70E-04	8.72E-05	5.48E-04	9.24E-05	8.36E-04	5.53E-04	1.42E-03	1.77E-04	7.35E-04	2.02E-04	7.51E-04	1.70E-05	2.10E-05	6.4577E-03
551568.15	4172675.45	6499.1789	5440.9176	3649.68792	18417.85653	6971.26328	3109.42413	6429.70106	3197.81976	1963.53401	12442.69525	16799.0257	4137.6244	0.67484	0.68731	4.06E-04	3.15E-04	2.11E-04	9.13E-04	4.35E-04	1.94E-04	6.32E-04	6.55E-04	4.02E-04	8.51E-04	7.89E-04	1.94E-04	9.44E-06	1.16E-05	6.0193E-03
551551.03	4173187.73	6098.0157	10646.58362	1395.22599	8279.94275	1246.80631	16638.75162	6174.35339	6472.97467	807.54452	8501.01827	3291.44995	19490.63067	1.78233	1.82066	3.81E-04	6.16E-04	8.07E-05	4.10E-04	7.79E-05	1.04E-03	6.07E-04	1.33E-03	1.66E-04	5.81E-04	1.55E-04	9.15E-04	2.49E-05	3.09E-05	6.4109E-03
551636.74	4172677.85	8621.62114	4669.33202	4829.42016	13194.06526	9793.0372	2818.27727	8500.45591	2813.27362	2526.26555	9867.32886	17547.35727	3811.31496	0.55183	0.56488	5.38E-04	2.70E-04	2.79E-04	6.54E-04	6.12E-04	1.76E-04	8.36E-04	5.77E-04	5.18E-04	6.75E-04	8.24E-04	1.79E-04	7.72E-06	9.57E-06	6.1545E-03
551716.94	4173214.4	10245.89272	7722.89255	1201.03982	5175.85832	971.67862	18528.0333	10550.9328	4388.95358	709.82977	5237.73352	2287.04003	21878.10189	2.874	2.76125	6.40E-04	4.46E-04	6.94E-05	2.57E-04	6.07E-05	1.16E-03	1.04E-03	9.00E-04	1.45E-04	3.58E-04	1.07E-04	1.03E-03	4.02E-05	4.68E-05	6.2926E-03
551427.2	4172872.62	4696.29779	8426.30094	2042.04701	21917.08372	2515.79432	4941.31998	4681.52344	4756.37253	1140.45723	15860.32438	11582.20137	6274.87142	1.14952	1.18666	2.93E-04	4.87E-04	1.18E-04	1.09E-03	1.57E-04	3.09E-04	4.60E-04	9.75E-04	2.34E-04	1.08E-03	5.44E-04	2.95E-04	1.61E-05	2.01E-05	6.0790E-03
551521.35	4172691.88	5467.19365	5834.56832	2885.21757	21611.09176	4978.74544	3278.00116	5422.3706	3366.93372	1575.21393	13384.09931	16711.71929	4306.51879	0.84404	0.86332	3.41E-04	3.37E-04	1.67E-04	1.07E-03	3.11E-04	2.05E-04	5.33E-04	6.90E-04	3.23E-04	9.15E-04	7.85E-04	2.02E-04	1.18E-05	1.46E-05	5.9074E-03
551434.89	4172981.27	5240.66069	11362.27841	1740.19402	17180.07368	1943.05556	7170.03117	5252.09433	6545.4699	988.9902	14845.01376	7499.13716	9014.57601	1.05197	1.07478	3.27E-04	6.57E-04	1.01E-04	8.52E-04	1.21E-04	4.48E-04	5.16E-04	1.34E-03	2.03E-04	1.02E-03	3.52E-04	4.23E-04	1.47E-05	1.82E-05	6.3899E-03
551424.79	4172924.11	4956.30786	9694.49001	1931.45315	19907.12514	2185.19745	5780.61542	4949.95533	5482.93991	1091.4267	15972.01162	9313.58693	7306.16642	1.09303	1.12151	3.09E-04	5.60E-04	1.12E-04	9.87E-04	1.36E-04	3.61E-04	4.87E-04	1.12E-03	2.24E-04	1.09E-03	4.37E-04	3.43E-04	1.53E-05	1.90E-05	6.2072E-03
551918.78	4172752.86	9680.41473	5434.14095	5575.20846	14818.54965	6423.8933	2449.00466	9427.8351	3238.17777	2956.59285	12391.15841	12822.0323	3320.61239	0.35122	0.35101	6.04E-04	3.14E-04	3.22E-04	7.35E-04	4.01E-04	1.53E-04	9.27E-04	6.64E-04	6.06E-04	8.47E-04	6.02E-04	1.56E-04	4.91E-06	5.95E-06	6.3426E-03
551557.34	4172675.93	6209.69049	5497.3166	3443.58783	19074.04001	6443.34211	3127.41171	6146.50259	3217.19972	1857.61926	12614.28756	16650.35802	4149.83454	0.7008	0.71398	3.88E-04	3.18E-04	1.99E-04	9.45E-04	4.02E-04	1.95E-04	6.04E-04	6.59E-04	3.81E-04	8.63E-04	7.82E-04	1.95E-04	9.81E-06	1.21E-05	5.9538E-03
551431.66	4172972.27	5181.87629	11037.45155	1762.12808	17523.14579	1968.86322	6866.94956	5189.80327	6326.62283	1001.19038	14996.8596	7710.39706	8642.70887	1.0477	1.07084	3.24E-04	6.38E-04	1.02E-04	8.69E-04	1.23E-04	4.29E-04	5.10E-04	1.30E-03	2.05E-04	1.03E-03	3.62E-04	4.06E-04	1.47E-05	1.81E-05	6.3226E-03
551495.46	4172711.26	5002.70044	6072.30703	2523.39535	22681.90199	4122.62913	3400.04504	4969.8239	3473.08559	1382.36131	13689.99814	16378.99775	4438.04476	0.96332	0.99154	3.12E-04	3.51E-04	1.46E-04	1.12E-03	2.57E-04	2.12E-04	4.89E-04	7.12E-04	2.83E-04	9.36E-04	7.69E-04	2.08E-04	1.35E-05	1.68E-05	5.8315E-03
551962.65	4172775.55	12581.41759	6356.77227	4510.68727	12701.35803	4680.65288	3343.47516	12343.36837	3808.8656	2505.3093	11081.7547	9700.91185	4518.47613	0.31526	0.31463	7.86E-04	3.68E-04	2.61E-04	6.30E-04	2.92E-04	2.09E-04	1.21E-03	7.81E-04	5.14E-04	7.58E-04	4.56E-04	2.12E-04	4.41E-06	5.33E-06	6.4876E-03
551518.33	4173156.07	5748.21688	11146.43861	1454.40741	9644.67885	1361.4988	14573.36562	5811.3238	6734.69087	835.71769	9694.03579	3779.03002	17264.38226	1.37537	1.40014	3.59E-04	6.44E-04	8.41E-05	4.78E-04	8.50E-05	9.10E-04	5.71E-04	1.38E-03	1.71E-04	6.63E-04	1.77E-04	8.11E-04	1.92E-05	2.37E-05	6.3780E-03
551834.05	4172723.51	6801.86376	3503.65161	4336.60986	16501.06934	10841.29338	1752.54116	6704.60509	1976.5709	2102.55019	10947.90221	20180.93154	2353.52979	0.48903	0.48952	4.25E-04	2.03E-04	2.51E-04	8.18E-04	6.77E-04	1.09E-04	6.59E-04	4.05E-04	4.31E-04	7.49E-04	9.48E-04	1.11E-04	6.84E-06	8.30E-06	5.7999E-03
551475.21	4173093.96	5410.08448	11503.13058	1533.29842	12218.65572	1567.31735	11673.21676	5458.49289	6947.55655	873.98899	11507.46923	4821.03944	14157.97738	1.10334	1.12181	3.38E-04	6.65E-04	8.86E-05	6.06E-04	9.79E-05	7.29E-04	5.37E-04	1.42E-03	1.79E-04	7.87E-04	2.26E-04	6.65E-04	1.54E-05	1.90E-05	6.3767E-03
551863.63	4172731.06	6769.80853	3961.57367	5164.22253	16316.22095	9746.43758	1818.66706	6631.37484	2257.78176	2538.57472	11760.18209	18209.07847	2448.57852	0.4228	0.42261	4.23E-04	2.29E-04	2.99E-04	8.09E-04	6.09E-04	1.14E-04	6.52E-04	4.63E-04	5.20E-04	8.04E-04	8.55E-04	1.15E-04	5.92E-06	7.16E-06	5.9040E-03
551424.38	4172893.89	4757.75161	8811.56158	1987.29718	20831.1488	2342.28996	5210.76381	4746.08431	4976.21292	1115.45505	15829.77137	10365.86619	6602.76629	1.11133	1.14475	2.97E-04	5.09E-04	1.15E-04	1.03E-03	1.46E-04	3.25E-04	4.67E-04	1.02E-03	2.29E-04	1.08E-03	4.87E-04	3.10E-04	1.56E-05	1.94E-05	6.0554E-03
551499.79	4173133.65	5534.61766	11269.73316	1479.99874	10581.73384	1436.55755	13354.43286	5591.22391	6746.71192	847.5788	10358.44343	4137.55024	15937.27701	1.22157	1.24199	3.46E-04	6.52E-04	8.56E-05	5.25E-04	8.97E-05	8.34E-04	5.50E-04	1.38E-03	1.74E-04	7.08E-04	1.94E-04	7.49E-04	1.71E-05	2.10E-05	6.3267E-03
551428.43	4172963.31	5101.77742	10649.36037	1777.07037	17747.36665	1990.39691	6559.48015	5106.63616	6081.19222	1009.24853	15030.69282	7899.93049	8263.38441	1.03852	1.06209	3.19E-04	6.16E-04	1.03E-04	8.80E-04	1.24E-04	4.10E-04	5.02E-04	1.25E-03	2.07E-04	1.03E-03	3.71E-04	3.88E-04	1.45E-05	1.80E-05	6.2256E-03
551452.97	4172764.65	4491.2152	6699.17062	2152.88551	23103.4301	3298.23432	3771.9156	4469.46512	3786.76244	1181.69109	14191.35118	15163.73854	4872.16457	1.1541	1.20346	2.80E-04	3.87E-04	1.24E-04	1.15E-03	2.06E-04	2.36E-04	4.39E-04	7.76E-04	2.42E-04	9.70E-04	7.12E-04	2.29E-04	1.61E-05	2.04E-05	5.7848E-03
551545.57	4172676.99	5890.5603	5517.28279	3208.81491	19488.56755	5846.8332	3131.62543	5834.19699	3215.06536	1736.86853	12639.01185	16291.35184	4142.20801	0.72195	0.73583	3.68E-04	3.19E-04	1.86E-04	9.66E-04	3.65E-04	1.96E-04	5.73E-04	6.59E-04	3.56E-04	8.64E-04	7.65E-04	1.95E-04	1.01E-05	1.25E-05	5.8342E-03
551429.66	4172828.01	4461.3216	7464.63486	2045.30832	22364.02465	2802.18461	4330.69988	4443.08479	4211.80586	1133.20628	14743.96046	13292.35129	5528.93924	1.16254	1.2065	2.79E-04	4.32E-04	1.18E-04	1.11E-03	1.75E-04	2.70E-04	4.37E-04	8.63E-04	2.32E-04	1.01E-03	6.24E-04	2.60E-04	1.63E-05	2.04E-05	5.8438E-03
551878.56	4172734.36	7098.27749	4244.29396	5386.3548	15994.90891	8928.71031	1899.02959	6931.18912	2448.34366	2695.14031	11971.04265	16566.59866	2560.61949	0.3907	0.39038	4.43E-04	2.45E-04	3.11E-04	7.93E-04	5.58E-04	1.19E-04	6.81E-04	5.02E-04	5.52E-04	8.19E-04	7.78E-04	1.20E-04	5.47E-06	6.62E-06	5.9338E-03
551622.14	4173227.33	6915.77288	8716.65113	1245.82166	6309.61703	1073.36334	18621.57799	7037.05798	5179.27891	727.70647	6377.17848	2649.27818	21736.18695	4.84135	5.06075	4.32E-04	5.04E-04	7.20E-05	3.13E-04	6.70E-05	1.16E-03	6.92E-04	1.06E-03	1.49E-04	4.36E-04	1.24E-04	1.02E-03	6.77E-05	8.58E-05	6.1881E-03
551933.52	4172755.95	10128.05736	5590.18663	5188.97856	13949.87201	5774.15258	2654.96009	9878.34415	3390.6498	2795.67553	11868.71436	11661.02566	3515.72965	0.33718	0.33669	6.32E-04	3.23E-04	3.00E-04	6.91E-04	3.61E-04	1.66E-04	9.71E-04	6.95E-04	5.73E-04	8.12E-04	5.48E-04	1.65E-04	4.72E-06	5.71E-06	6.2475E-03
551446.9	4172775.46	4433.63857	6783.70339	2109.90781	22747.63259	3177.07724	3840.77651	4412.81581	3831.38558	1159.68792	14145.79717	14692.43396	4949.4112	1.15174	1.20095	2.77E-04	3.92E-04	1.22E-04	1.13E-03	1.98E-04	2.40E-04	4.34E-04	7.85E-04	2.38E-04	9.67E-04	6.90E-04	2.32E-04	1.61E-05	2.04E-05	5.7401E-03
551537.33	4173179.94	5849.30969	10557.96601	1394.56794	8579.81558	1267.33498	15264.32149	5918.24848	6411.23991	804.1748	8742.41263	3403.94415	17973.20261	1.55344	1.58396	3.65E-04	6.10E-04	8.06E-05	4.25E-04	7.92E-05	9.53E-04	5.82E-04	1.31E-03	1.65E-04	5.98E-04	1.60E-04	8.44E-04	2.17E-05	2.68E-05	6.2253E-03
551468.16	4172738.88	4594.39284	6331.18009	2226.78208	22703.45291	3502.34033	3554.74035	4570.32938	3594.99083	1220.45987	13759.31273	15437.8918	4613.26535	1.06619	1.107	2.87E-04	3.66E-04	1.29E-04	1.13E-03	2.19E-04	2.22E-04	4.49E-04	7.37E-04	2.50E-04	9.41E-04	7.25E-04	2.17E-04	1.49E-05	1.88E-05	5.7005E-03
551782.09	4172711.34	8684.98841	3210.99339	3157.3612	15802.02183	9789.6449	1875.69267	8577.65461	1844.13948	1628.42283	9020.8852	19981.14643	2531.25638	0.60982	0.61619	5.42E-04	1.86E-04	1.83E-04	7.83E-04	6.11E-04	1.17E-04	8.43E-04	3.78E-04	3.34E-04	6.17E-04	9.38E-04	1.19E-04	8.53E-06	1.04E-05	5.6705E-03
551708.84	4173219.94	9681.00693	7632.47019	1188.9772	5173.96699	967.77495	17808.95379	9953.82575	4352.86406	701.94523	5230.23234	2283.15653	21081.44089	3.56256	3.40112	6.04E-04	4.41E-04	6.87E-05	2.56E-04	6.04E-05	1.11E-03	9.78E-04	8.92E-04	1.44E-04	3.58E-04	1.07E-04	9.90E-04	4.98E-05	5.76E-05	6.1208E-03
551425.2	4172954.34	5012.74194	10240.31965	1789.65755	17912.3072	2011.41794	6264.40422	5014.71798	5831.32166	1015.64634	15000.72376	8050.0463	7898.09796	1.02766	1.05136	3.13E-04	5.92E-04	1.03E-04	8.88E-04	1.26E-04	3.91E-04	4.93E-04	1.20E-03	2.08E-04	1.03E-03	3.78E-04	3.71E-04	1.44E-05	1.78E-05	6.1168E-03
551421.57	4172915.15	4806.08817	9160.41576	1908.83022	19567.44367	2181.57952	5475.13312	4798.32174	5180.23272	1076.63104	15471.77536	9409.21808	6925.75983	1.06127	1.0893	3.00E-04	5.30E-04	1.10E-04	9.70E-04	1.36E-04	3.42E-04	4.72E-04	1.06E-03	2.21E-04	1.06E-03	4.42E-04	3.25E-04	1.48E-05	1.85E-05	6.0010E-03
551951.63	4172762.91	11335.31514	5965.43623	4681.41911	12981.59099	5072.91723	3002.13435	11095.99284	3580.66021	2573.97841	11211.52059	10380.76646	4056.42602	0.32092	0.32042	7.08E-04	3.45E-04	2.71E-04	6.43E-04	3.17E-04	1.88E-04	1.09E-03	7.34E-04	5.28E-04	7.67E-04	4.88E-04	1.91E-04	4.49E-06	5.43E-06	6.2781E-03
551424.71	4172863.54	4556.19918	7987.43781	1994.66528	21284.01488	2509.45998	4705.25507	4541.1346	4510.59251	1112.07905	15123.59101	11554.41895	5980.85441	1.10751	1.14267	2.84E-04	4.62E-04	1.15E-04	1.06E-03	1.57E-04	2.94E-04	4.46E-04	9.25E-04	2.28E-04	1.03E-03	5.43E-04	2.81E-04	1.55E-05	1.94E-05	5.8588E-03
551988.57	4172791.46	13493.64447	6500.57642	3941.48732	11489.07899	3840.69712	3690.65799	13311.61051	3877.99715	2218.71993	10245.6316	8119.73165	5032.40648	0.29469	0.29397	8.42E-04	3.76E-04	2.28E-04	5.70E-04	2.40E-04	2.31E-04	1.31E-03	7.95E-04	4.55E-04	7.01E-04	3.81E-04	2.36E-04	4.12E-06	4.98E-06	6.3718E-03
551512.63	4172694.38	5217.549	5759.79167	2693.6306	21119.04432	4535.05026	3248.99397	5177.85706	3316.26467	1473.84123	13044.22126	15904.36104	4258.21996	0.83664	0.85643	3.26E-04	3.33E-04	1.56E-04	1.05E-03	2.83E-04	2.03E-04	5.09E-04	6.80E-04	3.02E-04	8.92E-04	7.47E-04	2.00E-04	1.17E-05	1.45E-05	5.7036E-03

551541.83	4173191.25	5736.4338	9917.06305	1339.09007	8058.13983	1214.15247	14604.03601	5804.96299	6014.93307	772.89506	8182.58607	3232.9741	17200.17893	1.54747	1.57811	3.58E-04	5.73E-04	7.74E-05	3.99E-04	7.58E-05	9.12E-04	5.71E-04	1.23E-03	1.58E-04	5.60E-04	1.52E-04	8.08E-04	2.17E-05	2.67E-05	5.9260E-03
551428.85	4172993.56	4988.52114	10585.03829	1606.39171	15300.707	1798.40034	6957.45182	5003.33557	6150.77294	912.66017	13269.96176	6742.90484	8733.43013	0.95412	0.97329	3.11E-04	6.12E-04	9.29E-05	7.58E-04	1.12E-04	4.35E-04	4.92E-04	1.26E-03	1.87E-04	9.07E-04	3.17E-04	4.10E-04	1.34E-05	1.65E-05	5.9255E-03
551487.44	4173128.4	5242.74561	10552.81116	1430.32389	10487.68843	1417.61376	11942.99632	5294.04881	6286.57173	817.7689	10064.59577	4155.63941	14317.99032	1.09666	1.11399	3.27E-04	6.10E-04	8.27E-05	5.20E-04	8.85E-05	7.46E-04	5.20E-04	1.29E-03	1.68E-04	6.88E-04	1.95E-04	6.73E-04	1.53E-05	1.89E-05	5.9413E-03
551471.35	4172725.21	4530.59899	5985.57604	2191.15088	21290.43148	3455.78267	3384.72789	4506.2253	3408.07889	1201.15093	12997.95976	14614.28753	4397.58005	0.96186	0.99512	2.83E-04	3.46E-04	1.27E-04	1.06E-03	2.16E-04	2.11E-04	4.43E-04	6.99E-04	2.46E-04	8.89E-04	6.86E-04	2.07E-04	1.35E-05	1.69E-05	5.4381E-03
551459.14	4173077.88	5121.25966	10770.51396	1486.67947	12212.42723	1568.69948	9912.54617	5162.71572	6426.67968	845.59409	11288.0121	4997.6241	12116.1204	0.99425	1.0095	3.20E-04	6.23E-04	8.60E-05	6.05E-04	9.80E-05	6.19E-04	5.07E-04	1.32E-03	1.73E-04	7.72E-04	2.35E-04	5.69E-04	1.39E-05	1.71E-05	5.9557E-03
551940.61	4172750.27	9534.95296	5341.55342	4841.91367	13279.75728	5457.77343	2566.69918	9306.18857	3237.73251	2609.22785	11257.90203	11052.31997	3394.09294	0.32548	0.3251	5.95E-04	3.09E-04	2.80E-04	6.58E-04	3.41E-04	1.60E-04	9.15E-04	6.64E-04	5.35E-04	7.70E-04	5.19E-04	1.59E-04	4.55E-06	5.51E-06	5.9153E-03
551562.13	4172665.95	6042.47987	5117.61132	3296.81864	16913.56069	6129.46719	2953.59049	5980.84015	3003.98104	1776.3834	11476.15714	15009.87056	3923.15804	0.61035	0.62061	3.77E-04	2.96E-04	1.91E-04	8.38E-04	3.83E-04	1.84E-04	5.88E-04	6.16E-04	3.64E-04	7.85E-04	7.05E-04	1.84E-04	8.54E-06	1.05E-05	5.5303E-03
551992.5	4172782.15	12507.79856	6151.96172	3798.82464	11151.64904	3798.88472	3473.67467	12334.70231	3666.75902	2129.47858	9869.12996	8007.75795	4732.10218	0.28769	0.28708	7.81E-04	3.56E-04	2.20E-04	5.53E-04	2.37E-04	2.17E-04	1.21E-03	7.52E-04	4.36E-04	6.75E-04	3.76E-04	2.22E-04	4.03E-06	4.86E-06	6.0460E-03
551517.79	4172682.65	5182.60775	5461.34677	2680.00947	19490.14209	4561.63604	3107.8034	5141.1866	3154.5294	1463.59488	12267.1473	14936.89166	4079.72014	0.75169	0.76781	3.24E-04	3.16E-04	1.55E-04	9.66E-04	2.85E-04	1.94E-04	5.05E-04	6.47E-04	3.00E-04	8.39E-04	7.02E-04	1.92E-04	1.05E-05	1.30E-05	5.4470E-03
551425.63	4172984.6	4937.53813	10332.71823	1622.71314	15575.96712	1818.79349	6667.57019	4949.23312	5972.36615	922.03577	13410.48767	6921.01832	8380.1879	0.9487	0.96834	3.08E-04	5.97E-04	9.38E-05	7.72E-04	1.14E-04	4.16E-04	4.87E-04	1.22E-03	1.89E-04	9.17E-04	3.25E-04	3.94E-04	1.33E-05	1.64E-05	5.8667E-03
551462.96	4173088.88	5108.09556	10589.82573	1465.22042	11782.49838	1525.8046	10368.17254	5151.50178	6391.86732	834.06768	10941.06303	4771.84342	12424.43039	0.99639	1.01309	3.19E-04	6.12E-04	8.47E-05	5.84E-04	9.53E-05	6.48E-04	5.06E-04	1.31E-03	1.71E-04	7.48E-04	2.24E-04	5.84E-04	1.39E-05	1.72E-05	5.9173E-03
551415.53	4172927.45	4687.44122	8937.70545	1794.6956	17897.00565	2031.18677	5432.97331	4682.75825	5070.77341	1014.49055	14429.00507	8436.28526	6863.85871	0.97747	1.00157	2.93E-04	5.17E-04	1.04E-04	8.87E-04	1.27E-04	3.39E-04	4.60E-04	1.04E-03	2.08E-04	9.87E-04	3.96E-04	3.22E-04	1.37E-05	1.70E-05	5.7101E-03
551491.86	4172702.15	4771.90973	5687.29614	2368.19041	20485.86393	3830.12313	3225.4212	4741.22313	3257.5618	1298.46126	12585.46201	14688.63348	4207.74085	0.85363	0.87706	2.98E-04	3.29E-04	1.37E-04	1.02E-03	2.39E-04	2.01E-04	4.66E-04	6.68E-04	2.66E-04	8.61E-04	6.90E-04	1.98E-04	1.19E-05	1.49E-05	5.3947E-03
551417.93	4172875.96	4442.58582	7811.2428	1888.63776	19505.54948	2307.13936	4672.69251	4430.01562	4419.43418	1055.87743	14338.67291	10245.05913	5929.01767	1.01113	1.04014	2.77E-04	4.52E-04	1.09E-04	9.67E-04	1.44E-04	2.92E-04	4.35E-04	9.06E-04	2.16E-04	9.81E-04	4.81E-04	2.78E-04	1.41E-05	1.76E-05	5.5708E-03
551509.06	4173159.4	5365.62003	10207.26312	1382.61079	9269.35381	1315.8853	12863.11632	5422.1269	6140.86679	793.59368	9168.2071	3683.38956	15296.1963	1.21739	1.23767	3.35E-04	5.90E-04	7.99E-05	4.59E-04	8.22E-05	8.03E-04	5.33E-04	1.26E-03	1.63E-04	6.27E-04	1.73E-04	7.18E-04	1.70E-05	2.10E-05	5.8609E-03
551688.86	4172679.19	9618.77682	3809.80395	4464.23239	11128.66244	8322.73766	2389.4922	9470.06371	2289.26149	2281.76421	7500.46714	16326.40824	3255.40514	0.52814	0.54305	6.01E-04	2.20E-04	2.58E-04	5.52E-04	5.20E-04	1.49E-04	9.31E-04	4.69E-04	4.68E-04	5.13E-04	7.67E-04	1.53E-04	7.39E-06	9.20E-06	5.6167E-03
551422.39	4172975.61	4876.5538	10039.68296	1638.21611	15814.22943	1838.55747	6385.32375	4885.09925	5776.2239	930.71187	13504.32204	7082.89303	8034.2205	0.94194	0.96175	3.04E-04	5.80E-04	9.47E-05	7.84E-04	1.15E-04	3.99E-04	4.80E-04	1.18E-03	1.91E-04	9.23E-04	3.33E-04	3.77E-04	1.32E-05	1.63E-05	5.7951E-03
551607.18	4172661.39	7163.94565	4649.26364	3962.5935	13626.46173	7761.80193	2771.54967	7076.09255	2775.28315	2106.50924	10021.60258	15049.00221	3718.5571	0.51171	0.52059	4.47E-04	2.69E-04	2.29E-04	6.75E-04	4.85E-04	1.73E-04	6.96E-04	5.69E-04	4.32E-04	6.85E-04	7.07E-04	1.75E-04	7.16E-06	8.82E-06	5.5575E-03
551490.53	4173136.98	5214.01701	10296.5766	1405.81414	10062.91577	1378.80734	11923.04538	5265.60839	6146.83856	804.29361	9742.10321	3996.09489	14267.93967	1.10094	1.11827	3.26E-04	5.95E-04	8.13E-05	4.99E-04	8.61E-05	7.45E-04	5.18E-04	1.26E-03	1.65E-04	6.66E-04	1.88E-04	6.70E-04	1.54E-05	1.89E-05	5.8326E-03
551955.66	4172753.71	10060.48135	5547.21391	4472.36424	12452.51453	4925.43173	2752.40995	9840.53828	3323.49449	2442.52532	10732.04643	10073.53827	3723.85468	0.31184	0.31151	6.28E-04	3.21E-04	2.59E-04	6.17E-04	3.08E-04	1.72E-04	9.67E-04	6.81E-04	5.01E-04	7.34E-04	4.73E-04	1.75E-04	4.36E-06	5.28E-06	5.8450E-03
551981.57	4172769.62	11494.91846	5912.8545	3963.09751	11520.3863	4145.624	3201.91739	11295.40837	3533.79653	2208.34676	10046.37372	8657.00016	4320.75231	0.29395	0.29344	7.18E-04	3.42E-04	2.29E-04	5.71E-04	2.59E-04	2.00E-04	1.11E-03	7.24E-04	4.53E-04	6.87E-04	4.07E-04	2.03E-04	4.11E-06	4.97E-06	5.9116E-03
551830.42	4172714.2	6356.74058	3193.36704	3649.50872	15237.56704	9744.46998	1659.27974	6275.37198	1803.88152	1788.36558	9816.25749	18515.0446	2224.72303	0.48433	0.48612	3.97E-04	1.85E-04	2.11E-04	7.55E-04	6.09E-04	1.04E-04	6.17E-04	3.70E-04	3.67E-04	6.71E-04	8.70E-04	1.04E-04	6.78E-06	8.24E-06	5.2737E-03
551654.45	4172671.43	8600.61685	4141.48606	4478.01432	11136.46916	8672.17539	2561.22416	8477.45259	2497.25996	2325.71525	8329.84306	15546.83742	3472.76141	0.47467	0.48594	5.37E-04	2.39E-04	2.59E-04	5.52E-04	5.42E-04	1.60E-04	8.33E-04	5.12E-04	4.77E-04	5.70E-04	7.30E-04	1.63E-04	6.64E-06	8.23E-06	5.5887E-03
551419.16	4172966.64	4808.20232	9721.42216	1652.99958	16017.90264	1858.23627	6115.77832	4813.89262	5571.87346	938.74088	13554.82259	7220.67182	7702.25749	0.93416	0.95429	3.00E-04	5.62E-04	9.56E-05	7.94E-04	1.16E-04	3.82E-04	4.73E-04	1.14E-03	1.92E-04	9.27E-04	3.39E-04	3.62E-04	1.31E-05	1.62E-05	5.7147E-03
551882.85	4172725.46	6421.10133	3918.76554	4802.49993	14917.00804	8241.55241	1782.02737	6277.34303	2255.97629	2404.39517	11024.33731	15471.29796	2398.70867	0.37754	0.3775	4.01E-04	2.27E-04	2.78E-04	7.39E-04	5.15E-04	1.11E-03	6.17E-04	4.62E-04	4.93E-04	7.54E-04	7.27E-04	1.13E-04	5.28E-06	6.40E-06	5.4478E-03

551937.87	4172719.48	6452.32314	4021.53515	4014.74131	12158.57428	5548.70836	1842.74569	6297.25017	2365.1592	2101.22347	9575.23274	10695.31951	2488.44876	0.30234	0.30255	4.03E-04	2.33E-04	2.32E-04	6.03E-04	3.47E-04	1.15E-04	6.19E-04	4.85E-04	4.31E-04	6.55E-04	5.02E-04	1.17E-04	4.23E-06	5.13E-06	4.7497E-03
551541.12	4172647.77	5033.58637	4515.68212	2565.45609	14305.85207	4464.42895	2660.68622	4989.06319	2638.66453	1389.48339	9707.76327	11735.89795	3514.27653	0.51005	0.5175	3.14E-04	2.61E-04	1.48E-04	7.09E-04	2.79E-04	1.66E-04	4.90E-04	5.41E-04	2.85E-04	6.64E-04	5.51E-04	1.65E-04	7.14E-06	8.77E-06	4.5900E-03
552083.8	4172922.82	12542.26191	6059.2122	1812.5858	6616.06787	1456.20581	5177.89635	12613.90227	3559.3992	1068.1868	6358.71824	3408.78395	6802.64628	0.24866	0.24732	7.83E-04	3.50E-04	1.05E-04	3.28E-04	9.10E-05	3.23E-04	1.24E-03	7.30E-04	2.19E-04	4.35E-04	1.60E-04	3.20E-04	3.48E-06	4.19E-06	5.0911E-03
552080.83	4172943.74	12620.30368	6115.24826	1683.75218	6322.28991	1323.68805	5463.30163	12722.36834	3582.78933	996.74378	6131.75299	3134.87226	7147.77584	0.25309	0.25158	7.88E-04	3.54E-04	9.73E-05	3.13E-04	8.27E-05	3.41E-04	1.25E-03	7.34E-04	2.04E-04	4.19E-04	1.47E-04	3.36E-04	3.54E-06	4.26E-06	5.0755E-03
551577.41	4172638.02	5688.3364	4245.99878	2964.29015	12520.41834	5406.28919	2541.31918	5629.66876	2509.22068	1593.6273	8993.10274	11757.45491	3383.91888	0.44085	0.44662	3.55E-04	2.45E-04	1.71E-04	6.21E-04	3.38E-04	1.59E-04	5.53E-04	5.14E-04	3.27E-04	6.15E-04	5.52E-04	1.59E-04	6.17E-06	7.57E-06	4.6233E-03
551435.94	4172739.46	3829.22129	5382.76489	1748.71853	16776.35209	2634.42981	3156.56482	3813.14084	3061.0353	960.99142	10810.65731	10843.50477	4074.625	0.7746	0.80077	2.39E-04	3.11E-04	1.01E-04	8.32E-04	1.65E-04	1.97E-04	3.75E-04	6.27E-04	1.97E-04	7.39E-04	5.09E-04	1.91E-04	1.08E-05	1.36E-05	4.5083E-03
551952.92	4172722.92	6941.93216	4223.70761	3921.6718	11714.55519	4970.42121	1971.67626	6779.7073	2499.0061	2079.06842	9451.98477	9777.87803	2666.02277	0.29143	0.29162	4.33E-04	2.44E-04	2.27E-04	5.81E-04	3.10E-04	1.23E-04	6.66E-04	5.12E-04	4.26E-04	6.46E-04	4.59E-04	1.25E-04	4.08E-06	4.94E-06	4.7633E-03
552086.78	4172901.9	12269.85401	5938.92314	1925.28642	6852.21445	1586.76296	4865.55847	12312.88419	3496.70007	1128.83111	6522.69991	3670.84715	6416.04736	0.24386	0.24267	7.66E-04	3.43E-04	1.11E-04	3.40E-04	9.91E-05	3.04E-04	1.21E-03	7.17E-04	2.31E-04	4.46E-04	1.72E-04	3.01E-04	3.41E-06	4.11E-06	5.0492E-03
551586.5	4172636.36	5865.14902	4161.3349	3057.97767	12021.00468	5618.57795	2505.95783	5802.39677	2466.65343	1639.7721	8752.22489	11742.81089	3342.32722	0.42558	0.43114	3.66E-04	2.41E-04	1.77E-04	5.96E-04	3.51E-04	1.57E-04	5.70E-04	5.06E-04	3.36E-04	5.99E-04	5.52E-04	1.57E-04	5.95E-06	7.31E-06	4.6193E-03
551401.07	4172839.32	3806.29225	6096.24146	1638.42912	16073.19484	2146.33696	3753.98118	3794.00189	3464.91172	911.15626	11254.2403	9191.96308	4772.45273	0.80083	0.82425	2.38E-04	3.52E-04	9.47E-05	7.97E-04	1.34E-04	2.34E-04	3.73E-04	7.10E-04	1.87E-04	7.70E-04	4.32E-04	2.24E-04	1.12E-05	1.40E-05	4.5707E-03
551494.81	4172669.19	4383.43102	4766.71966	2125.41578	15779.21754	3418.57216	2789.17616	4353.76908	2747.32419	1165.89065	10155.93916	11473.41179	3642.57268	0.61511	0.62822	2.74E-04	2.76E-04	1.23E-04	7.82E-04	2.14E-04	1.74E-04	4.28E-04	5.63E-04	2.39E-04	6.95E-04	5.39E-04	1.71E-04	8.61E-06	1.06E-05	4.4959E-03
551447.33	4172717.95	3898.33532	5180.38596	1792.29836	16634.783	2734.88086	3027.90361	3880.84121	2954.02141	984.48201	10616.35965	10992.15418	3920.90255	0.73964	0.7631	2.43E-04	3.00E-04	1.04E-04	8.25E-04	1.71E-04	1.89E-04	3.81E-04	6.06E-04	2.02E-04	7.26E-04	5.16E-04	1.84E-04	1.03E-05	1.29E-05	4.4695E-03
551592.28	4173247.93	5475.22783	7284.74974	1098.83013	5837.08117	992.59674	12532.44716	5557.88115	4350.9431	638.32147	5796.38875	2510.65841	14533.91724	2.16984	2.23163	3.42E-04	4.21E-04	6.35E-05	2.89E-04	6.20E-05	7.83E-04	5.46E-04	8.92E-04	1.31E-04	3.96E-04	1.18E-04	6.83E-04	3.04E-05	3.78E-05	4.7948E-03
551640.12	4172644.2	7111.93019	3725.17312	3556.09908	9635.49951	6579.81137	2329.94661	7020.52406	2238.27778	1868.20394	7383.61922	11950.25537	3140.6359	0.37115	0.37725	4.44E-04	2.15E-04	2.06E-04	4.78E-04	4.11E-04	1.46E-04	6.90E-04	4.59E-04	3.83E-04	5.05E-04	5.61E-04	1.48E-04	5.19E-06	6.39E-06	4.6563E-03
551614.45	4172638	6467.49165	3922.0515	3329.70534	10614.55855	6184.69934	2411.69792	6391.0961	2344.86621	1767.38454	8015.35487	11753.74356	3233.41857	0.38727	0.39256	4.04E-04	2.27E-04	1.93E-04	5.26E-04	3.86E-04	1.51E-04	6.28E-04	4.81E-04	3.62E-04	5.48E-04	5.52E-04	1.52E-04	5.42E-06	6.65E-06	4.6214E-03
552008.54	4172745.27	9046.84056	4927.59422	3213.30421	9797.8143	3528.99604	2731.04493	8899.89075	2937.43702	1782.72894	8431.28383	7402.44288	3669.35189	0.26059	0.26038	5.65E-04	2.85E-04	1.86E-04	4.86E-04	2.20E-04	1.71E-04	8.75E-04	6.02E-04	3.65E-04	5.77E-04	3.48E-04	1.72E-04	3.65E-06	4.41E-06	4.8592E-03
551478.17	4173160.82	4555.19083	8237.03927	1222.93682	8462.62518	1211.10479	9441.57636	4598.13712	4905.44771	699.44183	8066.88038	3484.36128	11332.69325	0.89849	0.91094	2.84E-04	4.76E-04	7.07E-05	4.19E-04	7.56E-05	5.90E-04	4.52E-04	1.01E-03	1.43E-04	5.52E-04	1.64E-04	5.32E-04	1.26E-05	1.54E-05	4.7926E-03
551967.91	4172726.3	7364.16906	4380.2384	3771.50663	11120.6687	4472.63601	2102.91767	7200.76872	2605.46176	2023.02738	9236.34015	9060.55369	2841.57264	0.28143	0.28159	4.60E-04	2.53E-04	2.18E-04	5.51E-04	2.79E-04	1.31E-04	7.08E-04	5.34E-04	4.15E-04	6.32E-04	4.26E-04	1.33E-04	3.94E-06	4.77E-06	4.7489E-03
551396.71	4172873	3874.40895	6420.71653	1594.16922	15315.68217	1951.5113	3989.52477	3865.04735	3650.33263	891.49334	11388.72851	8151.94503	5059.44248	0.77612	0.79653	2.42E-04	3.71E-04	9.22E-05	7.59E-04	1.22E-04	2.49E-04	3.80E-04	7.48E-04	1.83E-04	7.79E-04	3.83E-04	2.38E-04	1.09E-05	1.35E-05	4.5701E-03
551496.71	4173183.25	4679.15601	8172.40655	1202.78482	7869.92739	1160.00963	9926.29709	4725.60621	4898.19042	689.8852	7647.62545	3238.82144	11872.38213	0.97855	0.99275	2.92E-04	4.72E-04	6.95E-05	3.90E-04	7.25E-05	6.20E-04	4.65E-04	1.00E-03	1.41E-04	5.23E-04	1.52E-04	5.58E-04	1.37E-05	1.68E-05	4.7899E-03
551682.33	4172660.6	8158.77712	3390.72205	3629.95527	8866.93967	6377.75164	2164.16585	8044.02508	2034.9929	1878.87288	6411.55434	12162.64693	2939.70094	0.39168	0.40145	5.09E-04	1.96E-04	2.10E-04	4.40E-04	3.98E-04	1.35E-04	7.91E-04	4.17E-04	3.85E-04	4.38E-04	5.71E-04	1.38E-04	5.48E-06	6.80E-06	4.6414E-03
552086.95	4172931.62	12273.50214	5968.61485	1724.55519	6381.2084	1377.49307	5209.33889	12356.72608	3501.94647	1017.71676	6151.48949	3240.78226	6828.04657	0.24745	0.24606	7.66E-04	3.45E-04	9.97E-05	3.16E-04	8.60E-05	3.25E-04	1.21E-03	7.18E-04	2.09E-04	4.21E-04	1.52E-04	3.21E-04	3.46E-06	4.17E-06	4.9811E-03
552089.93	4172910.7	12097.15566	5880.52214	1840.88425	6636.38711	1505.73244	4918.93344	12152.03766	3458.40817	1081.19573	6338.3843	3501.62719	6472.33591	0.24292	0.24168	7.55E-04	3.40E-04	1.06E-04	3.29E-04	9.40E-05	3.07E-04	1.19E-03	7.09E-04	2.22E-04	4.33E-04	1.64E-04	3.04E-04	3.40E-06	4.10E-06	4.9664E-03
551460.34	4172697.79	3990.17639	4971.80011	1853.15213	16234.67383	2855.13469	2907.82749	3970.21554	2843.40236	1018.17202	10338.8816	10995.83659	3774.67828	0.69255	0.71219	2.49E-04	2.87E-04	1.07E-04	8.05E-04	1.78E-04	1.82E-04	3.90E-04	5.83E-04	2.09E-04	7.07E-04	5.16E-04	1.77E-04	9.69E-06	1.21E-05	4.4127E-03
551429.94	4172746.15	3755.33655	5357.78656	1704.06655	16337.24194	2545.49933	3160.59383	3740.00552	3045.47916	937.0023	10619.22763	10457.84173	4073.4379	0.76084	0.78643	2.34E-04	3.10E-04	9.85E-05	8.10E-04	1.59E-04	1.97E-04	3.68E-04	6.24E-04	1.92E-04	7.26E-04	4.91E-04	1.91E-04	1.06E-05	1.33E-05	4.4256E-03
551420.4	4173057.28	4313.25001	8378.24711	1270.46424	10710.86745	1409.98431	6941.04048	4341.19628	4981.70058	720.09257	9336.76867	4720.48448	8589.61525	0.74646	0.75829	2.69E-04	4.84E-04	7.35E-05	5.31E-04	8.81E-05	4.34E-04	4.27E-04	1.02E-03	1.48E-04	6.38E-04	2.22E-04	4.03E-04	1.04E-05	1.28E-05	4.7621E-03
551514.24	4173201.82	4783.01787	8012.52414	1175.78371	7362.23962	1116.29277	10296.46975	4833.52454	4818.13454	676.21439	7202.85164	3044.27203	12289.46865	1.06498	1.08119	2.99E-04	4.63E-04	6.80E-05	3.65E-04	6.97E-05	6.43E-04	4.75E-04	9.88E-04	1.39E-04	4.93E-04	1.43E-04	5.77E-04	1.49E-05	1.83E-05	4.7549E-03
551417.18	4173048.33	4295.95222	8372.50118	1273.14179	10906.18636	1423.3064	6707.27232	4321.93204	4975.65701	721.73065	9428.39802	4846.91488	8324.96184	0.74023	0.75191	2.68E-04	4.84E-04	7.36E-05	5.41E-04	8.89E-05	4.19E-04	4.25E-04	1.02E-03	1.48E-04	6.45E-04	2.28E-04	3.91E-04	1.04E-05	1.27E-05	4.7535E-03
551596.99	4172633.65	6005.08238	4007.40348	3103.75458	11220.42224	5708.57537	2438.07588	5938.75435	2383.47585	1658.8531	8309.04521	11451.60017	3257.39273	0.39953	0.40464	3.75E-04	2.32E-04	1.79E-04	5.56E-04	3.57E-04	1.52E-04	5.84E-04	4.89E-04	3.40E-04	5.68E-04	5.38E-04	1.53E-04	5.59E-06	6.86E-06	4.5350E-03
551839.3	4172696.53	5237.10587	2747.68569	2836.26969	12748.49003	7457.99415	1469.90708	5175.28377	1555.69666	1410.87646	8100.49673	14761.43184	1965.04179	0.42929	0.43218	3.27E-04	1.59E-04	1.64E-04	6.32E-04	4.66E-04	9.18E-05	5.09E-04	3.19E-04	2.89E-04	5.54E-04	6.93E-04	9.23E-05	6.01E-06	7.32E-06	4.3091E-03
551537.69	4173220.88	4934.82519	7781.67675	1143.69572	6825.02843	1072.69266	10867.85258	4992.53556	4680.23342	659.94058	6686.89257	2851.91364	12938.70449	1.22389	1.2447	3.08E-04	4.50E-04	6.61E-05	3.38E-04	6.70E-05	6.79E-04	4.91E-04	9.59E-04	1.35E-04	4.57E-04	1.34E-04	6.08E-04	1.71E-05	2.11E-05	4.7308E-03
551413.95	4173039.38	4283.8587	8365.96241	1279.7259	10981.51095	1437.88221	6484.28414	4307.63368	4963.42753	725.6839	9550.76316	4967.21542	8069.81673	0.73622	0.74807	2.67E-04	4.84E-04	7.40E-05	5.44E-04	8.98E-05	4.05E-04	4.23E-04	1.02E-03	1.49E-04	6.53E-04	2.33E-04	3.79E-04	1.03E-05	1.27E-05	4.7423E-03
551422.77	4172759.08	3714.40407	5430.70045	1677.80306	16178.30488	2474.83841	3223.73151	3699.5439	3084.16312	923.57075	10605.53821	10228.7629	4144.68305	0.76669	0.79264	2.32E-04	3.14E-04	9.70E-05	8.02E-04	1.55E-04	2.01E-04	3.64E-04	6.32E-04	1.89E-04	7.25E-04	4.80E-04	1.95E-04	1.07E-05	1.34E-05	4.4104E-03
551644.19	4173256.28	6051.82971	6563.728	1089.84882	5124.79716	931.56945	12643.92657	6163.91212	3925.88212	635.69663	5085.75893	2286.28388	14837.05468	6.80891	7.28786	3.78E-04	3.79E-04	6.30E-05	2.54E-04	5.82E-05	7.90E-04	6.06E-04	8.05E-04	1.30E-04	3.48E-04	1.07E-04	6.97E-04	9.53E-05	1.23E-04	4.8340E-03
551410.73	4173030.42	4269.00691	8336.33056	1287.79377	11168.48671	1452.31839	6263.12082	4290.46565	4932.97765	730.51737	9678.48613	5085.37816	7813.1268	0.73253	0.74424	2.67E-04	4.82E-04	7.45E-05	5.54E-04	9.07E-05	3.91E-04	4.22E-04	1.01E-03	1.50E-04	6.62E-04	2.39E-04	3.67E-04	1.02E-05	1.26E-05	4.7316E-03
552034.12	4172760.8	9658.17111	5034.2078	2915.81819	9064.41398	3038.46572	2981.30896	9543.51171	2991.29886	1630.62943	7938.67107	6468.00378	4030.3668	0.24721	0.24688	6.03E-04	2.91E-04	1.69E-04	4.49E-04	1.90E-04	1.86E-04	9.38E-04	6.13E-04	3.34E-04	5.43E-04	3.04E-04	1.89E-04	3.46E-06	4.18E-06	4.8171E-03
551393.35	4172894.92	3909.15625	6638.46806	1551.49555	14636.54402	1830.24171	4147.89775	3902.30548	3777.2082	871.30367	11312.65821	7453.7928	5253.35324	0.75605	0.77343	2.44E-04	3.84E-04	8.97E-05	7.26E-04	1.14E-04	2.59E-04	3.84E-04	7.74E-04	1.79E-04	7.74E-04	3.50E-04	2.47E-04	1.06E-05	1.31E-05	4.5470E-03
551982.85	4172729.62	7734.65051	4507.64293	3553.56817	10540.37112	4060.14077	2303.57948	7574.93463	2723.33983	1929.8814	8898.73306	8392.29186	3030.26077	0.27293	0.27294	4.83E-04	2.61E-04	2.05E-04	5.22E-04	2.54E-04	1.44E-04	7.45E-04	5.58E-04	3.96E-04	6.09E-04	3.94E-04	1.42E-04	3.82E-06	4.63E-06	4.7208E-03
551721	4172671.33	8580.32588	3087.94634	3197.28458	9779.25881	5477.40489	1978.30761	8459.93433	1836.21278	1657.30178	6060.76186	12407.93625	2686.72573	0.46749	0.48018	5.36E-04	1.79E-04	1.85E-04	4.85E-04	3.42E-04	1.24E-04	8.32E-04	3.76E-04	3.40E-04	4.14E-04	5.83E-04	1.26E-04	6.54E-06	8.14E-06	4.5353E-03
551520.77	4172651.67	4638.59032	4509.81576	2300.42856	14467.77307	3851.48344	2660.10936	4601.77213	2620.88605	1252.51716	9611.07517	11189.48145	3495.08654	0.53005	0.53868	2.90E-04	2.61E-04	1.33E-04	7.17E-04	2.41E-04	1.66E-04	4.52E-04	5.37E-04	2.57E-04	6.57E-04	5.26E-04	1.64E-04	7.42E-06	9.13E-06	4.4170E-03
551407.5	4173021.47	4250.82094	8280.75803	1297.45826	11357.35743	1466.57153	6045.75848	4269.88703	4883.24834	736.28857	9808.98312	5198.68134	7557.66839	0.72869	0.74118	2.65E-04	4.79E-04	7.50E-05	5.63E-04	9.16E-05	3.78E-04	4.20E-04	1.00E-03	1.51E-04	6.71E-04	2.44E-04	3.55E-04	1.02E-05	1.26E-05	4.7156E-03
551404.28	4173012.52	4233.2286	8208.89839	1310.47047	11565.09318	1481.83436	5839.8463	4249.8602	4820.74209	743.91615	9955.14404	5309.38718	7313.49485	0.72608	0.7388	2.64E-04	4.75E-04	7.58E-05	5.73E-04	9.26E-05	3.65E-04	4.18E-04	9.88E-04	1.52E-04	6.81E-04	2.49E-04	3.44E-04	1.02E-05	1.25E-05	4.7000E-03
551565.8	4172636.13	5344.71798	4216.21971	2744.09991	12557.14042	4904.20676	2520.71187	5292.83948	2483.15162	1479.82403	8910.06917	11221.4799	3347.96484	0.43896	0.44453	3.34E-04	2.44E-04	1.59E-04	6.22E-04	3.06E-04	1.57E-04	5.20E-04	5.09E-04	3.03E-04	6.09E-04	5.27E-04	1.57E-04	6.14E-06	7.53E-06	4.4622E-03
551429.19	4173081.98	4293.32995	8170.95014	1247.06449	10062.72977	1360.15475	7448.53397	4325.90629	4857.4346	707.00619	8917.4909	4380.83852	9136.35911	0.75327	0.76463	2.68E-04	4.72E-04	7.21E-05	4.99E-04	8.50E-05	4.65E-04	4.25E-04	9.96E-04	1.45E-04	6.10E-04	2.06E-04	4.29E-04	1.05E-05	1.30E-05	4.6955E-03
551481.26	4173169.41	4516.46565	8030.06336	1199.66294	8155.2677	1180.83579	9310.50441	4559.24257	4789.10533	686.57825	7805.79491	3368.33759	11169.93843	0.8958	0.90813	2.82E-04	4.64E-04	6.94E-05	4.04E-04	7.38E-05	5.82E-04	4.48E-04	9.82E-04	1.41E-04	5.34E-04	1.58E-04	5.25E-04	1.25E-05	1.54E-05	4.6902E-03
551400.14	4172827.72	3704.34617	5825.48581	1602.86132	15560.70252	2137.4658	3595.03476	3691.91893	3313.38098	890.20291	10774.86212	9061.65558	4574.51318	0.76941	0.79227	2.31E-04	3.37E-04	9.27E-05	7.71E-04	1.33E-04	2.25E-04	3.63E-04	6.79E-04	1.82E-04	7.37E-04	4.26E-04	2.15E-04	1.08E-05	1.34E-05	4.4162E-03
552093.08	4172919.5	11886.56714	5808.65503	1757.05146	6416.62091	1427.31374	4959.82062	11952.67706	3412.32232	1033.57546	6148.12985	3336.00555	6511.75929	0.24183	0.24054	7.42E-04	3.36E-04	1.02E-04	3.18E-04	8.91E-05	3.10E-04	1.17E-03	6.99E-04	2.12E-04	4.20E-04	1.57E-04	3.06E-04	3.38E-06	4.08E-06	4.8732E-03
551401.05	4173003.57	4197.75656	8077.8143	1319.33788	11715.78299	1494.14131	5621.63251	4211.96518	4724.43111	749.15163	10044.70074	5399.92136	7051.13335	0.72056	0.73325	2.62E-04	4.67E-04	7.63E-05	5.81E-04	9.33E-05	3.51E-04	4.14E-04	9.68E-04	1.54E-04	6.87E-04	2.54E-04	3.31E-04	1.01E-05	1.24E-05	4.6608E-03
552090.1	4172940.42	11973.20584	5866.53956	1638.84819	6147.23464	1302.7296	5228.10311	12066.98242	3437.99276	968.3434	5942.4781	3079.85863	6836.59815	0.24617	0.24474	7.48E-04	3.39E-04	9.47E-05	3.05E-04	8.14E-05	3.27E-04	1.19E-03	7.05E-04	1.98E-04	4.06E-04	1.45E-04	3.21E-04	3.44E-06	4.15E-06	4.8632E-03
552023.36	4172748.46	9073.70957	4878.64542	3006.54568	9292.60029	3244.72228	2797.03704	8942.69733	2899.47151	1669.95807	8039.18428	6855.69093	3777.15272	0.25076	0.25054	5.67E-04	2.82E-04	1.74E-04	4.61E-04	2.03E-04	1.75E-04	8.79E-04	5.94E-04	3.42E-04	5.50E-04	3.22E-04	1.77E-04	3.51E-06	4.25E-06	4.7330E-03
551659.95	4172647.6	7445.72763	3491.76639	3531.0671	8822.17412	6363.80298	2214.97208	7346.15718	2099.1799	1843.34193	6710.42149	11585.77652	2996.54661	0.35727	0.36421	4.65E-04	2.02E-04	2.04E-04	4.37E-04	3.97E-04	1.38E-04	7.22E-04	4.30E-04	3.78E-04	4.59E-04	5.44E-04	1.41E-04	5.00E-06	6.17E-06	4.5292E-03
551556.05	4172636.55	5139.09298	4244.32913	2618.13021	12840.11454	4619.07078	2530.30313	5091.24049	2492.58874	1414.37106	8989.45516	11071.33045	3353.59858	0.44979	0.45561	3.21E-04	2.45E-04	1.51E-04	6.36E-04	2.88E-04	1.58E-04	5.00E-04	5.11E-04	2.90E-04	6.15E-04	5.20E-04	1.58E-04	6.29E-06	7.72E-06	4.4082E-03
551997.75	4172732.89	8062.36789	4635.84057	3327.64818	9938.7446	3733.03448	2438.20395	7910.89236	2766.9113	1824.32205	8531.55266	7772.9204	3286.15064	0.26356	0.2635	5.03E-04	2.68E-04	1.92E-04	4.93E-04	2.33E-04	1.52E-04	7.78E-04	5.67E-04	3.74E-04	5.83E-04	3.65E-04	1.54E-04	3.69E-06	4.47E-06	4.6716E-03
552096.05	4172898.58	11630.41108	5694.47662	1860.66876	6635.72345	1550.43542	4669.15916	11670.55361	3352.44955	1089.04928	6297.87997	3582.98239	6151.86367	0.23727	0.23613	7.26E-04	3.29E-04	1.08E-04	3.29E-04	9.68E-05	2.92E-04	1.15E-03	6.87E-04	2.23E-04	4.31E-04	1.68E-04	2.89E-04	3.32E-06	4.00E-06	4.8332E-03
551631.15	4173258.18	5759.42178	6585.28031	1081.61011	5208.50098	935.38277	12254.95809	5860.73696	3955.69232	629.45101	5190.96704	2314.62436	14367.6902	4.47657	4.70593	3.60E-04	3.81E-04	6.25E-05	2.58E-04	5.84E-05	7.65E-04	5.76E-04	8.11E-04	1.29E-04	3.55E-04	1.09E-04	6.75E-04	6.26E-05	7.97E-05	4.6817E-03
551435.11	4173098.72	4270.81073	7990.24279	1234.46757	9627.49371	1320.11806	7712.12124	4305.50031	4744.28273	698.22756	8633.47899	4146.549	9405.11023	0.75904	0.76866	2.67E-04	4.62E-04	7.14E-05	4.77E-04	8.25E-05	4.82E-04	4.23E-04	9.72E-04	1.43E-04	5.90E-04	1.95E-04	4.42E-04	1.06E-05	1.30E-05	4.6307E-03
551393.41	4172852.77	3728.24373	5988.16315	1567.97421	15077.21653	2001.89637	3732.38766	3717.64121	3406.82105	873.78161	10833.81581	8397.33435	4738.0138	0.75191	0.77235	2.33E-04	3.46E-04	9.07E-05	7.47E-04	1.25E-04	2.33E-04	3.65E-04	6.98E-04	1.79E-04	7.41E-04	3.94E-04	2.23E-04	1.05E-05	1.31E-05	4.3994E-03
551397.83	4172994.62	4152.63448	7910.52456	1326.87638	11836.29783	1505.16295	5404.32367	4164.46322	4608.1213	753.52739	10103.14879	5474.40084	6787.67708	0.71349	0.72617	2.59E-04	4.57E-04	7.67E-05	5.87E-04	9.40E-05	3.38E-04	4.09E-04	9.45E-04	1.54E-04	6.91E-04	2.57E-04	3.19E-04	9.98E-06	1.23E-05	4.6091E-03
551508.61	4172654.58	4440.24136	4506.70046	2168.55852	14513.60926	3554.55503	2660.45301	4407.33013	2610.74959	1184.77857	9546.97223	10902.07044	3485.33584	0.54338	0.55312	2.77E-04	2.61E-04	1.25E-04	7.19E-04	2.22E-04	1.66E-04	4.33E-04	5.35E-04	2.43E-04	6.53E-04	5.12E-04	1.64E-04	7.60E-06	9.37E-06	4.3276E-03
551450.46	4172704.32	3851.16988	4936.32891	1765.79979	15794.01764	2695.92079	2899.97002	3833.3995	2820.03416	970.28843	10120.9521	10524.08815	3759.0645	0.68489	0.70513	2.40E-04	2.85E-04	1.02E-04	7.83E-04	1.68E-04	1.81E-04	3.77E-04	5.78E-04	1.99E-04	6.92E-04	4.94E-04	1.77E-04	9.58E-06	1.19E-05	4.2986E-03
551547.22	4173229.86	4929.67083	7458.1195	1116.97518	6506.40787	1046.53172	10865.78055	4989.94133	4521.3801	645.31414	6388.83315	2757.03232	12678.2895	1.29408	1.31534	3.08E-04	4.31E-04	6.46E-05	3.23E-04	6.54E-05	6.79E-04	4.91E-04	9.27E-04	1.32E-04	4.37E-04	1.29E-04	5.95E-04	1.81E-05	2.23E-05	4.6219E-03
551400.85	4172818.2	3655.43723	5683.37727	1590.25865	15355.42103	2152.3885	3502.86206	3642.78503	3232.81883	882.16518	10541.18362	9065.02172	4461.46746	0.75566	0.77857	2.28E-04	3.29E-04	9.19E-05	7.61E-04	1.34E-04	2.19E-04	3.58E-04	6.63E-04	1.81E-04	7.21E-04	4.26E-04	2.10E-04	1.06E-05	1.32E-05	4.3446E-03
551701.44	4172664.32	8291.18644	3174.56824	3363.93996	8835.38303	5691.77334	2040.05099	8174.79377	1897.59032	1739.7382	5991.1383	11744.54519	2772.52291	0.41044	0.42159	5.18E-04	1.84E-04	1.94E-04	4.38E-04	3.55E-04	1.27E-04	8.04E-04	3.89E-04	3.57E-04	4.10E-04	5.52E-04	1.30E-04	5.74E-06	7.14E-06	4.4701E-03
551437.62	4172724.36	3739.36632	5073.73135	1695.18453	15753.49556	2557.9854	2992.1243	3723.76838	2891.64453	931.65821	10186.73648	10244.70997	3867.73352	0.70706	0.72943	2.33E-04	2.93E-04	9.80E-05	7.81E-04	1.60E-04	1.87E-04	3.66E-04	5.93E-04	1.91E-04	6.97E-04	4.81E-04	1.82E-04	9.89E-06	1.24E-05	4.2838E-03
551500.85	4173194.8	4603.72739	7817.17374	1164.20792	7463.46398	1118.33457	9611.58331	4649.88032	4689.27458	668.34656	7254.48825	3093.47751	11499.99046	0.96916	0.98311	2.87E-04	4.52E-04	6.73E-05	3.70E-04	6.98E-05	6.00E-04	4.57E-04	9.61E-04	1.37E-04	4.96E-04	1.45E-04	5.40E-04	1.36E-05	1.67E-05	4.6138E-03
551601.42	4173256.54	5404.61906	6864.48888	1061.17458	5516.9059	957.38732	11794.84255	5489.30441	4129.15339	616.88121	5471.29707	2405.07632	13860.67898	2.40007	2.47596	3.37E-04	3.97E-04	6.14E-05	2.73E-04	5.98E-05	7.37E-04	5.40E-04	8.46E-04	1.26E-04	3.74E-04	1.13E-04	6.51E-04	3.36E-05	4.20E-05	4.5917E-03
551394.59	4172985.61	4107.51443	7732.0277	1337.14829	11969.30933	1506.40059	5200.12115	4117.01106	4486.43443	759.32165	10165.4021	5557.67684	6538.9122	0.70715	0.72009	2.56E-04	4.47E-04	7.73E-05	5.93E-04	9.41E-05	3.25E-04	4.05E-04	9.20E-04	1.56E-04	6.95E-04	2.61E-04	3.07E-04	9.89E-06	1.22E-05	4.5583E-03
551410	4172783.92	3619.32279	5452.81643	1608.71791	15428.9307	2291.9154	3301.10801	3605.6366	3098.23987	888.33359	10322.13045	9502.21241	4224.23054	0.74558	0.76985	2.26E-04	3.15E-04	9.30E-05	7.65E-04	1.43E-04	2.06E-04	3.54E-04	6.35E-04	1.82E-04	7.06E-04	4.46E-04	1.98E-04	1.04E-05	1.30E-05	4.2940E-03
551518.17	4173211.07	4701.02135	7675.71779	1139.86012	7053.17636	1084.54416	9959.26662	4751.36182	4611.87715	656.0515	6864.33747	2939.92613	11899.82655	1.05368	1.0696	2.94E-04	4.44E-04	6.59E-05	3.50E-04	6.77E-05	6.22E-04	4.67E-04	9.45E-04	1.34E-04	4.69E-04	1.38E-04	5.59E-04	1.47E-05	1.81E-05	4.5887E-03
552096.23	4172928.3	11643.41442	5725.30157	1674.7379	6196.1139	1352.30122	4988.9971	11720.07554	3359.54488	986.53153	5954.66096	3176.3324	6535.50981	0.24067	0.23934	7.27E-04	3.31E-04	9.68E-05	3.07E-04	8.45E-05	3.12E-04	1.15E-03	6.89E-04	2.02E-04	4.07E-04	1.49E-04	3.07E-04	3.37E-06	4.06E-06	4.7717E-03
551709.18	4172666.4	8339.56061	3107.75032	3256.42485	8999.46683	5466.59722	1998.9409	8223.01393	1853.99989	1685.96937	5910.80335	11724.00596	2716.07948	0.42445	0.43615	5.21E-04	1.80E-04	1.88E-04	4.46E-04	3.41E-04	1.25E-04	8.08E-04	3.80E-04	3.46E-04	4.04E-04	5.51E-04	1.28E-04	5.94E-06	7.39E-06	4.4307E-03
551484.35	4173178	4473.90806	7816.39521	1175.43158	7857.81718	1151.08422	9154.20214	4516.52331	4667.52081	673.13469	7542.65011	3257.45057	10980.17429	0.89186	0.90406	2.79E-04	4.52E-04	6.80E-05	3.90E-04	7.19E-05	5.72E-04	4.44E-04	9.57E-04	1.38E-04	5.16E-04	1.53E-04	5.16E-04	1.25E-05	1.53E-05	4.5833E-03
551926.94	4172706.94	5461.51457	3531.6196	3679.9285	11774.87334	5679.30145	1627.29896	5336.0902	2056.0782	1896.91248	8943.3831	11062.29683	2189.81659	0.30531	0.30561	3.41E-04	2.04E-04	2.13E-04	5.84E-04	3.55E-04	1.02E-04	5.25E-04	4.21E-04	3.89E-04	6.12E-04	5.20E-04	1.03E-04	4.27E-06	5.18E-06	4.3762E-03
551498.4	4172657.61	4297.86496	4514.41252	2074.84656	14576.29666	3347.46741	2665.43777	4267.86605	2608.31749	1136.51521	9521.00759	10714.53613	3484.1523	0.55679	0.56764	2.68E-04	2.61E-04	1.20E-04	7.23E-04	2.09E-04	1.66E-04	4.20E-04	5.35E-04	2.33E-04	6.51E-04	5.03E-04	1.64E-04	7.79E-06	9.62E-06	4.2699E-03
551539.9	4172638.01	4822.42773	4270.50165	2418.18822	13190.01746	4164.55478	2539.82683	4780.59734	2496.9175	1309.96019	9044.65922	10790.68343	3353.57067	0.46763	0.47405	3.01E-04	2.47E-04	1.40E-04	6.54E-04	2.60E-04	1.59E-04	4.70E-04	5.12E-04	2.69E-04	6.19E-04	5.07E-04	1.58E-04	6.54E-06	8.03E-06	4.3080E-03
552099.2	4172907.38	11473.75801	5640.49045	1781.96786	6432.96096	1473.4905	4718.37019	11524.64865	3317.14072	1044.79052	6125.77087	3422.4009	6203.79397	0.23636	0.23517	7.16E-04	3.26E-04	1.03E-04	3.19E-04	9.20E-05	2.95E-04	1.13E-03	6.80E-04	2.14E-04	4.19E-04	1.61E-04	2.91E-04	3.31E-06	3.99E-06	4.7564E-03
551441.03	4173115.46	4237.15362	7780.39721	1209.88197	9182.32002	1273.99672	7978.39243	4273.10793	4664.77611	688.18733	8380.66755	3916.62045	9556.95349	0.75812	0.76783	2.65E-04	4.50E-04	6.99E-05	4.55E-04	7.96E-05	4.98E-04	4.20E-04	9.56E-04	1.41E-04	5.73E-04	1.84E-04	4.49E-04	1.06E-05	1.30E-05	4.5642E-03
551664.88	4173262.23	6400.04341	6174.39717	1023.10186	4753.87904	885.57937	12086.58918	6527.89591	3654.42425	598.87402	4726.56089	2139.07866	14127.89596	16.7204	13.84824	4.00E-04	3.57E-04	5.92E-05	2.36E-04	5.53E-05	7.55E-04	6.42E-04	7.49E-04	1.23E-04	3.23E-04	1.00E-04	6.64E-04	2.34E-04	2.35E-04	4.9310E-03
552012.61	4172736.12	8344.22027	4650.80113	3098.55541	9458.8045	3437.92572	2548.1113	8205.78825	2773.24956	1711.76344	8135.23052	7210.9772	3424.60684	0.25383	0.25372	5.21E-04	2.69E-04	1.79E-04	4.69E-04	2.15E-04	1.59E-04	8.07E-04	5.68E-04	3.51E-04	5.56E-04	3.39E-04	1.61E-04	3.55E-06	4.30E-06	4.6014E-03
551390.13	4172885.96	3786.92167	6294.10858	1515.1459	14201.04284	1811.11419	3950.29664	3779.58422	3582.85709	849.52085	10840.91655	7371.40938	5005.72034	0.72617	0.74413	2.36E-04	3.64E-04	8.76E-05	7.04E-04	1.13E-04	2.47E-04	3.72E-04	7.34E-04	1.74E-04	7.41E-04	3.46E-04	2.35E-04	1.02E-05	1.26E-05	4.3772E-03
551911.78	4172703.37	5074.06233	3308.34928	3582.56552	11942.76982	6049.07704	1537.53088	4964.39102	1908.88122	1821.81911	8806.24879	11899.50507	2064.83114	0.32364	0.32409	3.17E-04	1.91E-04	2.07E-04	5.92E-04	3.78E-04	9.60E-05	4.88E-04	3.91E-04	3.73E-04	6.02E-04	5.59E-04	9.70E-05	4.53E-06	5.49E-06	4.3019E-03
551578.63	4172628.6	5478.4574	4009.04143	2799.03347	11510.19735	5034.92148	2423.45645	5422.80889	2370.63588	1505.16076	8351.38858	10818.38761	3226.15612	0.40267	0.40755	3.42E-04	2.32E-04	1.62E-04	5.71E-04	3.14E-04	1.51E-04	5.33E-04	4.86E-04	3.09E-04	5.71E-04	5.08E-04	1.52E-04	5.63E-06	6.91E-06	4.3429E-03
551401.79	4172808.81	3612.22655	5557.90695	1578.5657	15152.22645	2166.20568	3418.79346	3599.42879	3161.09916	874.67177	10330.93079	9056.68607	4359.05862	0.74176	0.76462	2.26E-04	3.21E-04	9.13E-05	7.51E-04	1.35E-04	2.14E-04	3.54E-04	6.48E-04	1.79E-04	7.06E-04	4.25E-04	2.05E-04	1.04E-05	1.30E-05	4.2790E-03
551391.36	4172976.65	4052.84652	7524.67195	1345.17698	12063.74101	1514.09339	4998.35122	4060.16497	4351.2163	763.73329	10186.21478	5632.96795	6291.71589	0.69853	0.71157	2.53E-04	4.35E-04	7.78E-05	5.98E-04	9.46E-05	3.12E-04	3.99E-04	8.92E-04	1.57E-04	6.97E-04	2.65E-04	2.96E-04	9.77E-06	1.21E-05	4.4967E-03
551646.43	4172638.95	6947.726	3510.59525	3359.70943	8862.7283	6077.20246	2219.01869	6859.01436	2109.23085	1764.05055	6820.31849	11046.06135	2992.58336	0.34172	0.34721	4.34E-04	2.03E-04	1.94E-04	4.39E-04	3.80E-04	1.39E-04	6.74E-04	4.32E-04	3.62E-04	4.66E-04	5.19E-04	1.41E-04	4.78E-06	5.88E-06	4.3931E-03
551737.74	4172672.32	8202.65783	2897.88879	2812.14357	10026.72919	5006.22406	1854.34409	8093.7813	1713.23769	1470.12732	5920.85253	11986.92765	2512.11878	0.47404	0.48602	5.12E-04	1.68E-04	1.63E-04	4.97E-04	3.13E-04	1.16E-04	7.96E-04	3.51E-04	3.01E-04	4.05E-04	5.63E-04	1.18E-04	6.63E-06	8.24E-06	4.3167E-03
552038.16	4172751.61	9032.32807	4793.64739	2810.45261	8802.82394	2985.41827	2825.64099	8920.79374	2846.60003	1567.21164	7661.87384	6348.54418	3817.41948	0.24132	0.24107	5.64E-04	2.77E-04	1.62E-04	4.36E-04	1.86E-04	1.76E-04	8.77E-04	5.83E-04	3.21E-04	5.24E-04	2.98E-04	1.79E-04	3.38E-06	4.09E-06	4.5934E-03
551405.75	4172792.19	3584.09081	5430.57722	1581.12132	15095.92645	2222.25487	3314.45954	3570.89521	3087.51411	874.18891	10179.57486	9204.65641	4235.08091	0.73208	0.75534	2.24E-04	3.14E-04	9.14E-05	7.48E-04	1.39E-04	2.07E-04	3.51E-04	6.33E-04	1.79E-04	6.96E-04	4.32E-04	1.99E-04	1.02E-05	1.28E-05	4.2368E-03
551611.42	4172628.63	6114.26151	3744.20812	3084.51078	10008.62365	5627.28266	2316.22092	6044.35204	2236.01236	1640.28119	7570.73807	10801.70242	3101.18547	0.3598	0.36425	3.82E-04	2.16E-04	1.78E-04	4.96E-04	3.51E-04	1.45E-04	5.94E-04	4.58E-04	3.36E-04	5.18E-04	5.07E-04	1.46E-04	5.03E-06	6.17E-06	4.3394E-03
551972.03	4172717.21	6698.7788	4080.2904	3522.25945	10639.46179	4341.38392	1957.90859	6551.34656	2419.90581	1882.42048	8725.98607	8704.24847	2644.53771	0.27181	0.27203	4.18E-04	2.36E-04	2.04E-04	5.27E-04	2.71E-04	1.22E-04	6.44E-04	4.96E-04	3.86E-04	5.97E-04	4.09E-04	1.24E-04	3.80E-06	4.61E-06	4.4427E-03
551388.14	4172967.68	3995.0013	7307.0206	1353.31812	12146.85047	1522.82508	4806.47229	4000.23328	4212.92604	768.00121	10188.09937	5710.65192	6055.70803	0.69073	0.70382	2.49E-04	4.22E-04	7.82E-05	6.02E-04	9.51E-05	3.00E-04	3.93E-04	8.64E-04	1.57E-04	6.97E-04	2.68E-04	2.84E-04	9.67E-06	1.19E-05	4.4327E-03
552102.35	4172916.18	11284.2031	5574.82074	1703.992	6227.66449	1399.25524	4756.83567	11345.34784	3275.16394	1000.61578	5948.87466	3266.16445	6241.11598	0.23536	0.23413	7.05E-04	3.22E-04	9.85E-05	3.09E-04	8.74E-05	2.97E-04	1.12E-03	6.71E-04	2.05E-04	4.07E-04	1.53E-04	2.93E-04	3.29E-06	3.97E-06	4.6708E-03
551652.44	4173264.04	6022.94153	6191.24193	1049.54447	4845.25317	894.37692	11737.68029	6136.75394	3679.36926	613.02294	4794.22684	2178.88313	13851.48481	8.41785	9.16379	3.76E-04	3.58E-04	6.07E-05	2.40E-04	5.59E-05	7.33E-04	6.03E-04	7.54E-04	1.26E-04	3.28E-04	1.02E-04	6.51E-04	1.18E-04	1.55E-04	4.6607E-03
552099.37	4172937.1	11373.04516	5632.04696	1594.65578	5977.16591	1281.15663	5007.30825	11459.40957	3301.22922	940.55226	5760.04917	3023.81122	6544.75843	0.2395	0.23812	7.10E-04	3.26E-04	9.22E-05	2.96E-04	8.00E-05	3.13E-04	1.13E-03	6.77E-04	1.93E-04	3.94E-04	1.42E-04	3.07E-04	3.35E-06	4.04E-06	4.6636E-03
551487.86	4172661.17	4136.88519	4490.564	1967.16611	14428.92441	3117.31065	2657.41887	4110.11359	2588.72311	1080.02961	9394.25025	10369.57317	3466.01689	0.56188	0.57355	2.58E-04	2.60E-04	1.14E-04	7.15E-04	1.95E-04	1.66E-04	4.04E-04	5.31E-04	2.21E-04	6.42E-04	4.87E-04	1.63E-04	7.86E-06	9.72E-06	4.1734E-03
551391.76	4172842.66	3618.25691	5703.78291	1528.06559	14548.98676	1978.35703	3570.06856	3607.53851	3248.10465	850.62545	10342.4673	8238.9515	4534.73585	0.71894	0.73855	2.26E-04	3.30E-04	8.83E-05	7.21E-04	1.24E-04	2.23E-04	3.55E-04	6.66E-04	1.74E-04	7.07E-04	3.87E-04	2.13E-04	1.01E-05	1.25E-05	4.2363E-03
551487.44	4173186.58	4422.61088	7588.84472	1149.39497	7573.43017	1122.44549	8963.18286	4464.97341	4535.44625	658.6881	7271.69264	3153.77843	10753.16648	0.88498	0.89695	2.76E-04	4.39E-04	6.65E-05	3.75E-04	7.01E-05	5.60E-04	4.39E-04	9.30E-04	1.35E-04	4.97E-04	1.48E-04	5.05E-04	1.24E-05	1.52E-05	4.4683E-03
551446.94	4173132.2	4186.52811	7529.70056	1180.66921	8711.74692	1226.58869	8004.05847	4222.9873	4507.4576	672.39263	8006.76147	3697.56815	9690.34131	0.7562	0.76607	2.61E-04	4.35E-04	6.83E-05	4.32E-04	7.66E-05	5.00E-04	4.15E-04	9.24E-04	1.38E-04	5.48E-04	1.74E-04	4.55E-04	1.06E-05	1.30E-05	4.4501E-03
552105.32	4172895.26	11040.85945	5465.46479	1798.90701	6429.65792	1514.93156	4485.02298	11078.34943	3217.3718	1051.19837	6084.61993	3497.75491	5904.45311	0.23097	0.22988	6.89E-04	3.16E-04	1.04E-04	3.19E-04	9.46E-05	2.80E-04	1.09E-03	6.59E-04	2.15E-04	4.16E-04	1.64E-04	2.77E-04	3.23E-06	3.90E-06	4.6316E-03
551523.8	4173219.98	4647.67009	7332.97197	1109.80248	6761.19696	1057.47209	9762.17777	4698.75054	4445.23051	639.28432	6568.84991	2847.54584	11669.8979	1.06014	1.07625	2.90E-04	4.24E-04	6.42E-05	3.35E-04	6.60E-05	6.10E-04	4.62E-04	9.11E-04	1.31E-04	4.49E-04	1.34E-04	5.48E-04	1.48E-05	1.82E-05	4.4575E-03
551428.29	4172733.26	3617.2212	5019.34541	1623.02426	15101.13025	2423.383	2984.94597	3602.93291	2858.75324	892.5088	9885.29645	9681.00529	3850.43061	0.68644	0.7081	2.26E-04	2.90E-04	9.38E-05	7.49E-04	1.51E-04	1.86E-04	3.54E-04	5.86E-04	1.83E-04	6.76E-04	4.55E-04	1.81E-04	9.61E-06	1.20E-05	4.1525E-03
551986.96	4172720.52	7085.51443	4219.42054	3372.80478	10136.65534	3912.3723	2098.77165	6939.5688	2514.78545	1822.30136	8501.57225	8095.70948	2829.03307	0.26354	0.26367	4.42E-04	2.44E-04	1.95E-04	5.02E-04	2.44E-04	1.31E-04	6.82E-04	5.15E-04	3.74E-04	5.81E-04	3.80E-04	1.33E-04	3.69E-06	4.47E-06	4.4331E-03
552027.43	4172739.3	8449.93237	4631.07453	2881.55279	8989.98242	3168.30353	2648.59999	8326.1442	2751.96238	1596.40971	7730.19042	6689.76017	3566.87745	0.24429	0.24414	5.28E-04	2.68E-04	1.67E-04	4.46E-04	1.98E-04	1.65E-04	8.18E-04	5.64E-04	3.27E-04	5.29E-04	3.14E-04	1.68E-04	3.42E-06	4.14E-06	4.4985E-03
551440.58	4172710.84	3693.71872	4848.30372	1668.51966	15052.64969	2520.13114	2870.16347	3678.06936	2767.95571	917.25578	9752.6791	9864.89505	3714.57952	0.65996	0.67966	2.31E-04	2.80E-04	9.65E-05	7.46E-04	1.57E-04	1.79E-04	3.62E-04	5.67E-04	1.88E-04	6.67E-04	4.63E-04	1.74E-04	9.23E-06	1.15E-05	4.1326E-03
551505.04	4173205.34	4522.48668	7482.04547	1126.86081	7122.81458	1083.57498	9290.57378	4568.4166	4487.33732	647.45731	6892.04786	2975.48064	11127.19476	0.95677	0.9703	2.82E-04	4.33E-04	6.51E-05	3.53E-04	6.77E-05	5.80E-04	4.49E-04	9.20E-04	1.33E-04	4.71E-04	1.40E-04	5.23E-04	1.34E-05	1.64E-05	4.4462E-03
551566.3	4173247.83	4947.53929	6952.67112	1064.63053	5916.13212	986.59036	10749.80586	5014.02119	4187.82515	616.35679	5823.14374	2549.62065	12486.13113	1.48566	1.51401	3.09E-04	4.02E-04	6.16E-05	2.93E-04	6.16E-05	6.71E-04	4.93E-04	8.58E-04	1.26E-04	3.98E-04	1.20E-04	5.86E-04	2.08E-05	2.57E-05	4.4272E-03
551387.38	4172876.15	3683.98078	6003.20132	1488.96619	13905.25749	1809.7511	3781.746	3676.07569	3419.10109	833.318	10459.16496	7371.3413	4794.10657	0.70182	0.71919	2.30E-04	3.47E-04	8.61E-05	6.89E-04	1.13E-04	2.36E-04	3.61E-04	7.01E-04	1.71E-04	7.15E-04	3.46E-04	2.25E-04	9.82E-06	1.22E-05	4.2433E-03
551384.91	4172958.72	3926.3204	7066.09847	1357.17383	12174.1994	1528.66247	4614.71183	3929.65753	4064.4513	769.68066	10135.32194	5778.12932	5819.02562	0.68061	0.694	2.45E-04	4.09E-04	7.85E-05	6.03E-04	9.55E-05	2.88E-04	3.86E-04	8.33E-04	1.58E-04	6.93E-04	2.71E-04	2.73E-04	9.52E-06	1.18E-05	4.3556E-03
551411.14	4173060.62	4069.81191	7654.91855	1195.37584	9947.73842	1334.91014	6410.16205	4096.2119	4549.5187	677.32952	8603.86867	4462.83768	7932.45443	0.6849	0.69538	2.54E-04	4.43E-04	6.91E-05	4.93E-04	8.34E-05	4.00E-04	4.03E-04	9.33E-04	1.39E-04	5.88E-04	2.10E-04	3.73E-04	9.58E-06	1.18E-05	4.4086E-03
551591.71	4172624.36	5614.96407	3815.37332	2835.90188	10530.41888	5102.81759	2336.21789	5555.78253	2265.49252	1519.68858	7807.11847	10405.82517	3116.29643	0.36945	0.37371	3.51E-04	2.21E-04	1.64E-04	5.22E-04	3.19E-04	1.46E-04	5.46E-04	4.64E-04	3.12E-04	5.34E-04	4.89E-04	1.46E-04	5.17E-06	6.33E-06	4.2242E-03
552105.5	4172924.98	11064.14798	5498.20011	1627.05246	6020.73205	1327.90007	4784.21185	11134.93082	3226.75835	956.79907	5768.28665	3114.62133	6263.64363	0.23427	0.23299	6.91E-04	3.18E-04	9.41E-05	2.98E-04	8.29E-05	2.99E-04	1.09E-03	6.61E-04	1.96E-04	3.94E-04	1.46E-04	2.94E-04	3.28E-06	3.95E-06	4.5772E-03
551452.4	4172691.47	3772.79888	4676.12888	1720.74078	14768.12259	2618.96076	2768.1483	3755.02996	2676.47342	946.19259	9542.80205	9899.73786	3589.96557	0.62601	0.6431	2.36E-04	2.70E-04	9.95E-05	7.32E-04	1.64E-04	1.73E-04	3.69E-04	5.49E-04	1.94E-04	6.53E-04	4.65E-04	1.69E-04	8.76E-06	1.09E-05	4.0914E-03
551450.37	4173141.74	4163.98618	7403.72233	1163.98908	8459.65669	1198.66764	7989.17119	4200.53952	4426.44313	663.36812	7800.92888	3573.48635	9657.94234	0.75652	0.76631	2.60E-04	4.28E-04	6.73E-05	4.19E-04	7.49E-05	4.99E-04	4.13E-04	9.07E-04	1.36E-04	5.33E-04	1.68E-04	4.54E-04	1.06E-05	1.30E-05	4.3832E-03
551656.68	4172638.3	7022.51922	3360.43049	3287.85688	8372.22043	5848.24643	2141.27859	6931.51512	2018.6141	1721.88749	6420.0779	10663.94355	2892.20955	0.33031	0.33603	4.38E-04	1.94E-04	1.90E-04	4.15E-04	3.65E-04	1.34E-04	6.81E-04	4.14E-04	3.53E-04	4.39E-04	5.01E-04	1.36E-04	4.62E-06	5.69E-06	4.2710E-03
551640.01	4173265.85	5678.97766	6174.08392	1042.94521	4923.14008	898.56595	11380.76831	5780.99891	3696.54625	607.50949	4878.96383	2212.16785	13391.70778	5.31372	5.64386	3.55E-04	3.57E-04	6.03E-05	2.44E-04	5.61E-05	7.11E-04	5.68E-04	7.58E-04	1.25E-04	3.34E-04	1.04E-04	6.29E-04	7.44E-05	9.56E-05	4.4698E-03
551771.82	4172683.44	7182.71091	2632.02811	2272.35488	11015.85509	5211.83375	1643.51406	7102.11023	1531.79165	1201.20061	6187.97469	12470.58174	2214.02385	0.48956	0.49931	4.48E-04	1.52E-04	1.31E-04	5.46E-04	3.26E-04	1.03E-04	6.98E-04	3.14E-04	2.46E-04	4.23E-04	5.86E-04	1.04E-04	6.85E-06	8.46E-06	4.0927E-03
552001.85	4172723.77	7364.96957	4306.22298	3172.88301	9611.56142	3614.60672	2269.67535	7224.63143	2593.78952	1731.83623	8168.7462	7533.24202	3060.09351	0.25576	0.25579	4.60E-04	2.49E-04	1.83E-04	4.76E-04	2.26E-04	1.42E-04	7.10E-04	5.32E-04	3.55E-04	5.59E-04	3.54E-04	1.44E-04	3.58E-06	4.33E-06	4.3971E-03
551404.69	4173042.71	4042.62637	7647.27734	1202.35434	10147.76945	1359.03823	6010.42842	4065.28477	4537.86078	681.66055	8775.6357	4676.15157	7478.5256	0.67534	0.68533	2.52E-04	4.42E-04	6.95E-05	5.03E-04	8.49E-05	3.75E-04	4.00E-04	9.30E-04	1.40E-04	6.00E-04	2.20E-04	3.51E-04	9.45E-06	1.16E-05	4.3889E-03
551407.91	4173051.67	4048.39587	7637.75383	1195.14441	9979.1527	1345.47348	6198.22075	4073.03374	4539.07631	677.30817	8657.96378	4573.31249	7692.08026	0.6778	0.68836	2.53E-04	4.42E-04	6.91E-05	4.95E-04	8.40E-05	3.87E-04	4.00E-04	9.30E-04	1.39E-04	5.92E-04	2.15E-04	3.61E-04	9.48E-06	1.17E-05	4.3882E-03
552108.47	4172904.06	10898.95643	5415.71281	1725.64589	6239.46601	1441.98976	4530.71233	10946.28937	3184.93816	1010.09726	5924.06874	3345.75463	5952.73472	0.23011	0.22897	6.80E-04	3.13E-04	9.98E-05	3.09E-04	9.01E-05	2.83E-04	1.08E-03	6.53E-04	2.07E-04	4.05E-04	1.57E-04	2.80E-04	3.22E-06	3.88E-06	4.5605E-03
551401.46	4173033.76	4030.21839	7626.79752	1209.5589	10305.33558	1371.58046	5816.81083	4050.78665	4515.5665	686.00552	8884.92204	4774.09796	7254.54641	0.67149	0.6824	2.52E-04	4.41E-04	6.99E-05	5.11E-04	8.57E-05	3.63E-04	3.98E-04	9.26E-04	1.41E-04	6.08E-04	2.24E-04	3.41E-04	9.40E-06	1.16E-05	4.3802E-03
551422.26	4172739.98	3551.29167	4998.35219	1585.03792	14743.30718	2349.45699	2989.42539	3537.627	2845.66276	872.03904	9724.70578	9372.8283	3850.28256	0.67632	0.69761	2.22E-04	2.89E-04	9.16E-05	7.31E-04	1.47E-04	1.87E-04	3.48E-04	5.83E-04	1.79E-04	6.65E-04	4.40E-04	1.81E-04	9.46E-06	1.18E-05	4.0838E-03
551398.24	4173024.81	4013.94249	7582.5245	1217.89819	10461.86344	1383.89848	5624.44688	4032.34826	4475.85503	691.00217	8994.61635	4861.06801	7029.12163	0.66809	0.67869	2.51E-04	4.38E-04	7.04E-05	5.19E-04	8.64E-05	3.51E-04	3.96E-04	9.17E-04	1.42E-04	6.15E-04	2.28E-04	3.30E-04	9.35E-06	1.15E-05	4.3656E-03
551533.5	4173229.12	4646.55226	7096.72497	1086.89263	6464.83466	1034.66105	9808.56336	4699.96618	4323.97391	626.84603	6301.64519	2760.42354	11476.27033	1.11531	1.13165	2.90E-04	4.10E-04	6.28E-05	3.20E-04	6.46E-05	6.13E-04	4.62E-04	8.86E-04	1.28E-04	4.31E-04	1.30E-04	5.39E-04	1.56E-05	1.92E-05	4.3721E-03
551395.01	4173015.86	3997.38024	7522.17145	1228.98661	10632.14143	1396.7704	5439.78905	4013.5762	4423.75662	697.51119	9116.35081	4946.14198	6810.74685	0.66509	0.67613	2.50E-04	4.35E-04	7.11E-05	5.27E-04	8.72E-05	3.40E-04	3.95E-04	9.07E-04	1.43E-04	6.23E-04	2.32E-04	3.20E-04	9.31E-06	1.15E-05	4.3502E-03
551381.68	4172949.75	3852.95969	6819.67344	1358.90792	12170.97803	1534.34483	4430.38473	3854.57855	3914.95687	769.96569	10049.66567	5845.31952	5591.17625	0.66949	0.68296	2.41E-04	3.94E-04	7.86E-05	6.03E-04	9.58E-05	2.77E-04	3.79E-04	8.02E-04	1.58E-04	6.87E-04	2.75E-04	2.63E-04	9.37E-06	1.16E-05	4.2738E-03
552052.92	4172754.73	8860.25967	4693.58352	2628.28414	8342.99633	2756.21639	2843.58957	8763.65777	2785.85391	1470.6393	7298.4119	5898.72423	3832.82878	0.23263	0.23237	5.53E-04	2.71E-04	1.52E-04	4.14E-04	1.72E-04	1.78E-04	8.61E-04	5.71E-04	3.01E-04	4.99E-04	2.77E-04	1.80E-04	3.26E-06	3.94E-06	4.4371E-03
551419.9	4173085.26	4043.26334	7452.41447	1173.86187	9380.09173	1289.63555	6831.65764	4073.7738	4427.51887	665.0979	8234.98919	4168.74163	8382.11014	0.68989	0.69955	2.52E-04	4.31E-04	6.79E-05	4.65E-04	8.05E-05	4.27E-04	4.00E-04	9.08E-04	1.36E-04	5.63E-04	1.96E-04	3.94E-04	9.65E-06	1.19E-05	4.3418E-03
551391.79	4173006.9	3973.79841	7431.2123	1240.07908	10790.28561	1409.23481	5255.65978	3987.73213	4353.04329	704.0243	9223.50372	5027.80569	6590.64098	0.6616	0.67266	2.48E-04	4.30E-04	7.17E-05	5.35E-04	8.80E-05	3.28E-04	3.92E-04	8.92E-04	1.44E-04	6.31E-04	2.36E-04	3.10E-04	9.26E-06	1.14E-05	4.3263E-03
551422.86	4173093.63	4043.31208	7401.03191	1170.25255	9208.54284	1275.89257	6967.07363	4074.82556	4393.32879	663.34594	8145.84597	4061.58096	8524.9002	0.6942	0.70412	2.52E-04	4.28E-04	6.77E-05	4.56E-04	7.97E-05	4.35E-04	4.01E-04	9.01E-04	1.36E-04	5.57E-04	1.91E-04	4.00E-04	9.71E-06	1.19E-05	4.3262E-03
551610.57	4173265.16	5251.88818	6376.02744	1040.84551	5198.45653	920.49697	10952.28114	5336.7635	3840.13307	603.70914	5198.96873	2305.83444	12875.33039	2.65361	2.75383	3.28E-04	3.69E-04	6.02E-05	2.58E-04	5.75E-05	6.84E-04	5.25E-04	7.87E-04	1.24E-04	3.56E-04	1.08E-04	6.05E-04	3.71E-05	4.67E-05	4.3438E-03
551453.46	4173150.32	4141.26875	7355.70098	1148.03912	8218.49678	1173.36553	7950.46275	4177.79738	4352.03855	654.7158	7611.24682	3465.02255	9600.93641	0.75568	0.76526	2.59E-04	4.25E-04	6.64E-05	4.07E-04	7.33E-05	4.97E-04	4.11E-04	8.92E-04	1.34E-04	5.20E-04	1.63E-04	4.51E-04	1.06E-05	1.30E-05	4.3221E-03
551601.52	4172621.5	5734.35957	3684.93333	2868.19445	9921.96371	5161.93747	2276.55548	5671.96371	2194.27931	1531.57645	7451.60177	10193.7015	3041.15142	0.35061	0.35462	3.58E-04	2.13E-04	1.66E-04	4.92E-04	3.22E-04	1.42E-04	5.58E-04	4.50E-04	3.14E-04	5.10E-04	4.79E-04	1.43E-04	4.91E-06	6.01E-06	4.1567E-03
552042.22	4172742.44	8446.89171	4564.90935	2704.55895	8538.78213	2925.07035	2679.73183	8339.50237	2708.87916	1504.19757	7388.02874	6215.79761	3617.89911	0.2354	0.23523	5.27E-04	2.64E-04	1.56E-04	4.23E-04	1.83E-04	1.67E-04	8.20E-04	5.55E-04	3.08E-04	5.05E-04	2.92E-04	1.70E-04	3.29E-06	3.99E-06	4.3787E-03
552016.7	4172726.99	7615.09833	4390.63804	2971.16039	9123.25162	3340.60497	2386.65757	7483.61439	2617.24219	1635.15939	7822.20852	7008.73073	3207.74817	0.24698	0.24696	4.75E-04	2.54E-04	1.72E-04	4.52E-04	2.09E-04	1.49E-04	7.36E-04	5.36E-04	3.35E-04	5.35E-04	3.29E-04	1.51E-04	3.46E-06	4.18E-06	4.3407E-03
551505.73	4172645.18	4234.68875	4250.2656	2034.27553	13311.45012	3301.32065	2535.68881	4204.00407	2464.21553	1111.28629	8859.00549	9948.03519	3320.05777	0.49534	0.5038	2.64E-04	2.46E-04	1.18E-04	6.60E-04	2.06E-04	1.58E-04	4.13E-04	5.05E-04	2.28E-04	6.06E-04	4.67E-04	1.56E-04	6.93E-06	8.54E-06	4.0428E-03
552111.62	4172912.86	10726.7822	5355.07226	1652.76975	6046.46461	1371.41499	4566.38115	10783.47535	3146.23329	968.94537	5758.68822	3197.42021	5987.43251	0.22915	0.22797	6.70E-04	3.10E-04	9.56E-05	3.00E-04	8.57E-05	2.85E-04	1.06E-03	6.45E-04	1.99E-04	3.94E-04	1.50E-04	2.81E-04	3.21E-06	3.86E-06	4.4813E-03
551627.58	4173267.66	5419.68481	6177.21816	1033.96318	4993.09248	901.19653	11015.86452	5512.63063	3712.33158	600.97876	4964.67499	2236.87855	12953.27606	3.7515	3.92255	3.38E-04	3.57E-04	5.98E-05	2.48E-04	5.63E-05	6.88E-04	5.42E-04	7.61E-04	1.23E-04	3.40E-04	1.05E-04	6.08E-04	5.25E-05	6.65E-05	4.3451E-03
551390.28	4172827.82	3504.4632	5407.99577	1491.31489	14049.55952	1976.213	3393.61804	3493.45856	3081.76855	828.77959	9841.55534	8140.4143	4314.88058	0.68815	0.70736	2.19E-04	3.13E-04	8.62E-05	6.96E-04	1.23E-04	2.12E-04	3.43E-04	6.32E-04	1.70E-04	6.73E-04	3.82E-04	2.03E-04	9.63E-06	1.20E-05	4.0741E-03
551409.14	4172764.49	3476.8153	5085.20311	1538.25438	14371.72835	2225.22925	3085.18208	3463.89487	2892.82831	848.11457	9626.25717	8952.44592	3955.609	0.67857	0.69991	2.17E-04	2.94E-04	8.89E-05	7.12E-04	1.39E-04	1.93E-04	3.40E-04	5.93E-04	1.74E-04	6.58E-04	4.20E-04	1.86E-04	9.49E-06	1.19E-05	4.0373E-03
551388.56	4172997.95	3935.83982	7295.05204	1247.89223	10902.1053	1410.70367	5064.12813	3947.56276	4257.24445	708.55104	9284.92008	5095.6026	6359.11216	0.65524	0.66672	2.46E-04	4.22E-04	7.21E-05	5.40E-04	8.81E-05	3.16E-04	3.88E-04	8.73E-04	1.45E-04	6.35E-04	2.39E-04	2.99E-04	9.17E-06	1.13E-05	4.2838E-03
551384.09	4172856.02	3553.60144	5621.64092	1468.75194	13746.86057	1858.51327	3552.38821	3544.40764	3203.52577	819.14144	10004.73166	7605.27512	4506.95168	0.68224	0.69969	2.22E-04	3.25E-04	8.49E-05	6.81E-04	1.16E-04	2.22E-04	3.48E-04	6.57E-04	1.68E-04	6.84E-04	3.57E-04	2.12E-04	9.55E-06	1.19E-05	4.0986E-03
552108.65	4172933.78	10816.51275	5411.28147	1551.55876	5813.18853	1259.48944	4800.45728	10896.19796	3172.39354	913.56673	5585.01602	2968.08375	6271.47483	0.23309	0.23177	6.75E-04	3.13E-04	8.97E-05	2.88E-04	7.87E-05	3.00E-04	1.07E-03	6.50E-04	1.87E-04	3.82E-04	1.39E-04	2.95E-04	3.26E-06	3.93E-06	4.4762E-03
551491.73	4173198.52	4349.68915	7270.82783	1112.74674	7191.72356	1083.09717	8679.57767	4391.69841	4349.19986	638.23592	6904.22894	3015.00233	10418.88625	0.87466	0.88634	2.72E-04	4.20E-04	6.43E-05	3.56E-04	6.76E-05	5.42E-04	4.32E-04	8.91E-04	1.31E-04	4.72E-04	1.42E-04	4.89E-04	1.22E-05	1.50E-05	4.3069E-03
552004.89	4173097.63	10297.12437	5722.61531	875.94405	4042.9137	680.88835	7746.1173	10629.56328	3258.94457	521.92451	4119.00285	1683.04071	9711.24297	0.33383	0.33025	6.43E-04	3.31E-04	5.06E-05	2.00E-04	4.25E-05	4.84E-04	1.04E-03	6.68E-04	1.07E-04	2.82E-04	7.91E-05	4.56E-04	4.67E-06	5.60E-06	4.3981E-03
551575.84	4173256.81	4918.34135	6641.9941	1034.38802	5619.99802	955.3275	10320.41123	4987.41922	4006.99657	603.81592	5532.44604	2448.28007	12183.06753	1.60488	1.64108	3.07E-04	3.84E-04	5.98E-05	2.79E-04	5.97E-05	6.45E-04	4.90E-04	8.21E-04	1.24E-04	3.78E-04	1.15E-04	5.72E-04	2.25E-05	2.78E-05	4.2849E-03
551428.78	4173110.37	4023.30959	7248.66564	1158.8812	8837.19187	1239.15957	7155.04209	4056.27367	4297.7912	656.08286	7983.18072	3852.15394	8711.80555	0.69923	0.70798	2.51E-04	4.19E-04	6.70E-05	4.38E-04	7.74E-05	4.47E-04	3.99E-04	8.81E-04	1.34E-04	5.46E-04	1.81E-04	4.09E-04	9.78E-06	1.20E-05	4.2716E-03
551509.26	4173215.25	4437.80386	7164.83837	1091.29309	6809.83215	1052.40503	8983.60145	4483.57351	4295.58077	627.50091	6559.89671	2872.14645	10772.43889	0.94452	0.95773	2.77E-04	4.14E-04	6.31E-05	3.38E-04	6.57E-05	5.61E-04	4.41E-04	8.81E-04	1.29E-04	4.49E-04	1.35E-04	5.06E-04	1.32E-05	1.62E-05	4.2875E-03
551598.15	4173265.64	5105.02238	6414.78033	1014.57417	5277.96142	923.07671	10618.50095	5183.60076	3859.52512	598.89453	5291.71168	2324.4973	12511.49173	2.1247	2.18537	3.19E-04	3.71E-04	5.87E-05	2.62E-04	5.77E-05	6.63E-04	5.10E-04	7.91E-04	1.23E-04	3.62E-04	1.09E-04	5.88E-04	2.97E-05	3.70E-05	4.2796E-03
551497.06	4172647.66	4122.0837	4254.14621	1962.20644	13348.04079	3143.42595	2538.83102	4093.62916	2461.28455	1074.35345	8834.52591	9798.59421	3317.9569	0.50461	0.51384	2.57E-04	2.46E-04	1.13E-04	6.62E-04	1.96E-04	1.59E-04	4.02E-04	5.05E-04	2.20E-04	6.04E-04	4.60E-04	1.56E-04	7.06E-06	8.71E-06	3.9964E-03
551442.82	4172697.8	3640.78143	4628.25007	1639.38892	14308.67161	2473.60701	2753.62002	3625.00815	2646.8262	901.61629	9309.42156	9445.17769	3566.47037	0.61456	0.63182	2.27E-04	2.68E-04	9.48E-05	7.09E-04	1.54E-04	1.72E-04	3.56E-04	5.43E-04	1.85E-04	6.37E-04	4.44E-04	1.68E-04	8.60E-06	1.07E-05	3.9762E-03
551378.46	4172940.79	3766.00176	6551.24424	1352.80813	12078.42244	1533.84261	4242.84877	3766.22908	3755.69206	765.62993	9889.40098	5817.81924	5358.43041	0.6548	0.66825	2.35E-04	3.79E-04	7.82E-05	5.99E-04	9.58E-05	2.65E-04	3.70E-04	7.70E-04	1.57E-04	6.76E-04	2.73E-04	2.52E-04	9.16E-06	1.13E-05	4.1703E-03
551456.55	4173158.91	4116.33033	7217.6743	1131.20817	7965.70218	1147.94	7890.13399	4152.75947	4275.55902	645.53023	7417.37692	3359.38032	9519.80495	0.75424	0.76377	2.57E-04	4.17E-04	6.54E-05	3.95E-04	7.17E-05	4.93E-04	4.08E-04	8.76E-04	1.32E-04	5.07E-04	1.58E-04	4.47E-04	1.06E-05	1.29E-05	4.2516E-03
551385.32	4172988.95	3883.35269	7116.41156	1251.73181	10961.19595	1413.93549	4865.57029	3893.02889	4138.7184	710.76126	9295.00601	5150.3176	6117.12505	0.64599	0.65727	2.42E-04	4.11E-04	7.24E-05	5.43E-04	8.83E-05	3.04E-04	3.83E-04	8.48E-04	1.46E-04	6.36E-04	2.42E-04	2.87E-04	9.04E-06	1.11E-05	4.2235E-03
551430.7	4172717.37	3541.85002	4743.53963	1578.09097	14251.93407	2358.86594	2833.56772	3527.95214	2706.87016	867.99498	9351.15535	9200.05624	3660.93381	0.63073	0.64946	2.21E-04	2.74E-04	9.12E-05	7.06E-04	1.47E-04	1.77E-04	3.47E-04	5.55E-04	1.78E-04	6.39E-04	4.32E-04	1.72E-04	8.83E-06	1.10E-05	3.9603E-03
551390.96	4172818.7	3457.98438	5282.51944	1478.53987	13847.88878	1984.90649	3312.63422	3446.77412	3010.23866	820.84913	9628.62594	8126.23251	4215.57267	0.67492	0.69409	2.16E-04	3.05E-04	8.55E-05	6.86E-04	1.24E-04	2.07E-04	3.39E-04	6.17E-04	1.68E-04	6.58E-04	3.82E-04	1.98E-04	9.44E-06	1.18E-05	4.0075E-03
551431.74	4173118.74	4001.02426	7142.45085	1147.00945	8630.8287	1218.64668	7199.69369	4034.42376	4234.52946	652.01278	7826.07414	3752.42626	8746.93085	0.69822	0.70696	2.50E-04	4.13E-04	6.63E-05	4.28E-04	7.61E-05	4.50E-04	3.97E-04	8.68E-04	1.34E-04	5.35E-04	1.76E-04	4.11E-04	9.77E-06	1.20E-05	4.2249E-03
552031.51	4172730.16	7867.30174	4395.59028	2758.60445	8691.88312	3087.91328	2510.19524	7750.30536	2612.82631	1524.48743	7429.40259	6518.48829	3364.38518	0.2379	0.23784	4.91E-04	2.54E-04	1.59E-04	4.31E-04	1.93E-04	1.57E-04	7.62E-04	5.36E-04	3.12E-04	5.08E-04	3.06E-04	1.58E-04	3.33E-06	4.03E-06	4.2748E-03
551552.9	4173247.39	4701.65179	6732.34636	1044.02236	5928.53604	980.07311	9712.94356	4761.141	4072.2282	603.4194	5802.63871	2561.3036	11516.3555	1.2672	1.28906	2.94E-04	3.89E-04	6.04E-05	2.94E-04	6.12E-05	6.07E-04	4.68E-04	8.35E-04	1.24E-04	3.97E-04	1.20E-04	5.41E-04	1.77E-05	2.18E-05	4.2289E-03
552114.77	4172921.66	10526.85718	5284.38401	1580.75439	5851.79029	1303.45311	4591.94722	10592.38494	3101.64397	928.04007	5589.76264	3053.31588	6008.61124	0.22811	0.22689	6.57E-04	3.06E-04	9.14E-05	2.90E-04	8.14E-05	2.87E-04	1.04E-03	6.36E-04	1.90E-04	3.82E-04	1.43E-04	2.82E-04	3.19E-06	3.84E-06	4.3946E-03
551998.09	4173105.85	9982.81252	5635.3206	847.80188	3926.55145	664.35101	7853.484	10319.75361	3203.75281	504.46187	4003.29119	1639.20149	9814.74731	0.34241	0.33862	6.23E-04	3.26E-04	4.90E-05	1.95E-04	4.15E-05	4.91E-04	1.01E-03	6.57E-04	1.03E-04	2.74E-04	7.70E-05	4.61E-04	4.79E-06	5.74E-06	4.3215E-03
551404.85	4172772.83	3430.12136	5051.32058	1506.82952	13986.43916	2152.4508	3091.20278	3417.69194	2875.2809	831.72315	9445.53996	8638.73986	3957.01229	0.66345	0.68385	2.14E-04	2.92E-04	8.71E-05	6.93E-04	1.34E-04	1.93E-04	3.36E-04	5.89E-04	1.70E-04	6.46E-04	4.06E-04	1.86E-04	9.28E-06	1.16E-05	3.9683E-03
551717.7	4172662.03	7880.24546	2895.27477	2894.15696	8484.89255	4747.37935	1874.78305	7774.97324	1722.29499	1507.40034	5492.32012	10558.02837	2543.42834	0.40057	0.41147	4.92E-04	1.67E-04	1.67E-04	4.21E-04	2.97E-04	1.17E-04	7.64E-04	3.53E-04	3.09E-04	3.76E-04	4.96E-04	1.19E-04	5.60E-06	6.97E-06	4.0907E-03
551675.8	4172642.02	7229.08395	3144.94852	3165.09994	7814.72094	5438.34423	2026.55748	7133.5962	1886.0349	1650.52661	5861.05422	10190.38624	2744.41068	0.32536	0.3321	4.51E-04	1.82E-04	1.83E-04	3.87E-04	3.40E-04	1.27E-04	7.01E-04	3.87E-04	3.38E-04	4.01E-04	4.79E-04	1.29E-04	4.55E-06	5.63E-06	4.1144E-03
551488.37	4172650.57	4011.36421	4252.0333	1890.75906	13333.48199	2989.74366	2539.65261	3985.16145	2455.30509	1037.38842	8789.93341	9619.48815	3313.18578	0.51215	0.52208	2.50E-04	2.46E-04	1.09E-04	6.61E-04	1.87E-04	1.59E-04	3.92E-04	5.03E-04	2.13E-04	6.01E-04	4.52E-04	1.56E-04	7.17E-06	8.85E-06	3.9441E-03
551862.74	4173191.13	8176.45784	5031.51337	811.21138	3474.86747	674.93099	10510.27635	8452.18997	2873.32045	477.70799	3501.69718	1602.62135	12625.38932	0.65844	0.64708	5.11E-04	2.91E-04	4.69E-05	1.72E-04	4.22E-05	6.56E-04	8.31E-04	5.89E-04	9.79E-05	2.39E-04	7.53E-05	5.93E-04	9.21E-06	1.10E-05	4.1648E-03
551382.1	4172979.98	3831.63899	6933.32808	1257.71143	11028.17882	1419.0682	4680.76481	3839.34786	4019.04528	714.03044	9305.67702	5211.57712	5891.14935	0.63832	0.64972	2.39E-04	4.01E-04	7.27E-05	5.47E-04	8.86E-05	2.92E-04	3.77E-04	8.24E-04	1.46E-04	6.36E-04	2.45E-04	2.77E-04	8.93E-06	1.10E-05	4.1658E-03
551698.18	4172655.03	7670.9103	3005.61937	3067.79405	7894.28362	5069.03262	1947.87972	7568.01515	1795.82578	1594.55053	5551.5063	10256.6144	2644.19276	0.35578	0.3649	4.79E-04	1.74E-04	1.77E-04	3.91E-04	3.17E-04	1.22E-04	7.44E-04	3.68E-04	3.27E-04	3.80E-04	4.82E-04	1.24E-04	4.98E-06	6.18E-06	4.0953E-03
551991.09	4172711.43	6490.177	3947.43137	3172.59418	9737.28127	3791.57174	1959.22969	6357.00478	2347.3794	1708.22631	8070.22721	7798.27367	2639.45572	0.25485	0.25504	4.05E-04	2.28E-04	1.83E-04	4.83E-04	2.37E-04	1.22E-04	6.25E-04	4.81E-04	3.50E-04	5.52E-04	3.66E-04	1.24E-04	3.57E-06	4.32E-06	4.1649E-03
551656.69	4173272.39	5816.70987	5793.38834	1005.95532	4602.73441	859.20202	10680.29741	5926.46005	3436.9173	587.51096	4532.76865	2090.54691	12649.6886	8.89717	9.78506	3.63E-04	3.35E-04	5.82E-05	2.28E-04	5.37E-05	6.67E-04	5.83E-04	7.04E-04	1.20E-04	3.10E-04	9.82E-05	5.94E-04	1.24E-04	1.66E-04	4.4052E-03
551643.76	4172629.47	6497.88151	3329.87095	3071.34252	8245.00081	5435.51444	2120.82258	6418.21245	1999.07687	1617.99017	6388.86719	9943.43838	2855.7076	0.3098	0.3141	4.06E-04	1.93E-04	1.78E-04	4.09E-04	3.39E-04	1.32E-04	6.31E-04	4.10E-04	3.32E-04	4.37E-04	4.67E-04	1.34E-04	4.33E-06	5.32E-06	4.0765E-03
551559.19	4172616.79	4862.78945	3840.0381	2416.28517	11124.25475	4206.68103	2325.09739	4817.96908	2258.61576	1305.1258	7940.39232	9711.69604	3082.66452	0.38727	0.39179	3.04E-04	2.22E-04	1.40E-04	5.51E-04	2.63E-04	1.45E-04	4.74E-04	4.63E-04	2.68E-04	5.43E-04	4.56E-04	1.45E-04	5.42E-06	6.64E-06	3.9848E-03
551459.64	4173167.49	4088.46205	7074.14422	1113.47293	7713.67575	1122.63502	7809.20623	4124.75658	4195.87626	635.80701	7219.03487	3257.47233	9416.49151	0.75213	0.76154	2.55E-04	4.09E-04	6.44E-05	3.82E-04	7.01E-05	4.88E-04	4.05E-04	8.60E-04	1.30E-04	4.94E-04	1.53E-04	4.42E-04	1.05E-05	1.29E-05	4.1771E-03
551382.45	4172845.96	3462.39068	5386.51509	1439.09199	13382.10256	1848.18463	3415.48449	3452.94393	3071.74713	801.69189	9627.00946	7526.28188	4335.45365	0.65859	0.67559	2.16E-04	3.11E-04	8.32E-05	6.63E-04	1.15E-04	2.13E-04	3.39E-04	6.30E-04	1.64E-04	6.58E-04	3.54E-04	2.04E-04	9.22E-06	1.14E-05	3.9724E-03
552056.98	4172745.56	8332.11663	4479.9341	2537.70624	8110.36781	2707.1877	2700.80403	8239.30025	2657.5276	1416.27011	7054.88653	5788.62717	3638.47737	0.2271	0.22691	5.20E-04	2.59E-04	1.47E-04	4.02E-04	1.69E-04	1.69E-04	8.10E-04	5.45E-04	2.90E-04	4.82E-04	2.72E-04	1.71E-04	3.18E-06	3.85E-06	4.2429E-03
551375.23	4172931.82	3677.07845	6285.43597	1344.04068	11955.19171	1532.60753	4063.94522	3676.07368	3600.31345	759.6377	9703.1799	5833.28965	5135.28469	0.63929	0.65255	2.30E-04	3.63E-04	7.77E-05	5.93E-04	9.57E-05	2.54E-04	3.61E-04	7.38E-04	1.56E-04	6.64E-04	2.74E-04	2.41E-04	8.95E-06	1.11E-05	4.0666E-03
551514.43	4173223.34	4394.84228	6863.08182	1067.04566	6549.61305	1029.88049	8848.96087	4441.12444	4170.49568	614.05225	6320.78977	2793.83126	10454.75785	0.95167	0.96522	2.74E-04	3.97E-04	6.17E-05	3.25E-04	6.43E-05	5.53E-04	4.37E-04	8.55E-04	1.26E-04	4.32E-04	1.31E-04	4.91E-04	1.33E-05	1.64E-05	4.1760E-03
551643.97	4173274.24	5557.2823	5849.34312	1005.2188	4690.73664	865.53704	10571.19444	5657.33052	3488.14742	585.87228	4641.73457	2121.56094	12493.04776	5.4606	5.8157	3.47E-04	3.38E-04	5.81E-05	2.33E-04	5.41E-05	6.60E-04	5.56E-04	7.15E-04	1.20E-04	3.17E-04	9.96E-05	5.87E-04	7.64E-05	9.86E-05	4.2601E-03
551495.84	4173208.86	4280.0915	6992.42445	1080.09312	6881.9766	1051.34438	8422.98784	4321.92768	4183.76403	620.01045	6588.7065	2905.64617	10120.47825	0.86456	0.87593	2.67E-04	4.04E-04	6.24E-05	3.41E-04	6.57E-05	5.26E-04	4.25E-04	8.58E-04	1.27E-04	4.51E-04	1.36E-04	4.75E-04	1.21E-05	1.48E-05	4.1657E-03
551378.87	4172971.02	3776.69	6740.10918	1263.67886	11083.87213	1424.96295	4504.19933	3782.46877	3895.69135	717.12946	9299.44902	5274.10641	5674.45984	0.63039	0.64212	2.36E-04	3.90E-04	7.31E-05	5.49E-04	8.90E-05	2.81E-04	3.72E-04	7.99E-04	1.47E-04	6.36E-04	2.48E-04	2.67E-04	8.82E-06	1.09E-05	4.1055E-03
551400.56	4172781.18	3391.99851	5022.4335	1479.81561	13663.50875	2087.23832	3099.19194	3380.00477	2860.68955	817.75545	9295.24775	8367.8939	3961.76972	0.65109	0.67068	2.12E-04	2.90E-04	8.56E-05	6.77E-04	1.30E-04	1.94E-04	3.32E-04	5.86E-04	1.68E-04	6.36E-04	3.93E-04	1.86E-04	9.11E-06	1.14E-05	3.9104E-03
551392.06	4172807.34	3399.83235	5130.98608	1460.35859	13543.29535	1988.71022	3214.57887	3388.52386	2924.64775	809.75178	9360.35278	8063.44766	4094.87957	0.6555	0.67437	2.12E-04	2.97E-04	8.44E-05	6.71E-04	1.24E-04	2.01E-04	3.33E-04	5.99E-04	1.66E-04	6.40E-04	3.79E-04	1.92E-04	9.17E-06	1.14E-05	3.9200E-03

551478.34	4172654.76	3888.33111	4247.79467	1810.76895	13278.69314	2821.6086	2540.482	3864.69451	2447.89283	995.39227	8727.8532	9394.25928	3308.09429	0.51987	0.53057	2.43E-04	2.46E-04	1.05E-04	6.58E-04	1.76E-04	1.59E-04	3.80E-04	5.02E-04	2.04E-04	5.97E-04	4.41E-04	1.55E-04	7.27E-06	8.99E-06	3.8816E-03
551437.66	4173135.48	3957.2783	6935.76861	1121.77164	8222.48123	1176.04333	7312.80787	3991.0455	4150.52269	638.42347	7507.7334	3554.03876	8752.46995	0.6943	0.70261	2.47E-04	4.01E-04	6.49E-05	4.08E-04	7.35E-05	4.57E-04	3.92E-04	8.51E-04	1.31E-04	5.13E-04	1.67E-04	4.11E-04	9.72E-06	1.19E-05	4.1377E-03
552005.96	4172714.68	6772.41412	4043.06311	3008.70945	9278.46895	3491.5331	2129.29844	6642.89064	2437.75464	1637.00046	7798.15126	7284.08831	2793.2954	0.24785	0.24798	4.23E-04	2.34E-04	1.74E-04	4.60E-04	2.18E-04	1.33E-04	6.53E-04	5.00E-04	3.36E-04	5.33E-04	3.42E-04	1.31E-04	3.47E-06	4.20E-06	4.1440E-03
551547.92	4172617.54	4662.68206	3867.33362	2299.88028	11379.22908	3953.72691	2335.45102	4621.62024	2268.22085	1244.43905	8013.44505	9577.36268	3089.43427	0.39826	0.40308	2.91E-04	2.24E-04	1.33E-04	5.64E-04	2.47E-04	1.46E-04	4.54E-04	4.65E-04	2.55E-04	5.48E-04	4.50E-04	1.45E-04	5.57E-06	6.83E-06	3.9342E-03
552117.92	4172930.46	10300.83534	5203.77359	1509.75886	5655.7423	1237.9309	4606.86582	10374.54236	3051.25509	887.48763	5417.61382	2913.19204	6015.83066	0.22696	0.2257	6.43E-04	3.01E-04	8.73E-05	2.80E-04	7.73E-05	2.88E-04	1.02E-03	6.25E-04	1.82E-04	3.70E-04	1.37E-04	2.83E-04	3.18E-06	3.82E-06	4.3007E-03
551763.58	4172677.42	7153.66003	2580.22803	2225.40118	10082.68524	4545.8558	1637.04186	7072.37918	1508.78694	1179.29144	5714.50487	11266.59381	2207.31724	0.4632	0.47365	4.47E-04	1.49E-04	1.29E-04	5.00E-04	2.84E-04	1.02E-04	6.95E-04	3.09E-04	2.42E-04	3.91E-04	5.29E-04	1.04E-04	6.48E-06	8.03E-06	3.8948E-03
552046.29	4172733.3	7901.87149	4347.92385	2599.1094	8275.74905	2859.62651	2543.30482	7798.87857	2578.39529	1442.17214	7119.60993	6074.15782	3431.42238	0.22952	0.22942	4.93E-04	2.51E-04	1.50E-04	4.10E-04	1.79E-04	1.59E-04	7.67E-04	5.29E-04	2.96E-04	4.87E-04	2.85E-04	1.61E-04	3.21E-06	3.89E-06	4.1739E-03
551562.6	4173256.53	4680.22974	6461.90232	1021.44267	5646.1255	951.26188	9552.14155	4742.27359	3901.326	589.1452	5616.36346	2464.77274	11309.75283	1.36032	1.38569	2.92E-04	3.74E-04	5.91E-05	2.80E-04	5.94E-05	5.97E-04	4.66E-04	8.00E-04	1.21E-04	3.84E-04	1.16E-04	5.31E-04	1.90E-05	2.35E-05	4.1209E-03
551396.27	4172789.52	3368.92083	5013.76518	1460.92282	13462.86944	2036.39944	3116.55417	3357.25684	2857.06388	808.24511	9212.41454	8175.03445	3978.09769	0.64485	0.66393	2.10E-04	2.90E-04	8.45E-05	6.67E-04	1.27E-04	1.95E-04	3.30E-04	5.86E-04	1.66E-04	6.30E-04	3.84E-04	1.87E-04	9.02E-06	1.13E-05	3.8763E-03
551420.64	4172727.06	3425.62264	4696.60015	1511.94209	13687.41386	2238.9072	2829.13768	3412.889	2678.12461	831.98139	9084.38522	8714.49285	3647.3537	0.61456	0.63281	2.14E-04	2.72E-04	8.74E-05	6.78E-04	1.40E-04	1.77E-04	3.35E-04	5.49E-04	1.71E-04	6.21E-04	4.09E-04	1.71E-04	8.60E-06	1.07E-05	3.8440E-03
551401.87	4173063.96	3852.48193	7035.60903	1128.80912	9271.96655	1266.7663	5944.83766	3877.43563	4178.9147	639.43346	7972.20267	4219.86672	7356.82567	0.63204	0.64079	2.41E-04	4.07E-04	6.53E-05	4.60E-04	7.91E-05	3.71E-04	3.81E-04	8.57E-04	1.31E-04	5.45E-04	1.98E-04	3.46E-04	8.84E-06	1.09E-05	4.1000E-03
551375.64	4172962.05	3719.80581	6543.00489	1269.73031	11132.63989	1432.41496	4337.141	3723.78312	3772.13704	720.13591	9278.70201	5340.22042	5468.8937	0.62238	0.63397	2.32E-04	3.78E-04	7.34E-05	5.52E-04	8.95E-05	2.71E-04	3.66E-04	7.73E-04	1.48E-04	6.35E-04	2.51E-04	2.57E-04	8.71E-06	1.07E-05	4.0447E-03
551441.1	4173145.07	3945.2115	6848.99358	1108.04226	8014.63701	1150.1822	7306.13988	3979.0254	4088.83015	631.04962	7338.71712	3437.18617	8847.55735	0.69632	0.70492	2.46E-04	3.96E-04	6.41E-05	3.97E-04	7.18E-05	4.56E-04	3.91E-04	8.38E-04	1.29E-04	5.02E-04	1.61E-04	4.16E-04	9.74E-06	1.19E-05	4.0909E-03
551523.78	4173232.15	4408.65486	6697.6764	1049.38954	6302.33594	1009.86377	8787.00577	4457.27507	4047.2494	604.5324	6103.443	2714.27431	10481.72761	1.00434	1.01648	2.75E-04	3.87E-04	6.07E-05	3.12E-04	6.31E-05	5.49E-04	4.38E-04	8.30E-04	1.24E-04	4.17E-04	1.27E-04	4.92E-04	1.41E-05	1.72E-05	4.1076E-03
552020.8	4172717.88	7075.38635	4157.50356	2827.11782	8792.12947	3237.19217	2259.6992	6953.2308	2476.88258	1552.06484	7487.65733	6793.77565	3033.46387	0.24006	0.24012	4.42E-04	2.40E-04	1.63E-04	4.36E-04	2.02E-04	1.41E-04	6.83E-04	5.08E-04	3.18E-04	5.12E-04	3.19E-04	1.42E-04	3.36E-06	4.07E-06	4.1151E-03
551462.73	4173176.08	4054.95015	6920.64302	1094.3276	7467.18069	1097.73388	7703.52287	4091.01332	4109.62473	625.272	7012.26282	3160.25646	9286.46582	0.74852	0.75777	2.53E-04	4.00E-04	6.33E-05	3.70E-04	6.86E-05	4.81E-04	4.02E-04	8.42E-04	1.28E-04	4.80E-04	1.48E-04	4.36E-04	1.05E-05	1.28E-05	4.0965E-03
551445.95	4172684.17	3594.80645	4414.41073	1615.72534	13566.96218	2434.84139	2640.96963	3578.62393	2528.96235	889.09113	8874.08361	9032.82182	3422.76665	0.57092	0.58587	2.24E-04	2.55E-04	9.34E-05	6.73E-04	1.52E-04	1.65E-04	3.52E-04	5.18E-04	1.82E-04	6.07E-04	4.24E-04	1.61E-04	7.99E-06	9.93E-06	3.8248E-03
551536.7	4172618.56	4468.94241	3877.97989	2182.96521	11544.09991	3698.81999	2339.58028	4431.38998	2268.48603	1183.0875	8030.96737	9397.6443	3087.41699	0.40769	0.41287	2.79E-04	2.24E-04	1.26E-04	5.72E-04	2.31E-04	1.46E-04	4.36E-04	4.65E-04	2.43E-04	5.49E-04	4.41E-04	1.45E-04	5.70E-06	7.00E-06	3.8702E-03
551395.42	4173046.05	3828.86807	7034.26572	1134.68157	9428.71855	1287.85256	5595.37949	3850.43345	4173.38559	643.16948	8116.12631	4402.8826	6960.96305	0.62284	0.63239	2.39E-04	4.07E-04	6.56E-05	4.67E-04	8.04E-05	3.49E-04	3.78E-04	8.55E-04	1.32E-04	5.55E-04	2.07E-04	3.27E-04	8.72E-06	1.07E-05	4.0826E-03
551631.25	4173276.08	5282.03994	5846.50909	997.66092	4761.23469	868.74943	10253.92589	5372.81197	3504.08763	580.0968	4724.18911	2148.88749	12098.75118	3.80224	3.98862	3.30E-04	3.38E-04	5.77E-05	2.36E-04	5.43E-05	6.40E-04	5.28E-04	7.18E-04	1.19E-04	3.23E-04	1.01E-04	5.68E-04	5.32E-05	6.76E-05	4.1345E-03
551398.65	4173055	3830.35067	7015.68588	1127.17229	9275.69092	1275.49325	5755.6564	3853.70395	4168.09931	638.65657	8005.81812	4316.64406	7142.09907	0.62538	0.63397	2.39E-04	4.06E-04	6.52E-05	4.60E-04	7.97E-05	3.59E-04	3.79E-04	8.54E-04	1.31E-04	5.47E-04	2.03E-04	3.35E-04	8.75E-06	1.07E-05	4.0781E-03
551653.41	4172629.01	6567.43734	3202.33788	3018.35349	7821.7037	5264.84614	2054.2745	6485.73211	1922.36509	1586.6497	6052.97139	9637.7267	2770.2816	0.29985	0.30434	4.10E-04	1.85E-04	1.75E-04	3.88E-04	3.29E-04	1.28E-04	6.38E-04	3.94E-04	3.25E-04	4.14E-04	4.53E-04	1.30E-04	4.20E-06	5.16E-06	3.9774E-03
551433.24	4172704.13	3485.73295	4525.01588	1545.28658	13553.61361	2305.77866	2715.48853	3471.9745	2586.83482	850.29573	8923.27242	8804.89574	3511.78027	0.58706	0.60353	2.18E-04	2.62E-04	8.93E-05	6.72E-04	1.44E-04	1.70E-04	3.41E-04	5.30E-04	1.74E-04	6.10E-04	4.14E-04	1.65E-04	8.21E-06	1.02E-05	3.8070E-03
551392.2	4173037.1	3812.45596	7007.04444	1138.89599	9542.30101	1297.72704	5417.216	3832.16002	4150.16968	645.78486	8190.29222	4475.95448	6754.64525	0.61853	0.628	2.38E-04	4.05E-04	6.58E-05	4.73E-04	8.11E-05	3.38E-04	3.77E-04	8.51E-04	1.32E-04	5.60E-04	2.10E-04	3.17E-04	8.65E-06	1.06E-05	4.0680E-03
551631.73	4172621.44	6096.94461	3325.93926	2904.71358	8307.95751	5132.58739	2111.76213	6025.58346	1993.59514	1537.02064	6432.76876	9512.0026	2835.34774	0.30276	0.30635	3.81E-04	1.92E-04	1.68E-04	4.12E-04	3.21E-04	1.32E-04	5.92E-04	4.09E-04	3.15E-04	4.40E-04	4.47E-04	1.33E-04	4.24E-06	5.19E-06	3.9505E-03
551567	4172610.17	4893.72964	3695.5128	2416.90262	10452.81922	4212.40766	2254.23921	4847.59387	2178.39071	1303.71634	7564.17423	9369.98094	2992.40535	0.36288	0.36691	3.06E-04	2.14E-04	1.40E-04	5.18E-04	2.63E-04	1.41E-04	4.77E-04	4.47E-04	2.67E-04	5.17E-04	4.40E-04	1.41E-04	5.08E-06	6.22E-06	3.8804E-03
551388.97	4173028.15	3798.08424	6971.8963	1146.18788	9673.54156	1308.27689	5246.46958	3815.82295	4118.43394	650.18342	8284.0026	4544.88781	6555.16545	0.6152	0.62458	2.37E-04	4.03E-04	6.63E-05	4.80E-04	8.17E-05	3.28E-04	3.75E-04	8.44E-04	1.33E-04	5.66E-04	2.13E-04	3.08E-04	8.61E-06	1.06E-05	4.0550E-03
551607.5	4173274.45	4983.72418	5996.52793	996.84396	4981.88261	887.22567	9951.90465	5062.78137	3609.26483	577.68134	4970.75509	2226.73698	11734.47614	2.32104	2.40616	3.11E-04	3.47E-04	5.76E-05	2.47E-04	5.54E-05	6.22E-04	4.98E-04	7.40E-04	1.18E-04	3.40E-04	1.05E-04	5.51E-04	3.25E-05	4.08E-05	4.0642E-03
551444.19	4173153.66	3926.07796	6815.1555	1094.02951	7811.8297	1127.18889	7270.73567	3959.83589	4026.41916	623.47315	7174.85545	3337.70666	8796.70449	0.69544	0.7039	2.45E-04	3.94E-04	6.33E-05	3.87E-04	7.04E-05	4.54E-04	3.89E-04	8.25E-04	1.28E-04	4.91E-04	1.57E-04	4.13E-04	9.73E-06	1.19E-05	4.0388E-03
551372.01	4172922.86	3576.78205	6001.67289	1325.69812	11731.76173	1522.12989	3879.98712	3574.82402	3436.35959	748.16656	9442.55905	5809.65456	4905.57892	0.61898	0.63186	2.23E-04	3.47E-04	7.66E-05	5.82E-04	9.51E-05	2.42E-04	3.51E-04	7.04E-04	1.53E-04	6.46E-04	2.73E-04	2.30E-04	8.66E-06	1.07E-05	3.9434E-03
551410.62	4173088.55	3814.79305	6826.17833	1106.63432	8765.29851	1224.86902	6287.33751	3843.41117	4053.27188	626.69666	7626.52796	3966.47737	7716.91284	0.63408	0.64299	2.38E-04	3.95E-04	6.40E-05	4.34E-04	7.65E-05	3.93E-04	3.78E-04	8.31E-04	1.28E-04	5.22E-04	1.86E-04	3.62E-04	8.87E-06	1.09E-05	4.0276E-03
551385.75	4173019.19	3776.52958	6907.75421	1153.20687	9790.79789	1311.65801	5073.11561	3792.28478	4067.84308	654.37134	8364.97189	4609.55791	6349.99906	0.61051	0.62029	2.36E-04	3.99E-04	6.67E-05	4.85E-04	8.19E-05	3.17E-04	3.73E-04	8.34E-04	1.34E-04	5.72E-04	2.17E-04	2.98E-04	8.54E-06	1.05E-05	4.0325E-03
552035.61	4172721.04	7347.0543	4175.68594	2637.97196	8396.11296	3002.10471	2381.10229	7237.26325	2481.69322	1454.57209	7136.38564	6337.5178	3188.70829	0.23155	0.23155	4.59E-04	2.41E-04	1.53E-04	4.16E-04	1.88E-04	1.49E-04	7.11E-04	5.09E-04	2.98E-04	4.88E-04	2.98E-04	1.50E-04	3.24E-06	3.92E-06	4.0659E-03
551414.59	4172733.81	3364.49749	4674.6148	1477.89101	13373.04704	2174.54184	2832.00285	3352.29036	2664.75482	813.55245	8937.76465	8449.61794	3645.52256	0.606	0.62394	2.10E-04	2.70E-04	8.54E-05	6.63E-04	1.36E-04	1.77E-04	3.30E-04	5.46E-04	1.67E-04	6.11E-04	3.97E-04	1.71E-04	8.48E-06	1.06E-05	3.7822E-03
551499.44	4173217.32	4216.71373	6684.36404	1052.8682	6621.99116	1026.52915	8210.33895	4258.44778	4046.01779	604.79836	6334.40915	2822.02794	9872.24947	0.85575	0.86685	2.63E-04	3.86E-04	6.09E-05	3.28E-04	6.41E-05	5.13E-04	4.19E-04	8.29E-04	1.24E-04	4.33E-04	1.33E-04	4.64E-04	1.20E-05	1.47E-05	4.0437E-03
551372.42	4172953.09	3649.15996	6320.09872	1269.34566	11106.79545	1434.83206	4165.72813	3651.57844	3636.39372	719.35246	9191.5427	5334.02691	5257.31165	0.61153	0.62309	2.28E-04	3.65E-04	7.34E-05	5.51E-04	8.96E-05	2.60E-04	3.59E-04	7.45E-04	1.47E-04	6.29E-04	2.51E-04	2.47E-04	8.56E-06	1.06E-05	3.9639E-03
551577.15	4172608.33	5033.07668	3613.93717	2480.22166	10004.332	4344.65141	2218.57043	4983.9225	2136.38938	1334.81328	7338.95226	9290.30559	2949.78406	0.34722	0.35096	3.14E-04	2.09E-04	1.43E-04	4.96E-04	2.71E-04	1.39E-04	4.90E-04	4.38E-04	2.74E-04	5.02E-04	4.36E-04	1.39E-04	4.86E-06	5.95E-06	3.8614E-03
551734.37	4172663.02	7544.58245	2709.76404	2549.97232	8634.04176	4253.13478	1755.47271	7449.10925	1603.74117	1338.52204	5300.54464	10134.16734	2376.06435	0.40998	0.42083	4.71E-04	1.57E-04	1.47E-04	4.28E-04	2.66E-04	1.10E-04	7.32E-04	3.29E-04	2.74E-04	3.62E-04	4.76E-04	1.12E-04	5.74E-06	7.13E-06	3.8767E-03
551382.52	4173010.24	3752.2573	6824.96368	1161.66052	9909.95903	1319.33969	4904.3734	3765.93964	4004.87234	659.38843	8446.20216	4675.03134	6148.57758	0.60619	0.61576	2.34E-04	3.95E-04	6.72E-05	4.91E-04	8.24E-05	3.06E-04	3.70E-04	8.21E-04	1.35E-04	5.78E-04	2.20E-04	2.89E-04	8.48E-06	1.04E-05	4.0071E-03
551524.41	4172620.54	4271.64686	3881.5877	2061.13116	11654.58897	3432.3796	2342.36462	4237.64179	2264.36372	1119.16807	8013.49873	9177.45281	3082.35254	0.41727	0.42297	2.67E-04	2.24E-04	1.19E-04	5.78E-04	2.14E-04	1.46E-04	4.17E-04	4.64E-04	2.29E-04	5.48E-04	4.31E-04	1.45E-04	5.84E-06	7.17E-06	3.7956E-03
551374.77	4172859.26	3393.91815	5293.13054	1380.27875	12607.78288	1733.38023	3385.02376	3385.96388	3020.65155	770.35093	9278.72258	6937.6702	4292.90007	0.62389	0.639	2.12E-04	3.06E-04	7.98E-05	6.25E-04	1.08E-04	2.11E-04	3.33E-04	6.19E-04	1.58E-04	6.35E-04	3.26E-04	2.02E-04	8.73E-06	1.08E-05	3.8338E-03
551416.54	4173105.29	3813.11431	6733.68994	1101.04527	8465.05361	1199.69467	6500.62387	3843.32044	3991.68873	624.05395	7478.40163	3777.29735	7939.02232	0.64203	0.65072	2.38E-04	3.89E-04	6.37E-05	4.20E-04	7.49E-05	4.06E-04	3.78E-04	8.18E-04	1.28E-04	5.11E-04	1.77E-04	3.73E-04	8.98E-06	1.10E-05	3.9972E-03
551465.82	4173184.67	4019.13336	6762.52953	1074.42564	7226.1274	1073.02904	7582.03759	4054.97885	4020.08996	614.27998	6803.17597	3066.3491	9139.78956	0.7441	0.75319	2.51E-04	3.91E-04	6.21E-05	3.58E-04	6.70E-05	4.74E-04	3.99E-04	8.24E-04	1.26E-04	4.65E-04	1.44E-04	4.29E-04	1.04E-05	1.28E-05	4.0131E-03
551379.3	4173001.29	3721.12129	6716.12024	1169.64745	10014.00478	1326.19615	4736.39392	3732.76814	3926.85774	664.03288	8510.21673	4737.03893	5946.25876	0.60034	0.61018	2.32E-04	3.88E-04	6.76E-05	4.96E-04	8.28E-05	2.96E-04	3.67E-04	8.05E-04	1.36E-04	5.82E-04	2.22E-04	2.79E-04	8.40E-06	1.03E-05	3.9737E-03
551380.43	4172827.9	3327.47785	5046.84619	1395.1452	12807.20961	1839.4882	3212.87921	3317.66477	2880.24147	775.7447	9058.52506	7394.41496	4082.64593	0.6231	0.63959	2.08E-04	2.92E-04	8.07E-05	6.35E-04	1.15E-04	2.01E-04	3.26E-04	5.90E-04	1.59E-04	6.19E-04	3.47E-04	1.92E-04	8.72E-06	1.08E-05	3.7842E-03
551572.3	4173265.66	4639.67844	6170.76411	994.80322	5367.53453	920.48975	9300.77975	4703.94573	3724.44667	574.06738	5341.04951	2368.43683	11001.93146	1.45684	1.48581	2.90E-04	3.57E-04	5.75E-05	2.66E-04	5.75E-05	5.81E-04	4.62E-04	7.63E-04	1.18E-04	3.65E-04	1.11E-04	5.17E-04	2.04E-05	2.52E-05	3.9907E-03
551447.28	4173162.24	3903.50882	6697.47032	1079.02124	7587.24341	1104.20008	7215.26677	3937.14521	3961.04827	615.32373	7005.00286	3241.53183	8723.10273	0.69382	0.70216	2.44E-04	3.87E-04	6.24E-05	3.76E-04	6.90E-05	4.51E-04	3.87E-04	8.12E-04	1.26E-04	4.79E-04	1.52E-04	4.10E-04	9.71E-06	1.19E-05	3.9767E-03
551404.08	4172753.23	3304.0589	4728.16599	1443.05434	13092.13435	2088.07415	2897.57642	3292.36517	2694.20595	795.49619	8850.87612	8155.11151	3716.46988	0.60713	0.62511	2.06E-04	2.73E-04	8.34E-05	6.49E-04	1.30E-04	1.81E-04	3.24E-04	5.52E-04	1.63E-04	6.05E-04	3.83E-04	1.75E-04	8.50E-06	1.06E-05	3.7443E-03
551618.54	4173277.93	5025.68377	5808.6877	985.01653	4815.82519	869.34965	9819.84685	5108.19437	3493.83098	571.43623	4785.45536	2170.42122	11582.25339	2.7989	2.91863	3.14E-04	3.36E-04	5.69E-05	2.39E-04	5.43E-05	6.13E-04	5.02E-04	7.16E-04	1.17E-04	3.27E-04	1.02E-04	5.44E-04	3.92E-05	4.95E-05	4.0101E-03
551585.86	4172605.56	5118.09261	3510.26485	2504.15782	9506.13764	4390.12896	2170.9783	5066.79376	2080.21121	1344.54822	7058.96135	9098.82059	2890.04437	0.33037	0.33381	3.20E-04	2.03E-04	1.45E-04	4.71E-04	2.74E-04	1.36E-04	4.98E-04	4.26E-04	2.76E-04	4.83E-04	4.27E-04	1.36E-04	4.62E-06	5.66E-06	3.8044E-03
551995.23	4172702.36	5951.2846	3695.26659	2978.50949	9336.56848	3678.49172	1831.54145	5829.87566	2191.99794	1598.8129	7652.03297	7501.60146	2466.56261	0.24625	0.24654	3.72E-04	2.14E-04	1.72E-04	4.63E-04	2.30E-04	1.14E-04	5.73E-04	4.49E-04	3.28E-04	5.23E-04	3.52E-04	1.16E-04	3.45E-06	4.18E-06	3.9136E-03
551672.53	4172632.73	6796.90108	3020.55307	2945.23687	7342.92498	4995.33127	1956.61946	6710.13945	1810.66071	1541.43789	5584.93908	9322.58866	2645.80561	0.29709	0.30257	4.24E-04	1.75E-04	1.70E-04	3.64E-04	3.12E-04	1.22E-04	6.60E-04	3.71E-04	3.16E-04	3.82E-04	4.38E-04	1.24E-04	4.16E-06	5.13E-06	3.8675E-03
551436.21	4172690.6	3457.17705	4347.92732	1531.78552	13044.56365	2286.01848	2617.34257	3443.03347	2489.37906	843.11636	8601.99694	8548.40024	3387.76102	0.55492	0.56973	2.16E-04	2.51E-04	8.86E-05	6.47E-04	1.43E-04	1.63E-04	3.38E-04	5.10E-04	1.73E-04	5.88E-04	4.02E-04	1.59E-04	7.76E-06	9.65E-06	3.6965E-03
551376.05	4172992.28	3675.37025	6566.15192	1173.60439	10067.84008	1328.94833	4559.69024	3685.14328	3826.42495	666.33574	8525.5529	4786.61526	5731.48934	0.59298	0.60291	2.29E-04	3.80E-04	6.79E-05	4.99E-04	8.30E-05	2.85E-04	3.62E-04	7.84E-04	1.37E-04	5.83E-04	2.25E-04	2.69E-04	8.30E-06	1.02E-05	3.9225E-03
551369.19	4172944.12	3568.71744	6081.48964	1263.42943	11017.53205	1432.87162	3993.97927	3569.82517	3494.55694	715.26679	9052.13787	5345.87531	5043.79541	0.59756	0.60956	2.23E-04	3.52E-04	7.30E-05	5.46E-04	8.95E-05	2.49E-04	3.51E-04	7.16E-04	1.47E-04	6.19E-04	2.51E-04	2.37E-04	8.36E-06	1.03E-05	3.8721E-03
551511.9	4172623.53	4091.63591	3883.88789	1948.60158	11721.21638	3185.66775	2345.98286	4060.88589	2259.36148	1060.62322	7978.42723	8953.3381	3078.06206	0.4269	0.43328	2.55E-04	2.25E-04	1.13E-04	5.81E-04	1.99E-04	1.47E-04	3.99E-04	4.63E-04	2.17E-04	5.46E-04	4.21E-04	1.45E-04	5.97E-06	7.34E-06	3.7229E-03
551422.45	4173122.03	3782.19802	6574.65242	1085.55944	8120.93439	1166.03881	6603.30036	3813.28269	3894.90774	616.00419	7250.23618	3594.75627	8030.37141	0.64392	0.65233	2.36E-04	3.80E-04	6.28E-05	4.03E-04	7.28E-05	4.12E-04	3.75E-04	7.98E-04	1.26E-04	4.96E-04	1.69E-04	3.77E-04	9.01E-06	1.11E-05	3.9282E-03
551457.36	4172663.43	3617.25864	4175.79638	1637.49721	12791.20791	2482.96584	2512.87796	3598.82167	2399.36257	901.71381	8423.66551	8714.42384	3261.67339	0.51947	0.53137	2.26E-04	2.41E-04	9.47E-05	6.34E-04	1.55E-04	1.57E-04	3.54E-04	4.92E-04	1.85E-04	5.76E-04	4.09E-04	1.53E-04	7.27E-06	9.00E-06	3.6933E-03
551771.22	4172674.3	6661.6584	2469.04999	2066.60839	9792.79373	4381.18246	1562.6034	6590.09408	1440.1202	1096.51456	5561.96594	10789.64669	2102.743	0.44345	0.45301	4.16E-04	1.43E-04	1.19E-04	4.85E-04	2.74E-04	9.76E-05	6.48E-04	2.95E-04	2.25E-04	3.80E-04	5.07E-04	9.88E-05	6.20E-06	7.68E-06	3.7023E-03
551368.78	4172913.89	3482.49907	5734.59469	1306.22851	11513.44359	1512.74763	3709.4371	3479.72039	3281.88789	735.97889	9176.61565	5788.32002	4692.80575	0.59977	0.61255	2.17E-04	3.32E-04	7.55E-05	5.71E-04	9.45E-05	2.32E-04	3.42E-04	6.73E-04	1.51E-04	6.28E-04	2.72E-04	2.20E-04	8.39E-06	1.04E-05	3.8256E-03
551661.08	4173280.71	5616.27426	5425.16077	964.14904	4375.44212	825.68325	9739.39565	5721.92005	3213.35366	563.03154	4287.93709	2006.64873	11575.69503	9.49217	10.56209	3.51E-04	3.14E-04	5.57E-05	2.17E-04	5.16E-05	6.08E-04	5.62E-04	6.59E-04	1.15E-04	2.93E-04	9.43E-05	5.44E-04	1.33E-04	1.79E-04	4.1763E-03
551555.07	4172607.02	4610.16679	3654.27455	2249.55754	10421.23068	3856.12354	2228.36892	4569.10831	2147.96363	1216.47338	7464.39622	8964.57434	2951.2943	0.36207	0.36609	2.88E-04	2.11E-04	1.30E-04	5.17E-04	2.41E-04	1.39E-04	4.49E-04	4.40E-04	2.49E-04	5.10E-04	4.21E-04	1.39E-04	5.07E-06	6.20E-06	3.7459E-03
551481.42	4172642.56	3802.6685	4027.52815	1761.94421	12322.5093	2751.73574	2428.88735	3778.81501	2325.5669	967.45044	8197.30901	8800.6479	3165.16263	0.47395	0.48296	2.37E-04	2.33E-04	1.02E-04	6.11E-04	1.72E-04	1.52E-04	3.71E-04	4.77E-04	1.98E-04	5.61E-04	4.13E-04	1.49E-04	6.63E-06	8.18E-06	3.6904E-03
552005.11	4173111.94	9122.22683	5263.71584	802.1407	3714.14146	634.46698	7364.78811	9424.55122	2995.70347	476.57166	3775.9384	1565.01039	9190.67155	0.33322	0.32944	5.70E-04	3.04E-04	4.64E-05	1.84E-04	3.96E-05	4.60E-04	9.26E-04	6.14E-04	9.77E-05	2.58E-04	7.35E-05	4.32E-04	4.66E-06	5.58E-06	4.0158E-03
551399.76	4172761.64	3266.65212	4711.70811	1419.13111	12821.13622	2032.42826	2909.54289	3255.3061	2685.87591	783.03854	8724.30314	7930.70664	3725.97409	0.59851	0.61599	2.04E-04	2.72E-04	8.20E-05	6.36E-04	1.27E-04	1.82E-04	3.20E-04	5.51E-04	1.61E-04	5.97E-04	3.72E-04	1.75E-04	8.37E-06	1.04E-05	3.6966E-03
552010.1	4172705.6	6267.72496	3810.28721	2845.44827	8919.53304	3365.43361	1958.37903	6148.41282	2269.20665	1544.40814	7435.16671	7028.83066	2631.53009	0.24017	0.24023	3.91E-04	2.20E-04	1.65E-04	4.42E-04	2.10E-04	1.22E-04	6.04E-04	4.65E-04	3.17E-04	5.08E-04	3.30E-04	1.24E-04	3.36E-06	4.07E-06	3.9065E-03
551468.91	4173193.25	3979.44426	6598.00377	1053.52406	6991.94371	1048.78571	7444.29046	4015.0787	3925.91033	602.7278	6590.84566	2976.50921	8976.00168	0.73851	0.7474	2.48E-04	3.81E-04	6.09E-05	3.47E-04	6.55E-05	4.65E-04	3.95E-04	8.05E-04	1.24E-04	4.51E-04	1.40E-04	4.22E-04	1.03E-05	1.27E-05	3.9259E-03
551648.11	4173282.59	5387.4581	5503.16469	966.24005	4466.28085	833.0301	9727.93614	5484.35027	3275.05417	563.20143	4402.51976	2037.87076	11536.26683	5.63995	6.04368	3.36E-04	3.18E-04	5.59E-05	2.21E-04	5.20E-05	6.08E-04	5.39E-04	6.71E-04	1.15E-04	3.01E-04	9.57E-05	5.42E-04	7.89E-05	1.02E-04	4.0372E-03
551641.09	4172619.99	6115.86563	3176.40569	2835.77563	7755.07564	4933.51617	2035.84444	6043.51904	1905.31549	1497.9971	6035.11062	9082.85486	2737.32128	0.28591	0.28939	3.82E-04	1.84E-04	1.64E-04	3.84E-04	3.08E-04	1.27E-04	5.94E-04	3.91E-04	3.07E-04	4.13E-04	4.27E-04	1.29E-04	4.00E-06	4.90E-06	3.8176E-03
551373.14	4172849.24	3317.10203	5095.27826	1358.04438	12353.99859	1731.69888	3267.88337	3308.79169	2909.32114	757.04347	8983.8337	6909.00085	4146.04112	0.6065	0.62137	2.07E-04	2.95E-04	7.85E-05	6.12E-04	1.08E-04	2.04E-04	3.25E-04	5.96E-04	1.55E-04	6.14E-04	3.25E-04	1.95E-04	8.49E-06	1.05E-05	3.7342E-03
551449.33	4172670.38	3542.91472	4200.25361	1589.5626	12782.877	2392.64823	2529.43065	3526.20308	2410.56816	875.27868	8420.17741	8587.60477	3279.87015	0.52731	0.54007	2.21E-04	2.43E-04	9.19E-05	6.34E-04	1.49E-04	1.58E-04	3.47E-04	4.94E-04	1.79E-04	5.76E-04	4.03E-04	1.54E-04	7.38E-06	9.15E-06	3.6669E-03
551450.37	4173170.83	3876.21925	6571.49252	1062.75938	7364.2573	1081.36957	7138.43063	3909.67064	3890.7823	606.42532	6827.14943	3149.03865	8626.05932	0.69108	0.6993	2.42E-04	3.80E-04	6.14E-05	3.65E-04	6.75E-05	4.46E-04	3.84E-04	7.98E-04	1.24E-04	4.67E-04	1.48E-04	4.05E-04	9.67E-06	1.19E-05	3.9094E-03
551551.85	4173258.58	4446.26296	6184.45938	989.41764	5580.49171	937.20441	8776.93091	4502.50321	3734.42717	569.86949	5509.27044	2450.42181	10421.23743	1.1921	1.21279	2.78E-04	3.58E-04	5.72E-05	2.77E-04	5.85E-05	5.48E-04	4.43E-04	7.65E-04	1.17E-04	3.77E-04	1.15E-04	4.89E-04	1.67E-05	2.06E-05	3.9191E-03
551423.66	4172710.46	3355.39992	4439.05494	1470.40142	12924.15064	2175.82425	2685.18382	3343.05754	2536.48668	809.38715	8599.93199	8287.05894	3467.1823	0.56531	0.58111	2.09E-04	2.57E-04	8.50E-05	6.41E-04	1.36E-04	1.68E-04	3.29E-04	5.20E-04	1.66E-04	5.88E-04	3.89E-04	1.63E-04	7.91E-06	9.85E-06	3.6678E-03
551381.08	4172819.11	3275.47975	4917.42688	1377.99468	12546.38565	1835.90442	3133.22044	3265.55645	2807.08886	765.60317	8826.12591	7327.97345	3984.10007	0.6069	0.62311	2.05E-04	2.84E-04	7.97E-05	6.22E-04	1.15E-04	1.96E-04	3.21E-04	5.75E-04	1.57E-04	6.04E-04	3.44E-04	1.87E-04	8.49E-06	1.06E-05	3.7080E-03
551372.83	4172983.32	3630.61489	6413.06105	1179.76286	10131.71397	1333.91756	4395.54186	3638.57937	3725.13871	669.73426	8544.16961	4841.67128	5531.34852	0.58634	0.5967	2.27E-04	3.71E-04	6.82E-05	5.02E-04	8.33E-05	2.75E-04	3.58E-04	7.64E-04	1.37E-04	5.84E-04	2.27E-04	2.60E-04	8.20E-06	1.01E-05	3.8741E-03
551425.41	4173130.4	3763.69272	6489.75897	1077.89061	7943.96684	1147.29763	6623.16554	3794.96872	3844.87046	611.09261	7185.15248	3504.66089	8040.78017	0.64374	0.65114	2.35E-04	3.75E-04	6.23E-05	3.94E-04	7.17E-05	4.14E-04	3.73E-04	7.88E-04	1.25E-04	4.91E-04	1.65E-04	3.78E-04	9.01E-06	1.10E-05	3.8917E-03
551510.06	4173231.4	4172.84994	6363.21822	1018.61141	6222.9965	992.84791	7989.6534	4216.09861	3840.08296	585.9191	5978.68173	2698.70085	9564.96937	0.88656	0.90041	2.61E-04	3.68E-04	5.89E-05	3.08E-04	6.20E-05	4.99E-04	4.14E-04	7.87E-04	1.20E-04	4.09E-04	1.27E-04	4.49E-04	1.24E-05	1.53E-05	3.8910E-03
551714.4	4172652.74	7345.10014	2756.00026	2680.44839	7594.04168	4294.48038	1798.5808	7250.71269	1639.44273	1400.74163	5104.00912	9318.93505	2437.90712	0.35147	0.36074	4.59E-04	1.59E-04	1.55E-04	3.76E-04	2.68E-04	1.12E-04	7.13E-04	3.36E-04	2.87E-04	3.49E-04	4.38E-04	1.15E-04	4.92E-06	6.11E-06	3.7781E-03
551499.38	4172626.52	3929.93287	3880.24844	1848.27304	11737.47533	2967.90905	2346.51765	3902.11848	2250.95936	1008.9189	7925.82892	8731.05997	3070.25181	0.43564	0.44279	2.45E-04	2.24E-04	1.07E-04	5.82E-04	1.85E-04	1.47E-04	3.84E-04	4.61E-04	2.07E-04	5.42E-04	4.10E-04	1.44E-04	6.10E-06	7.50E-06	3.6520E-03
551594.72	4172603.01	5192.73988	3398.78638	2514.70027	8995.20469	4402.58508	2119.38784	5139.39538	2019.08646	1346.63757	6759.2223	8873.25989	2824.70629	0.31348	0.31666	3.24E-04	1.96E-04	1.45E-04	4.46E-04	2.75E-04	1.32E-04	5.05E-04	4.14E-04	2.76E-04	4.62E-04	4.17E-04	1.33E-04	4.39E-06	5.37E-06	3.7358E-03
551428.75	4173139.82	3744.94785	6400.10587	1065.60217	7748.21233	1125.35272	6705.96815	3776.30013	3828.13116	606.10859	7033.99773	3403.00509	8035.1195	0.64054	0.64762	2.34E-04	3.70E-04	6.16E-05	3.84E-04	7.03E-05	4.19E-04	3.71E-04	7.85E-04	1.24E-04	4.81E-04	1.60E-04	3.77E-04	8.96E-06	1.10E-05	3.8570E-03
551365.97	4172935.16	3490.53884	5852.42183	1257.0514	10925.27256	1432.65909	3833.93949	3490.45133	3359.57543	710.72385	8904.89626	5361.94772	4844.48742	0.58487	0.59648	2.18E-04	3.38E-04	7.27E-05	5.42E-04	8.95E-05	2.39E-04	3.43E-04	6.89E-04	1.46E-04	6.09E-04	2.52E-04	2.28E-04	8.18E-06	1.01E-05	3.7835E-03
551635.15	4173284.48	5136.04246	5524.07118	961.67863	4540.27788	837.32745	9522.35661	5224.34537	3303.47919	559.30014	4491.79046	2065.53913	11272.19419	3.86465	4.06572	3.21E-04	3.19E-04	5.56E-05	2.25E-04	5.23E-05	5.95E-04	5.14E-04	6.77E-04	1.15E-04	3.07E-04	9.70E-05	5.29E-04	5.41E-05	6.89E-05	3.9297E-03
551395.43	4172770.04	3229.31057	4684.58639	1394.474	12535.03418	1974.72319	2916.92958	3218.33804	2671.9967	770.23213	8585.34395	7697.91837	3729.74453	0.58846	0.60533	2.02E-04	2.71E-04	8.06E-05	6.21E-04	1.23E-04	1.82E-04	3.16E-04	5.48E-04	1.58E-04	5.87E-04	3.62E-04	1.75E-04	8.23E-06	1.03E-05	3.6442E-03
551582	4173274.8	4611.92745	5906.24328	970.72879	5102.02302	889.30001	9051.96314	4678.3599	3560.12729	560.66191	5080.51532	2270.20793	10708.54366	1.56686	1.60204	2.88E-04	3.41E-04	5.61E-05	2.53E-04	5.55E-05	5.65E-04	4.60E-04	7.30E-04	1.15E-04	3.47E-04	1.07E-04	5.03E-04	2.19E-05	2.71E-05	3.8700E-03
551369.6	4172974.35	3575.47675	6235.27778	1182.59075	10152.60539	1336.16557	4229.60539	3581.70749	3611.44029	671.10101	8520.83239	4889.1926	5328.24052	0.5777	0.58813	2.23E-04	3.60E-04	6.84E-05	5.03E-04	8.35E-05	2.64E-04	3.52E-04	7.40E-04	1.38E-04	5.83E-04	2.30E-04	2.50E-04	8.08E-06	9.97E-06	3.8135E-03
551630.69	4172612.69	5821.57714	3186.21341	2724.62773	7873.28042	4748.84819	2034.21493	5755.02835	1908.34269	1443.83634	6108.63254	8850.2658	2728.62275	0.28434	0.28745	3.63E-04	1.84E-04	1.58E-04	3.90E-04	2.97E-04	1.27E-04	5.66E-04	3.91E-04	2.96E-04	4.18E-04	4.16E-04	1.28E-04	3.98E-06	4.87E-06	3.7424E-03
551453.46	4173179.41	3847.19974	6441.87657	1045.7807	7143.45517	1058.59561	7047.25562	3880.42875	3818.26874	597.09932	6646.3555	3059.32567	8513.99924	0.68777	0.69585	2.40E-04	3.72E-04	6.05E-05	3.54E-04	6.61E-05	4.40E-04	3.81E-04	7.83E-04	1.22E-04	4.55E-04	1.44E-04	4.00E-04	9.62E-06	1.18E-05	3.8395E-03
551535.45	4172608.8	4280.44099	3674.734	2057.26426	10690.95376	3446.64028	2236.4362	4245.37268	2150.58007	1115.69522	7504.77656	8667.2284	2950.23506	0.37612	0.38062	2.67E-04	2.12E-04	1.19E-04	5.30E-04	2.15E-04	1.40E-04	4.17E-04	4.41E-04	2.29E-04	5.13E-04	4.07E-04	1.39E-04	5.26E-06	6.45E-06	3.6410E-03
551519.56	4173240.35	4185.04351	6214.02827	991.9494	5998.53141	973.05295	8023.76792	4230.48077	3754.24867	570.02125	5803.02586	2621.97926	9586.59076	0.93899	0.95153	2.61E-04	3.59E-04	5.73E-05	2.97E-04	6.08E-05	5.01E-04	4.16E-04	7.70E-04	1.17E-04	3.97E-04	1.23E-04	4.50E-04	1.31E-05	1.61E-05	3.8389E-03
551569.28	4172600.57	4740.89522	3498.82513	2301.48095	9652.68465	3966.51553	2154.13116	4696.70441	2064.24655	1241.44987	7057.06933	8692.87067	2859.35511	0.33379	0.33723	2.96E-04	2.02E-04	1.33E-04	4.78E-04	2.48E-04	1.35E-04	4.62E-04	4.23E-04	2.54E-04	4.83E-04	4.08E-04	1.34E-04	4.67E-06	5.71E-06	3.6670E-03
551431.84	4173148.41	3731.35023	6326.14845	1054.21632	7575.6996	1104.84014	6690.94671	3762.68037	3777.95244	600.00706	6897.63414	3310.26798	8020.0149	0.64023	0.64797	2.33E-04	3.66E-04	6.09E-05	3.76E-04	6.90E-05	4.18E-04	3.70E-04	7.74E-04	1.23E-04	4.72E-04	1.55E-04	3.77E-04	8.96E-06	1.10E-05	3.8131E-03
551439.45	4172676.9	3423.85909	4166.11174	1516.36112	12467.63095	2262.06308	2518.86667	3409.18236	2388.93077	835.0263	8251.34493	8244.18854	3262.38448	0.52118	0.53427	2.14E-04	2.41E-04	8.77E-05	6.18E-04	1.41E-04	1.57E-04	3.35E-04	4.90E-04	1.71E-04	5.64E-04	3.87E-04	1.53E-04	7.29E-06	9.05E-06	3.5759E-03
551365.55	4172904.93	3383.62877	5469.28789	1280.72365	11235.85553	1497.33989	3543.01205	3380.21282	3128.14416	720.56108	8869.36031	5733.91927	4485.8896	0.58017	0.59193	2.11E-04	3.16E-04	7.40E-05	5.57E-04	9.35E-05	2.21E-04	3.32E-04	6.41E-04	1.48E-04	6.07E-04	2.69E-04	2.11E-04	8.12E-06	1.00E-05	3.6991E-03
551561.2	4173267.39	4422.92322	5955.66763	967.52848	5333.51414	909.09812	8623.56461	4481.42941	3595.23797	557.52068	5274.28566	2362.06396	10227.93213	1.25888	1.28141	2.76E-04	3.44E-04	5.59E-05	2.64E-04	5.68E-05	5.39E-04	4.41E-04	7.37E-04	1.14E-04	3.61E-04	1.11E-04	4.80E-04	1.76E-05	2.17E-05	3.8193E-03
551392.6	4173067.29	3639.50285	6460.01131	1063.25421	8546.21851	1201.45022	5508.81712	3663.13617	3836.81242	602.14113	7369.16793	3997.02807	6817.44696	0.58222	0.59051	2.27E-04	3.73E-04	6.15E-05	4.24E-04	7.50E-05	3.44E-04	3.60E-04	7.86E-04	1.23E-04	5.04E-04	1.88E-04	3.20E-04	8.15E-06	1.00E-05	3.8049E-03
551604.45	4173283.76	4757.47242	5672.55079	957.37402	4782.28692	856.3694	9139.76005	4831.56789	3409.18242	554.48909	4765.13056	2150.09674	10810.45692	2.07007	2.13456	2.97E-04	3.28E-04	5.54E-05	2.37E-04	5.35E-05	5.71E-04	4.75E-04	6.99E-04	1.14E-04	3.26E-04	1.01E-04	5.08E-04	2.90E-05	3.62E-05	3.8289E-03
551382.3	4172805.94	3208.64226	4753.79028	1356.6241	12203.10693	1834.39625	3028.78939	3198.61279	2715.01108	752.68672	8534.39054	7241.92724	3854.87394	0.58553	0.60138	2.00E-04	2.75E-04	7.84E-05	6.05E-04	1.15E-04	1.89E-04	3.14E-04	5.57E-04	1.54E-04	5.84E-04	3.40E-04	1.81E-04	8.19E-06	1.02E-05	3.6107E-03
551366.38	4172965.39	3522.69694	6061.85726	1187.41838	10186.68621	1341.73339	4077.06173	3527.2635	3502.1123	673.53618	8500.9375	4896.81673	5140.92494	0.57001	0.58052	2.20E-04	3.50E-04	6.87E-05	5.05E-04	8.38E-05	2.55E-04	3.47E-04	7.18E-04	1.38E-04	5.81E-04	2.30E-04	2.41E-04	7.98E-06	9.84E-06	3.7557E-03
551650.15	4172619.72	6158.51825	3056.70171	2781.47649	7343.37485	4768.40046	1973.50807	6084.86827	1833.72021	1467.00014	5721.27587	8768.29243	2657.25201	0.2749	0.27846	3.85E-04	1.77E-04	1.61E-04	3.64E-04	2.98E-04	1.23E-04	5.98E-04	3.76E-04	3.01E-04	3.91E-04	4.12E-04	1.25E-04	3.85E-06	4.72E-06	3.7183E-03
551389.38	4173058.34	3629.16249	6465.70128	1064.7595	8641.17095	1210.63625	5356.70602	3651.3456	3840.19671	603.16921	7423.28691	4075.78931	6646.53112	0.57805	0.58646	2.27E-04	3.74E-04	6.16E-05	4.28E-04	7.56E-05	3.35E-04	3.59E-04	7.87E-04	1.24E-04	5.08E-04	1.91E-04	3.12E-04	8.09E-06	9.94E-06	3.7995E-03
551391.11	4172778.45	3195.51621	4654.68921	1371.12032	12267.05827	1918.85281	2922.77152	3184.8983	2656.70978	758.1645	8454.75517	7476.62021	3731.8674	0.57875	0.59503	2.00E-04	2.69E-04	7.93E-05	6.08E-04	1.20E-04	1.83E-04	3.13E-04	5.45E-04	1.55E-04	5.78E-04	3.51E-04	1.75E-04	8.10E-06	1.01E-05	3.5942E-03
551384.34	4172796.44	3197.01277	4710.19376	1359.86027	12210.79762	1861.71738	2988.29589	3186.73694	2689.57162	753.5818	8488.17162	7323.19596	3806.89121	0.58323	0.59931	2.00E-04	2.72E-04	7.86E-05	6.05E-04	1.16E-04	1.87E-04	3.13E-04	5.51E-04	1.54E-04	5.80E-04	3.44E-04	1.79E-04	8.16E-06	1.02E-05	3.5993E-03
551684.5	4172633.81	6804.74954	2873.30442	2802.41587	7023.73486	4632.06787	1873.62384	6718.17419	1719.06001	1465.2625	5245.82787	8882.56699	2535.71396	0.29369	0.2997	4.25E-04	1.66E-04	1.62E-04	3.48E-04	2.89E-04	1.17E-04	6.60E-04	3.52E-04	3.00E-04	3.59E-04	4.17E-04	1.19E-04	4.11E-06	5.08E-06	3.7248E-03
551386.16	4173049.39	3622.41385	6471.51151	1069.21886	8752.32931	1220.40812	5208.19839	3642.9829	3840.17542	605.93734	7498.78526	4140.92879	6478.19626	0.57497	0.58328	2.26E-04	3.74E-04	6.18E-05	4.34E-04	7.62E-05	3.25E-04	3.58E-04	7.87E-04	1.24E-04	5.13E-04	1.94E-04	3.04E-04	8.05E-06	9.88E-06	3.7964E-03
551371.5	4172839.22	3233.05852	4888.71847	1329.08292	11997.02597	1717.87892	3146.74278	3224.56502	2793.09644	740.19956	8642.62432	6801.82812	3994.22774	0.58437	0.59882	2.02E-04	2.83E-04	7.68E-05	5.95E-04	1.07E-04	1.97E-04	3.17E-04	5.73E-04	1.52E-04	5.91E-04	3.19E-04	1.88E-04	8.18E-06	1.01E-05	3.6175E-03
551412.98	4172720.87	3244.26833	4396.33238	1409.10398	12422.51544	2068.13974	2682.06719	3232.97046	2510.12239	775.92269	8356.78234	7860.88767	3455.5586	0.55197	0.56741	2.03E-04	2.54E-04	8.15E-05	6.16E-04	1.29E-04	1.68E-04	3.18E-04	5.15E-04	1.59E-04	5.71E-04	3.69E-04	1.62E-04	7.72E-06	9.62E-06	3.5624E-03
551382.93	4173040.44	3609.2659	6453.44997	1073.29373	8850.70692	1229.08467	5052.41093	3628.13649	3823.6715	608.46692	7565.59222	4197.30944	6298.46587	0.571	0.57913	2.25E-04	3.73E-04	6.21E-05	4.39E-04	7.68E-05	3.16E-04	3.57E-04	7.84E-04	1.25E-04	5.17E-04	1.97E-04	2.96E-04	7.99E-06	9.81E-06	3.7848E-03
551434.93	4173156.99	3725.14408	6267.23847	1043.21762	7417.68668	1083.35399	6671.91089	3756.39803	3733.90022	594.12679	6768.04923	3215.21979	8086.35569	0.64183	0.64933	2.33E-04	3.62E-04	6.03E-05	3.68E-04	6.77E-05	4.17E-04	3.69E-04	7.65E-04	1.22E-04	4.63E-04	1.51E-04	3.80E-04	8.98E-06	1.10E-05	3.7773E-03
551473.49	4173205.95	3911.13242	6340.32954	1020.65082	6655.61151	1013.85435	7212.08281	3946.35417	3776.57935	584.46735	6270.33604	2851.27903	8703.79495	0.72757	0.73611	2.44E-04	3.67E-04	5.90E-05	3.30E-04	6.33E-05	4.50E-04	3.88E-04	7.74E-04	1.20E-04	4.29E-04	1.34E-04	4.09E-04	1.02E-05	1.25E-05	3.7895E-03
551622.18	4173286.37	4887.55608	5500.91496	951.34172	4598.19517	838.83642	9175.22315	4967.94132	3302.75546	552.02673	4557.82902	2088.43631	10851.68674	2.81718	2.94141	3.05E-04	3.18E-04	5.50E-05	2.28E-04	5.24E-05	5.73E-04	4.88E-04	6.77E-04	1.13E-04	3.12E-04	9.81E-05	5.10E-04	3.94E-05	4.98E-05	3.8188E-03
551379.71	4173031.48	3594.15052	6420.50605	1078.72886	8951.99332	1231.92064	4897.70986	3611.27072	3795.63455	611.76528	7637.81244	4254.48265	6117.92046	0.56657	0.57551	2.24E-04	3.71E-04	6.24E-05	4.44E-04	7.69E-05	3.06E-04	3.55E-04	7.78E-04	1.25E-04	5.22E-04	2.00E-04	2.87E-04	7.93E-06	9.75E-06	3.7701E-03
551401.33	4173091.83	3611.96451	6291.68173	1046.86309	8216.88699	1166.0438	5813.6777	3638.84975	3733.68989	592.61314	7099.96861	3772.71669	7138.7467	0.58652	0.59378	2.26E-04	3.64E-04	6.05E-05	4.07E-04	7.28E-05	3.63E-04	3.58E-04	7.65E-04	1.21E-04	4.86E-04	1.77E-04	3.35E-04	8.21E-06	1.01E-05	3.7538E-03
551376.48	4173022.53	3578.95246	6375.99653	1086.44465	9064.52352	1239.154	4747.96537	3594.20332	3758.24784	616.37628	7721.08495	4314.19562	5941.62766	0.56296	0.57183	2.23E-04	3.69E-04	6.28E-05	4.49E-04	7.74E-05	2.97E-04	3.53E-04	7.70E-04	1.26E-04	5.28E-04	2.03E-04	2.79E-04	7.88E-06	9.69E-06	3.7554E-03
551362.74	4172926.19	3399.85156	5600.42485	1240.61891	10732.92842	1422.35725	3665.76409	3398.82514	3212.95362	700.46404	8680.18334	5337.82821	4634.8155	0.56658	0.57815	2.12E-04	3.24E-04	7.17E-05	5.32E-04	8.88E-05	2.29E-04	3.34E-04	6.59E-04	1.44E-04	5.94E-04	2.51E-04	2.18E-04	7.93E-06	9.80E-06	3.6736E-03
551518.38	4172611.9	4040.70442	3691.03273	1913.89011	10874.73378	3140.65046	2245.98121	4009.80583	2152.14873	1040.2998	7513.94992	8444.02931	2951.76215	0.39028	0.39552	2.52E-04	2.13E-04	1.11E-04	5.39E-04	1.96E-04	1.40E-04	3.94E-04	4.41E-04	2.13E-04	5.14E-04	3.97E-04	1.39E-04	5.46E-06	6.70E-06	3.5616E-03
551456.55	4173188	3810.03033	6299.62792	1027.0553	6927.06589	1036.44425	6931.16743	3842.95008	3737.48648	586.77785	6454.18929	2974.88782	8375.22789	0.68244	0.69032	2.38E-04	3.64E-04	5.94E-05	3.43E-04	6.47E-05	4.33E-04	3.78E-04	7.66E-04	1.20E-04	4.41E-04	1.40E-04	3.93E-04	9.55E-06	1.17E-05	3.7623E-03
551578.79	4172597.4	4829.08514	3396.77442	2329.02733	9161.87786	4020.62981	2106.79417	4782.74786	2009.19211	1253.51723	6785.39977	8511.58147	2800.18738	0.31663	0.31977	3.02E-04	1.96E-04	1.35E-04	4.54E-04	2.51E-04	1.32E-04	4.70E-04	4.12E-04	2.57E-04	4.64E-04	4.00E-04	1.32E-04	4.43E-06	5.42E-06	3.6135E-03
551386.79	4172786.86	3170.01833	4633.51604	1351.90756	12060.04864	1870.01855	2931.60208	3159.72187	2646.07524	748.38442	8359.48645	7292.87748	3738.33933	0.57178	0.58758	1.98E-04	2.68E-04	7.82E-05	5.98E-04	1.17E-04	1.83E-04	3.11E-04	5.42E-04	1.53E-04	5.72E-04	3.43E-04	1.76E-04	8.00E-06	9.96E-06	3.5558E-03
551426.47	4172697.04	3301.37042	4235.05821	1438.79124	12296.52408	2122.82125	2573.48085	3289.19352	2424.37327	792.36709	8207.85096	7928.21166	3326.03603	0.52688	0.54082	2.06E-04	2.45E-04	8.32E-05	6.10E-04	1.33E-04	1.61E-04	3.23E-04	4.97E-04	1.62E-04	5.61E-04	3.72E-04	1.56E-04	7.37E-06	9.16E-06	3.5261E-03
551751.03	4172664.01	6936.4808	2499.54893	2178.97658	8580.53135	3821.48256	1617.30714	6856.43826	1470.85281	1154.24781	5077.01727	9538.65191	2182.48115	0.40443	0.41466	4.33E-04	1.45E-04	1.26E-04	4.25E-04	2.39E-04	1.01E-04	6.74E-04	3.01E-04	2.37E-04	3.47E-04	4.48E-04	1.03E-04	5.66E-06	7.03E-06	3.5911E-03
551404.29	4173100.2	3605.14113	6237.13477	1043.3934	8078.20323	1153.85451	5901.88863	3632.81212	3698.51821	590.74849	7024.89596	3691.94523	7228.53787	0.5886	0.59645	2.25E-04	3.61E-04	6.03E-05	4.00E-04	7.21E-05	3.69E-04	3.57E-04	7.58E-04	1.21E-04	4.80E-04	1.73E-04	3.40E-04	8.24E-06	1.01E-05	3.7351E-03
551365.45	4172862.48	3242.93788	4988.18001	1298.54133	11591.75632	1619.11519	3224.47039	3236.09926	2850.42887	725.22448	8618.517	6349.10943	4088.28638	0.57257	0.58574	2.02E-04	2.88E-04	7.51E-05	5.75E-04	1.01E-04	2.01E-04	3.18E-04	5.84E-04	1.49E-04	5.89E-04	2.98E-04	1.92E-04	8.01E-06	9.93E-06	3.5916E-03
551373.26	4173013.58	3554.60623	6300.87952	1092.79197	9154.54822	1244.5079	4593.62484	3567.9666	3702.26043	620.18919	7782.64755	4367.66541	5757.60145	0.55801	0.56659	2.22E-04	3.64E-04	6.32E-05	4.54E-04	7.77E-05	2.87E-04	3.51E-04	7.59E-04	1.27E-04	5.32E-04	2.05E-04	2.70E-04	7.81E-06	9.60E-06	3.7297E-03
551538.56	4173258.25	4229.35989	5953.01831	962.3658	5563.2067	927.3276	8092.23668	4279.78021	3594.07491	553.56189	5439.63328	2453.51474	9639.05391	1.03796	1.05352	2.64E-04	3.44E-04	5.56E-05	2.76E-04	5.79E-05	5.05E-04	4.21E-04	7.37E-04	1.13E-04	3.72E-04	1.15E-04	4.53E-04	1.45E-05	1.79E-05	3.7462E-03
551438.02	4173165.58	3706.02026	6228.93099	1029.96544	7227.83098	1062.38189	6622.65294	3737.15069	3678.82209	586.93904	6620.39755	3126.76188	8021.76489	0.64033	0.64766	2.31E-04	3.60E-04	5.95E-05	3.58E-04	6.64E-05	4.14E-04	3.67E-04	7.54E-04	1.20E-04	4.53E-04	1.47E-04	3.77E-04	8.96E-06	1.10E-05	3.7274E-03
551999.39	4172693.31	5483.2519	3468.78223	2793.0406	8937.07306	3543.81478	1722.34038	5372.51189	2053.90194	1495.71879	7252.7389	7205.75306	2317.52145	0.23803	0.23846	3.42E-04	2.01E-04	1.61E-04	4.43E-04	2.21E-04	1.08E-04	5.28E-04	4.21E-04	3.07E-04	4.96E-04	3.38E-04	1.09E-04	3.33E-06	4.04E-06	3.6826E-03
551363.15	4172956.42	3452.13157	5854.06494	1184.08206	10128.63103	1339.65123	3914.63044	3455.28531	3376.03457	671.19041	8404.49239	4907.17412	4939.83628	0.55844	0.5686	2.16E-04	3.38E-04	6.85E-05	5.02E-04	8.37E-05	2.44E-04	3.40E-04	6.92E-04	1.38E-04	5.75E-04	2.30E-04	2.32E-04	7.81E-06	9.64E-06	3.6766E-03
552014.24	4172696.53	5805.89245	3591.39616	2703.43742	8571.64325	3239.17733	1847.16796	5696.05064	2136.21772	1461.41122	7111.473	6775.30988	2479.5772	0.23243	0.23273	3.63E-04	2.08E-04	1.56E-04	4.25E-04	2.02E-04	1.15E-04	5.60E-04	4.38E-04	3.00E-04	4.86E-04	3.18E-04	1.16E-04	3.25E-06	3.94E-06	3.6946E-03
551370.03	4173004.63	3521.60396	6197.74211	1097.72576	9221.58019	1248.07468	4436.58811	3533.15421	3629.85745	623.09533	7821.375	4415.37925	5568.57193	0.55246	0.56115	2.20E-04	3.58E-04	6.35E-05	4.57E-04	7.80E-05	2.77E-04	3.47E-04	7.44E-04	1.28E-04	5.35E-04	2.07E-04	2.62E-04	7.73E-06	9.51E-06	3.6939E-03
551410.21	4173116.94	3589.4827	6126.43976	1035.34142	7795.67979	1128.39168	6034.45013	3618.20833	3628.40461	586.68991	6868.64575	3527.02738	7358.55351	0.59402	0.60056	2.24E-04	3.54E-04	5.99E-05	3.86E-04	7.05E-05	3.77E-04	3.56E-04	7.44E-04	1.20E-04	4.70E-04	1.66E-04	3.46E-04	8.31E-06	1.02E-05	3.6911E-03
551362.33	4172895.96	3294.39009	5232.69559	1259.21286	11002.46469	1488.43289	3397.22375	3290.39547	2992.85306	707.30746	8596.05111	5701.63123	4303.00983	0.5617	0.57368	2.06E-04	3.03E-04	7.28E-05	5.45E-04	9.30E-05	2.12E-04	3.23E-04	6.13E-04	1.45E-04	5.88E-04	2.68E-04	2.02E-04	7.86E-06	9.72E-06	3.5888E-03
551570.55	4173276.2	4392.99107	5723.73391	945.78328	5091.17899	880.90558	8426.55171	4453.45833	3453.41203	545.3098	5040.85263	2273.22794	9989.12086	1.33436	1.35959	2.74E-04	3.31E-04	5.47E-05	2.52E-04	5.50E-05	5.26E-04	4.38E-04	7.08E-04	1.12E-04	3.45E-04	1.07E-04	4.69E-04	1.87E-05	2.30E-05	3.7134E-03
551665.6	4173289.01	5447.22639	5101.03399	924.83758	4164.29923	794.02407	8937.90449	5549.50743	3014.30045	540.09382	4065.14929	1925.69729	10663.05961	10.23691	11.53143	3.40E-04	2.95E-04	5.35E-05	2.06E-04	4.96E-05	5.58E-04	5.46E-04	6.18E-04	1.11E-04	2.78E-04	9.04E-05	5.01E-04	1.43E-04	1.95E-04	3.9847E-03
551370.59	4172827.76	3159.62228	4710.24177	1305.88235	11693.6755	1713.57753	3038.60375	3150.89032	2691.77082	726.49206	8345.15354	6733.60712	3859.56292	0.56569	0.5799	1.97E-04	2.72E-04	7.55E-05	5.80E-04	1.07E-04	1.90E-04	3.10E-04	5.52E-04	1.49E-04	5.71E-04	3.16E-04	1.81E-04	7.92E-06	9.83E-06	3.5179E-03
551398.65	4172742.7	3144.629	4412.27667	1355.07223	11971.35222	1957.67199	2730.40211	3134.08238	2517.47383	747.03812	8166.1056	7448.74474	3503.20549	0.54682	0.56214	1.96E-04	2.55E-04	7.83E-05	5.93E-04	1.22E-04	1.71E-04	3.08E-04	5.16E-04	1.53E-04	5.58E-04	3.50E-04	1.65E-04	7.65E-06	9.53E-06	3.4832E-03
551452.84	4172654.71	3464.37838	3951.04634	1548.14697	11818.70799	2328.15397	2400.74556	3447.16933	2272.09662	853.09304	7865.14397	8017.93785	3114.52638	0.47715	0.4876	2.16E-04	2.28E-04	8.95E-05	5.86E-04	1.45E-04	1.50E-04	3.39E-04	4.66E-04	1.75E-04	5.38E-04	3.77E-04	1.46E-04	6.68E-06	8.26E-06	3.4706E-03
551652.41	4173290.93	5217.15942	5176.07612	928.46149	4254.11263	801.81056	8953.88291	5310.7603	3075.0682	541.18042	4175.70772	1958.26381	10653.0926	5.86557	6.32681	3.26E-04	2.99E-04	5.37E-05	2.11E-04	5.01E-05	5.59E-04	5.22E-04	6.30E-04	1.11E-04	2.86E-04	9.20E-05	5.00E-04	8.21E-05	1.07E-04	3.8293E-03
551505.24	4172615.04	3866.30578	3686.84212	1807.17366	10894.50089	2911.79307	2246.99689	3838.45034	2143.9287	984.65461	7461.05803	8213.00809	2944.25147	0.39793	0.40383	2.41E-04	2.13E-04	1.04E-04	5.40E-04	1.82E-04	1.40E-04	3.77E-04	4.39E-04	2.02E-04	5.10E-04	3.86E-04	1.38E-04	5.57E-06	6.84E-06	3.4865E-03
551558.02	4172597.13	4462.61686	3446.01162	2140.15332	9547.23196	3626.7015	2122.99607	4423.44172	2027.98403	1157.62461	6925.77104	8262.05187	2812.06055	0.32978	0.33311	2.79E-04	1.99E-04	1.24E-04	4.73E-04	2.27E-04	1.33E-04	4.35E-04	4.16E-04	2.37E-04	4.74E-04	3.88E-04	1.32E-04	4.61E-06	5.64E-06	3.5258E-03
551459.64	4173196.59	3777.0996	6161.69143	1008.63322	6713.50272	1013.90475	6816.88749	3809.83128	3659.26376	576.59529	6268.93423	2890.31224	8239.03466	0.67778	0.68549	2.36E-04	3.56E-04	5.83E-05	3.33E-04	6.33E-05	4.26E-04	3.74E-04	7.50E-04	1.18E-04	4.29E-04	1.36E-04	3.87E-04	9.48E-06	1.16E-05	3.6875E-03
551609.91	4172598.09	5258.34357	3178.18907	2478.96119	8066.71912	4297.77821	2013.52128	5202.61454	1894.94946	1322.02303	6176.00642	8339.73485	2688.82736	0.28318	0.2859	3.28E-04	1.84E-04	1.43E-04	4.00E-04	2.68E-04	1.26E-04	5.11E-04	3.88E-04	2.71E-04	4.22E-04	3.92E-04	1.26E-04	3.96E-06	4.84E-06	3.5694E-03
551366.79	4172995.62	3484.33735	6077.74857	1102.93093	9281.66607	1251.64185	4282.48718	3494.14033	3547.89861	626.15576	7850.27875	4462.86325	5381.9941	0.54653	0.5557	2.18E-04	3.51E-04	6.38E-05	4.60E-04	7.82E-05	2.67E-04	3.43E-04	7.27E-04	1.28E-04	5.37E-04	2.10E-04	2.53E-04	7.65E-06	9.42E-06	3.6538E-03
551441.11	4173174.16	3683.03941	6123.18237	1015.67636	7028.79805	1041.52019	6556.6183	3713.97118	3620.03697	579.15051	6466.0982	3041.53865	7938.43403	0.63791	0.64514	2.30E-04	3.54E-04	5.87E-05	3.48E-04	6.51E-05	4.10E-04	3.65E-04	7.42E-04	1.19E-04	4.42E-04	1.43E-04	3.73E-04	8.93E-06	1.09E-05	3.6692E-03
551731	4172653.72	7037.90345	2571.61589	2364.9787	7637.54488	3792.31585	1681.44293	6952.17101	1523.03438	1244.62829	4869.68766	8854.05524	2274.15457	0.35976	0.36929	4.39E-04	1.49E-04	1.37E-04	3.79E-04	2.37E-04	1.05E-04	6.83E-04	3.12E-04	2.55E-04	3.33E-04	4.16E-04	1.07E-04	5.03E-06	6.26E-06	3.5630E-03
551591.33	4172593.77	4943.4449	3262.73872	2356.21879	8552.93505	4069.62792	2044.50393	4894.1604	1936.27745	1263.57075	6432.39779	8280.62796	2721.90185	0.2965	0.29933	3.09E-04	1.89E-04	1.36E-04	4.24E-04	2.54E-04	1.28E-04	4.81E-04	3.97E-04	2.59E-04	4.40E-04	3.89E-04	1.28E-04	4.15E-06	5.07E-06	3.5422E-03
551669.26	4172623.44	6343.31515	2875.82379	2706.01847	6817.49213	4505.09642	1876.18512	6265.69897	1723.2283	1421.97914	5255.9086	8399.04359	2533.33006	0.26748	0.27175	3.96E-04	1.66E-04	1.56E-04	3.38E-04	2.81E-04	1.17E-04	6.16E-04	3.53E-04	2.91E-04	3.59E-04	3.94E-04	1.19E-04	3.74E-06	4.60E-06	3.5971E-03
551477.45	4173215.91	3853.69087	6070.13821	994.44458	6389.89007	988.0059	7030.4384	3888.70873	3658.43404	569.89416	6022.43561	2760.66138	8491.18667	0.71878	0.72706	2.41E-04	3.51E-04	5.75E-05	3.17E-04	6.17E-05	4.39E-04	3.82E-04	7.50E-04	1.17E-04	4.12E-04	1.30E-04	3.99E-04	1.01E-05	1.23E-05	3.6783E-03
551363.82	4172852.5	3174.70095	4813.45713	1280.22593	11395.45212	1620.61261	3119.86854	3167.48181	2751.78682	714.1342	8372.83915	6339.04911	3956.99593	0.55837	0.57137	1.98E-04	2.78E-04	7.40E-05	5.65E-04	1.01E-04	1.95E-04	3.11E-04	5.64E-04	1.46E-04	5.73E-04	2.98E-04	1.86E-04	7.81E-06	9.68E-06	3.5069E-03
551600.5	4172594.79	5078.56521	3208.34179	2405.67635	8267.21806	4161.45004	2022.4422	5026.40956	1908.48053	1286.582	6276.84908	8260.04037	2696.33068	0.28799	0.29072	3.17E-04	1.85E-04	1.39E-04	4.10E-04	2.60E-04	1.26E-04	4.94E-04	3.91E-04	2.64E-04	4.29E-04	3.88E-04	1.27E-04	4.03E-06	4.93E-06	3.5395E-03
551639.22	4173292.85	4984.17869	5213.59242	926.40146	4330.66242	807.06203	8830.64485	5069.74898	3112.34037	538.85461	4269.23247	1986.65166	10485.07092	3.93951	4.15835	3.11E-04	3.01E-04	5.36E-05	2.15E-04	5.04E-05	5.52E-04	4.98E-04	6.38E-04	1.10E-04	2.92E-04	9.33E-05	4.92E-04	5.51E-05	7.05E-05	3.7329E-03
551548.07	4173267.2	4215.58197	5759.40508	942.5822	5332.0526	901.33603	8001.2218	4268.32512	3476.90849	542.3746	5227.35743	2369.66894	9517.19509	1.0895	1.10601	2.63E-04	3.33E-04	5.45E-05	2.64E-04	5.63E-05	5.00E-04	4.20E-04	7.13E-04	1.11E-04	3.57E-04	1.11E-04	4.47E-04	1.52E-05	1.87E-05	3.6642E-03
551394.38	4172751	3114.37517	4407.28005	1336.95214	11781.29543	1915.72333	2745.54286	3104.07268	2515.22538	737.60172	8078.5729	7288.92391	3517.31579	0.54235	0.55741	1.94E-04	2.55E-04	7.73E-05	5.84E-04	1.20E-04	1.71E-04	3.05E-04	5.16E-04	1.51E-04	5.52E-04	3.42E-04	1.65E-04	7.59E-06	9.45E-06	3.4506E-03
551359.92	4172947.46	3375.90426	5637.78479	1177.02042	10029.15486	1334.64152	3754.53572	3377.85249	3247.04677	666.56788	8273.5226	4903.67694	4741.10274	0.54575	0.55595	2.11E-04	3.26E-04	6.80E-05	4.97E-04	8.34E-05	2.34E-04	3.32E-04	6.66E-04	1.37E-04	5.66E-04	2.30E-04	2.23E-04	7.64E-06	9.42E-06	3.5899E-03
551416.13	4173133.68	3565.75989	6003.21029	1022.67546	7500.11176	1099.24474	6093.83253	3594.90396	3553.98697	580.28717	6682.58081	3361.80566	7406.72444	0.5967	0.60338	2.23E-04	3.47E-04	5.91E-05	3.72E-04	6.87E-05	3.81E-04	3.53E-04	7.28E-04	1.19E-04	4.57E-04	1.58E-04	3.48E-04	8.35E-06	1.02E-05	3.6320E-03
551429.57	4172683.43	3275.77987	4074.55067	1426.54898	11856.11689	2104.30787	2482.96942	3263.2348	2335.81282	785.88699	7923.76962	7707.77417	3211.68774	0.49975	0.51237	2.05E-04	2.36E-04	8.25E-05	5.88E-04	1.31E-04	1.55E-04	3.21E-04	4.79E-04	1.61E-04	5.42E-04	3.62E-04	1.51E-04	6.99E-06	8.68E-06	3.4278E-03
551759.53	4172664.38	6602.68142	2409.83769	2029.43799	8595.55193	3721.05211	1554.6978	6530.32769	1413.8302	1078.4177	5017.69152	9376.57627	2094.47933	0.40156	0.41134	4.12E-04	1.39E-04	1.17E-04	4.26E-04	2.32E-04	9.71E-05	6.42E-04	2.90E-04	2.21E-04	3.43E-04	4.40E-04	9.84E-05	5.62E-06	6.97E-06	3.4718E-03
551359.51	4172917.23	3303.86515	5344.35624	1217.33943	10477.86923	1404.9098	3498.25461	3302.13716	3063.16692	686.39491	8406.8318	5279.6373	4427.08241	0.54805	0.55816	2.06E-04	3.09E-04	7.04E-05	5.19E-04	8.77E-05	2.18E-04	3.25E-04	6.28E-04	1.41E-04	5.75E-04	2.48E-04	2.08E-04	7.67E-06	9.46E-06	3.5524E-03
551441.29	4172664.13	3358.61122	3966.58161	1481.74775	11740.92032	2205.08102	2414.41984	3343.72386	2277.94342	816.50635	7823.64643	7812.08517	3128.0098	0.48326	0.49461	2.10E-04	2.29E-04	8.57E-05	5.82E-04	1.38E-04	1.51E-04	3.29E-04	4.67E-04	1.67E-04	5.35E-04	3.67E-04	1.47E-04	6.76E-06	8.38E-06	3.4222E-03
551496.48	4172617.13	3762.61641	3682.91676	1744.46599	10893.07676	2777.97019	2246.769	3736.57731	2137.75349	952.25856	7423.57728	8069.95973	2938.40572	0.40291	0.40928	2.35E-04	2.13E-04	1.01E-04	5.40E-04	1.74E-04	1.40E-04	3.67E-04	4.38E-04	1.95E-04	5.08E-04	3.79E-04	1.38E-04	5.64E-06	6.94E-06	3.4405E-03
551363.56	4172986.65	3444.55192	5947.3377	1108.78961	9338.51041	1256.06306	4134.85484	3452.6705	3460.69281	629.38792	7871.21037	4511.30351	5202.52851	0.54048	0.54938	2.15E-04	3.44E-04	6.41E-05	4.63E-04	7.84E-05	2.58E-04	3.39E-04	7.09E-04	1.29E-04	5.38E-04	2.12E-04	2.44E-04	7.56E-06	9.31E-06	3.6118E-03
551505.81	4173239.58	3968.18147	5914.97472	961.60886	5921.13295	956.41311	7331.72946	4008.70299	3569.58212	552.06435	5660.70268	2605.80208	8789.8971	0.83328	0.84327	2.48E-04	3.42E-04	5.56E-05	2.94E-04	5.97E-05	4.58E-04	3.94E-04	7.32E-04	1.13E-04	3.87E-04	1.22E-04	4.13E-04	1.17E-05	1.43E-05	3.6437E-03
551546.53	4172597.92	4264.65967	3454.96165	2028.84062	9677.1697	3395.2866	2125.77186	4229.12316	2028.16932	1099.63605	6944.10825	8072.81538	2809.77108	0.33565	0.33913	2.66E-04	2.00E-04	1.17E-04	4.80E-04	2.12E-04	1.33E-04	4.16E-04	4.16E-04	2.25E-04	4.75E-04	3.79E-04	1.32E-04	4.70E-06	5.75E-06	3.4611E-03
551416.74	4172703.47	3185.15414	4163.97478	1374.31103	11786.2839	2014.08962	2548.45274	3174.1775	2382.33974	757.04873	7940.8024	7510.47204	3288.86405	0.51043	0.52391	1.99E-04	2.41E-04	7.95E-05	5.84E-04	1.26E-04	1.59E-04	3.12E-04	4.88E-04	1.55E-04	5.43E-04	3.53E-04	1.54E-04	7.14E-06	8.88E-06	3.4101E-03
551371.29	4172818.38	3107.17209	4584.50823	1288.92475	11438.771	1708.2368	2962.0259	3098.31498	2621.06017	716.47839	8123.35507	6665.70577	3764.20387	0.55004	0.56399	1.94E-04	2.65E-04	7.45E-05	5.67E-04	1.07E-04	1.85E-04	3.05E-04	5.37E-04	1.47E-04	5.56E-04	3.13E-04	1.77E-04	7.70E-06	9.56E-06	3.4436E-03
551390.11	4172759.3	3087.9481	4399.80918	1320.59727	11608.04442	1875.46925	2759.94605	3077.85987	2511.95799	729.17762	7997.11173	7141.71277	3530.5683	0.53825	0.55306	1.93E-04	2.54E-04	7.63E-05	5.75E-04	1.17E-04	1.72E-04	3.03E-04	5.15E-04	1.49E-04	5.47E-04	3.35E-04	1.66E-04	7.53E-06	9.37E-06	3.4204E-03
551419.48	4173143.16	3555.01669	5941.07704	1015.11654	7336.0453	1079.42251	6104.99251	3584.20132	3517.164	577.05479	6620.8156	3266.94313	7411.24232	0.59551	0.6019	2.22E-04	3.43E-04	5.87E-05	3.64E-04	6.74E-05	3.81E-04	3.52E-04	7.21E-04	1.18E-04	4.53E-04	1.53E-04	3.48E-04	8.33E-06	1.02E-05	3.6009E-03
551444.2	4173182.75	3655.60619	6009.89689	1000.19663	6831.00129	1020.82398	6473.47067	3686.29375	3556.60745	570.68426	6304.34019	2959.55584	7836.69289	0.63443	0.64152	2.28E-04	3.47E-04	5.78E-05	3.39E-04	6.38E-05	4.04E-04	3.62E-04	7.29E-04	1.17E-04	4.31E-04	1.39E-04	3.68E-04	8.88E-06	1.09E-05	3.6065E-03
551767.7	4172665	6329.84853	2353.53636	1936.32448	8743.49968	3761.5866	1509.8299	6263.30754	1376.7647	1030.03322	5051.8796	9451.09296	2030.83784	0.40279	0.4121	3.95E-04	1.36E-04	1.12E-04	4.33E-04	2.35E-04	9.43E-05	6.16E-04	2.82E-04	2.11E-04	3.45E-04	4.44E-04	9.54E-05	5.64E-06	6.98E-06	3.4123E-03
551646.88	4172610.43	5831.40831	2944.75872	2601.99972	7012.28349	4411.06724	1909.30883	5763.81158	1765.14163	1375.74585	5480.99531	8152.46002	2567.15484	0.25834	0.26131	3.64E-04	1.70E-04	1.50E-04	3.48E-04	2.76E-04	1.19E-04	5.67E-04	3.62E-04	2.82E-04	3.75E-04	3.83E-04	1.21E-04	3.61E-06	4.43E-06	3.5239E-03
551359.34	4172885.37	3203.49357	4993.45693	1237.45344	10779.31877	1482.94696	3250.50139	3198.62792	2856.59625	693.78099	8314.60096	5684.85704	4118.73229	0.5424	0.55396	2.00E-04	2.89E-04	7.15E-05	5.34E-04	9.26E-05	2.03E-04	3.14E-04	5.86E-04	1.42E-04	5.69E-04	2.67E-04	1.93E-04	7.59E-06	9.39E-06	3.4784E-03
551626.04	4173294.77	4752.15333	5210.07381	918.71766	4392.20767	809.60422	8574.20873	4830.32457	3122.84049	533.19341	4341.52905	2010.38989	10168.3715	2.84666	2.97297	2.97E-04	3.01E-04	5.31E-05	2.18E-04	5.06E-05	5.36E-04	4.75E-04	6.40E-04	1.09E-04	2.97E-04	9.44E-05	4.78E-04	3.98E-05	5.04E-05	3.6382E-03
551360.34	4172977.69	3393.37624	5790.8279	1110.73216	9349.10244	1257.16259	3983.77145	3399.91993	3360.13588	630.30885	7848.63238	4511.11244	5017.97718	0.53232	0.54165	2.12E-04	3.35E-04	6.42E-05	4.63E-04	7.85E-05	2.49E-04	3.34E-04	6.89E-04	1.29E-04	5.37E-04	2.12E-04	2.36E-04	7.45E-06	9.18E-06	3.5547E-03
551422.57	4173151.74	3549.3867	5893.09747	1005.94203	7194.58767	1060.5875	6169.1172	3578.51924	3513.45499	572.20552	6510.29085	3180.46613	7409.74206	0.59382	0.6007	2.22E-04	3.41E-04	5.82E-05	3.57E-04	6.62E-05	3.85E-04	3.52E-04	7.20E-04	1.17E-04	4.45E-04	1.49E-04	3.48E-04	8.31E-06	1.02E-05	3.5790E-03
551579.91	4173285.01	4354.74228	5486.21916	923.56363	4853.5251	852.58962	8185.59655	4416.87318	3307.70833	532.8575	4808.03253	2184.83693	9704.25206	1.41769	1.4498	2.72E-04	3.17E-04	5.34E-05	2.41E-04	5.33E-05	5.11E-04	4.34E-04	6.78E-04	1.09E-04	3.29E-04	1.03E-04	4.56E-04	1.98E-05	2.46E-05	3.6006E-03
551356.7	4172938.49	3301.04783	5425.77021	1168.55229	9920.42078	1329.81018	3602.57257	3301.89802	3121.56216	661.02532	8128.12165	4900.04103	4552.24461	0.53207	0.54244	2.06E-04	3.14E-04	6.76E-05	4.92E-04	8.31E-05	2.25E-04	3.25E-04	6.40E-04	1.35E-04	5.56E-04	2.30E-04	2.14E-04	7.45E-06	9.19E-06	3.5035E-03
551525.09	4173257.74	4025.00277	5714.67346	935.47179	5528.38168	915.49911	7460.60351	4070.1621	3448.34903	537.54586	5348.20987	2450.10434	8915.83856	0.91324	0.92562	2.51E-04	3.30E-04	5.41E-05	2.74E-04	5.72E-05	4.66E-04	4.00E-04	7.07E-04	1.10E-04	3.66E-04	1.15E-04	4.19E-04	1.28E-05	1.57E-05	3.5781E-03
551362.19	4172842.52	3099.17601	4629.25812	1255.48798	11105.04505	1610.53912	3010.77374	3091.71014	2647.8239	699.67852	8082.17941	6259.43959	3820.15375	0.53988	0.55258	1.94E-04	2.68E-04	7.26E-05	5.50E-04	1.01E-04	1.88E-04	3.04E-04	5.43E-04	1.43E-04	5.53E-04	2.94E-04	1.79E-04	7.55E-06	9.36E-06	3.4059E-03
551557.57	4173276.15	4194.22476	5560.42573	922.98974	5103.07068	875.14136	7867.22774	4249.00836	3355.83494	531.33764	5014.69521	2284.62855	9349.17618	1.14433	1.16483	2.62E-04	3.21E-04	5.34E-05	2.53E-04	5.47E-05	4.91E-04	4.18E-04	6.88E-04	1.09E-04	3.43E-04	1.07E-04	4.39E-04	1.60E-05	1.97E-05	3.5752E-03
551534.19	4172599.04	4070.46368	3458.61914	1917.12578	9785.10868	3165.11275	2127.2906	4038.32058	2025.23755	1040.82552	6942.22211	7881.72164	2804.90504	0.34253	0.34629	2.54E-04	2.00E-04	1.11E-04	4.85E-04	1.98E-04	1.33E-04	3.97E-04	4.15E-04	2.13E-04	4.75E-04	3.70E-04	1.32E-04	4.79E-06	5.87E-06	3.3933E-03
551464.37	4173209.67	3720.38538	5940.88056	979.01371	6396.44887	980.3069	6624.10903	3752.80881	3532.63834	560.18987	5982.15045	2767.98931	8011.80881	0.66894	0.67633	2.32E-04	3.43E-04	5.66E-05	3.17E-04	6.12E-05	4.14E-04	3.69E-04	7.24E-04	1.15E-04	4.09E-04	1.30E-04	3.76E-04	9.36E-06	1.15E-05	3.5684E-03

551356.29	4172908.26	3225.65447	5133.26021	1202.79201	10322.81112	1401.61149	3361.78786	3223.18209	2940.80131	677.13561	8200.57786	5274.02749	4256.4237	0.53456	0.54545	2.01E-04	2.97E-04	6.95E-05	5.12E-04	8.75E-05	2.10E-04	3.17E-04	6.03E-04	1.39E-04	5.61E-04	2.48E-04	2.00E-04	7.48E-06	9.24E-06	3.4605E-03
551383.34	4173070.63	3448.2149	5961.87915	1004.75453	7976.67807	1141.86367	5124.14472	3470.60689	3540.17318	568.88896	6844.38993	3786.13784	6341.64758	0.53945	0.54689	2.15E-04	3.45E-04	5.81E-05	3.95E-04	7.13E-05	3.20E-04	3.41E-04	7.26E-04	1.17E-04	4.68E-04	1.78E-04	2.98E-04	7.55E-06	9.27E-06	3.5488E-03
551425.66	4173160.33	3542.11001	5839.45311	995.99716	7051.00371	1041.21716	6147.88473	3571.14361	3474.20526	566.86228	6394.78603	3094.69493	7463.41692	0.59466	0.60133	2.21E-04	3.38E-04	5.76E-05	3.50E-04	6.50E-05	3.84E-04	3.51E-04	7.12E-04	1.16E-04	4.37E-04	1.45E-04	3.51E-04	8.32E-06	1.02E-05	3.5460E-03
551376.89	4173052.73	3440.12154	5990.15071	1012.16222	8169.38596	1159.352	4868.41876	3459.72792	3553.79073	573.50187	6973.47064	3901.71101	6054.98462	0.53335	0.54102	2.15E-04	3.46E-04	5.85E-05	4.05E-04	7.24E-05	3.04E-04	3.40E-04	7.28E-04	1.18E-04	4.77E-04	1.83E-04	2.84E-04	7.46E-06	9.17E-06	3.5483E-03
551380.11	4173061.68	3440.92556	5972.27725	1006.48987	8060.39496	1150.12045	4992.9869	3462.00966	3546.45192	570.03965	6894.10551	3844.27282	6194.89836	0.53589	0.54321	2.15E-04	3.45E-04	5.82E-05	4.00E-04	7.18E-05	3.12E-04	3.40E-04	7.27E-04	1.17E-04	4.71E-04	1.81E-04	2.91E-04	7.50E-06	9.21E-06	3.5453E-03
551385.84	4172767.6	3048.32926	4358.90322	1295.13737	11312.64444	1819.23576	2758.96283	3038.60494	2490.33811	715.86195	7843.3165	6913.94637	3524.20696	0.5272	0.54141	1.90E-04	2.52E-04	7.49E-05	5.61E-04	1.14E-04	1.72E-04	2.99E-04	5.10E-04	1.47E-04	5.36E-04	3.25E-04	1.66E-04	7.38E-06	9.17E-06	3.3630E-03
551481.5	4173225.42	3783.42425	5828.80594	967.97817	6119.29479	964.5688	6844.28964	3818.29296	3537.82165	555.12472	5781.0505	2681.37156	8154.25343	0.71237	0.72071	2.36E-04	3.37E-04	5.60E-05	3.03E-04	6.02E-05	4.27E-04	3.75E-04	7.25E-04	1.14E-04	3.95E-04	1.26E-04	3.83E-04	9.97E-06	1.22E-05	3.5610E-03
551373.67	4173043.77	3427.40951	5974.16185	1015.28889	8248.72195	1162.45077	4728.81257	3445.45857	3539.97456	575.47346	7027.10982	3949.88237	5894.18913	0.52944	0.53702	2.14E-04	3.45E-04	5.87E-05	4.09E-04	7.26E-05	2.95E-04	3.39E-04	7.26E-04	1.18E-04	4.81E-04	1.86E-04	2.77E-04	7.41E-06	9.10E-06	3.5366E-03
551447.29	4173191.34	3624.86618	5890.89189	983.77101	6635.28831	1000.30855	6376.88387	3655.29142	3489.52289	561.64396	6137.53238	2880.50068	7720.85576	0.63005	0.63697	2.26E-04	3.41E-04	5.69E-05	3.29E-04	6.25E-05	3.98E-04	3.59E-04	7.15E-04	1.15E-04	4.20E-04	1.35E-04	3.63E-04	8.82E-06	1.08E-05	3.5404E-03
551357.11	4172968.72	3334.79213	5618.55038	1110.18901	9325.86505	1256.15697	3833.79921	3339.875	3252.80023	629.79679	7795.18454	4524.91379	4833.24901	0.5231	0.532	2.08E-04	3.25E-04	6.42E-05	4.62E-04	7.85E-05	2.39E-04	3.28E-04	6.67E-04	1.29E-04	5.33E-04	2.13E-04	2.27E-04	7.32E-06	9.02E-06	3.4905E-03
551370.44	4173034.82	3414.68976	5948.97072	1020.36828	8336.5732	1167.88197	4591.72873	3431.14183	3518.0177	578.56324	7091.7298	3999.93278	5734.66926	0.52553	0.53328	2.13E-04	3.44E-04	5.90E-05	4.13E-04	7.29E-05	2.87E-04	3.37E-04	7.21E-04	1.19E-04	4.85E-04	1.88E-04	2.69E-04	7.35E-06	9.04E-06	3.5247E-03
551570.92	4172589.64	4511.67308	3261.62557	2135.90571	8707.64643	3613.00106	2033.46098	4470.83185	1926.12173	1152.90561	6446.33679	7827.76394	2697.85095	0.29905	0.30179	2.82E-04	1.89E-04	1.23E-04	4.32E-04	2.26E-04	1.27E-04	4.39E-04	3.95E-04	2.36E-04	4.41E-04	3.68E-04	1.27E-04	4.18E-06	5.11E-06	3.3932E-03
551612.85	4173296.68	4564.0853	5202.84898	908.8276	4443.84405	810.46209	8293.35357	4636.13228	3123.56723	526.50255	4404.83591	2027.39153	9837.08422	2.15158	2.22874	2.85E-04	3.01E-04	5.25E-05	2.20E-04	5.06E-05	5.18E-04	4.56E-04	6.40E-04	1.08E-04	3.01E-04	9.52E-05	4.62E-04	3.01E-05	3.78E-05	3.5575E-03
551372.57	4172804.46	3041.67475	4430.43777	1268.3578	11121.71644	1705.47535	2863.98569	3032.7032	2534.37388	704.05564	7850.90642	6582.80895	3642.54522	0.53029	0.5439	1.90E-04	2.56E-04	7.33E-05	5.51E-04	1.07E-04	1.79E-04	2.98E-04	5.19E-04	1.44E-04	5.37E-04	3.09E-04	1.71E-04	7.42E-06	9.22E-06	3.3518E-03
551431.66	4172670.48	3237.36047	3912.67204	1408.13997	11355.49833	2075.57135	2394.03729	3224.44733	2245.74988	776.09	7613.30166	7437.56656	3098.22703	0.47215	0.4835	2.02E-04	2.26E-04	8.14E-05	5.63E-04	1.30E-04	1.50E-04	3.17E-04	4.60E-04	1.59E-04	5.21E-04	3.49E-04	1.46E-04	6.61E-06	8.19E-06	3.3184E-03
551392.05	4173095.11	3423.09044	5813.58298	991.0414	7643.26003	1110.99812	5387.8323	3448.38384	3448.61329	560.83733	6619.64458	3590.58845	6618.71795	0.54323	0.55033	2.14E-04	3.36E-04	5.73E-05	3.79E-04	6.94E-05	3.37E-04	3.39E-04	7.07E-04	1.15E-04	4.53E-04	1.69E-04	3.11E-04	7.60E-06	9.33E-06	3.5018E-03
551381.57	4172775.9	3026.13566	4342.9303	1279.74363	11152.94581	1779.35803	2768.73851	3016.63928	2482.59747	708.02609	7766.92731	6772.94634	3532.08994	0.52277	0.53668	1.89E-04	2.51E-04	7.40E-05	5.53E-04	1.11E-04	1.73E-04	2.97E-04	5.09E-04	1.45E-04	5.31E-04	3.18E-04	1.66E-04	7.31E-06	9.09E-06	3.3330E-03
551367.22	4173025.87	3397.69947	5905.02468	1025.83094	8419.57439	1172.7336	4453.51036	3412.43975	3483.25391	581.89549	7152.73286	4048.18342	5571.94926	0.52104	0.52858	2.12E-04	3.41E-04	5.93E-05	4.17E-04	7.32E-05	2.78E-04	3.35E-04	7.14E-04	1.19E-04	4.89E-04	1.90E-04	2.62E-04	7.29E-06	8.96E-06	3.5075E-03
551419.69	4172689.95	3150.43594	4000.03954	1354.82114	11345.15029	1982.87599	2454.80721	3139.42299	2292.05288	746.59629	7650.99515	7275.3473	3171.19586	0.48272	0.49493	1.97E-04	2.31E-04	7.83E-05	5.62E-04	1.24E-04	1.53E-04	3.09E-04	4.70E-04	1.53E-04	5.23E-04	3.42E-04	1.49E-04	6.75E-06	8.39E-06	3.3063E-03
551688.38	4172627.16	6437.25883	2695.02333	2552.50578	6467.97535	4108.30129	1772.323	6358.36393	1610.1404	1338.74763	4848.75905	7970.73321	2396.6879	0.26869	0.27397	4.02E-04	1.56E-04	1.48E-04	3.21E-04	2.57E-04	1.11E-04	6.25E-04	3.30E-04	2.74E-04	3.32E-04	3.74E-04	1.13E-04	3.76E-06	4.64E-06	3.4496E-03
551428.75	4173168.91	3523.77818	5807.50178	984.03666	6887.33709	1022.31047	6101.30451	3552.66352	3425.86422	560.40472	6263.80275	3014.74017	7403.15149	0.5929	0.59942	2.20E-04	3.36E-04	5.69E-05	3.41E-04	6.39E-05	3.81E-04	3.49E-04	7.02E-04	1.15E-04	4.28E-04	1.42E-04	3.48E-04	8.30E-06	1.02E-05	3.5014E-03
551374.62	4172794.89	3025.56579	4383.10432	1268.14295	11084.8035	1724.53225	2824.39442	3016.40385	2507.14735	703.1562	7785.39899	6624.80491	3595.0667	0.52587	0.53956	1.89E-04	2.53E-04	7.33E-05	5.49E-04	1.08E-04	1.76E-04	2.97E-04	5.14E-04	1.44E-04	5.32E-04	3.11E-04	1.69E-04	7.36E-06	9.14E-06	3.3327E-03
551517.54	4172602.01	3857.48827	3478.03083	1794.75414	9967.61203	2911.44087	2138.54923	3828.89647	2029.90494	976.18041	6967.07389	7712.22144	2809.82216	0.35567	0.3601	2.41E-04	2.01E-04	1.04E-04	4.94E-04	1.82E-04	1.34E-04	3.76E-04	4.16E-04	2.00E-04	4.76E-04	3.62E-04	1.32E-04	4.98E-06	6.10E-06	3.3295E-03
551534.72	4173266.82	4021.27973	5554.73095	917.68189	5315.31677	891.88212	7421.90704	4068.79134	3351.98513	527.45342	5159.84626	2371.3049	8855.1621	0.95398	0.96664	2.51E-04	3.21E-04	5.31E-05	2.63E-04	5.57E-05	4.64E-04	4.00E-04	6.87E-04	1.08E-04	3.53E-04	1.11E-04	4.16E-04	1.33E-05	1.64E-05	3.5130E-03
551355.89	4172864.24	3091.27313	4682.24376	1220.86388	10662.46144	1515.36564	3057.40585	3085.39734	2679.09734	682.14446	7987.97108	5829.52463	3876.16002	0.52548	0.537	1.93E-04	2.71E-04	7.06E-05	5.29E-04	9.46E-05	1.91E-04	3.03E-04	5.49E-04	1.40E-04	5.46E-04	2.74E-04	1.82E-04	7.35E-06	9.10E-06	3.3593E-03
551363.99	4173016.92	3375.11881	5839.9732	1031.17188	8492.93639	1176.85558	4313.99582	3388.12918	3434.98636	585.09478	7204.51232	4093.47932	5405.94323	0.51686	0.52448	2.11E-04	3.38E-04	5.96E-05	4.21E-04	7.35E-05	2.69E-04	3.33E-04	7.04E-04	1.20E-04	4.93E-04	1.92E-04	2.54E-04	7.23E-06	8.89E-06	3.4840E-03
551580.01	4172587.43	4610.06313	3189.91431	2171.68973	8367.79445	3684.45667	2000.33457	4566.97606	1888.0351	1169.47137	6259.70284	7746.87615	2657.22786	0.28754	0.29011	2.88E-04	1.84E-04	1.26E-04	4.15E-04	2.30E-04	1.25E-04	4.49E-04	3.87E-04	2.40E-04	4.28E-04	3.64E-04	1.25E-04	4.02E-06	4.92E-06	3.3690E-03
551397.97	4173111.85	3411.61111	5721.76403	986.15629	7474.03553	1089.21158	5528.17803	3438.13703	3388.67597	558.25588	6498.9813	3446.24517	6760.02828	0.54831	0.55424	2.13E-04	3.31E-04	5.70E-05	3.70E-04	6.80E-05	3.45E-04	3.38E-04	6.95E-04	1.14E-04	4.44E-04	1.62E-04	3.18E-04	7.67E-06	9.39E-06	3.4725E-03
551353.47	4172929.53	3226.1473	5217.79368	1157.67964	9795.32549	1324.34719	3457.34216	3226.04695	2998.6133	653.99172	7963.11262	4891.42772	4371.8754	0.51867	0.52871	2.01E-04	3.02E-04	6.69E-05	4.86E-04	8.27E-05	2.16E-04	3.17E-04	6.15E-04	1.34E-04	5.45E-04	2.30E-04	2.05E-04	7.26E-06	8.96E-06	3.4159E-03
551747.6	4172654.71	6592.46359	2405.04112	2075.25013	7746.35136	3466.37289	1569.66223	6517.91621	1417.54983	1100.14435	4722.98627	8547.67844	2117.0472	0.36511	0.37447	4.12E-04	1.39E-04	1.20E-04	3.84E-04	2.16E-04	9.80E-05	6.41E-04	2.91E-04	2.26E-04	3.23E-04	4.01E-04	9.94E-05	5.11E-06	6.35E-06	3.3613E-03
551377.3	4172784.21	3009.80786	4332.8872	1266.94525	11032.15672	1743.63483	2780.1739	3000.52151	2478.06734	701.64744	7715.01764	6653.94195	3542.51556	0.51993	0.5336	1.88E-04	2.51E-04	7.32E-05	5.47E-04	1.09E-04	1.74E-04	2.95E-04	5.08E-04	1.44E-04	5.28E-04	3.13E-04	1.66E-04	7.28E-06	9.04E-06	3.3106E-03
551673.23	4173296.86	5334.39798	4779.68189	885.13555	3944.6983	761.63493	8193.52619	5435.48944	2814.26339	517.10815	3831.21529	1840.5286	9817.93377	13.26704	15.28695	3.33E-04	2.76E-04	5.12E-05	1.96E-04	4.76E-05	5.12E-04	5.34E-04	5.77E-04	1.06E-04	2.62E-04	8.64E-05	4.61E-04	1.86E-04	2.59E-04	3.8868E-03
551607.23	4172588.61	5002.18346	3046.34748	2319.62039	7653.97788	3967.80372	1940.02717	4950.70795	1814.63875	1238.93219	5868.0228	7762.19825	2587.85766	0.26696	0.26935	3.12E-04	1.76E-04	1.34E-04	3.79E-04	2.48E-04	1.21E-04	4.87E-04	3.72E-04	2.54E-04	4.01E-04	3.65E-04	1.22E-04	3.74E-06	4.56E-06	3.3792E-03
551660.52	4173298.71	5105.31983	4847.6338	890.87032	4030.25867	769.77587	8239.32882	5197.66304	2871.82238	519.49343	3931.72772	1873.99498	9840.15717	7.06568	7.75297	3.19E-04	2.80E-04	5.15E-05	2.00E-04	4.81E-05	5.15E-04	5.11E-04	5.89E-04	1.06E-04	2.69E-04	8.80E-05	4.62E-04	9.89E-05	1.31E-04	3.6684E-03
551447.97	4172646.12	3324.7853	3752.87599	1468.74955	10994.16483	2192.92987	2300.00838	3308.65839	2159.50994	809.80291	7383.07256	7432.50852	2982.42133	0.4422	0.45155	2.08E-04	2.17E-04	8.49E-05	5.45E-04	1.37E-04	1.44E-04	3.25E-04	4.43E-04	1.66E-04	5.05E-04	3.49E-04	1.40E-04	6.19E-06	7.65E-06	3.2768E-03
551353.88	4172959.76	3277.42233	5449.05618	1110.36413	9306.37021	1257.24046	3693.1855	3281.1379	3148.71494	629.47244	7738.88311	4543.18224	4659.67762	0.51449	0.52373	2.05E-04	3.15E-04	6.42E-05	4.61E-04	7.85E-05	2.31E-04	3.23E-04	6.45E-04	1.29E-04	5.29E-04	2.13E-04	2.19E-04	7.20E-06	8.87E-06	3.4289E-03
551400.92	4173120.22	3406.67423	5679.58135	983.50656	7352.94913	1077.99278	5580.63303	3433.5671	3361.53289	557.00199	6438.66613	3371.60265	6811.30049	0.55069	0.55721	2.13E-04	3.28E-04	5.69E-05	3.64E-04	6.73E-05	3.49E-04	3.38E-04	6.89E-04	1.14E-04	4.40E-04	1.58E-04	3.20E-04	7.71E-06	9.44E-06	3.4547E-03
551567.07	4173285.1	4170.73496	5363.09874	904.05156	4878.23165	848.9829	7706.1649	4227.01548	3234.88614	520.76063	4804.86556	2199.01503	9154.44222	1.20991	1.23151	2.60E-04	3.10E-04	5.23E-05	2.42E-04	5.30E-05	4.81E-04	4.16E-04	6.63E-04	1.07E-04	3.29E-04	1.03E-04	4.30E-04	1.69E-05	2.09E-05	3.4838E-03
551450.38	4173199.92	3593.84712	5770.12618	966.89823	6442.40761	979.81011	6274.71973	3624.03877	3421.24278	552.34828	5970.70512	2803.14923	7599.45397	0.62537	0.63211	2.24E-04	3.34E-04	5.59E-05	3.19E-04	6.12E-05	3.92E-04	3.56E-04	7.01E-04	1.13E-04	4.08E-04	1.32E-04	3.57E-04	8.75E-06	1.07E-05	3.4734E-03
551647.8	4173300.56	4904.86646	4908.3868	892.76387	4108.50831	776.27044	8224.59973	4990.00562	2921.14037	519.66423	4028.90831	1902.48769	9800.48711	4.5673	4.86787	3.06E-04	2.84E-04	5.16E-05	2.04E-04	4.85E-05	5.14E-04	4.91E-04	5.99E-04	1.07E-04	2.76E-04	8.94E-05	4.60E-04	6.39E-05	8.25E-05	3.5748E-03
551486.84	4173233.89	3759.98565	5684.70536	950.57166	5923.31924	945.83169	6691.79982	3795.39273	3420.90865	539.86877	5595.25824	2612.74534	8057.52155	0.72486	0.73358	2.35E-04	3.29E-04	5.50E-05	2.94E-04	5.91E-05	4.18E-04	3.73E-04	7.01E-04	1.11E-04	3.83E-04	1.23E-04	3.78E-04	1.01E-05	1.24E-05	3.4803E-03
551589.26	4173293.82	4310.98202	5246.60744	900.82909	4621.85378	824.23353	7910.97021	4374.29092	3159.94956	520.16262	4577.74694	2097.34675	9385.4392	1.51709	1.55214	2.69E-04	3.03E-04	5.21E-05	2.29E-04	5.15E-05	4.94E-04	4.30E-04	6.48E-04	1.07E-04	3.13E-04	9.85E-05	4.41E-04	2.12E-05	2.63E-05	3.4835E-03
551360.77	4173007.96	3342.26851	5745.63188	1034.24393	8536.9976	1178.42444	4169.20696	3353.68047	3369.48952	586.98452	7228.74986	4131.97407	5231.85984	0.51109	0.51881	2.09E-04	3.32E-04	5.98E-05	4.23E-04	7.36E-05	2.60E-04	3.30E-04	6.91E-04	1.20E-04	4.94E-04	1.94E-04	2.46E-04	7.15E-06	8.79E-06	3.4486E-03
551468.25	4173219.43	3660.30782	5686.65223	954.47738	6142.35066	957.4986	6456.70867	3692.44945	3427.13536	546.57937	5754.29838	2688.45237	7814.88321	0.66018	0.66744	2.29E-04	3.29E-04	5.52E-05	3.04E-04	5.98E-05	4.03E-04	3.63E-04	7.02E-04	1.12E-04	3.94E-04	1.26E-04	3.67E-04	9.24E-06	1.13E-05	3.4649E-03
552131.21	4173000.54	8427.11118	4534.42088	1054.79842	4323.97229	841.56887	4604.2919	8546.07687	2639.7412	624.43172	4219.92509	2043.58731	5919.83162	0.22212	0.22046	5.26E-04	2.62E-04	6.10E-05	2.14E-04	5.26E-05	2.88E-04	8.40E-04	5.41E-04	1.28E-04	2.89E-04	9.60E-05	2.78E-04	3.11E-06	3.74E-06	3.5824E-03
551505.3	4172604.93	3713.25205	3483.1064	1710.11394	10029.27911	2733.86575	2143.6567	3687.06803	2027.9874	931.77172	6949.61101	7558.51333	2808.91938	0.36366	0.36868	2.32E-04	2.01E-04	9.89E-05	4.97E-04	1.71E-04	1.34E-04	3.62E-04	4.16E-04	1.91E-04	4.75E-04	3.55E-04	1.32E-04	5.09E-06	6.25E-06	3.2765E-03
551353.06	4172899.3	3137.87821	4909.21217	1180.77624	10084.3101	1387.98295	3221.08298	3134.85916	2812.42121	663.69783	7941.7447	5221.87563	4079.94101	0.51521	0.52566	1.96E-04	2.84E-04	6.83E-05	5.00E-04	8.67E-05	2.01E-04	3.08E-04	5.76E-04	1.36E-04	5.43E-04	2.45E-04	1.92E-04	7.21E-06	8.91E-06	3.3525E-03
551431.84	4173177.5	3500.35197	5712.77938	970.82451	6708.96665	1003.52238	6037.54522	3529.01058	3372.91499	553.25136	6124.12038	2937.86138	7323.65645	0.59008	0.59644	2.19E-04	3.30E-04	5.61E-05	3.33E-04	6.27E-05	3.77E-04	3.47E-04	6.91E-04	1.13E-04	4.19E-04	1.38E-04	3.44E-04	8.26E-06	1.01E-05	3.4481E-03
551697.23	4172629.13	6466.76993	2623.0454	2472.9901	6413.35075	3928.57859	1728.78598	6387.83524	1564.49269	1297.05416	4711.58026	7830.15288	2338.22967	0.27406	0.27991	4.04E-04	1.52E-04	1.43E-04	3.18E-04	2.45E-04	1.08E-04	6.28E-04	3.21E-04	2.66E-04	3.22E-04	3.68E-04	1.10E-04	3.83E-06	4.74E-06	3.3925E-03
551393.6	4172731.4	2997.37494	4124.37311	1274.94589	10982.33405	1836.60897	2575.09072	2987.86887	2356.3955	702.98314	7557.24338	6829.59899	3305.11546	0.49451	0.50763	1.87E-04	2.38E-04	7.37E-05	5.44E-04	1.15E-04	1.61E-04	2.94E-04	4.83E-04	1.44E-04	5.17E-04	3.21E-04	1.55E-04	6.92E-06	8.60E-06	3.2484E-03
551357.52	4172998.95	3309.98645	5645.34746	1039.5366	8593.07998	1181.86434	4031.68962	3319.75363	3300.10506	590.08594	7260.25286	4174.46648	5065.89347	0.50584	0.51368	2.07E-04	3.26E-04	6.01E-05	4.26E-04	7.38E-05	2.52E-04	3.26E-04	6.76E-04	1.21E-04	4.96E-04	1.96E-04	2.38E-04	7.08E-06	8.70E-06	3.4147E-03
551635.08	4173302.41	4702.84968	4936.90364	889.79951	4175.08914	780.5162	8099.40276	4781.28828	2949.86169	516.91067	4110.43302	1927.17199	9635.71342	3.24512	3.41044	2.94E-04	2.85E-04	5.14E-05	2.07E-04	4.87E-05	5.06E-04	4.70E-04	6.05E-04	1.06E-04	2.81E-04	9.05E-05	4.53E-04	4.54E-05	5.78E-05	3.5001E-03
551544.36	4173275.89	4008.47852	5385.45829	899.84908	5101.55527	867.82231	7340.42977	4058.10418	3249.36026	517.3694	4968.38278	2290.96146	8747.10777	0.99766	1.01233	2.50E-04	3.11E-04	5.20E-05	2.53E-04	5.42E-05	4.58E-04	3.99E-04	6.66E-04	1.06E-04	3.40E-04	1.08E-04	4.11E-04	1.40E-05	1.72E-05	3.4395E-03
551360.74	4172827.84	2999.02031	4394.94168	1221.71867	10675.2484	1594.2081	2871.07507	2991.30382	2515.05079	680.06079	7688.45079	6131.06745	3645.39868	0.51386	0.52611	1.87E-04	2.54E-04	7.06E-05	5.29E-04	9.96E-05	1.79E-04	2.94E-04	5.16E-04	1.39E-04	5.26E-04	2.88E-04	1.71E-04	7.19E-06	8.92E-06	3.2701E-03
551406.84	4173136.96	3385.33769	5574.0897	973.25256	7093.03234	1052.99717	5628.07931	3412.55259	3297.56535	551.88423	6281.63182	3223.53099	6848.51055	0.55368	0.55929	2.11E-04	3.22E-04	5.63E-05	3.52E-04	6.58E-05	3.52E-04	3.35E-04	6.76E-04	1.13E-04	4.30E-04	1.51E-04	3.22E-04	7.75E-06	9.48E-06	3.4031E-03
551354.17	4172853.67	3024.98897	4514.88726	1203.43256	10482.62985	1517.10383	2956.31044	3018.69198	2584.31447	671.58116	7759.85857	5819.32681	3749.14778	0.51215	0.52353	1.89E-04	2.61E-04	6.96E-05	5.20E-04	9.48E-05	1.85E-04	2.97E-04	5.30E-04	1.38E-04	5.31E-04	2.73E-04	1.76E-04	7.17E-06	8.87E-06	3.2787E-03
551666	4172614.15	5936.33589	2742.62142	2494.747	6366.98694	4086.82395	1801.63128	5866.65803	1642.64629	1315.74492	4959.30233	7618.47719	2429.22378	0.24335	0.24669	3.71E-04	1.59E-04	1.44E-04	3.16E-04	2.55E-04	1.13E-04	5.77E-04	3.37E-04	2.70E-04	3.39E-04	3.58E-04	1.14E-04	3.41E-06	4.18E-06	3.3586E-03
551350.66	4172950.79	3213.52791	5268.25699	1106.72409	9247.51745	1255.42934	3552.8124	3216.04669	3039.78309	626.86302	7646.79846	4549.69906	4485.87021	0.50397	0.51313	2.01E-04	3.05E-04	6.40E-05	4.58E-04	7.84E-05	2.22E-04	3.16E-04	6.23E-04	1.28E-04	5.23E-04	2.14E-04	2.11E-04	7.05E-06	8.70E-06	3.3587E-03
551389.31	4172739.76	2973.8321	4131.1397	1261.86507	10861.4845	1806.67216	2594.12502	2964.48112	2360.39822	696.15585	7504.69976	6722.26709	3324.66611	0.49345	0.5065	1.86E-04	2.39E-04	7.30E-05	5.38E-04	1.13E-04	1.62E-04	2.91E-04	4.84E-04	1.43E-04	5.13E-04	3.16E-04	1.56E-04	6.90E-06	8.58E-06	3.2292E-03
551434.88	4172656.79	3205.28206	3755.10892	1394.314	10853.29448	2055.95776	2307.82031	3191.72781	2157.94596	768.86479	7305.68789	7176.59358	2988.17312	0.44502	0.45511	2.00E-04	2.17E-04	8.06E-05	5.38E-04	1.28E-04	1.44E-04	3.14E-04	4.42E-04	1.58E-04	5.00E-04	3.37E-04	1.40E-04	6.23E-06	7.71E-06	3.2130E-03
551350.25	4172920.56	3150.956	5016.78046	1144.75895	9654.80598	1318.77889	3320.31812	3150.01524	2880.01959	645.80054	7782.91028	4877.92748	4201.95176	0.50668	0.51597	1.97E-04	2.90E-04	6.62E-05	4.79E-04	8.24E-05	2.07E-04	3.10E-04	5.90E-04	1.32E-04	5.32E-04	2.29E-04	1.97E-04	7.09E-06	8.74E-06	3.3282E-03
551557.43	4172587.3	4230.82826	3232.79624	1981.93374	8699.81573	3298.52499	2014.31521	4195.11173	1903.34915	1073.42762	6376.21744	7467.944	2666.2419	0.29872	0.30142	2.64E-04	1.87E-04	1.15E-04	4.31E-04	2.06E-04	1.26E-04	4.12E-04	3.90E-04	2.20E-04	4.36E-04	3.51E-04	1.25E-04	4.18E-06	5.11E-06	3.2726E-03
551410.21	4173146.49	3386.04901	5544.20384	968.8258	6962.81417	1035.53736	5651.92317	3413.26588	3278.67808	550.44755	6248.43832	3133.67258	6871.23427	0.55405	0.55976	2.11E-04	3.21E-04	5.60E-05	3.45E-04	6.47E-05	3.53E-04	3.36E-04	6.72E-04	1.13E-04	4.27E-04	1.47E-04	3.23E-04	7.75E-06	9.49E-06	3.3856E-03
551354.29	4172989.99	3270.1638	5525.18843	1043.08621	8624.77358	1183.85058	3894.12853	3278.39396	3220.03869	592.04666	7266.87003	4211.6734	4899.00129	0.49948	0.50733	2.04E-04	3.19E-04	6.03E-05	4.28E-04	7.39E-05	2.43E-04	3.22E-04	6.60E-04	1.21E-04	4.97E-04	1.98E-04	2.30E-04	6.99E-06	8.60E-06	3.3727E-03
551434.93	4173186.08	3469.30455	5607.40385	956.11068	6526.97333	985.16039	5953.55207	3497.66439	3313.64924	545.16978	5973.46626	2865.48341	7222.00594	0.58568	0.59192	2.17E-04	3.24E-04	5.53E-05	3.24E-04	6.15E-05	3.72E-04	3.44E-04	6.79E-04	1.12E-04	4.08E-04	1.35E-04	3.39E-04	8.20E-06	1.00E-05	3.3883E-03
551493.06	4172607.86	3573.18872	3472.53602	1627.19714	10000.62224	2560.38157	2141.31151	3549.34672	2017.15094	888.6321	6887.29011	7358.51439	2798.40478	0.36857	0.37412	2.23E-04	2.01E-04	9.41E-05	4.96E-04	1.60E-04	1.34E-04	3.49E-04	4.13E-04	1.82E-04	4.71E-04	3.46E-04	1.31E-04	5.16E-06	6.34E-06	3.2114E-03
551409.81	4172696.48	3037.73814	3928.56356	1293.36761	10864.86204	1880.76062	2428.62086	3027.84511	2249.95985	712.89986	7394.29487	6888.29362	3132.84123	0.46711	0.47888	1.90E-04	2.27E-04	7.48E-05	5.39E-04	1.17E-04	1.52E-04	2.98E-04	4.61E-04	1.46E-04	5.06E-04	3.24E-04	1.47E-04	6.54E-06	8.11E-06	3.1952E-03
551422.04	4172676.84	3104.94241	3829.70136	1329.78462	10829.74919	1941.05453	2360.61916	3093.86734	2197.51853	733.17861	7325.71899	6985.47894	3051.5482	0.45371	0.46463	1.94E-04	2.21E-04	7.69E-05	5.37E-04	1.21E-04	1.47E-04	3.04E-04	4.50E-04	1.50E-04	5.01E-04	3.28E-04	1.43E-04	6.35E-06	7.87E-06	3.1891E-03
551593.47	4172582.73	4696.18233	3039.52047	2176.59833	7730.21776	3686.18236	1928.16825	4650.62651	1804.92954	1167.79981	5874.73667	7455.80043	2565.58654	0.26645	0.26871	2.93E-04	1.76E-04	1.26E-04	3.83E-04	2.30E-04	1.20E-04	4.57E-04	3.70E-04	2.39E-04	4.02E-04	3.50E-04	1.21E-04	3.73E-06	4.55E-06	3.2758E-03
551622.37	4173304.26	4503.50833	4931.98669	882.17951	4228.68198	782.48182	7874.62279	4575.79894	2956.41855	511.47193	4173.52324	1947.69316	9360.10935	2.4148	2.51666	2.81E-04	2.85E-04	5.10E-05	2.10E-04	4.89E-05	4.92E-04	4.50E-04	6.06E-04	1.05E-04	2.85E-04	9.15E-05	4.40E-04	3.38E-05	4.26E-05	3.4212E-03
551385.01	4172748.11	2946.02149	4121.67304	1245.66637	10692.09897	1769.85536	2606.16152	2936.86909	2355.75744	687.72047	7421.15923	6584.88496	3335.18124	0.48951	0.50235	1.84E-04	2.38E-04	7.20E-05	5.30E-04	1.11E-04	1.63E-04	2.89E-04	4.83E-04	1.41E-04	5.07E-04	3.09E-04	1.57E-04	6.85E-06	8.51E-06	3.1989E-03
551413.3	4173155.08	3380.03962	5501.34057	960.643	6835.95041	1018.52345	5705.31993	3407.18848	3275.23892	546.13	6151.02391	3055.60075	6865.85172	0.55215	0.55829	2.11E-04	3.18E-04	5.55E-05	3.39E-04	6.36E-05	3.56E-04	3.35E-04	6.71E-04	1.12E-04	4.21E-04	1.44E-04	3.22E-04	7.73E-06	9.46E-06	3.3655E-03
551361.41	4172818.78	2957.72937	4296.77522	1210.24886	10502.34178	1594.32675	2810.59339	2949.83713	2459.79107	673.12198	7525.74971	6099.86769	3569.91188	0.50297	0.5151	1.85E-04	2.48E-04	7.00E-05	5.21E-04	9.96E-05	1.76E-04	2.90E-04	5.04E-04	1.38E-04	5.15E-04	2.87E-04	1.68E-04	7.04E-06	8.73E-06	3.2155E-03
551727.64	4172644.43	6576.07834	2445.64004	2196.52868	6800.33367	3418.37982	1612.78837	6499.02625	1448.77037	1159.06257	4502.52822	7797.49111	2179.81562	0.31557	0.32373	4.11E-04	1.41E-04	1.27E-04	3.37E-04	2.14E-04	1.01E-04	6.39E-04	2.97E-04	2.38E-04	3.08E-04	3.66E-04	1.02E-04	4.42E-06	5.49E-06	3.2901E-03
551545.83	4172588.11	4052.25764	3247.0608	1886.74671	8840.67131	3106.88454	2019.84016	4019.78139	1907.2447	1023.9275	6410.62788	7327.9036	2668.2077	0.30514	0.308	2.53E-04	1.88E-04	1.09E-04	4.38E-04	1.94E-04	1.26E-04	3.95E-04	3.91E-04	2.10E-04	4.38E-04	3.44E-04	1.25E-04	4.27E-06	5.22E-06	3.2216E-03
551350	4172888.58	3052.4397	4688.83581	1161.18711	9893.59243	1382.50594	3082.98365	3048.79927	2686.35399	651.46324	7693.09081	5205.21697	3906.5266	0.49771	0.50783	1.91E-04	2.71E-04	6.71E-05	4.90E-04	8.63E-05	1.93E-04	3.00E-04	5.51E-04	1.34E-04	5.26E-04	2.44E-04	1.83E-04	6.96E-06	8.61E-06	3.2516E-03
551576.57	4173294.05	4122.53972	5137.98128	882.35396	4652.84481	821.85756	7468.6826	4180.52014	3098.24538	508.52667	4584.22484	2114.84309	8873.14586	1.27779	1.30192	2.57E-04	2.97E-04	5.10E-05	2.31E-04	5.13E-05	4.66E-04	4.11E-04	6.35E-04	1.04E-04	3.13E-04	9.93E-05	4.17E-04	1.79E-05	2.21E-05	3.3737E-03
551351.07	4172981.02	3225.0659	5391.30903	1045.52828	8638.62781	1185.13524	3758.89299	3231.83739	3133.57523	593.31233	7254.47069	4203.40481	4733.67384	0.49229	0.50063	2.01E-04	3.12E-04	6.04E-05	4.28E-04	7.40E-05	2.35E-04	3.18E-04	6.42E-04	1.22E-04	4.96E-04	1.97E-04	2.22E-04	6.89E-06	8.48E-06	3.3234E-03
551455.25	4173213.39	3532.5753	5509.9013	938.05902	6133.40352	948.54099	6088.10992	3562.40013	3302.97524	536.38395	5696.46218	2689.52121	7379.80037	0.61522	0.62166	2.21E-04	3.19E-04	5.42E-05	3.04E-04	5.92E-05	3.80E-04	3.50E-04	6.77E-04	1.10E-04	3.90E-04	1.26E-04	3.47E-04	8.61E-06	1.05E-05	3.3557E-03
551554	4173284.97	3985.98492	5207.27605	881.80749	4887.67685	843.25634	7215.74031	4037.50907	3141.20893	507.18721	4773.64941	2209.65196	8591.89562	1.04531	1.0621	2.49E-04	3.01E-04	5.10E-05	2.42E-04	5.27E-05	4.51E-04	3.97E-04	6.44E-04	1.04E-04	3.26E-04	1.04E-04	4.04E-04	1.46E-05	1.80E-05	3.3577E-03
551380.71	4172756.47	2923.06092	4112.38426	1231.76433	10549.45768	1735.83901	2618.39823	2914.07165	2351.40241	680.58119	7349.92019	6465.05512	3346.18661	0.48649	0.49914	1.83E-04	2.38E-04	7.12E-05	5.23E-04	1.08E-04	1.64E-04	2.86E-04	4.82E-04	1.40E-04	5.03E-04	3.04E-04	1.57E-04	6.81E-06	8.46E-06	3.1730E-03
551416.39	4173163.66	3368.3412	5445.04554	951.15352	6699.22746	1001.40111	5678.18015	3395.35912	3237.36212	541.03397	6043.89218	2980.15953	6903.6366	0.55179	0.55784	2.10E-04	3.15E-04	5.50E-05	3.32E-04	6.25E-05	3.55E-04	3.34E-04	6.64E-04	1.11E-04	4.13E-04	1.40E-04	3.24E-04	7.72E-06	9.45E-06	3.3323E-03
551347.43	4172941.83	3141.86679	5072.47262	1096.997	9131.42031	1247.76902	3409.27622	3143.3737	2923.38193	620.72844	7505.41022	4533.41454	4307.82847	0.49133	0.49958	1.96E-04	2.93E-04	6.34E-05	4.53E-04	7.79E-05	2.13E-04	3.09E-04	5.99E-04	1.27E-04	5.13E-04	2.13E-04	2.02E-04	6.87E-06	8.47E-06	3.2757E-03
551715.34	4173290.52	5920.28423	4360.48993	829.39601	3608.26265	720.10182	7403.99671	6051.19859	2527.73565	485.76218	3537.50822	1713.9551	8964.84254	5.77216	5.25235	3.70E-04	2.52E-04	4.80E-05	1.79E-04	4.50E-05	4.62E-04	5.95E-04	5.18E-04	9.96E-05	2.42E-04	8.05E-05	4.21E-04	8.08E-05	8.90E-05	3.4817E-03
551438.02	4173194.67	3445.48853	5509.70025	941.83639	6354.26952	966.06251	5874.79392	3473.61553	3259.03193	537.36411	5830.33558	2790.90777	7127.31781	0.58223	0.58832	2.15E-04	3.19E-04	5.45E-05	3.15E-04	6.03E-05	3.67E-04	3.41E-04	6.68E-04	1.10E-04	3.99E-04	1.31E-04	3.35E-04	8.15E-06	9.97E-06	3.3327E-03
551374.07	4173073.97	3274.87475	5525.9493	952.02715	7469.3681	1087.01603	4781.17935	3296.11553	3280.16072	538.93596	6382.34871	3585.93767	5917.67695	0.50177	0.50795	2.04E-04	3.19E-04	5.50E-05	3.70E-04	6.79E-05	2.99E-04	3.24E-04	6.72E-04	1.10E-04	4.36E-04	1.68E-04	2.78E-04	7.02E-06	8.61E-06	3.3210E-03
551347.02	4172911.6	3079.50667	4828.57561	1132.53249	9524.16659	1315.98637	3195.27101	3077.83586	2770.57795	637.92083	7608.394	4873.31725	4045.54886	0.49388	0.50352	1.92E-04	2.79E-04	6.55E-05	4.72E-04	8.22E-05	2.00E-04	3.03E-04	5.68E-04	1.31E-04	5.20E-04	2.29E-04	1.90E-04	6.91E-06	8.53E-06	3.2466E-03
551352.44	4172843.11	2955.36204	4347.17378	1182.0131	10240.54138	1510.99789	2855.64238	2948.76787	2489.16083	658.98514	7505.98522	5762.91953	3622.81972	0.49644	0.50761	1.85E-04	2.51E-04	6.83E-05	5.08E-04	9.44E-05	1.78E-04	2.90E-04	5.10E-04	1.35E-04	5.13E-04	2.71E-04	1.70E-04	6.95E-06	8.60E-06	3.1894E-03
551764.2	4172655.69	6041.0297	2257.65968	1835.25385	7867.1054	3320.81903	1464.51491	5978.66526	1323.7702	977.80798	4648.66222	8391.07803	1969.11652	0.36582	0.37464	3.77E-04	1.31E-04	1.06E-04	3.90E-04	2.07E-04	9.15E-05	5.88E-04	2.71E-04	2.00E-04	3.18E-04	3.94E-04	9.25E-05	5.12E-06	6.35E-06	3.1781E-03
551524.25	4173269.13	3826.68327	5282.88596	885.89914	5216.72424	873.21335	6850.36104	3869.92383	3186.69317	508.72884	5009.50319	2344.61237	8193.78888	0.85284	0.8638	2.39E-04	3.05E-04	5.12E-05	2.59E-04	5.45E-05	4.28E-04	3.80E-04	6.53E-04	1.04E-04	3.43E-04	1.10E-04	3.85E-04	1.19E-05	1.46E-05	3.3386E-03
551370.85	4173065.02	3270.61544	5540.77325	954.15012	7545.3142	1094.5016	4668.50102	3290.64419	3289.12718	540.30035	6429.72892	3631.37574	5792.2987	0.49831	0.50512	2.04E-04	3.20E-04	5.52E-05	3.74E-04	6.84E-05	2.92E-04	3.23E-04	6.74E-04	1.11E-04	4.40E-04	1.71E-04	2.72E-04	6.97E-06	8.56E-06	3.3199E-03
552091.09	4173065.79	7941.13463	4482.52808	839.53667	3715.28541	659.29151	5233.45091	8114.88168	2587.22108	499.14774	3700.76028	1631.72894	6635.32671	0.24915	0.24679	4.96E-04	2.59E-04	4.85E-05	1.84E-04	4.12E-05	3.27E-04	7.98E-04	5.30E-04	1.02E-04	2.53E-04	7.66E-05	3.12E-04	3.49E-06	4.18E-06	3.4351E-03
551367.62	4173056.06	3266.18684	5549.73783	957.69441	7625.86957	1101.81434	4553.0501	3284.87965	3292.46032	542.545	6486.03536	3677.95501	5662.23967	0.49545	0.50235	2.04E-04	3.21E-04	5.54E-05	3.78E-04	6.88E-05	2.84E-04	3.23E-04	6.75E-04	1.11E-04	4.44E-04	1.73E-04	2.66E-04	6.93E-06	8.51E-06	3.3180E-03
551472.7	4173229.89	3582.74766	5437.55839	918.67087	5865.96774	933.49017	6189.48315	3614.62333	3267.13393	526.24272	5476.73228	2608.13853	7471.63651	0.66463	0.67098	2.24E-04	3.14E-04	5.31E-05	2.91E-04	5.83E-05	3.87E-04	3.55E-04	6.70E-04	1.08E-04	3.75E-04	1.23E-04	3.51E-04	9.30E-06	1.14E-05	3.3283E-03
551364.4	4173047.11	3255.67359	5539.06905	960.64548	7694.11905	1102.92358	4429.98061	3272.95003	3282.63075	544.39928	6533.92372	3720.60752	5520.9347	0.49145	0.49833	2.03E-04	3.20E-04	5.55E-05	3.81E-04	6.89E-05	2.77E-04	3.22E-04	6.73E-04	1.12E-04	4.47E-04	1.75E-04	2.59E-04	6.88E-06	8.44E-06	3.3084E-03
551376.42	4172764.83	2899.2418	4094.00903	1216.55882	10390.39959	1698.7497	2626.06069	2890.4464	2342.09689	672.76413	7268.16788	6332.99121	3351.57451	0.48215	0.49454	1.81E-04	2.37E-04	7.03E-05	5.15E-04	1.06E-04	1.64E-04	2.84E-04	4.80E-04	1.38E-04	4.97E-04	2.97E-04	1.57E-04	6.75E-06	8.38E-06	3.1423E-03
551347.84	4172972.06	3176.10807	5248.22132	1047.12651	8637.70039	1186.19419	3626.9966	3181.4756	3043.48253	593.99875	7225.63918	4221.10629	4571.62903	0.48452	0.49298	1.98E-04	3.03E-04	6.05E-05	4.28E-04	7.41E-05	2.27E-04	3.13E-04	6.24E-04	1.22E-04	4.94E-04	1.98E-04	2.15E-04	6.78E-06	8.35E-06	3.2716E-03
551419.48	4173172.25	3352.51239	5378.67847	940.58507	6554.301	984.14906	5636.27343	3379.36291	3196.00936	535.33275	5929.35716	2906.837	6850.00046	0.55024	0.55606	2.09E-04	3.11E-04	5.44E-05	3.25E-04	6.15E-05	3.52E-04	3.32E-04	6.55E-04	1.10E-04	4.05E-04	1.37E-04	3.22E-04	7.70E-06	9.42E-06	3.2909E-03
551361.18	4173038.16	3239.30254	5508.2665	963.08652	7750.4181	1105.54694	4301.46447	3255.12262	3259.26257	546.01061	6573.35488	3759.64907	5371.12015	0.48649	0.49358	2.02E-04	3.18E-04	5.57E-05	3.84E-04	6.90E-05	2.69E-04	3.20E-04	6.68E-04	1.12E-04	4.50E-04	1.77E-04	2.52E-04	6.81E-06	8.36E-06	3.2918E-03
551382.76	4173098.39	3249.64435	5390.08065	939.75888	7180.61126	1059.77741	5007.17611	3273.48133	3196.22722	531.65993	6187.70416	3418.5452	6153.75666	0.50555	0.5111	2.03E-04	3.12E-04	5.43E-05	3.56E-04	6.62E-05	3.13E-04	3.22E-04	6.55E-04	1.09E-04	4.23E-04	1.61E-04	2.89E-04	7.07E-06	8.66E-06	3.2781E-03
551622.67	4172584.25	5026.16072	2841.78877	2256.02908	6878.23508	3800.59359	1837.03515	4973.18777	1697.07012	1201.6277	5347.49759	7250.10588	2455.39417	0.24259	0.24472	3.14E-04	1.64E-04	1.30E-04	3.41E-04	2.37E-04	1.15E-04	4.89E-04	3.48E-04	2.46E-04	3.66E-04	3.41E-04	1.15E-04	3.39E-06	4.15E-06	3.2137E-03
551425.13	4172663.24	3082.365	3690.86568	1320.59382	10442.04401	1927.43886	2282.01992	3070.76083	2120.32739	728.41588	7077.38163	6795.85791	2951.64259	0.43186	0.4418	1.92E-04	2.13E-04	7.63E-05	5.18E-04	1.20E-04	1.43E-04	3.02E-04	4.35E-04	1.49E-04	4.84E-04	3.19E-04	1.39E-04	6.04E-06	7.49E-06	3.1038E-03
551357.95	4173029.21	3226.04667	5475.7921	968.69473	7826.76601	1110.04362	4179.97041	3240.28981	3232.43588	549.37582	6632.79906	3802.86256	5228.63597	0.48347	0.4902	2.01E-04	3.17E-04	5.60E-05	3.88E-04	6.93E-05	2.61E-04	3.19E-04	6.63E-04	1.13E-04	4.54E-04	1.79E-04	2.46E-04	6.76E-06	8.31E-06	3.2789E-03
551344.21	4172932.86	3086.84112	4914.92764	1095.3792	9104.92043	1253.31941	3292.07574	3087.30426	2828.92652	618.93289	7419.93576	4564.74384	4162.51086	0.48257	0.49157	1.93E-04	2.84E-04	6.33E-05	4.51E-04	7.83E-05	2.06E-04	3.03E-04	5.80E-04	1.27E-04	5.07E-04	2.14E-04	1.96E-04	6.75E-06	8.33E-06	3.2180E-03
551412.41	4172683.2	3002.86377	3778.54652	1273.86077	10466.61457	1849.1735	2341.82711	2992.97604	2166.87475	702.43788	7130.07944	6674.01677	3023.85017	0.44286	0.45358	1.87E-04	2.18E-04	7.36E-05	5.19E-04	1.15E-04	1.46E-04	2.94E-04	4.44E-04	1.44E-04	4.88E-04	3.13E-04	1.42E-04	6.20E-06	7.69E-06	3.0995E-03
551372.12	4172773.18	2880.76889	4079.37009	1203.75076	10266.01382	1665.19606	2634.45735	2872.1517	2334.79962	666.27463	7206.95553	6220.24863	3358.33233	0.47914	0.49133	1.80E-04	2.36E-04	6.96E-05	5.09E-04	1.04E-04	1.65E-04	2.82E-04	4.79E-04	1.37E-04	4.93E-04	2.92E-04	1.58E-04	6.70E-06	8.33E-06	3.1180E-03
551664.92	4173307.03	4934.72686	4560.62695	855.28173	3843.12562	741.11973	7589.75287	5023.53608	2698.28034	498.66504	3731.76642	1802.18413	9091.51795	7.45162	8.23843	3.08E-04	2.64E-04	4.94E-05	1.91E-04	4.63E-05	4.74E-04	4.94E-04	5.53E-04	1.02E-04	2.55E-04	8.46E-05	4.27E-04	1.04E-04	1.40E-04	3.4919E-03
551362.83	4172802.99	2890.91211	4143.6158	1190.20642	10202.4095	1592.67866	2713.3048	2882.84976	2373.49289	660.96148	7260.10019	6025.18507	3448.90321	0.48415	0.496	1.80E-04	2.40E-04	6.88E-05	5.06E-04	9.95E-05	1.69E-04	2.83E-04	4.87E-04	1.35E-04	4.96E-04	2.83E-04	1.62E-04	6.77E-06	8.41E-06	3.1256E-03
551652	4173308.91	4749.17947	4629.69775	858.97612	3922.02576	748.18757	7616.45235	4831.22797	2751.5398	499.96583	3829.86041	1831.07508	9101.69475	4.68764	5.01878	2.97E-04	2.68E-04	4.97E-05	1.94E-04	4.67E-05	4.76E-04	4.75E-04	5.64E-04	1.02E-04	2.62E-04	8.60E-05	4.27E-04	6.56E-05	8.50E-05	3.3981E-03
551388.68	4173115.13	3245.25182	5323.36705	938.02314	7054.4802	1041.29331	5135.67745	3270.14304	3150.82255	530.81124	6103.37279	3289.41312	6285.11625	0.51035	0.51661	2.03E-04	3.08E-04	5.42E-05	3.50E-04	6.50E-05	3.21E-04	3.21E-04	6.46E-04	1.09E-04	4.17E-04	1.55E-04	2.95E-04	7.14E-06	8.75E-06	3.2592E-03
551677.84	4173305.16	5153.43482	4490.47842	848.1155	3758.19762	732.51696	7521.20759	5250.703	2640.26478	495.37327	3633.65726	1768.1807	9040.81285	14.6212	12.81838	3.22E-04	2.60E-04	4.90E-05	1.86E-04	4.58E-05	4.70E-04	5.16E-04	5.41E-04	1.02E-04	2.48E-04	8.30E-05	4.25E-04	2.05E-04	2.17E-04	3.6691E-03
551346.58	4172867.53	2957.41575	4422.95507	1151.26175	9851.1523	1419.6929	2913.99623	2952.47478	2533.73002	643.65371	7445.18828	5365.35251	3694.19837	0.48534	0.4955	1.85E-04	2.56E-04	6.66E-05	4.88E-04	8.87E-05	1.82E-04	2.90E-04	5.19E-04	1.32E-04	5.09E-04	2.52E-04	1.74E-04	6.79E-06	8.40E-06	3.1573E-03
551533.6	4173277.94	3827.84482	5158.33149	871.90884	5030.54272	852.67745	6821.58064	3873.14617	3110.63856	500.83781	4853.87919	2271.20926	8149.47773	0.88931	0.90116	2.39E-04	2.98E-04	5.04E-05	2.49E-04	5.33E-05	4.26E-04	3.81E-04	6.38E-04	1.03E-04	3.32E-04	1.07E-04	3.83E-04	1.24E-05	1.53E-05	3.2864E-03
551354.73	4173020.25	3207.00996	5423.49099	973.93572	7893.16841	1113.80056	4056.16225	3219.67818	3192.9457	552.51446	6682.75785	3843.25917	5081.81356	0.47978	0.48664	2.00E-04	3.14E-04	5.63E-05	3.91E-04	6.96E-05	2.53E-04	3.16E-04	6.54E-04	1.13E-04	4.57E-04	1.81E-04	2.39E-04	6.71E-06	8.25E-06	3.2596E-03
551662.73	4172604.86	5655.85206	2663.04416	2365.99989	6143.04018	3855.49822	1754.13632	5591.09435	1594.19076	1250.52075	4804.51218	7194.52031	2362.08014	0.23126	0.2341	3.53E-04	1.54E-04	1.37E-04	3.05E-04	2.41E-04	1.10E-04	5.50E-04	3.27E-04	2.56E-04	3.29E-04	3.38E-04	1.11E-04	3.24E-06	3.97E-06	3.2161E-03
551441.11	4173203.26	3414.55465	5356.03797	926.20046	6171.45457	947.40775	5780.46496	3442.41992	3198.25965	528.74834	5678.20744	2720.43042	7015.33026	0.57732	0.58325	2.13E-04	3.10E-04	5.35E-05	3.06E-04	5.92E-05	3.61E-04	3.38E-04	6.56E-04	1.08E-04	3.88E-04	1.28E-04	3.30E-04	8.08E-06	9.88E-06	3.2684E-03
551482.44	4173241.93	3586.5276	5310.15862	898.09357	5641.25225	910.47359	6191.29215	3619.74916	3196.73261	514.8469	5284.54322	2522.9015	7464.14269	0.68325	0.69087	2.24E-04	3.07E-04	5.19E-05	2.80E-04	5.69E-05	3.87E-04	3.56E-04	6.55E-04	1.06E-04	3.61E-04	1.18E-04	3.51E-04	9.56E-06	1.17E-05	3.2744E-03
551364.9	4172793.36	2874.48825	4099.20463	1189.00484	10155.66962	1607.86444	2677.58783	2866.25621	2348.00975	659.60198	7193.91117	6052.43498	3405.86772	0.47951	0.49139	1.79E-04	2.37E-04	6.87E-05	5.03E-04	1.00E-04	1.67E-04	2.82E-04	4.81E-04	1.35E-04	4.92E-04	2.84E-04	1.60E-04	6.71E-06	8.33E-06	3.1058E-03
551563.64	4173294.05	3962.71042	5032.88307	864.67421	4677.38055	818.67469	7072.7151	4015.93946	3034.67449	497.6374	4582.24036	2127.67891	8419.33881	1.10125	1.11927	2.47E-04	2.91E-04	5.00E-05	2.32E-04	5.11E-05	4.42E-04	3.95E-04	6.22E-04	1.02E-04	3.13E-04	9.99E-05	3.95E-04	1.54E-05	1.90E-05	3.2750E-03
551367.82	4172781.54	2867.90802	4071.09484	1193.47332	10177.74604	1635.45476	2644.51671	2859.45341	2331.09518	661.19184	7169.82545	6127.04221	3367.50806	0.47762	0.48964	1.79E-04	2.35E-04	6.90E-05	5.05E-04	1.02E-04	1.65E-04	2.81E-04	4.78E-04	1.36E-04	4.90E-04	2.88E-04	1.58E-04	6.68E-06	8.30E-06	3.1009E-03
551344.62	4172963.09	3124.88682	5100.60863	1047.87226	8626.34243	1187.57006	3499.64993	3128.97128	2952.23446	594.04448	7182.3305	4238.148	4414.7282	0.47736	0.48542	1.95E-04	2.95E-04	6.06E-05	4.28E-04	7.42E-05	2.19E-04	3.08E-04	6.05E-04	1.22E-04	4.91E-04	1.99E-04	2.07E-04	6.68E-06	8.23E-06	3.2179E-03
551639.08	4173310.79	4562.44288	4670.77347	858.04782	3990.35178	753.19989	7546.97984	4638.2629	2786.94318	498.49967	3914.61331	1856.30918	9002.55047	3.28155	3.45246	2.85E-04	2.70E-04	4.96E-05	1.98E-04	4.70E-05	4.71E-04	4.56E-04	5.71E-04	1.02E-04	2.68E-04	8.72E-05	4.23E-04	4.59E-05	5.85E-05	3.3322E-03
551459.06	4173222.95	3484.12498	5342.83703	917.05504	5907.34661	927.54491	5955.93225	3513.72785	3217.50627	524.74781	5502.27352	2615.17373	7145.58914	0.60897	0.61532	2.18E-04	3.09E-04	5.30E-05	2.93E-04	5.79E-05	3.72E-04	3.45E-04	6.60E-04	1.08E-04	3.76E-04	1.23E-04	3.36E-04	8.52E-06	1.04E-05	3.2683E-03
551422.57	4173180.83	3331.82294	5342.40877	928.85953	6400.10959	967.02709	5579.76817	3358.45244	3150.69852	528.97981	5806.8323	2836.46948	6779.83888	0.54761	0.55331	2.08E-04	3.09E-04	5.37E-05	3.17E-04	6.04E-05	3.48E-04	3.30E-04	6.46E-04	1.08E-04	3.97E-04	1.33E-04	3.18E-04	7.66E-06	9.38E-06	3.2469E-03
551685.11	4172617.87	5999.33089	2561.90749	2348.15199	5957.04124	3713.07035	1697.87828	5928.99076	1530.33594	1236.3909	4547.27314	7154.9625	2293.06438	0.23984	0.24396	3.75E-04	1.48E-04	1.36E-04	2.95E-04	2.32E-04	1.06E-04	5.83E-04	3.14E-04	2.53E-04	3.11E-04	3.36E-04	1.08E-04	3.36E-06	4.13E-06	3.2038E-03
551728.06	4173288.67	6002.40513	4190.18108	812.7545	3495.41735	704.31561	7045.817	6140.57607	2423.772	476.25042	3421.8858	1672.28942	8549.03128	3.73694	3.46695	3.75E-04	2.42E-04	4.70E-05	1.73E-04	4.40E-05	4.40E-04	6.04E-04	4.97E-04	9.76E-05	2.34E-04	7.85E-05	4.02E-04	5.23E-05	5.87E-05	3.3445E-03
551351.5	4173011.3	3181.12958	5350.06457	978.27116	7944.25155	1116.3911	3930.01875	3192.33092	3140.64938	555.13675	6717.44125	3879.97136	4930.78749	0.4752	0.48211	1.99E-04	3.09E-04	5.66E-05	3.94E-04	6.97E-05	2.45E-04	3.14E-04	6.44E-04	1.14E-04	4.59E-04	1.82E-04	2.32E-04	6.65E-06	8.17E-06	3.2328E-03
551394.6	4173131.87	3235.41657	5250.1053	933.31953	6840.66533	1020.85121	5211.43471	3260.80457	3103.97168	528.64119	5997.73328	3155.65289	6357.24941	0.51539	0.52054	2.02E-04	3.04E-04	5.40E-05	3.39E-04	6.38E-05	3.25E-04	3.21E-04	6.36E-04	1.08E-04	4.10E-04	1.48E-04	2.99E-04	7.21E-06	8.82E-06	3.2260E-03
551343.79	4172902.63	3001.13576	4631.78758	1114.48262	9334.65929	1305.91599	3068.32748	2998.90183	2657.27385	626.75582	7394.03093	4836.79113	3886.38192	0.4776	0.4869	1.87E-04	2.68E-04	6.44E-05	4.63E-04	8.16E-05	1.92E-04	2.95E-04	5.45E-04	1.28E-04	5.06E-04	2.27E-04	1.83E-04	6.68E-06	8.25E-06	3.1537E-03
551586.08	4173303	4069.13845	4911.46909	860.33105	4432.78181	794.7067	7205.36813	4127.98684	2960.20115	496.15343	4365.71407	2031.36252	8565.79187	1.35243	1.38304	2.54E-04	2.84E-04	4.97E-05	2.20E-04	4.96E-05	4.50E-04	4.06E-04	6.07E-04	1.02E-04	2.99E-04	9.54E-05	4.02E-04	1.89E-05	2.34E-05	3.2600E-03
551491.92	4173250.86	3608.7497	5233.2075	885.11097	5486.59853	894.09409	6253.82029	3643.68375	3154.38518	507.62855	5155.76126	2464.11455	7526.5009	0.7071	0.71423	2.25E-04	3.03E-04	5.12E-05	2.72E-04	5.58E-05	3.91E-04	3.58E-04	6.47E-04	1.04E-04	3.53E-04	1.16E-04	3.54E-04	9.89E-06	1.21E-05	3.2501E-03
551744.18	4172645.41	6234.88059	2304.36393	1960.09165	6958.56651	3142.74351	1516.58952	6166.25345	1359.46689	1040.46781	4384.37728	7615.30943	2044.53556	0.32646	0.33484	3.89E-04	1.33E-04	1.13E-04	3.45E-04	1.96E-04	9.47E-05	6.06E-04	2.79E-04	2.13E-04	3.00E-04	3.58E-04	9.60E-05	4.57E-06	5.67E-06	3.1336E-03
551391.55	4172715.31	2879.55901	3863.01379	1211.20835	10194.46714	1741.68452	2424.56641	2870.89615	2210.16674	667.90955	7053.18748	6349.54226	3115.6341	0.4504	0.46172	1.80E-04	2.23E-04	7.00E-05	5.05E-04	1.09E-04	1.51E-04	2.82E-04	4.53E-04	1.37E-04	4.82E-04	2.98E-04	1.46E-04	6.30E-06	7.82E-06	3.0519E-03
551348.25	4173002.29	3149.43064	5258.75916	981.98388	7982.32155	1118.25515	3802.97621	3159.12197	3077.75561	557.33903	6738.07585	3914.27718	4777.74976	0.46944	0.47685	1.97E-04	3.04E-04	5.68E-05	3.96E-04	6.98E-05	2.38E-04	3.11E-04	6.31E-04	1.14E-04	4.61E-04	1.84E-04	2.24E-04	6.57E-06	8.08E-06	3.1998E-03
551626.17	4173312.67	4370.60008	4675.73107	852.20284	4045.96073	755.86575	7373.28125	4440.55095	2799.6516	494.11012	3980.53132	1877.80417	8784.8423	2.41348	2.5217	2.73E-04	2.70E-04	4.93E-05	2.01E-04	4.72E-05	4.61E-04	4.36E-04	5.74E-04	1.01E-04	2.72E-04	8.82E-05	4.13E-04	3.38E-05	4.27E-05	3.2619E-03
551542.96	4173286.75	3815.66915	5016.32352	856.74987	4840.4788	831.15724	6745.46374	3862.8731	3024.42717	492.27231	4688.80769	2197.13836	8051.18938	0.92744	0.94018	2.38E-04	2.90E-04	4.95E-05	2.40E-04	5.19E-05	4.21E-04	3.80E-04	6.20E-04	1.01E-04	3.21E-04	1.03E-04	3.78E-04	1.30E-05	1.59E-05	3.2224E-03
551340.98	4172923.9	3016.98446	4733.71827	1083.62471	8979.05135	1247.87938	3165.22301	3016.65644	2721.52465	611.48672	7260.63622	4551.12228	4005.37478	0.47181	0.48012	1.88E-04	2.74E-04	6.26E-05	4.45E-04	7.79E-05	1.98E-04	2.97E-04	5.58E-04	1.25E-04	4.97E-04	2.14E-04	1.88E-04	6.60E-06	8.14E-06	3.1383E-03
551341.39	4172954.13	3070.19129	4946.97193	1046.5557	8594.52365	1188.07574	3375.00481	3073.10016	2858.83625	592.80142	7116.65124	4251.25185	4260.73192	0.46852	0.47698	1.92E-04	2.86E-04	6.05E-05	4.26E-04	7.42E-05	2.11E-04	3.02E-04	5.86E-04	1.22E-04	4.87E-04	2.00E-04	2.00E-04	6.56E-06	8.08E-06	3.1599E-03
551344.87	4172857.03	2894.22333	4265.51456	1134.38437	9683.08866	1419.43911	2818.0312	2888.86776	2444.27263	633.4661	7235.48024	5347.4684	3573.58525	0.47258	0.48259	1.81E-04	2.47E-04	6.56E-05	4.80E-04	8.87E-05	1.76E-04	2.84E-04	5.01E-04	1.30E-04	4.95E-04	2.51E-04	1.68E-04	6.61E-06	8.18E-06	3.0810E-03
551425.66	4173189.42	3308.19705	5256.47645	916.19378	6240.3579	949.89887	5512.00553	3334.57196	3102.71273	522.08925	5678.62649	2767.98596	6697.49111	0.54428	0.54983	2.07E-04	3.04E-04	5.30E-05	3.09E-04	5.93E-05	3.44E-04	3.28E-04	6.36E-04	1.07E-04	3.88E-04	1.30E-04	3.15E-04	7.62E-06	9.32E-06	3.1970E-03
551400.52	4173148.61	3222.70463	5175.52567	925.54151	6619.02864	996.48166	5236.39433	3248.15588	3058.48966	524.52741	5868.61376	3019.05735	6374.55144	0.51664	0.52213	2.01E-04	2.99E-04	5.35E-05	3.28E-04	6.22E-05	3.27E-04	3.19E-04	6.27E-04	1.08E-04	4.01E-04	1.42E-04	2.99E-04	7.23E-06	8.85E-06	3.1837E-03
551428.44	4172649.49	3059.02489	3555.55247	1312.32006	10039.98511	1917.17524	2206.2002	3046.71688	2044.82182	724.16448	6825.40876	6600.24117	2854.90972	0.41033	0.4193	1.91E-04	2.06E-04	7.59E-05	4.98E-04	1.20E-04	1.38E-04	2.99E-04	4.19E-04	1.48E-04	4.67E-04	3.10E-04	1.34E-04	5.74E-06	7.11E-06	3.0184E-03
551384.28	4172728.44	2842.81162	3879.3893	1192.49049	10042.12861	1703.21328	2454.46999	2834.34891	2219.11413	657.93733	6989.88877	6213.31841	3146.88337	0.45064	0.462	1.77E-04	2.24E-04	6.89E-05	4.98E-04	1.06E-04	1.53E-04	2.79E-04	4.55E-04	1.35E-04	4.78E-04	2.92E-04	1.48E-04	6.31E-06	7.83E-06	3.0283E-03
551612.28	4172576.95	4757.49448	2813.52161	2134.2187	6847.23188	3573.02532	1816.26195	4709.54499	1677.05867	1140.24909	5303.49175	6945.07764	2422.38958	0.23825	0.24018	2.97E-04	1.63E-04	1.23E-04	3.39E-04	2.23E-04	1.13E-04	4.63E-04	3.44E-04	2.34E-04	3.63E-04	3.26E-04	1.14E-04	3.33E-06	4.07E-06	3.1096E-03
551676.03	4172610.16	5763.00143	2561.61918	2307.79648	5873.56957	3675.72871	1698.08412	5696.66638	1531.52332	1217.814	4552.88405	6964.19437	2290.43643	0.22844	0.23175	3.60E-04	1.48E-04	1.33E-04	2.91E-04	2.30E-04	1.06E-04	5.60E-04	3.14E-04	2.50E-04	3.11E-04	3.27E-04	1.08E-04	3.20E-06	3.93E-06	3.1448E-03
551404.04	4173158.41	3219.77082	5141.02851	917.81205	6495.19387	978.81266	5288.70255	3245.136	3058.22884	521.50557	5815.28697	2937.18713	6374.30107	0.51428	0.51951	2.01E-04	2.97E-04	5.31E-05	3.22E-04	6.11E-05	3.30E-04	3.19E-04	6.27E-04	1.07E-04	3.98E-04	1.38E-04	2.99E-04	7.20E-06	8.80E-06	3.1685E-03
551345.03	4172993.32	3106.20233	5140.72862	982.07652	7978.89813	1116.5222	3671.25205	3114.51314	3000.36592	557.39538	6721.58835	3903.63744	4617.48893	0.46252	0.47	1.94E-04	2.97E-04	5.68E-05	3.96E-04	6.97E-05	2.29E-04	3.06E-04	6.15E-04	1.14E-04	4.60E-04	1.83E-04	2.17E-04	6.47E-06	7.96E-06	3.1522E-03
551602.26	4172574.89	4603.12416	2845.64728	2077.70484	7005.37334	3470.54714	1829.18585	4558.37146	1693.13051	1113.09007	5393.76003	6882.39279	2435.42723	0.24159	0.24348	2.87E-04	1.65E-04	1.20E-04	3.47E-04	2.17E-04	1.14E-04	4.48E-04	3.47E-04	2.28E-04	3.69E-04	3.23E-04	1.14E-04	3.38E-06	4.13E-06	3.0876E-03
551711.13	4172625.92	6144.347	2411.70347	2180.90175	6011.04158	3362.85411	1601.59785	6072.84601	1433.62247	1149.01942	4305.42652	7033.67048	2163.50746	0.2638	0.26972	3.84E-04	1.39E-04	1.26E-04	2.98E-04	2.10E-04	1.00E-04	5.97E-04	2.94E-04	2.36E-04	2.94E-04	3.30E-04	1.02E-04	3.69E-06	4.57E-06	3.1182E-03
551402.78	4172689.56	2898.56238	3710.32066	1217.97839	10034.84884	1757.73271	2315.99358	2889.67626	2126.81383	671.76457	6894.80066	6331.17654	2986.41648	0.42878	0.43911	1.81E-04	2.15E-04	7.04E-05	4.97E-04	1.10E-04	1.45E-04	2.84E-04	4.36E-04	1.38E-04	4.71E-04	2.97E-04	1.40E-04	6.00E-06	7.44E-06	2.9980E-03
551573.27	4173303.13	3929.93694	4848.14238	846.55554	4468.87517	793.59425	6893.05284	3984.45002	2921.68003	487.53343	4387.09108	2046.28245	8206.96982	1.161	1.1813	2.45E-04	2.80E-04	4.89E-05	2.22E-04	4.96E-05	4.31E-04	3.92E-04	5.99E-04	9.99E-05	3.00E-04	9.61E-05	3.85E-04	1.62E-05	2.00E-05	3.1845E-03
551415.37	4172669.68	2963.79554	3621.53973	1252.49195	10011.20317	1812.64586	2253.85678	2953.81213	2079.89203	691.03033	6838.72349	6424.2352	2912.16357	0.41731	0.42694	1.85E-04	2.09E-04	7.24E-05	4.96E-04	1.13E-04	1.41E-04	2.90E-04	4.26E-04	1.42E-04	4.68E-04	3.02E-04	1.37E-04	5.84E-06	7.23E-06	2.9947E-03
551379.95	4172736.84	2816.22451	3872.85282	1177.8482	9894.83973	1671.78999	2466.55783	2807.92897	2215.91867	650.24046	6916.6454	6096.11451	3157.73615	0.44775	0.45897	1.76E-04	2.24E-04	6.81E-05	4.90E-04	1.04E-04	1.54E-04	2.76E-04	4.54E-04	1.33E-04	4.73E-04	2.86E-04	1.48E-04	6.27E-06	7.78E-06	3.0020E-03
551446.13	4173217.1	3360.44808	5166.07925	899.8002	5877.86359	917.58992	5619.48318	3387.94961	3095.88265	514.15894	5430.0459	2610.97704	6824.36264	0.56898	0.57439	2.10E-04	2.99E-04	5.20E-05	2.91E-04	5.73E-05	3.51E-04	3.33E-04	6.35E-04	1.05E-04	3.71E-04	1.23E-04	3.21E-04	7.96E-06	9.73E-06	3.1654E-03
551407.13	4173167	3212.0177	5098.44535	909.7311	6378.05396	963.08203	5266.72487	3237.24089	3027.51989	517.18943	5724.40546	2867.37354	6412.60566	0.51418	0.51936	2.01E-04	2.95E-04	5.26E-05	3.16E-04	6.02E-05	3.29E-04	3.18E-04	6.21E-04	1.06E-04	3.91E-04	1.35E-04	3.01E-04	7.19E-06	8.80E-06	3.1413E-03
551428.75	4173198.01	3286.33123	5171.32188	903.31485	6083.92379	932.45611	5441.85824	3312.47835	3055.1876	515.0445	5550.84992	2699.59511	6613.20112	0.54095	0.54637	2.05E-04	2.99E-04	5.22E-05	3.02E-04	5.82E-05	3.40E-04	3.26E-04	6.26E-04	1.06E-04	3.80E-04	1.27E-04	3.11E-04	7.57E-06	9.26E-06	3.1473E-03
551552.31	4173295.57	3808.2475	4885.52292	843.50808	4653.5497	809.71514	6665.69515	3857.28933	2944.12523	484.93143	4530.30288	2121.62252	7952.28506	0.9715	0.98546	2.38E-04	2.82E-04	4.88E-05	2.31E-04	5.06E-05	4.16E-04	3.79E-04	6.03E-04	9.94E-05	3.10E-04	9.97E-05	3.74E-04	1.36E-05	1.67E-05	3.1619E-03
551595.58	4173311.95	4050.63049	4724.88193	841.70139	4225.81908	768.72299	7001.20844	4110.44305	2841.46509	486.00043	4168.50191	1947.41102	8334.96383	1.45462	1.49095	2.53E-04	2.73E-04	4.87E-05	2.09E-04	4.80E-05	4.37E-04	4.04E-04	5.82E-04	9.96E-05	2.85E-04	9.15E-05	3.91E-04	2.04E-05	2.53E-05	3.1692E-03
551341.8	4172984.36	3071.07836	5034.50862	986.97205	8015.3342	1120.20566	3554.3648	3077.99792	2930.58016	560.04302	6732.96314	3929.7058	4475.06289	0.45719	0.46427	1.92E-04	2.91E-04	5.71E-05	3.97E-04	7.00E-05	2.22E-04	3.03E-04	6.01E-04	1.15E-04	4.60E-04	1.85E-04	2.10E-04	6.40E-06	7.87E-06	3.1167E-03
551340.67	4172891.68	2913.53377	4414.41547	1092.74417	9124.01639	1293.91943	2929.89016	2910.72166	2532.65369	613.43007	7144.49798	4791.60545	3712.63176	0.45917	0.4681	1.82E-04	2.55E-04	6.32E-05	4.52E-04	8.08E-05	1.83E-04	2.86E-04	5.19E-04	1.26E-04	4.89E-04	2.25E-04	1.74E-04	6.42E-06	7.93E-06	3.0497E-03
551463.74	4173233.96	3415.87028	5123.12889	883.49072	5647.88838	903.76902	5721.73149	3445.26506	3074.50155	505.76364	5234.648	2534.69687	6921.05302	0.61512	0.62072	2.13E-04	2.96E-04	5.11E-05	2.80E-04	5.64E-05	3.57E-04	3.39E-04	6.30E-04	1.04E-04	3.58E-04	1.19E-04	3.25E-04	8.61E-06	1.05E-05	3.1481E-03
551338.16	4172945.16	3003.09439	4769.6916	1037.13726	8485.88253	1180.16555	3241.77273	3005.06996	2752.96293	586.91879	6988.1208	4232.77768	4095.74874	0.45702	0.4652	1.88E-04	2.76E-04	6.00E-05	4.21E-04	7.37E-05	2.02E-04	2.95E-04	5.64E-04	1.20E-04	4.78E-04	1.99E-04	1.92E-04	6.39E-06	7.88E-06	3.0834E-03
551343.15	4172846.54	2835.12686	4122.96898	1118.15356	9509.61658	1419.16815	2731.15745	2829.41633	2362.97298	623.77443	7034.32217	5324.83615	3464.52998	0.46072	0.47061	1.77E-04	2.38E-04	6.46E-05	4.71E-04	8.86E-05	1.71E-04	2.78E-04	4.84E-04	1.28E-04	4.81E-04	2.50E-04	1.63E-04	6.45E-06	7.97E-06	3.0093E-03
551520.35	4173277.65	3643.26914	4939.26535	845.03274	4989.66142	840.6692	6320.69133	3684.00936	2977.775	484.93552	4750.21728	2266.962	7571.16677	0.78807	0.79794	2.27E-04	2.86E-04	4.89E-05	2.47E-04	5.25E-05	3.95E-04	3.62E-04	6.10E-04	9.94E-05	3.25E-04	1.06E-04	3.56E-04	1.10E-05	1.35E-05	3.1399E-03
551337.75	4172914.93	2945.22042	4553.46502	1069.61262	8829.28376	1240.26646	3043.23862	2944.23074	2616.52181	602.7328	7086.14737	4526.54414	3852.94032	0.45861	0.46721	1.84E-04	2.63E-04	6.18E-05	4.38E-04	7.75E-05	1.90E-04	2.89E-04	5.36E-04	1.24E-04	4.85E-04	2.13E-04	1.81E-04	6.42E-06	7.92E-06	3.0560E-03
551637.08	4172582.56	5038.07591	2668.80233	2183.80745	6259.20807	3608.39601	1747.15631	4984.24246	1595.70145	1161.44526	4909.54657	6794.52118	2340.01873	0.22378	0.22576	3.15E-04	1.54E-04	1.26E-04	3.10E-04	2.25E-04	1.09E-04	4.90E-04	3.27E-04	2.38E-04	3.36E-04	3.19E-04	1.10E-04	3.13E-06	3.83E-06	3.0667E-03
551375.63	4172745.25	2790.20764	3859.06674	1163.06233	9740.10667	1638.8591	2475.52933	2782.07519	2208.92668	642.53055	6835.82906	5975.27728	3164.68729	0.4441	0.45513	1.74E-04	2.23E-04	6.72E-05	4.83E-04	1.02E-04	1.55E-04	2.73E-04	4.53E-04	1.32E-04	4.67E-04	2.81E-04	1.49E-04	6.21E-06	7.71E-06	2.9730E-03
551720.56	4173298.73	5656.75153	4070.88512	791.70391	3429.49843	690.41532	6731.07834	5780.91316	2360.21274	463.3959	3352.57476	1642.78043	8170.92473	5.22637	4.7595	3.53E-04	2.35E-04	4.58E-05	1.70E-04	4.31E-05	4.20E-04	5.68E-04	4.84E-04	9.50E-05	2.29E-04	7.72E-05	3.84E-04	7.31E-05	8.07E-05	3.2589E-03
551410.22	4173175.58	3193.74045	5033.48016	899.83425	6241.89674	947.72133	5223.41821	3218.758	2988.67531	511.84377	5619.12402	2802.40505	6357.7216	0.5121	0.51729	1.99E-04	2.91E-04	5.20E-05	3.09E-04	5.92E-05	3.26E-04	3.16E-04	6.13E-04	1.05E-04	3.84E-04	1.32E-04	2.99E-04	7.17E-06	8.77E-06	3.1016E-03
551656.32	4173317.25	4600.7151	4370.47187	826.4612	3746.10165	721.29546	7063.98236	4679.82121	2593.89906	481.024	3642.63127	1762.75504	8465.05099	4.83061	5.1904	2.87E-04	2.53E-04	4.78E-05	1.86E-04	4.50E-05	4.41E-04	4.60E-04	5.32E-04	9.86E-05	2.49E-04	8.28E-05	3.98E-04	6.76E-05	8.80E-05	3.2350E-03
551669.43	4173315.34	4781.00811	4300.54647	821.43166	3667.80615	713.82976	7016.51422	4866.74293	2540.23341	478.89319	3546.8326	1733.16978	8430.38956	7.91444	8.81363	2.99E-04	2.49E-04	4.75E-05	1.82E-04	4.46E-05	4.38E-04	4.78E-04	5.21E-04	9.82E-05	2.43E-04	8.14E-05	3.96E-04	1.11E-04	1.49E-04	3.3365E-03
551371.31	4172753.65	2769.91091	3847.76245	1151.06182	9618.95593	1609.72384	2485.47011	2761.90136	2203.37727	636.37545	6772.31406	5875.84708	3173.21317	0.44175	0.45264	1.73E-04	2.22E-04	6.65E-05	4.77E-04	1.01E-04	1.55E-04	2.71E-04	4.52E-04	1.30E-04	4.63E-04	2.76E-04	1.49E-04	6.18E-06	7.67E-06	2.9501E-03
551373.48	4173101.68	3096.41889	5026.68564	894.61883	6773.93705	1012.85508	4674.31318	3118.90175	2978.97582	506.00901	5814.22689	3255.15997	5747.65526	0.47203	0.47784	1.93E-04	2.91E-04	5.17E-05	3.36E-04	6.33E-05	2.92E-04	3.07E-04	6.11E-04	1.04E-04	3.98E-04	1.53E-04	2.70E-04	6.60E-06	8.10E-06	3.0827E-03
551338.58	4172975.39	3025.08115	4905.89706	987.74272	8007.62434	1120.15983	3432.59659	3030.70921	2849.38009	560.2996	6704.6558	3941.03137	4325.66735	0.45039	0.45779	1.89E-04	2.84E-04	5.71E-05	3.97E-04	7.00E-05	2.14E-04	2.98E-04	5.84E-04	1.15E-04	4.58E-04	1.85E-04	2.03E-04	6.30E-06	7.76E-06	3.0686E-03
551682.53	4173313.44	4990.32763	4229.82108	813.00522	3584.17385	704.91773	6932.58655	5084.28269	2482.71405	474.78426	3452.12055	1698.82347	8359.98968	16.26291	13.79184	3.12E-04	2.45E-04	4.70E-05	1.78E-04	4.40E-05	4.33E-04	5.00E-04	5.09E-04	9.73E-05	2.36E-04	7.98E-05	3.93E-04	2.28E-04	2.34E-04	3.5336E-03
551643.22	4173319.15	4424.52812	4419.25018	827.29096	3815.36034	726.92651	7034.42239	4497.7186	2633.55286	480.64706	3728.61493	1788.6615	8412.76087	3.32004	3.49929	2.76E-04	2.55E-04	4.78E-05	1.89E-04	4.54E-05	4.39E-04	4.42E-04	5.40E-04	9.85E-05	2.55E-04	8.40E-05	3.95E-04	4.65E-05	5.93E-05	3.1738E-03
551431.84	4173206.59	3256.61073	5033.89662	888.95107	5915.85984	915.48123	5356.39898	3282.46592	3001.40883	507.15548	5413.2743	2635.41599	6511.68189	0.53615	0.5414	2.03E-04	2.91E-04	5.14E-05	2.93E-04	5.72E-05	3.35E-04	3.23E-04	6.15E-04	1.04E-04	3.70E-04	1.24E-04	3.06E-04	7.50E-06	9.17E-06	3.0891E-03
551366.99	4172762.06	2758.47756	3846.0774	1143.52023	9556.84474	1587.2277	2499.2575	2750.52629	2203.08367	632.67745	6742.36869	5811.3024	3187.13578	0.44194	0.45279	1.72E-04	2.22E-04	6.61E-05	4.74E-04	9.91E-05	1.56E-04	2.70E-04	4.52E-04	1.30E-04	4.61E-04	2.73E-04	1.50E-04	6.18E-06	7.67E-06	2.9389E-03
551379.4	4173118.42	3092.79029	4969.36814	893.7656	6669.36319	996.54333	4785.69101	3116.20235	2939.59302	505.61879	5745.97777	3140.73864	5861.50078	0.47675	0.48212	1.93E-04	2.87E-04	5.17E-05	3.31E-04	6.22E-05	2.99E-04	3.06E-04	6.03E-04	1.04E-04	3.93E-04	1.48E-04	2.75E-04	6.67E-06	8.17E-06	3.0669E-03
551760.72	4172646.39	5753.64123	2164.87838	1738.16004	7072.06576	2963.43912	1418.28477	5695.49502	1271.44643	927.4096	4292.03421	7459.77319	1906.36708	0.33026	0.33842	3.59E-04	1.25E-04	1.00E-04	3.51E-04	1.85E-04	8.86E-05	5.60E-04	2.61E-04	1.90E-04	2.94E-04	3.50E-04	8.95E-05	4.62E-06	5.73E-06	2.9635E-03
551529.83	4173286.57	3640.52487	4824.12707	831.76613	4815.74839	821.37453	6285.44971	3683.23107	2907.69661	477.417	4607.55954	2197.13671	7520.45905	0.81994	0.82941	2.27E-04	2.79E-04	4.81E-05	2.39E-04	5.13E-05	3.93E-04	3.62E-04	5.96E-04	9.79E-05	3.15E-04	1.03E-04	3.53E-04	1.15E-05	1.41E-05	3.0898E-03
551449.86	4173226.47	3317.50957	5022.51686	881.19425	5677.43011	898.50265	5507.57465	3344.8038	3023.56607	503.85941	5259.67047	2542.92262	6615.35056	0.56435	0.56854	2.07E-04	2.90E-04	5.09E-05	2.81E-04	5.61E-05	3.44E-04	3.29E-04	6.20E-04	1.03E-04	3.60E-04	1.19E-04	3.11E-04	7.90E-06	9.63E-06	3.0892E-03

551478.15	4173250.08	3425.68181	4971.75622	857.50152	5380.05309	874.87326	5748.47492	3456.9973	2993.88098	491.42461	4996.78617	2435.90383	6938.2529	0.63811	0.64498	2.14E-04	2.87E-04	4.96E-05	2.67E-04	5.46E-05	3.59E-04	3.40E-04	6.14E-04	1.01E-04	3.42E-04	1.14E-04	3.26E-04	8.93E-06	1.09E-05	3.0873E-03
551405.61	4172676.13	2867.3231	3573.00607	1200.62411	9682.27738	1728.87014	2235.45658	2858.42589	2050.81671	662.48783	6658.29519	6144.45006	2885.31792	0.40749	0.41693	1.79E-04	2.07E-04	6.94E-05	4.80E-04	1.08E-04	1.40E-04	2.81E-04	4.20E-04	1.36E-04	4.55E-04	2.89E-04	1.36E-04	5.70E-06	7.07E-06	2.9119E-03
551334.94	4172936.2	2941.79967	4609.22822	1029.65919	8401.0201	1176.76287	3121.783	2942.88459	2656.41913	582.04026	6871.57566	4227.88427	3947.73639	0.44691	0.45491	1.84E-04	2.66E-04	5.95E-05	4.16E-04	7.35E-05	1.95E-04	2.89E-04	5.45E-04	1.19E-04	4.70E-04	1.99E-04	1.85E-04	6.25E-06	7.71E-06	3.0156E-03
551362.67	4172770.46	2746.81456	3839.37614	1135.00548	9487.52576	1562.46559	2509.4611	2738.97657	2199.94074	628.47619	6709.36413	5737.95009	3196.81568	0.44135	0.45211	1.72E-04	2.22E-04	6.56E-05	4.70E-04	9.76E-05	1.57E-04	2.69E-04	4.51E-04	1.29E-04	4.59E-04	2.70E-04	1.50E-04	6.18E-06	7.66E-06	2.9250E-03
551413.31	4173184.17	3174.52469	4965.5774	889.25992	6102.9488	932.13028	5171.71469	3199.3207	2949.0024	506.11424	5510.16196	2738.17561	6293.82911	0.50954	0.51461	1.98E-04	2.87E-04	5.14E-05	3.03E-04	5.82E-05	3.23E-04	3.14E-04	6.04E-04	1.04E-04	3.77E-04	1.29E-04	2.96E-04	7.13E-06	8.72E-06	3.0600E-03
551337.26	4172870.81	2823.1568	4166.63386	1082.50741	9074.03796	1324.92511	2769.51667	2819.09949	2389.80388	605.63191	6917.8848	4918.33433	3511.2514	0.44666	0.45557	1.76E-04	2.41E-04	6.26E-05	4.50E-04	8.28E-05	1.73E-04	2.77E-04	4.90E-04	1.24E-04	4.73E-04	2.31E-04	1.65E-04	6.25E-06	7.72E-06	2.9594E-03
551418.56	4172656.01	2931.40511	3477.59384	1236.81041	9591.07829	1786.42004	2173.39209	2921.06794	1999.83742	682.75762	6571.58706	6203.01196	2809.45371	0.3948	0.40348	1.83E-04	2.01E-04	7.15E-05	4.75E-04	1.12E-04	1.36E-04	2.87E-04	4.10E-04	1.40E-04	4.49E-04	2.91E-04	1.32E-04	5.52E-06	6.84E-06	2.9004E-03
551582.91	4173312.2	3883.81464	4648.83509	826.73288	4262.55931	768.02158	6670.76526	3939.09443	2800.01146	476.45138	4186.83444	1966.18972	7947.26395	1.22659	1.24979	2.42E-04	2.69E-04	4.78E-05	2.11E-04	4.80E-05	4.17E-04	3.87E-04	5.74E-04	9.77E-05	2.86E-04	9.23E-05	3.73E-04	1.72E-05	2.12E-05	3.0840E-03
551561.67	4173304.38	3769.60104	4713.12809	825.90042	4460.56752	786.70117	6502.68318	3819.88047	2840.37768	474.9973	4350.00078	2047.57469	7755.78988	1.01388	1.02874	2.35E-04	2.72E-04	4.77E-05	2.21E-04	4.91E-05	4.06E-04	3.75E-04	5.82E-04	9.74E-05	2.97E-04	9.62E-05	3.64E-04	1.42E-05	1.74E-05	3.0766E-03
551385.31	4173135.16	3086.66081	4911.83769	890.96262	6485.25496	978.6624	4853.31424	3110.48752	2901.94317	504.45473	5663.53324	3020.13907	5926.89287	0.48177	0.4864	1.93E-04	2.84E-04	5.15E-05	3.21E-04	6.11E-05	3.03E-04	3.06E-04	5.95E-04	1.03E-04	3.87E-04	1.42E-04	2.78E-04	6.74E-06	8.24E-06	3.0404E-03
551630.12	4173321.06	4240.88605	4433.50149	823.15776	3872.6544	730.27351	6905.97379	4308.46564	2651.84968	477.29213	3797.00063	1810.99629	8247.09149	2.41271	2.52364	2.65E-04	2.56E-04	4.76E-05	1.92E-04	4.56E-05	4.31E-04	4.24E-04	5.44E-04	9.78E-05	2.60E-04	8.51E-05	3.87E-04	3.38E-05	4.28E-05	3.1111E-03
551335.35	4172966.43	2977.57907	4773.64505	988.01322	7993.29303	1120.56585	3315.18697	2982.02054	2767.2898	560.13421	6665.02788	3952.74066	4181.24667	0.44318	0.45086	1.86E-04	2.76E-04	5.71E-05	3.96E-04	7.00E-05	2.07E-04	2.93E-04	5.67E-04	1.15E-04	4.56E-04	1.86E-04	1.96E-04	6.20E-06	7.64E-06	3.0191E-03
551353.09	4172801.52	2748.32908	3876.39883	1117.19951	9369.32951	1487.77108	2569.35898	2741.10622	2223.16726	620.68792	6718.70207	5521.36403	3264.37743	0.44284	0.45318	1.72E-04	2.24E-04	6.46E-05	4.64E-04	9.29E-05	1.60E-04	2.69E-04	4.56E-04	1.27E-04	4.59E-04	2.59E-04	1.53E-04	6.20E-06	7.68E-06	2.9165E-03
551334.53	4172905.97	2870.63514	4371.82477	1052.32166	8651.39125	1228.84161	2923.45638	2869.10431	2511.63275	592.11637	6890.60807	4485.37827	3702.83511	0.4434	0.45169	1.79E-04	2.53E-04	6.08E-05	4.29E-04	7.67E-05	1.83E-04	2.82E-04	5.15E-04	1.21E-04	4.71E-04	2.11E-04	1.74E-04	6.20E-06	7.65E-06	2.9689E-03
551733.47	4173296.85	5709.00162	3906.49889	774.81666	3320.69196	674.73853	6396.26514	5839.02774	2261.24957	453.71399	3241.32893	1602.02532	7778.48731	3.41271	3.16285	3.56E-04	2.26E-04	4.48E-05	1.65E-04	4.21E-05	3.99E-04	5.74E-04	4.64E-04	9.30E-05	2.22E-04	7.52E-05	3.65E-04	4.78E-05	5.36E-05	3.1274E-03
551693.03	4172613.45	5754.90755	2402.55449	2150.5943	5556.69146	3316.75699	1604.10587	5689.63483	1432.34964	1134.90122	4214.87415	6524.25993	2165.25635	0.22655	0.23053	3.59E-04	1.39E-04	1.24E-04	2.75E-04	2.07E-04	1.00E-04	5.59E-04	2.94E-04	2.33E-04	2.88E-04	3.06E-04	1.02E-04	3.17E-06	3.91E-06	2.9943E-03
551539.31	4173295.5	3633.7219	4707.43443	819.11259	4727.61125	801.56939	6227.17742	3678.26973	2836.68359	470.29818	4464.05702	2125.93715	7444.90182	0.8537	0.86472	2.27E-04	2.72E-04	4.74E-05	2.34E-04	5.01E-05	3.89E-04	3.62E-04	5.81E-04	9.64E-05	3.05E-04	9.99E-05	3.50E-04	1.19E-05	1.47E-05	3.0406E-03
551355.17	4172791.83	2728.89465	3829.79224	1113.63678	9295.7263	1497.21914	2534.75935	2721.54523	2196.27499	618.10908	6640.48119	5525.65473	3222.41661	0.4371	0.4474	1.70E-04	2.21E-04	6.44E-05	4.61E-04	9.35E-05	1.58E-04	2.68E-04	4.50E-04	1.27E-04	4.54E-04	2.60E-04	1.51E-04	6.12E-06	7.58E-06	2.8919E-03
551720.95	4172625.84	5958.90447	2297.89019	2015.56967	5872.08707	3070.83605	1530.59103	5891.985	1362.84438	1065.68832	4111.5748	6670.30479	2065.47393	0.26259	0.26871	3.72E-04	1.33E-04	1.17E-04	2.91E-04	1.92E-04	9.56E-05	5.79E-04	2.79E-04	2.18E-04	2.81E-04	3.13E-04	9.70E-05	3.67E-06	4.55E-06	2.9766E-03
551358.34	4172778.87	2719.85803	3801.02849	1116.74482	9298.76103	1521.63462	2502.86809	2712.30665	2179.15351	618.99013	6608.10137	5586.27725	3185.17558	0.43439	0.44478	1.70E-04	2.20E-04	6.46E-05	4.61E-04	9.50E-05	1.56E-04	2.67E-04	4.47E-04	1.27E-04	4.52E-04	2.62E-04	1.50E-04	6.08E-06	7.54E-06	2.8841E-03
551391.23	4173151.9	3078.00083	4853.51839	884.96573	6293.54668	956.81946	4876.70273	3101.84492	2865.65963	501.45308	5590.51542	2895.95804	5944.58897	0.48308	0.48746	1.92E-04	2.81E-04	5.12E-05	3.12E-04	5.98E-05	3.05E-04	3.05E-04	5.87E-04	1.03E-04	3.82E-04	1.36E-04	2.79E-04	6.76E-06	8.26E-06	3.0079E-03
551416.4	4173192.75	3152.23388	4890.60491	877.81577	5958.29394	916.55766	5110.12559	3176.77359	2906.88387	499.92142	5395.68806	2675.8433	6219.0648	0.50629	0.51123	1.97E-04	2.83E-04	5.08E-05	2.95E-04	5.72E-05	3.19E-04	3.12E-04	5.96E-04	1.02E-04	3.69E-04	1.26E-04	2.92E-04	7.08E-06	8.66E-06	3.0152E-03
551331.71	4172927.23	2886.22648	4463.27432	1024.49739	8342.57453	1178.62837	3014.98594	2886.47287	2569.68633	578.33198	6769.01831	4241.36582	3815.02744	0.43908	0.44653	1.80E-04	2.58E-04	5.92E-05	4.14E-04	7.36E-05	1.88E-04	2.84E-04	5.27E-04	1.19E-04	4.63E-04	1.99E-04	1.79E-04	6.14E-06	7.57E-06	2.9570E-03
551617.02	4173322.96	4086.53159	4439.8996	816.59813	3921.4543	732.05876	6745.02133	4149.45998	2660.64499	472.67273	3857.24019	1828.27476	8051.23448	1.85084	1.91341	2.55E-04	2.57E-04	4.72E-05	1.94E-04	4.57E-05	4.21E-04	4.08E-04	5.45E-04	9.69E-05	2.64E-04	8.59E-05	3.78E-04	2.59E-05	3.24E-05	3.0567E-03
551332.12	4172957.46	2928.08569	4637.14901	986.8704	7966.45642	1120.73506	3200.83219	2931.40299	2683.86949	559.06527	6608.76399	3962.97527	4040.2482	0.43524	0.44277	1.83E-04	2.68E-04	5.71E-05	3.95E-04	7.00E-05	2.00E-04	2.88E-04	5.50E-04	1.15E-04	4.52E-04	1.86E-04	1.90E-04	6.09E-06	7.50E-06	2.9671E-03
551335.56	4172860.37	2769.08314	4031.34292	1069.63388	8954.80391	1328.75193	2685.43173	2764.59021	2312.39712	597.69292	6750.17219	4920.91342	3405.5863	0.43673	0.44554	1.73E-04	2.33E-04	6.18E-05	4.44E-04	8.30E-05	1.68E-04	2.72E-04	4.74E-04	1.23E-04	4.62E-04	2.31E-04	1.60E-04	6.11E-06	7.55E-06	2.8970E-03
551383.87	4172709.15	2737.9689	3632.60672	1135.84332	9360.00943	1621.31117	2305.1998	2730.27959	2080.65216	626.70715	6540.91946	5802.9473	2960.62074	0.41105	0.42088	1.71E-04	2.10E-04	6.57E-05	4.64E-04	1.01E-04	1.44E-04	2.68E-04	4.26E-04	1.28E-04	4.47E-04	2.73E-04	1.39E-04	5.75E-06	7.13E-06	2.8510E-03
551394.77	4173161.75	3069.67266	4812.37503	877.44138	6174.51769	941.07871	4914.54562	3093.40026	2861.09606	498.31605	5502.91058	2823.72626	5931.56278	0.47998	0.48469	1.92E-04	2.78E-04	5.07E-05	3.06E-04	5.88E-05	3.07E-04	3.04E-04	5.86E-04	1.02E-04	3.76E-04	1.33E-04	2.79E-04	6.72E-06	8.21E-06	2.9876E-03
551656.2	4172586.28	5139.0615	2507.29219	2125.64769	5717.55165	3422.54761	1661.19841	5083.17325	1499.31797	1128.09567	4497.91119	6420.88494	2231.2913	0.21005	0.21215	3.21E-04	1.45E-04	1.23E-04	2.83E-04	2.14E-04	1.04E-04	5.00E-04	3.07E-04	2.31E-04	3.08E-04	3.02E-04	1.05E-04	2.94E-06	3.60E-06	2.9484E-03
551627.72	4172572.6	4733.50487	2610.56508	2046.65767	6119.523	3359.69644	1710.96112	4685.13268	1559.00052	1091.73739	4799.71795	6405.34506	2286.47231	0.21524	0.21693	2.96E-04	1.51E-04	1.18E-04	3.03E-04	2.10E-04	1.07E-04	4.61E-04	3.20E-04	2.24E-04	3.28E-04	3.01E-04	1.07E-04	3.01E-06	3.68E-06	2.9319E-03
551378.8	4172717.99	2715.21981	3644.45347	1125.16756	9278.47605	1600.39626	2324.66999	2707.61483	2087.12401	620.96601	6507.57858	5731.08525	2981.06259	0.41191	0.42179	1.70E-04	2.11E-04	6.51E-05	4.60E-04	1.00E-04	1.45E-04	2.66E-04	4.28E-04	1.27E-04	4.45E-04	2.69E-04	1.40E-04	5.76E-06	7.15E-06	2.8387E-03
551571.02	4173313.19	3737.47687	4552.83437	809.82032	4361.47958	763.92355	6345.03249	3788.79721	2742.70279	466.02537	4177.13878	1973.16672	7569.40985	1.06189	1.07839	2.33E-04	2.63E-04	4.68E-05	2.16E-04	4.77E-05	3.96E-04	3.72E-04	5.62E-04	9.55E-05	2.86E-04	9.27E-05	3.56E-04	1.49E-05	1.83E-05	3.0007E-03
551341.04	4172827.78	2719.63866	3863.98017	1080.1722	9050.61528	1396.91788	2576.6604	2713.58041	2216.32946	601.79847	6618.27535	5180.61914	3270.1139	0.43293	0.44236	1.70E-04	2.23E-04	6.24E-05	4.49E-04	8.72E-05	1.61E-04	2.67E-04	4.54E-04	1.23E-04	4.53E-04	2.43E-04	1.54E-04	6.06E-06	7.50E-06	2.8599E-03
551437.01	4173220.82	3198.2119	4848.0615	863.38539	5631.31972	887.69524	5200.31301	3223.63794	2905.49312	493.04708	5176.85661	2533.96509	6262.12044	0.52735	0.53251	2.00E-04	2.80E-04	4.99E-05	2.79E-04	5.54E-05	3.25E-04	3.17E-04	5.96E-04	1.01E-04	3.54E-04	1.19E-04	2.94E-04	7.38E-06	9.02E-06	2.9863E-03
551740.78	4172636.11	5859.78388	2195.34817	1831.76542	6205.81474	2832.42831	1457.66631	5797.5336	1295.97355	974.38177	4052.52495	6726.99147	1963.95001	0.28826	0.29554	3.66E-04	1.27E-04	1.06E-04	3.08E-04	1.77E-04	9.10E-05	5.70E-04	2.66E-04	2.00E-04	2.77E-04	3.16E-04	9.22E-05	4.03E-06	5.01E-06	2.9039E-03
551408.68	4172662.54	2834.65604	3433.46179	1183.37899	9299.23009	1699.13043	2155.82652	2825.61667	1973.4447	653.29097	6408.49491	5940.06813	2784.27919	0.38607	0.39464	1.77E-04	1.99E-04	6.84E-05	4.61E-04	1.06E-04	1.35E-04	2.78E-04	4.05E-04	1.34E-04	4.38E-04	2.79E-04	1.31E-04	5.40E-06	6.69E-06	2.8219E-03
551548.79	4173304.43	3626.54615	4593.21271	807.35232	4556.39168	781.45232	6155.92151	3672.77861	2766.8166	463.79081	4321.40857	2053.89391	7356.84143	0.89151	0.90271	2.26E-04	2.66E-04	4.67E-05	2.26E-04	4.88E-05	3.84E-04	3.61E-04	5.67E-04	9.51E-05	2.96E-04	9.65E-05	3.46E-04	1.25E-05	1.53E-05	2.9863E-03
551419.49	4173201.34	3129.07213	4812.43262	865.75362	5812.10519	900.83044	5042.96931	3153.34574	2863.5736	493.32944	5278.36794	2614.32215	6138.49033	0.50273	0.50746	1.95E-04	2.78E-04	5.01E-05	2.88E-04	5.63E-05	3.15E-04	3.10E-04	5.87E-04	1.01E-04	3.61E-04	1.23E-04	2.88E-04	7.03E-06	8.60E-06	2.9687E-03
551454.78	4173238.04	3256.04311	4825.59873	849.29485	5433.32709	874.62993	5296.89479	3283.19206	2893.37096	485.89803	4998.18424	2462.99555	6418.93805	0.56882	0.57378	2.03E-04	2.79E-04	4.91E-05	2.69E-04	5.46E-05	3.31E-04	3.23E-04	5.93E-04	9.96E-05	3.42E-04	1.16E-04	3.01E-04	7.96E-06	9.72E-06	2.9782E-03
551397.86	4173170.33	3058.01633	4766.89904	869.74656	6062.45045	927.14925	4888.10038	3081.57392	2831.06577	494.21219	5418.31748	2762.44095	5902.23372	0.47897	0.48377	1.91E-04	2.76E-04	5.03E-05	3.01E-04	5.79E-05	3.05E-04	3.03E-04	5.80E-04	1.01E-04	3.71E-04	1.30E-04	2.77E-04	6.70E-06	8.20E-06	2.9574E-03
551374.52	4172726.31	2691.11049	3641.52537	1112.59085	9157.76045	1574.70039	2337.07166	2683.63826	2085.80338	614.29265	6447.67438	5636.06378	2992.66306	0.4101	0.4199	1.68E-04	2.11E-04	6.43E-05	4.54E-04	9.84E-05	1.46E-04	2.64E-04	4.28E-04	1.26E-04	4.41E-04	2.65E-04	1.41E-04	5.74E-06	7.12E-06	2.8175E-03
551331.34	4172894.83	2791.84159	4178.55885	1034.49603	8486.76997	1221.20444	2796.91555	2789.70359	2400.23389	581.02363	6682.14672	4457.63652	3544.13682	0.4278	0.43581	1.74E-04	2.42E-04	5.98E-05	4.21E-04	7.63E-05	1.75E-04	2.74E-04	4.92E-04	1.19E-04	4.57E-04	2.09E-04	1.66E-04	5.99E-06	7.39E-06	2.8788E-03
551592.55	4173321.28	3836.39452	4449.16675	806.38955	4061.54149	742.4119	6432.70581	3892.05512	2677.09653	465.11103	3988.87998	1887.12867	7672.36305	1.2988	1.32504	2.40E-04	2.57E-04	4.66E-05	2.01E-04	4.64E-05	4.02E-04	3.83E-04	5.49E-04	9.53E-05	2.73E-04	8.86E-05	3.60E-04	1.82E-05	2.25E-05	2.9819E-03
551328.49	4172918.27	2824.03419	4308.61634	1014.3372	8235.15217	1175.05624	2906.7272	2823.60231	2479.10651	571.76735	6632.14142	4232.491	3679.87688	0.4285	0.43625	1.76E-04	2.49E-04	5.86E-05	4.08E-04	7.34E-05	1.82E-04	2.78E-04	5.08E-04	1.17E-04	4.54E-04	1.99E-04	1.73E-04	6.00E-06	7.39E-06	2.8887E-03
551328.9	4172948.5	2871.74013	4489.329	981.2252	7898.31115	1116.91714	3084.48166	2874.12139	2594.62102	555.3489	6516.20435	3957.75433	3896.5635	0.4262	0.43355	1.79E-04	2.60E-04	5.67E-05	3.92E-04	6.98E-05	1.93E-04	2.83E-04	5.32E-04	1.14E-04	4.46E-04	1.86E-04	1.83E-04	5.96E-06	7.35E-06	2.9055E-03
551333.86	4172849.93	2714.85414	3901.80193	1055.34032	8808.07681	1329.31944	2605.67611	2709.99451	2238.23472	589.12298	6574.48595	4907.06247	3305.47113	0.42633	0.43505	1.70E-04	2.26E-04	6.10E-05	4.37E-04	8.30E-05	1.63E-04	2.66E-04	4.59E-04	1.21E-04	4.50E-04	2.30E-04	1.55E-04	5.97E-06	7.37E-06	2.8331E-03
551651.63	4173326.89	4347.87666	4171.67036	797.48819	3629.48757	700.06605	6575.4674	4420.32274	2479.43835	463.59681	3528.18566	1715.94882	7889.18459	3.77048	4.00475	2.71E-04	2.41E-04	4.61E-05	1.80E-04	4.37E-05	4.11E-04	4.35E-04	5.08E-04	9.50E-05	2.41E-04	8.06E-05	3.71E-04	5.28E-05	6.79E-05	3.0439E-03
551341.74	4172818.5	2685.58154	3785.23923	1071.74975	8929.44966	1398.11438	2528.67382	2679.31298	2171.89864	596.63918	6495.78396	5162.8923	3209.83984	0.42495	0.43432	1.68E-04	2.19E-04	6.20E-05	4.43E-04	8.73E-05	1.58E-04	2.63E-04	4.45E-04	1.22E-04	4.44E-04	2.42E-04	1.51E-04	5.95E-06	7.36E-06	2.8180E-03
551664.34	4173325.04	4501.9692	4109.4091	793.78242	3559.73771	693.61232	6545.70888	4579.853	2432.85151	462.16718	3441.028	1689.89304	7870.42728	5.66204	6.15601	2.81E-04	2.38E-04	4.59E-05	1.76E-04	4.33E-05	4.09E-04	4.50E-04	4.99E-04	9.47E-05	2.35E-04	7.94E-05	3.70E-04	7.92E-05	1.04E-04	3.1047E-03
551400.95	4173178.92	3046.66055	4720.91581	861.54728	5949.20416	912.82539	4855.06733	3070.03046	2801.08318	489.80293	5330.99668	2700.9652	5917.66152	0.47781	0.4824	1.90E-04	2.73E-04	4.98E-05	2.95E-04	5.70E-05	3.03E-04	3.02E-04	5.74E-04	1.00E-04	3.65E-04	1.27E-04	2.78E-04	6.69E-06	8.17E-06	2.9287E-03
551370.24	4172734.63	2667.68246	3632.22801	1100.06433	9030.92043	1547.87521	2346.77768	2660.33073	2081.15366	607.7203	6380.93564	5538.78925	3000.87244	0.40769	0.41738	1.67E-04	2.10E-04	6.36E-05	4.48E-04	9.67E-05	1.47E-04	2.62E-04	4.27E-04	1.25E-04	4.36E-04	2.60E-04	1.41E-04	5.70E-06	7.07E-06	2.7940E-03
551677.06	4173323.19	4661.62923	4033.63236	786.58045	3483.24159	685.55219	6461.36206	4745.65907	2376.982	458.64157	3348.38676	1660.43631	7790.18959	9.84762	11.17722	2.91E-04	2.33E-04	4.55E-05	1.73E-04	4.28E-05	4.04E-04	4.66E-04	4.87E-04	9.40E-05	2.29E-04	7.80E-05	3.66E-04	1.38E-04	1.89E-04	3.2366E-03
551464.26	4173249.18	3258.30101	4729.73197	832.04562	5264.14198	855.27624	5303.0361	3286.47889	2843.72848	476.42397	4843.5272	2400.71016	6418.25944	0.58044	0.58631	2.03E-04	2.73E-04	4.81E-05	2.61E-04	5.34E-05	3.31E-04	3.23E-04	5.83E-04	9.77E-05	3.31E-04	1.13E-04	3.01E-04	8.12E-06	9.94E-06	2.9377E-03
551638.91	4173328.74	4181.56475	4203.53233	796.69285	3689.29497	704.57859	6518.55502	4248.73456	2508.09097	462.29601	3600.99544	1739.19393	7806.62093	2.70928	2.83919	2.61E-04	2.43E-04	4.61E-05	1.83E-04	4.40E-05	4.07E-04	4.18E-04	5.14E-04	9.48E-05	2.46E-04	8.17E-05	3.67E-04	3.79E-05	4.81E-05	2.9913E-03
551725.8	4173306.93	5398.36419	3805.08962	756.03319	3262.88711	662.37812	6137.70114	5515.78298	2206.96607	443.38512	3180.7651	1575.73782	7467.5044	4.72441	4.30421	3.37E-04	2.20E-04	4.37E-05	1.62E-04	4.14E-05	3.83E-04	5.42E-04	4.52E-04	9.09E-05	2.18E-04	7.40E-05	3.51E-04	6.61E-05	7.29E-05	3.0540E-03
551365.96	4172742.95	2651.06473	3627.63528	1091.07887	8943.29603	1525.89876	2358.71039	2643.77713	2079.18028	603.12188	6335.05486	5467.61769	3012.24858	0.40692	0.41656	1.66E-04	2.10E-04	6.31E-05	4.43E-04	9.53E-05	1.47E-04	2.60E-04	4.26E-04	1.24E-04	4.33E-04	2.57E-04	1.41E-04	5.69E-06	7.06E-06	2.7782E-03
551473.96	4173258.32	3282.26478	4677.07096	820.92853	5141.2227	842.29196	5366.71657	3311.95147	2816.02621	470.31786	4740.17058	2351.3266	6485.14681	0.59848	0.60379	2.05E-04	2.70E-04	4.75E-05	2.55E-04	5.26E-05	3.35E-04	3.26E-04	5.77E-04	9.64E-05	3.24E-04	1.10E-04	3.05E-04	8.37E-06	1.02E-05	2.9224E-03
551422.58	4173209.93	3099.33262	4720.44994	852.49936	5657.05604	885.32594	4963.99418	3123.29596	2815.47802	486.06716	5153.1475	2555.78953	5989.21112	0.49842	0.5029	1.94E-04	2.73E-04	4.93E-05	2.80E-04	5.53E-05	3.10E-04	3.07E-04	5.77E-04	9.96E-05	3.52E-04	1.20E-04	2.81E-04	6.97E-06	8.52E-06	2.9145E-03
551361.69	4172751.27	2644.74153	3634.92739	1087.40674	8921.00125	1511.96654	2375.88514	2637.43702	2083.76787	601.45898	6326.65283	5436.84298	3030.78422	0.40907	0.41877	1.65E-04	2.10E-04	6.29E-05	4.42E-04	9.44E-05	1.48E-04	2.59E-04	4.27E-04	1.23E-04	4.33E-04	2.55E-04	1.42E-04	5.72E-06	7.10E-06	2.7760E-03
551526.12	4173295.26	3467.07834	4521.52479	794.34884	4687.71189	791.91609	5812.59352	3507.41873	2724.25247	455.64571	4377.87355	2125.55738	6964.107	0.75734	0.76641	2.16E-04	2.61E-04	4.59E-05	2.32E-04	4.95E-05	3.63E-04	3.45E-04	5.58E-04	9.34E-05	2.99E-04	9.98E-05	3.27E-04	1.06E-05	1.30E-05	2.9152E-03
551440.66	4173229.99	3159.51719	4723.47831	846.83124	5453.57694	870.37769	5053.24246	3184.74679	2821.42698	481.61067	5026.72415	2471.96876	6135.39603	0.52815	0.53275	1.97E-04	2.73E-04	4.90E-05	2.70E-04	5.44E-05	3.16E-04	3.13E-04	5.78E-04	9.87E-05	3.44E-04	1.16E-04	2.88E-04	7.39E-06	9.03E-06	2.9142E-03
551558.27	4173313.36	3602.27105	4456.29149	793.26107	4378.64346	760.2993	6037.54135	3649.75331	2683.81637	455.93281	4165.43851	1982.33935	7214.30479	0.92914	0.94279	2.25E-04	2.58E-04	4.59E-05	2.17E-04	4.75E-05	3.77E-04	3.59E-04	5.50E-04	9.35E-05	2.85E-04	9.31E-05	3.39E-04	1.30E-05	1.60E-05	2.9182E-03
551342.43	4172809.22	2653.07689	3712.51125	1063.17605	8805.74583	1398.81973	2483.49655	2646.64431	2130.7794	591.37461	6377.26272	5138.65663	3153.24365	0.41707	0.42636	1.66E-04	2.15E-04	6.15E-05	4.36E-04	8.74E-05	1.55E-04	2.60E-04	4.37E-04	1.21E-04	4.36E-04	2.41E-04	1.48E-04	5.84E-06	7.22E-06	2.7775E-03
551404.04	4173187.5	3030.08529	4663.71078	852.22445	5826.20408	898.57351	4809.72482	3053.23366	2767.17125	484.76539	5235.63653	2641.98727	5861.71541	0.47555	0.4801	1.89E-04	2.70E-04	4.93E-05	2.89E-04	5.61E-05	3.00E-04	3.00E-04	5.67E-04	9.94E-05	3.58E-04	1.24E-04	2.75E-04	6.65E-06	8.14E-06	2.8924E-03
551626.2	4173330.59	4031.98678	4222.28508	792.85915	3740.97081	707.51393	6414.59372	4094.64232	2525.7717	459.29042	3664.99366	1758.33843	7674.35342	2.03144	2.11044	2.52E-04	2.44E-04	4.58E-05	1.85E-04	4.42E-05	4.01E-04	4.02E-04	5.18E-04	9.41E-05	2.51E-04	8.26E-05	3.60E-04	2.84E-05	3.58E-05	2.9442E-03
551580.37	4173322	3701.04745	4387.40573	793.03386	4171.73546	740.88192	6167.97103	3752.99869	2641.30904	456.71819	4002.8456	1899.47689	7362.91518	1.11403	1.13248	2.31E-04	2.54E-04	4.58E-05	2.07E-04	4.63E-05	3.85E-04	3.69E-04	5.41E-04	9.36E-05	2.74E-04	8.92E-05	3.46E-04	1.56E-05	1.92E-05	2.9164E-03
551325.67	4172939.53	2814.66838	4344.77683	974.34117	7820.92069	1113.37278	2973.51016	2816.20972	2507.29195	550.90657	6412.57839	3951.10826	3759.91269	0.41747	0.42427	1.76E-04	2.51E-04	5.63E-05	3.88E-04	6.95E-05	1.86E-04	2.77E-04	5.14E-04	1.13E-04	4.39E-04	1.86E-04	1.77E-04	5.84E-06	7.19E-06	2.8436E-03
551357.41	4172759.58	2626.68963	3616.65202	1076.18902	8811.76163	1484.70696	2379.92698	2619.51074	2074.16288	595.71198	6266.606	5346.4566	3032.56407	0.40648	0.41603	1.64E-04	2.09E-04	6.22E-05	4.37E-04	9.27E-05	1.49E-04	2.57E-04	4.25E-04	1.22E-04	4.29E-04	2.51E-04	1.42E-04	5.69E-06	7.05E-06	2.7531E-03
551398.8	4172669.06	2739.36655	3381.5318	1132.69042	8973.91586	1618.02159	2135.18114	2731.39082	1942.6129	625.40284	6226.76089	5669.32324	2754.74733	0.37595	0.3843	1.71E-04	1.96E-04	6.55E-05	4.45E-04	1.01E-04	1.33E-04	2.68E-04	3.98E-04	1.28E-04	4.26E-04	2.66E-04	1.29E-04	5.26E-06	6.51E-06	2.7394E-03
551327.95	4172874.06	2704.41996	3944.98497	1023.33614	8423.71694	1245.43427	2642.81762	2701.11754	2265.08069	572.84583	6469.40116	4552.25722	3350.80414	0.4149	0.42284	1.69E-04	2.28E-04	5.92E-05	4.18E-04	7.78E-05	1.65E-04	2.66E-04	4.64E-04	1.17E-04	4.42E-04	2.14E-04	1.57E-04	5.81E-06	7.17E-06	2.7903E-03
551493.36	4173276.59	3332.77719	4566.55643	800.85446	4881.13945	815.12087	5487.80371	3365.92752	2749.81194	459.08298	4546.77466	2239.56106	6611.13134	0.63953	0.64626	2.08E-04	2.64E-04	4.63E-05	2.42E-04	5.09E-05	3.43E-04	3.31E-04	5.64E-04	9.41E-05	3.11E-04	1.05E-04	3.11E-04	8.95E-06	1.10E-05	2.8892E-03
551325.26	4172909.3	2753.36485	4141.50436	997.98375	8069.5555	1163.24296	2794.02129	2752.41267	2382.28995	561.77348	6454.41388	4190.58395	3538.75852	0.41444	0.42191	1.72E-04	2.39E-04	5.77E-05	4.00E-04	7.27E-05	1.75E-04	2.71E-04	4.88E-04	1.15E-04	4.41E-04	1.97E-04	1.66E-04	5.80E-06	7.15E-06	2.8076E-03
551332.16	4172839.5	2656.61241	3770.02869	1037.8829	8611.00692	1322.67908	2525.91353	2651.47574	2163.40743	578.92682	6378.98094	4859.01348	3204.90145	0.414	0.42256	1.66E-04	2.18E-04	6.00E-05	4.27E-04	8.26E-05	1.58E-04	2.61E-04	4.43E-04	1.19E-04	4.36E-04	2.28E-04	1.51E-04	5.79E-06	7.16E-06	2.7617E-03
551652.93	4172576.99	4901.59274	2431.66421	2014.42	5514.86915	3222.49007	1616.00793	4849.67003	1453.25569	1071.13332	4347.76515	6069.04357	2167.97403	0.20064	0.20246	3.06E-04	1.41E-04	1.16E-04	2.73E-04	2.01E-04	1.01E-04	4.77E-04	2.98E-04	2.20E-04	2.97E-04	2.85E-04	1.02E-04	2.81E-06	3.43E-06	2.8233E-03
551382.34	4172696.12	2655.60987	3452.953	1091.46329	8840.86782	1552.85974	2199.90937	2648.49613	1979.72417	602.47008	6201.2359	5484.62399	2828.16975	0.38294	0.39171	1.66E-04	2.00E-04	6.31E-05	4.38E-04	9.70E-05	1.37E-04	2.60E-04	4.06E-04	1.23E-04	4.24E-04	2.58E-04	1.33E-04	5.36E-06	6.64E-06	2.7173E-03
551407.13	4173196.09	3009.54644	4597.81768	841.89078	5695.66871	884.33957	4754.21636	3032.44036	2730.21438	479.16217	5133.63471	2584.88739	5794.36655	0.47252	0.47697	1.88E-04	2.66E-04	4.87E-05	2.82E-04	5.52E-05	2.97E-04	2.98E-04	5.60E-04	9.82E-05	3.51E-04	1.21E-04	2.72E-04	6.61E-06	8.08E-06	2.8522E-03
551535.71	4173304.3	3459.35789	4417.97708	782.92814	4530.60702	773.32396	5756.87562	3501.40673	2661.47777	449.21899	4248.75716	2057.66401	6892.46611	0.78687	0.79617	2.16E-04	2.55E-04	4.53E-05	2.25E-04	4.83E-05	3.60E-04	3.44E-04	5.46E-04	9.21E-05	2.91E-04	9.66E-05	3.24E-04	1.10E-05	1.35E-05	2.8664E-03
551503.06	4173285.73	3333.43668	4469.14893	787.2109	4788.65816	798.88495	5487.0663	3368.41218	2691.17028	451.25538	4423.31047	2180.63537	6599.55049	0.65989	0.6669	2.08E-04	2.58E-04	4.55E-05	2.37E-04	4.99E-05	3.43E-04	3.31E-04	5.52E-04	9.25E-05	3.02E-04	1.02E-04	3.10E-04	9.23E-06	1.13E-05	2.8526E-03
551639.79	4172569.24	4695.42858	2461.30062	1967.07353	5633.31378	3171.49904	1629.73396	4647.16853	1470.43454	1048.56024	4442.42627	6005.74667	2181.24721	0.2006	0.20219	2.93E-04	1.42E-04	1.14E-04	2.79E-04	1.98E-04	1.02E-04	4.57E-04	3.01E-04	2.15E-04	3.04E-04	2.82E-04	1.02E-04	2.81E-06	3.43E-06	2.7960E-03
551414.06	4172635.86	2802.18547	3222.00696	1173.803	8753.08706	1688.26443	2031.78025	2791.98153	1854.95394	648.40795	6047.37952	5692.78543	2626.44791	0.35679	0.36417	1.75E-04	1.86E-04	6.79E-05	4.34E-04	1.05E-04	1.27E-04	2.74E-04	3.80E-04	1.33E-04	4.14E-04	2.67E-04	1.23E-04	4.99E-06	6.17E-06	2.6984E-03
551322.45	4172930.57	2760.02633	4207.83761	968.13138	7750.5054	1112.10636	2871.43284	2760.79884	2425.94161	546.72281	6311.64613	3951.64694	3633.10399	0.40962	0.41628	1.72E-04	2.43E-04	5.60E-05	3.84E-04	6.95E-05	1.79E-04	2.71E-04	4.97E-04	1.12E-04	4.32E-04	1.86E-04	1.71E-04	5.73E-06	7.05E-06	2.7859E-03
551353.13	4172767.9	2596.24207	3572.13041	1057.16595	8611.6083	1444.28224	2369.83977	2589.33733	2049.90407	585.73334	6153.12093	5195.7034	3016.42214	0.39899	0.40817	1.62E-04	2.07E-04	6.11E-05	4.27E-04	9.02E-05	1.48E-04	2.55E-04	4.20E-04	1.20E-04	4.21E-04	2.44E-04	1.42E-04	5.58E-06	6.92E-06	2.7086E-03
551697.94	4172606.28	5467.76607	2266.74999	1976.98406	5207.4721	2997.05277	1522.51649	5407.90369	1349.38303	1045.97276	3944.65305	5972.22277	2053.09363	0.21287	0.21654	3.41E-04	1.31E-04	1.14E-04	2.58E-04	1.87E-04	9.51E-05	5.32E-04	2.77E-04	2.14E-04	2.70E-04	2.81E-04	9.64E-05	2.98E-06	3.67E-06	2.8031E-03
551567.75	4173322.28	3566.09698	4305.36031	777.70697	4198.32961	738.50744	5886.06131	3614.40409	2592.56361	447.231	4002.25119	1911.41312	7034.4777	0.96902	0.9828	2.23E-04	2.49E-04	4.50E-05	2.08E-04	4.61E-05	3.68E-04	3.55E-04	5.31E-04	9.17E-05	2.74E-04	8.98E-05	3.30E-04	1.36E-05	1.67E-05	2.8409E-03
551326.25	4172863.68	2645.66955	3804.60328	1006.94111	8268.56289	1241.26945	2554.9224	2642.0001	2184.32292	563.04292	6286.24329	4521.61854	3240.64932	0.40284	0.41058	1.65E-04	2.20E-04	5.82E-05	4.10E-04	7.75E-05	1.60E-04	2.60E-04	4.48E-04	1.15E-04	4.30E-04	2.12E-04	1.52E-04	5.64E-06	6.96E-06	2.7202E-03
551410.22	4173204.68	2987.0715	4527.12329	830.86255	5561.7873	870.01718	4692.55923	3009.69328	2691.62523	473.16341	5027.71263	2528.89402	5720.36843	0.46915	0.47335	1.87E-04	2.62E-04	4.80E-05	2.76E-04	5.43E-05	2.93E-04	2.96E-04	5.52E-04	9.70E-05	3.44E-04	1.19E-04	2.69E-04	6.56E-06	8.02E-06	2.8098E-03
551427.89	4173224.54	3041.78519	4547.48177	828.43314	5390.94475	858.96824	4773.19255	3065.29948	2709.7512	471.49931	4933.52715	2459.58904	5803.52809	0.49518	0.49937	1.90E-04	2.63E-04	4.79E-05	2.67E-04	5.36E-05	2.98E-04	3.01E-04	5.55E-04	9.66E-05	3.37E-04	1.16E-04	2.73E-04	6.93E-06	8.46E-06	2.8140E-03
551798.68	4173274.84	5814.54795	3518.29376	706.65833	2953.28666	611.13485	5673.52072	5966.25657	2023.05089	414.09722	2853.44698	1442.79484	6903.285	1.11071	1.07428	3.63E-04	2.03E-04	4.09E-05	1.46E-04	3.82E-05	3.54E-04	5.86E-04	4.15E-04	8.49E-05	1.95E-04	6.78E-05	3.24E-04	1.55E-05	1.82E-05	2.8531E-03
551717.62	4172616.54	5581.408	2189.46038	1875.82234	5337.11393	2804.29117	1469.57104	5521.2006	1298.73158	994.44304	3846.56314	5979.17815	1981.37923	0.23275	0.23776	3.48E-04	1.27E-04	1.08E-04	2.65E-04	1.75E-04	9.18E-05	5.43E-04	2.66E-04	2.04E-04	2.63E-04	2.81E-04	9.31E-05	3.26E-06	4.03E-06	2.7720E-03
551445.82	4173242.11	3101.78225	4542.3296	815.93094	5222.68752	844.86195	4907.89318	3126.88679	2722.18158	466.55757	4766.25674	2393.37179	5957.26541	0.52691	0.53192	1.94E-04	2.63E-04	4.72E-05	2.59E-04	5.28E-05	3.07E-04	3.07E-04	5.58E-04	9.56E-05	3.26E-04	1.12E-04	2.80E-04	7.37E-06	9.01E-06	2.8172E-03
551545.31	4173313.33	3454.05702	4321.14354	772.8454	4374.0861	754.53221	5696.5089	3497.65049	2602.24944	443.65445	4122.50793	1988.93587	6818.16767	0.81909	0.82884	2.16E-04	2.50E-04	4.47E-05	2.17E-04	4.71E-05	3.56E-04	3.44E-04	5.33E-04	9.09E-05	2.82E-04	9.34E-05	3.20E-04	1.15E-05	1.40E-05	2.8191E-03
551376.19	4172702.98	2607.13348	3422.87781	1067.30105	8624.75465	1512.84155	2194.76832	2600.30563	1962.36439	589.23355	6082.64505	5325.60547	2817.45829	0.37696	0.38555	1.63E-04	1.98E-04	6.17E-05	4.28E-04	9.45E-05	1.37E-04	2.56E-04	4.02E-04	1.21E-04	4.16E-04	2.50E-04	1.32E-04	5.27E-06	6.53E-06	2.6703E-03
551401.22	4172655.9	2709.85517	3260.15387	1117.93149	8657.49198	1593.18968	2064.43516	2701.71901	1875.06358	617.50255	6015.87396	5502.98406	2665.03068	0.3585	0.36618	1.69E-04	1.88E-04	6.46E-05	4.29E-04	9.95E-05	1.29E-04	2.66E-04	3.84E-04	1.27E-04	4.11E-04	2.58E-04	1.25E-04	5.02E-06	6.21E-06	2.6627E-03
551348.86	4172776.22	2575.52078	3542.19134	1043.05261	8475.48712	1412.07021	2364.73908	2568.82461	2033.54149	578.44415	6079.24616	5082.82819	3007.32146	0.39441	0.40335	1.61E-04	2.05E-04	6.03E-05	4.20E-04	8.82E-05	1.48E-04	2.53E-04	4.17E-04	1.19E-04	4.16E-04	2.39E-04	1.41E-04	5.52E-06	6.84E-06	2.6779E-03
551589.73	4173330.81	3651.55236	4207.00051	774.22606	3981.8051	717.37152	5953.88073	3703.61153	2531.13262	446.20533	3822.91018	1827.21773	7114.33232	1.16662	1.18999	2.28E-04	2.43E-04	4.48E-05	1.97E-04	4.48E-05	3.72E-04	3.64E-04	5.19E-04	9.15E-05	2.61E-04	8.58E-05	3.34E-04	1.63E-05	2.02E-05	2.8223E-03
551790.59	4173280.38	5754.15682	3528.82828	708.51767	2965.82458	613.9967	5617.7028	5901.84962	2026.76081	415.19613	2864.0048	1450.02455	6859.58856	1.21407	1.17099	3.59E-04	2.04E-04	4.10E-05	1.47E-04	3.83E-05	3.51E-04	5.80E-04	4.15E-04	8.51E-05	1.96E-04	6.81E-05	3.22E-04	1.70E-05	1.98E-05	2.8441E-03
551655.87	4173335.24	4217.09583	3950.63445	768.41136	3473.75718	675.80365	6133.81786	4286.96886	2345.0893	446.67403	3363.51318	1654.09354	7377.85086	3.82467	4.06821	2.63E-04	2.28E-04	4.44E-05	1.72E-04	4.22E-05	3.83E-04	4.21E-04	4.81E-04	9.16E-05	2.30E-04	7.77E-05	3.47E-04	5.35E-05	6.89E-05	2.9040E-03
551600.76	4173334.29	3718.58703	4163.39799	773.16998	3808.88496	707.27155	6000.59653	3772.76831	2500.68916	446.25649	3735.45002	1786.40656	7174.7462	1.31493	1.34222	2.32E-04	2.41E-04	4.47E-05	1.89E-04	4.42E-05	3.75E-04	3.71E-04	5.13E-04	9.15E-05	2.55E-04	8.39E-05	3.37E-04	1.84E-05	2.27E-05	2.8177E-03
551331.19	4172827.85	2590.96981	3626.83023	1016.42754	8351.69955	1308.39516	2440.77313	2585.64022	2082.53073	566.53071	6150.17918	4771.92221	3097.32554	0.39846	0.40676	1.62E-04	2.10E-04	5.88E-05	4.14E-04	8.17E-05	1.52E-04	2.54E-04	4.27E-04	1.16E-04	4.21E-04	2.24E-04	1.45E-04	5.58E-06	6.89E-06	2.6782E-03
551668.76	4173333.36	4359.7619	3883.24989	763.33021	3403.98626	668.90685	6080.52513	4434.8147	2296.14182	444.36645	3276.25559	1627.76407	7330.22477	5.88175	6.42001	2.72E-04	2.25E-04	4.41E-05	1.69E-04	4.18E-05	3.80E-04	4.36E-04	4.71E-04	9.11E-05	2.24E-04	7.65E-05	3.44E-04	8.23E-05	1.09E-04	2.9647E-03
551642.99	4173337.11	4064.58164	3992.51117	769.40078	3534.78988	680.93075	6113.67923	4129.51651	2378.89656	446.48933	3438.85111	1677.66145	7339.44974	2.71326	2.84376	2.54E-04	2.31E-04	4.45E-05	1.75E-04	4.25E-05	3.82E-04	4.06E-04	4.88E-04	9.15E-05	2.35E-04	7.88E-05	3.45E-04	3.80E-05	4.82E-05	2.8586E-03
551322	4172897.97	2670.26174	3946.62693	976.99091	7874.39102	1148.40492	2664.68547	2668.78039	2269.83331	549.01222	6235.33976	4131.67823	3376.65852	0.39737	0.40452	1.67E-04	2.28E-04	5.65E-05	3.90E-04	7.17E-05	1.66E-04	2.62E-04	4.65E-04	1.13E-04	4.26E-04	1.94E-04	1.59E-04	5.56E-06	6.85E-06	2.7115E-03
551454.83	4173252.47	3109.69284	4474.24642	802.10455	5087.0668	829.41469	4926.39614	3135.58905	2688.24353	459.01636	4642.35299	2341.0768	5973.22089	0.537	0.54207	1.94E-04	2.59E-04	4.64E-05	2.52E-04	5.18E-05	3.08E-04	3.08E-04	5.51E-04	9.41E-05	3.17E-04	1.10E-04	2.81E-04	7.51E-06	9.19E-06	2.7889E-03
551369.48	4172715.01	2575.92524	3429.04403	1052.6081	8501.84027	1485.12595	2215.59442	2569.21899	1965.85724	581.29658	6025.0404	5225.63466	2838.31861	0.3768	0.3854	1.61E-04	1.98E-04	6.09E-05	4.21E-04	9.28E-05	1.38E-04	2.53E-04	4.03E-04	1.19E-04	4.12E-04	2.45E-04	1.33E-04	5.27E-06	6.53E-06	2.6497E-03
551346.28	4173083.98	2837.16774	4491.02393	820.06021	6226.86025	945.17343	3943.36201	2855.37195	2662.27566	464.01597	5270.84799	3060.16698	4883.04152	0.41069	0.41507	1.77E-04	2.60E-04	4.74E-05	3.09E-04	5.90E-05	2.46E-04	2.81E-04	5.46E-04	9.51E-05	3.60E-04	1.44E-04	2.29E-04	5.75E-06	7.03E-06	2.7660E-03
551681.64	4173331.49	4515.24807	3810.05221	755.27927	3328.91966	660.62202	5990.88979	4596.39737	2241.99285	440.30964	3187.70203	1597.89203	7243.09522	10.64538	12.17056	2.82E-04	2.20E-04	4.37E-05	1.65E-04	4.13E-05	3.74E-04	4.52E-04	4.60E-04	9.03E-05	2.18E-04	7.51E-05	3.40E-04	1.49E-04	2.06E-04	3.1164E-03
551343.05	4173075.03	2831.02086	4496.53863	820.1129	6262.8648	946.51986	3860.55813	2848.30789	2666.54354	464.1896	5290.29009	3088.4114	4790.75448	0.40693	0.4116	1.77E-04	2.60E-04	4.74E-05	3.10E-04	5.91E-05	2.41E-04	2.80E-04	5.47E-04	9.51E-05	3.62E-04	1.45E-04	2.25E-04	5.69E-06	6.97E-06	2.7611E-03
551319.22	4172921.6	2696.20656	4057.14449	955.8641	7620.49563	1103.23648	2764.54432	2696.36873	2337.73942	539.09698	6170.03163	3921.8897	3499.69244	0.39746	0.40437	1.68E-04	2.35E-04	5.53E-05	3.78E-04	6.89E-05	1.73E-04	2.65E-04	4.79E-04	1.11E-04	4.22E-04	1.84E-04	1.64E-04	5.56E-06	6.85E-06	2.7151E-03
551339.83	4173066.08	2829.46957	4507.94644	822.91034	6315.16522	949.85729	3780.72278	2845.74271	2672.49269	465.92202	5329.57734	3120.28234	4701.642	0.40318	0.40833	1.77E-04	2.61E-04	4.76E-05	3.13E-04	5.93E-05	2.36E-04	2.80E-04	5.48E-04	9.55E-05	3.64E-04	1.47E-04	2.21E-04	5.64E-06	6.92E-06	2.7608E-03
551630.1	4173338.98	3919.75852	4017.2308	766.97152	3587.74232	684.42563	6039.27421	3980.32333	2400.44894	444.31895	3504.4069	1697.66788	7240.8478	2.01171	2.0905	2.45E-04	2.32E-04	4.43E-05	1.78E-04	4.27E-05	3.77E-04	3.91E-04	4.92E-04	9.11E-05	2.40E-04	7.97E-05	3.40E-04	2.81E-05	3.54E-05	2.8165E-03
551336.6	4173057.12	2820.20855	4500.10845	824.17182	6350.25168	951.22288	3690.28027	2835.35922	2666.39	466.81745	5355.15221	3147.13012	4598.22366	0.40013	0.40535	1.76E-04	2.60E-04	4.76E-05	3.15E-04	5.94E-05	2.30E-04	2.79E-04	5.47E-04	9.57E-05	3.66E-04	1.48E-04	2.16E-04	5.60E-06	6.87E-06	2.7520E-03
551354.91	4173108.24	2822.15067	4404.94199	813.77643	6055.96856	927.59552	4100.24605	2842.20532	2607.71816	460.15407	5162.41881	2957.73262	5047.16313	0.41465	0.41949	1.76E-04	2.55E-04	4.70E-05	3.00E-04	5.79E-05	2.56E-04	2.79E-04	5.35E-04	9.43E-05	3.53E-04	1.39E-04	2.37E-04	5.80E-06	7.11E-06	2.7423E-03
551413.31	4173213.26	2959.68389	4446.03512	818.8603	5421.5463	855.80497	4622.26449	2981.99581	2649.59442	466.60352	4915.72801	2475.11103	5584.04726	0.46502	0.46928	1.85E-04	2.57E-04	4.73E-05	2.69E-04	5.35E-05	2.89E-04	2.93E-04	5.43E-04	9.56E-05	3.36E-04	1.16E-04	2.62E-04	6.51E-06	7.95E-06	2.7611E-03
551464.29	4173261.39	3121.25193	4410.46713	789.34668	4974.36751	817.05344	4964.05551	3148.43187	2655.45598	451.97579	4532.35109	2299.16618	6009.34265	0.55118	0.55568	1.95E-04	2.55E-04	4.56E-05	2.47E-04	5.10E-05	3.10E-04	3.09E-04	5.44E-04	9.26E-05	3.10E-04	1.08E-04	2.82E-04	7.71E-06	9.42E-06	2.7669E-03
551365.18	4172723.37	2554.92137	3424.81536	1042.11073	8400.34372	1463.66464	2226.6641	2548.29852	1963.93327	575.73334	5972.24259	5148.26321	2848.48486	0.37552	0.38407	1.60E-04	1.98E-04	6.02E-05	4.16E-04	9.14E-05	1.39E-04	2.50E-04	4.03E-04	1.18E-04	4.08E-04	2.42E-04	1.34E-04	5.25E-06	6.51E-06	2.6315E-03
551360.82	4173124.98	2825.44766	4373.66544	815.86412	5990.81084	915.71965	4192.35494	2846.21922	2584.08225	461.35005	5131.36442	2866.60137	5143.239	0.41966	0.42409	1.76E-04	2.53E-04	4.72E-05	2.97E-04	5.72E-05	2.62E-04	2.80E-04	5.30E-04	9.46E-05	3.51E-04	1.35E-04	2.42E-04	5.87E-06	7.19E-06	2.7366E-03
551324.56	4172853.3	2592.86701	3680.80749	992.86546	8125.55159	1239.98127	2478.47921	2588.83558	2113.68161	554.64793	6121.89856	4502.97761	3144.27712	0.39269	0.40031	1.62E-04	2.13E-04	5.74E-05	4.03E-04	7.74E-05	1.55E-04	2.54E-04	4.33E-04	1.14E-04	4.19E-04	2.12E-04	1.48E-04	5.49E-06	6.78E-06	2.6587E-03
551331.86	4172818.83	2561.95106	3559.83859	1009.85331	8257.53292	1310.725	2400.1009	2556.39683	2044.63832	562.45365	6050.11413	4762.18514	3046.09046	0.39213	0.4004	1.60E-04	2.06E-04	5.84E-05	4.09E-04	8.19E-05	1.50E-04	2.51E-04	4.19E-04	1.15E-04	4.14E-04	2.24E-04	1.43E-04	5.49E-06	6.79E-06	2.6437E-03
551333.38	4173048.17	2808.86021	4483.54992	826.06886	6384.95447	952.38687	3598.03917	2822.86587	2653.72162	468.06	5382.82609	3173.11007	4491.4495	0.39739	0.4023	1.75E-04	2.59E-04	4.78E-05	3.16E-04	5.95E-05	2.25E-04	2.77E-04	5.44E-04	9.59E-05	3.68E-04	1.49E-04	2.11E-04	5.56E-06	6.82E-06	2.7409E-03
551360.88	4172731.73	2542.75321	3428.92489	1036.51151	8350.19053	1449.19869	2241.9863	2536.12286	1966.80964	572.90448	5947.77583	5105.89495	2864.31893	0.3765	0.38508	1.59E-04	1.98E-04	5.99E-05	4.14E-04	9.05E-05	1.40E-04	2.49E-04	4.03E-04	1.17E-04	4.07E-04	2.40E-04	1.35E-04	5.27E-06	6.53E-06	2.6241E-03
551431.46	4173233.52	3009.75058	4444.31464	809.83473	5236.69196	842.78237	4687.59252	3033.08964	2653.45146	462.44596	4758.15404	2402.15058	5699.82949	0.49614	0.50004	1.88E-04	2.57E-04	4.68E-05	2.60E-04	5.26E-05	2.93E-04	2.98E-04	5.44E-04	9.48E-05	3.25E-04	1.13E-04	2.68E-04	6.94E-06	8.47E-06	2.7549E-03
551356.58	4172740.1	2535.39957	3435.5666	1033.14038	8325.75582	1437.30192	2258.29454	2528.74377	1971.0183	571.33127	5937.10934	5079.40711	2881.77607	0.37847	0.38711	1.58E-04	1.99E-04	5.97E-05	4.13E-04	8.98E-05	1.41E-04	2.49E-04	4.04E-04	1.17E-04	4.06E-04	2.39E-04	1.35E-04	5.30E-06	6.56E-06	2.6217E-03
551483.21	4173279.21	3180.39172	4338.10002	773.08607	4788.88305	794.57298	5101.5679	3210.80186	2611.65514	442.94932	4380.22236	2199.54209	6158.52142	0.58681	0.59183	1.99E-04	2.51E-04	4.47E-05	2.37E-04	4.96E-05	3.19E-04	3.16E-04	5.35E-04	9.08E-05	3.00E-04	1.03E-04	2.89E-04	8.21E-06	1.00E-05	2.7518E-03
551577.22	4173331.21	3532.35371	4157.10358	762.35738	4020.06486	716.65456	5731.02849	3581.1897	2501.76575	438.73873	3841.20876	1840.79601	6853.54538	1.01176	1.02678	2.21E-04	2.40E-04	4.41E-05	1.99E-04	4.48E-05	3.58E-04	3.52E-04	5.13E-04	8.99E-05	2.63E-04	8.65E-05	3.22E-04	1.42E-05	1.74E-05	2.7643E-03
551554.9	4173322.37	3428.01829	4196.56494	759.75515	4208.02178	734.47324	5585.4029	3472.70857	2527.20404	436.34616	3978.73052	1920.62819	6684.29246	0.8504	0.86162	2.14E-04	2.43E-04	4.39E-05	2.09E-04	4.59E-05	3.49E-04	3.41E-04	5.18E-04	8.94E-05	2.72E-04	9.02E-05	3.14E-04	1.19E-05	1.46E-05	2.7555E-03
551330.15	4173039.22	2795.83883	4458.59272	828.75738	6421.73644	953.75994	3505.46372	2808.6537	2634.68477	469.76773	5413.78624	3198.91343	4383.23858	0.39381	0.39919	1.75E-04	2.58E-04	4.79E-05	3.18E-04	5.96E-05	2.19E-04	2.76E-04	5.40E-04	9.63E-05	3.70E-04	1.50E-04	2.06E-04	5.51E-06	6.76E-06	2.7281E-03
551366.74	4173141.72	2820.02293	4329.33356	814.46029	5848.39725	901.44375	4240.86186	2841.10139	2554.6732	460.81181	5072.56906	2769.69768	5189.78287	0.42348	0.42753	1.76E-04	2.50E-04	4.71E-05	2.90E-04	5.63E-05	2.65E-04	2.79E-04	5.24E-04	9.45E-05	3.47E-04	1.30E-04	2.44E-04	5.93E-06	7.24E-06	2.7158E-03
551352.28	4172748.46	2520.08957	3423.02304	1024.38335	8241.9479	1415.73499	2264.62701	2513.50299	1964.55091	566.86903	5889.96349	5011.53138	2886.60156	0.37718	0.38575	1.57E-04	1.98E-04	5.92E-05	4.09E-04	8.84E-05	1.41E-04	2.47E-04	4.03E-04	1.16E-04	4.03E-04	2.35E-04	1.36E-04	5.28E-06	6.54E-06	2.6044E-03
551332.54	4172809.81	2536.02462	3501.29749	1004.08408	8171.65016	1313.89603	2363.65094	2530.28468	2011.40031	558.79439	5959.95236	4754.12146	3000.36125	0.38641	0.39466	1.58E-04	2.02E-04	5.81E-05	4.05E-04	8.21E-05	1.48E-04	2.49E-04	4.12E-04	1.15E-04	4.08E-04	2.23E-04	1.41E-04	5.41E-06	6.69E-06	2.6130E-03
551326.93	4173030.27	2778.70114	4420.71583	831.30747	6452.64781	954.70822	3411.05755	2790.34003	2606.9907	471.38031	5439.76443	3222.94199	4271.74873	0.39022	0.39567	1.73E-04	2.56E-04	4.81E-05	3.20E-04	5.96E-05	2.13E-04	2.74E-04	5.34E-04	9.66E-05	3.72E-04	1.51E-04	2.01E-04	5.46E-06	6.70E-06	2.7111E-03
551318.63	4172877.31	2593.3028	3741.29129	969.10917	7842.71374	1173.45109	2525.0588	2590.67364	2150.26869	542.77317	6063.53396	4228.30504	3201.71391	0.38672	0.39383	1.62E-04	2.16E-04	5.60E-05	3.89E-04	7.33E-05	1.58E-04	2.55E-04	4.41E-04	1.11E-04	4.15E-04	1.99E-04	1.50E-04	5.41E-06	6.67E-06	2.6364E-03
551391.56	4172662.28	2619.56488	3207.7961	1070.52301	8349.90291	1518.02149	2042.94924	2612.39922	1844.17217	591.41278	5841.22245	5251.90584	2634.6457	0.34869	0.35613	1.64E-04	1.85E-04	6.19E-05	4.14E-04	9.48E-05	1.28E-04	2.57E-04	3.78E-04	1.21E-04	3.99E-04	2.47E-04	1.24E-04	4.88E-06	6.03E-06	2.5840E-03
551672.04	4172580.71	4928.90593	2269.53644	1911.38479	5052.8017	2964.55391	1524.25444	4876.80061	1354.40319	1015.0059	3967.1597	5647.94178	2049.15561	0.19001	0.19207	3.08E-04	1.31E-04	1.11E-04	2.50E-04	1.85E-04	9.52E-05	4.79E-04	2.78E-04	2.08E-04	2.71E-04	2.65E-04	9.62E-05	2.66E-06	3.25E-06	2.6841E-03
551323.7	4173021.31	2759.64992	4373.9563	834.60472	6485.20418	956.20042	3317.86519	2770.10162	2573.34454	473.40337	5466.14731	3246.69249	4160.86052	0.3866	0.3921	1.72E-04	2.53E-04	4.83E-05	3.21E-04	5.97E-05	2.07E-04	2.72E-04	5.27E-04	9.70E-05	3.74E-04	1.52E-04	1.95E-04	5.41E-06	6.64E-06	2.6924E-03
551648.9	4172566.87	4618.54499	2334.50694	1877.33751	5234.40073	2969.99607	1559.43403	4571.44937	1394.40973	1000.8751	4143.51851	5622.33935	2089.20413	0.18802	0.18952	2.88E-04	1.35E-04	1.09E-04	2.59E-04	1.85E-04	9.74E-05	4.49E-04	2.86E-04	2.05E-04	2.83E-04	2.64E-04	9.81E-05	2.63E-06	3.21E-06	2.6660E-03
551492.67	4173288.12	3169.82815	4230.70158	757.39285	4651.25304	779.49303	5084.73894	3201.68115	2548.32447	433.97137	4253.46601	2147.2679	6126.71983	0.60145	0.60716	1.98E-04	2.45E-04	4.38E-05	2.31E-04	4.87E-05	3.18E-04	3.15E-04	5.22E-04	8.90E-05	2.91E-04	1.01E-04	2.88E-04	8.42E-06	1.03E-05	2.7073E-03
551532.17	4173313.14	3300.30435	4158.67486	749.72915	4345.43791	746.78615	5344.82596	3340.09999	2504.51865	429.91241	4050.55836	1990.99674	6407.75655	0.72786	0.73562	2.06E-04	2.40E-04	4.33E-05	2.15E-04	4.66E-05	3.34E-04	3.28E-04	5.13E-04	8.81E-05	2.77E-04	9.35E-05	3.01E-04	1.02E-05	1.25E-05	2.7096E-03
551315.99	4172912.64	2630.06334	3904.60731	940.88248	7474.77279	1091.40827	2659.22635	2629.7268	2249.08292	529.94333	6011.53117	3880.16865	3367.94034	0.38454	0.39122	1.64E-04	2.26E-04	5.44E-05	3.71E-04	6.82E-05	1.66E-04	2.58E-04	4.61E-04	1.09E-04	4.11E-04	1.82E-04	1.58E-04	5.38E-06	6.63E-06	2.6408E-03
551322.87	4172842.92	2542.16999	3565.71626	979.00979	7974.45689	1237.4269	2407.96751	2537.82531	2048.21385	546.4554	5961.9476	4476.52798	3055.20682	0.38297	0.3905	1.59E-04	2.06E-04	5.66E-05	3.95E-04	7.73E-05	1.50E-04	2.49E-04	4.20E-04	1.12E-04	4.08E-04	2.10E-04	1.43E-04	5.36E-06	6.62E-06	2.5992E-03
551372.66	4173158.46	2801.43973	4262.95706	807.76052	5683.17382	883.87803	4238.85139	2822.46111	2514.57069	457.47047	4974.5897	2672.62067	5178.27546	0.42427	0.42795	1.75E-04	2.46E-04	4.67E-05	2.82E-04	5.52E-05	2.65E-04	2.77E-04	5.15E-04	9.38E-05	3.40E-04	1.26E-04	2.43E-04	5.94E-06	7.25E-06	2.6785E-03
551333.62	4172798.58	2508.13986	3440.49177	998.0621	8077.98665	1318.99914	2323.96263	2502.21388	1976.56185	554.87169	5862.74928	4747.5526	2951.00839	0.38002	0.38823	1.57E-04	1.99E-04	5.77E-05	4.00E-04	8.24E-05	1.45E-04	2.46E-04	4.05E-04	1.14E-04	4.01E-04	2.23E-04	1.39E-04	5.32E-06	6.58E-06	2.5804E-03
551407.55	4172628.59	2683.03647	3062.52443	1110.52494	8162.91013	1584.77189	1947.36966	2673.74643	1764.35021	613.81361	5684.63414	5284.0824	2516.13982	0.33208	0.33872	1.68E-04	1.77E-04	6.42E-05	4.05E-04	9.90E-05	1.22E-04	2.63E-04	3.62E-04	1.26E-04	3.89E-04	2.48E-04	1.18E-04	4.65E-06	5.74E-06	2.5498E-03
551374.67	4172689.94	2533.24347	3263.46488	1028.36773	8182.63348	1452.72038	2099.36028	2526.91506	1872.75673	567.96927	5789.81021	5056.70445	2697.56597	0.35314	0.36089	1.58E-04	1.89E-04	5.95E-05	4.06E-04	9.07E-05	1.31E-04	2.48E-04	3.84E-04	1.16E-04	3.96E-04	2.38E-04	1.27E-04	4.94E-06	6.12E-06	2.5536E-03
551320.45	4173012.29	2733.39275	4309.0018	836.39771	6499.8555	956.16916	3220.74354	2742.65762	2529.07651	474.48259	5475.90888	3240.21353	4043.89788	0.38196	0.38749	1.71E-04	2.49E-04	4.84E-05	3.22E-04	5.97E-05	2.01E-04	2.70E-04	5.18E-04	9.73E-05	3.74E-04	1.52E-04	1.90E-04	5.34E-06	6.57E-06	2.6650E-03
551564.5	4173331.41	3407.13237	4078.42533	747.56784	4043.73414	714.33911	5477.78482	3452.66455	2454.8597	429.63689	3838.09325	1852.13972	6557.59104	0.88486	0.89593	2.13E-04	2.36E-04	4.32E-05	2.00E-04	4.46E-05	3.42E-04	3.39E-04	5.03E-04	8.81E-05	2.62E-04	8.70E-05	3.08E-04	1.24E-05	1.52E-05	2.6946E-03
551604.33	4173342.73	3608.92095	3969.49432	749.37902	3721.91301	685.30057	5679.02603	3661.28223	2383.47836	432.48982	3578.66206	1727.87564	6800.42834	1.28093	1.30928	2.25E-04	2.29E-04	4.33E-05	1.84E-04	4.28E-05	3.55E-04	3.60E-04	4.89E-04	8.87E-05	2.45E-04	8.12E-05	3.19E-04	1.79E-05	2.22E-05	2.7026E-03
551347.98	4172756.83	2485.88521	3372.88023	1004.1882	8028.37754	1375.02101	2251.44343	2479.56119	1937.17127	556.1885	5764.26625	4857.72666	2866.42481	0.36912	0.37732	1.55E-04	1.95E-04	5.81E-05	3.98E-04	8.59E-05	1.41E-04	2.44E-04	3.97E-04	1.14E-04	3.94E-04	2.28E-04	1.35E-04	5.16E-06	6.39E-06	2.5561E-03
551734	4172617.51	5342.86268	2059.83374	1687.62449	5313.35842	2524.52864	1383.12857	5288.27582	1217.70772	898.91697	3672.362	5714.76399	1861.30604	0.2394	0.24492	3.34E-04	1.19E-04	9.76E-05	2.63E-04	1.58E-04	8.64E-05	5.20E-04	2.50E-04	1.84E-04	2.51E-04	2.68E-04	8.74E-05	3.35E-06	4.15E-06	2.6259E-03
551376.24	4173168.42	2791.36007	4226.23624	802.95019	5583.07065	871.43277	4225.81933	2812.22823	2493.05821	455.04348	4911.52567	2614.0739	5159.10502	0.42307	0.42716	1.74E-04	2.44E-04	4.64E-05	2.77E-04	5.44E-05	2.64E-04	2.76E-04	5.11E-04	9.33E-05	3.36E-04	1.23E-04	2.42E-04	5.92E-06	7.24E-06	2.6550E-03
551502.13	4173297.03	3167.43519	4144.1588	745.46856	4524.48527	764.89461	5074.2439	3200.95309	2495.92687	427.09547	4147.15007	2090.38337	6105.14756	0.61902	0.62436	1.98E-04	2.40E-04	4.31E-05	2.24E-04	4.78E-05	3.17E-04	3.15E-04	5.12E-04	8.75E-05	2.84E-04	9.82E-05	2.87E-04	8.66E-06	1.06E-05	2.6710E-03
551714.28	4172607.25	5301.90153	2116.07279	1785.56601	5000.08342	2647.79154	1427.49087	5246.22668	1255.54656	947.99975	3678.4681	5548.1717	1923.07345	0.21319	0.21738	3.31E-04	1.22E-04	1.03E-04	2.48E-04	1.65E-04	8.92E-05	5.16E-04	2.57E-04	1.94E-04	2.52E-04	2.61E-04	9.03E-05	2.98E-06	3.68E-06	2.6355E-03
551418.77	4173228.26	2905.89468	4289.81177	796.4555	5174.06498	830.77032	4447.16592	2927.75141	2553.78575	453.20442	4676.70303	2383.63312	5415.07487	0.46383	0.46753	1.81E-04	2.48E-04	4.60E-05	2.56E-04	5.19E-05	2.78E-04	2.88E-04	5.23E-04	9.29E-05	3.20E-04	1.12E-04	2.54E-04	6.49E-06	7.92E-06	2.6663E-03
551335.72	4172788.79	2485.11357	3391.79031	991.8671	7977.15776	1320.93938	2292.17455	2479.11248	1948.81722	550.97513	5774.70503	4726.6171	2911.59178	0.37339	0.38149	1.55E-04	1.96E-04	5.73E-05	3.95E-04	8.25E-05	1.43E-04	2.44E-04	3.99E-04	1.13E-04	3.95E-04	2.22E-04	1.37E-04	5.22E-06	6.46E-06	2.5511E-03
551660.21	4173343.57	4092.18687	3744.15459	740.4474	3326.55191	652.57926	5728.94665	4159.67422	2219.70819	430.3791	3208.34311	1594.91959	6907.77067	3.87928	4.13047	2.56E-04	2.16E-04	4.28E-05	1.65E-04	4.08E-05	3.58E-04	4.09E-04	4.55E-04	8.82E-05	2.19E-04	7.49E-05	3.24E-04	5.43E-05	7.00E-05	2.7734E-03

551360.15	4172712.05	2452.66537	3239.72243	990.16754	7851.52404	1387.20742	2118.02411	2446.67683	1859.16131	547.12683	5613.45487	4808.67466	2710.71965	0.34787	0.35548	1.53E-04	1.87E-04	5.72E-05	3.89E-04	8.66E-05	1.32E-04	2.41E-04	3.81E-04	1.12E-04	3.84E-04	2.26E-04	1.27E-04	4.87E-06	6.02E-06	2.4875E-03
551324.11	4173051.51	2685.19474	4206.17334	787.24756	6010.94134	908.5335	3401.07675	2698.65781	2489.49114	445.98935	5060.06945	3008.03063	4245.39158	0.37292	0.37739	1.68E-04	2.43E-04	4.55E-05	2.98E-04	5.67E-05	2.12E-04	2.65E-04	5.10E-04	9.14E-05	3.46E-04	1.41E-04	1.99E-04	5.22E-06	6.40E-06	2.5888E-03
551315.26	4172856.65	2485.70663	3491.36548	939.43868	7559.18161	1165.28304	2367.53644	2482.37893	2006.74704	525.09513	5740.43828	4172.72964	3003.69037	0.36534	0.37212	1.55E-04	2.02E-04	5.43E-05	3.75E-04	7.28E-05	1.48E-04	2.44E-04	4.11E-04	1.08E-04	3.93E-04	1.96E-04	1.41E-04	5.11E-06	6.31E-06	2.5107E-03
551310.78	4172985.39	2642.17695	4071.60526	842.19982	6528.22585	957.99139	2942.78357	2648.13737	2373.42407	477.60605	5473.12279	3270.47694	3706.06477	0.36818	0.37389	1.65E-04	2.35E-04	4.87E-05	3.24E-04	5.98E-05	1.84E-04	2.60E-04	4.87E-04	9.79E-05	3.74E-04	1.54E-04	1.74E-04	5.15E-06	6.34E-06	2.5744E-03
551355.83	4172720.45	2440.75679	3245.05652	985.08769	7807.60434	1375.41278	2133.0059	2434.75554	1862.53338	544.49567	5591.82595	4772.38412	2726.3229	0.34901	0.35666	1.52E-04	1.88E-04	5.70E-05	3.87E-04	8.59E-05	1.33E-04	2.39E-04	3.82E-04	1.12E-04	3.82E-04	2.24E-04	1.28E-04	4.88E-06	6.04E-06	2.4813E-03
551385.51	4173194.17	2759.31221	4117.03573	783.13242	5304.07049	836.41407	4179.57632	2779.57473	2443.3721	444.99135	4729.64696	2463.24606	5060.42992	0.41605	0.41961	1.72E-04	2.38E-04	4.53E-05	2.63E-04	5.22E-05	2.61E-04	2.73E-04	5.01E-04	9.12E-05	3.23E-04	1.16E-04	2.38E-04	5.82E-06	7.11E-06	2.5868E-03
551479.19	4173287.61	3035.87787	4067.43684	737.68481	4565.39196	765.66303	4754.3102	3064.65415	2449.28651	422.50726	4146.23136	2126.6734	5743.67102	0.54878	0.55364	1.90E-04	2.35E-04	4.26E-05	2.26E-04	4.78E-05	2.97E-04	3.01E-04	5.02E-04	8.66E-05	2.84E-04	9.99E-05	2.70E-04	7.68E-06	9.38E-06	2.5986E-03
551357.46	4173145	2701.09556	4079.15817	780.06691	5563.80411	866.193	3979.02917	2720.96927	2405.69891	441.24698	4812.45141	2653.8694	4874.30288	0.3987	0.40218	1.69E-04	2.36E-04	4.51E-05	2.76E-04	5.41E-05	2.49E-04	2.67E-04	4.93E-04	9.04E-05	3.29E-04	1.25E-04	2.29E-04	5.58E-06	6.82E-06	2.5741E-03
551351.51	4172728.86	2431.96712	3249.87919	981.47275	7777.59551	1364.80029	2147.83249	2425.93542	1865.79159	542.72061	5577.07735	4745.16082	2741.85193	0.3506	0.3583	1.52E-04	1.88E-04	5.67E-05	3.86E-04	8.52E-05	1.34E-04	2.38E-04	3.82E-04	1.11E-04	3.81E-04	2.23E-04	1.29E-04	4.91E-06	6.07E-06	2.4776E-03
551668.78	4172571.41	4688.72394	2195.98789	1808.73636	4842.23514	2786.56271	1480.55473	4640.57661	1310.07397	962.56224	3819.54173	5313.61029	1988.21812	0.17979	0.18152	2.93E-04	1.27E-04	1.05E-04	2.40E-04	1.74E-04	9.25E-05	4.56E-04	2.69E-04	1.97E-04	2.61E-04	2.50E-04	9.34E-05	2.52E-06	3.08E-06	2.5626E-03
551320.89	4173042.56	2675.70788	4189.2976	790.52496	6049.74954	910.42472	3319.91525	2688.06341	2475.73549	448.02717	5094.20486	3032.17617	4150.98231	0.37035	0.37488	1.67E-04	2.42E-04	4.57E-05	3.00E-04	5.69E-05	2.07E-04	2.64E-04	5.07E-04	9.18E-05	3.48E-04	1.42E-04	1.95E-04	5.18E-06	6.35E-06	2.5799E-03
551322.06	4172818.27	2447.6757	3354.54487	954.33793	7670.95279	1234.26297	2279.86952	2442.72721	1928.39877	531.72278	5653.12796	4418.3277	2893.31875	0.36365	0.37102	1.53E-04	1.94E-04	5.52E-05	3.80E-04	7.71E-05	1.42E-04	2.40E-04	3.95E-04	1.09E-04	3.87E-04	2.08E-04	1.36E-04	5.09E-06	6.29E-06	2.4874E-03
551608.04	4173351.15	3536.75488	3814.87014	729.30649	3521.14962	664.93062	5429.82566	3587.8757	2286.67916	421.08275	3442.9421	1670.56911	6514.74446	1.26329	1.28773	2.21E-04	2.21E-04	4.22E-05	1.75E-04	4.15E-05	3.39E-04	3.53E-04	4.69E-04	8.63E-05	2.35E-04	7.85E-05	3.06E-04	1.77E-05	2.18E-05	2.6059E-03
551317.66	4173033.6	2657.89296	4152.46837	791.98795	6069.12692	910.3348	3231.72597	2669.18063	2449.55227	449.00668	5111.20373	3051.40442	4046.85028	0.36665	0.37122	1.66E-04	2.40E-04	4.58E-05	3.01E-04	5.69E-05	2.02E-04	2.62E-04	5.02E-04	9.20E-05	3.50E-04	1.43E-04	1.90E-04	5.13E-06	6.29E-06	2.5622E-03
551347.19	4172737.26	2415.16777	3235.9144	972.65655	7690.35862	1344.70982	2153.00458	2409.18664	1858.56493	538.16061	5526.29968	4679.56162	2745.18939	0.34913	0.35676	1.51E-04	1.87E-04	5.62E-05	3.81E-04	8.40E-05	1.34E-04	2.37E-04	3.81E-04	1.10E-04	3.78E-04	2.20E-04	1.29E-04	4.89E-06	6.05E-06	2.4594E-03
551309.31	4172880.55	2489.26255	3553.76002	919.38787	7322.16214	1108.13698	2415.65161	2487.22437	2044.39015	515.17282	5695.55245	3940.86204	3063.19484	0.3616	0.368	1.55E-04	2.05E-04	5.32E-05	3.63E-04	6.92E-05	1.51E-04	2.44E-04	4.19E-04	1.06E-04	3.89E-04	1.85E-04	1.44E-04	5.06E-06	6.24E-06	2.4960E-03
551551.57	4173331.41	3231.86873	3913.89045	722.91043	4030.67453	708.70567	5116.2047	3273.58241	2359.39617	414.7424	3776.38538	1857.6477	6128.94129	0.77505	0.78343	2.02E-04	2.26E-04	4.18E-05	2.00E-04	4.43E-05	3.20E-04	3.22E-04	4.84E-04	8.50E-05	2.58E-04	8.73E-05	2.88E-04	1.08E-05	1.33E-05	2.5814E-03
551307.55	4172976.43	2607.65168	3980.89934	843.27798	6527.22221	958.96187	2853.80229	2612.61395	2316.13603	478.01927	5453.96694	3280.30366	3597.21262	0.36303	0.36802	1.63E-04	2.30E-04	4.88E-05	3.24E-04	5.99E-05	1.78E-04	2.57E-04	4.75E-04	9.80E-05	3.73E-04	1.54E-04	1.69E-04	5.08E-06	6.24E-06	2.5403E-03
551322.77	4172808.8	2424.1755	3301.79362	949.74338	7600.47341	1238.34074	2247.0326	2419.02155	1898.2807	528.72787	5574.84837	4416.6192	2852.06536	0.35878	0.36615	1.51E-04	1.91E-04	5.49E-05	3.77E-04	7.73E-05	1.40E-04	2.38E-04	3.89E-04	1.08E-04	3.81E-04	2.07E-04	1.34E-04	5.02E-06	6.20E-06	2.4607E-03
551658.01	4172564.49	4521.54807	2208.6355	1777.94007	4860.58778	2755.36155	1487.98641	4476.15294	1318.37644	948.25351	3856.21709	5235.23904	1995.05954	0.17635	0.17778	2.82E-04	1.28E-04	1.03E-04	2.41E-04	1.72E-04	9.29E-05	4.40E-04	2.70E-04	1.94E-04	2.64E-04	2.46E-04	9.37E-05	2.47E-06	3.01E-06	2.5321E-03
551388.6	4173202.76	2742.65737	4067.79203	774.88182	5199.52312	824.45307	4135.22677	2762.67172	2415.6138	440.53263	4649.65208	2415.01072	5007.09957	0.41362	0.41707	1.71E-04	2.35E-04	4.48E-05	2.58E-04	5.15E-05	2.58E-04	2.72E-04	4.95E-04	9.03E-05	3.18E-04	1.13E-04	2.35E-04	5.79E-06	7.07E-06	2.5552E-03
551488.76	4173296.61	3030.46033	3977.97279	724.3157	4443.36358	752.14297	4746.87916	3060.7745	2395.86363	414.82083	4038.66386	2072.45806	5724.85197	0.56246	0.56752	1.89E-04	2.30E-04	4.19E-05	2.20E-04	4.70E-05	2.96E-04	3.01E-04	4.91E-04	8.50E-05	2.76E-04	9.73E-05	2.69E-04	7.87E-06	9.62E-06	2.5617E-03
551373.18	4172676.87	2460.28497	3107.45954	990.18054	7749.95229	1392.20639	2006.94522	2454.42607	1785.18692	547.16725	5502.16944	4792.50653	2580.93793	0.33038	0.33733	1.54E-04	1.80E-04	5.72E-05	3.84E-04	8.70E-05	1.25E-04	2.41E-04	3.66E-04	1.12E-04	3.76E-04	2.25E-04	1.21E-04	4.62E-06	5.72E-06	2.4392E-03
551314.44	4173024.65	2639.86675	4110.54847	794.70443	6094.8485	911.33712	3146.44037	2650.0519	2419.64375	450.70136	5133.0814	3053.63489	3945.3756	0.36315	0.3678	1.65E-04	2.38E-04	4.59E-05	3.02E-04	5.69E-05	1.97E-04	2.60E-04	4.96E-04	9.24E-05	3.51E-04	1.43E-04	1.85E-04	5.08E-06	6.23E-06	2.5439E-03
551363.37	4173161.74	2672.26748	3997.8235	771.72558	5402.76236	848.61001	3959.09109	2692.06605	2357.64026	436.80506	4706.187	2569.76784	4840.91864	0.3974	0.40142	1.67E-04	2.31E-04	4.46E-05	2.68E-04	5.30E-05	2.47E-04	2.65E-04	4.83E-04	8.95E-05	3.22E-04	1.21E-04	2.27E-04	5.56E-06	6.80E-06	2.5304E-03
551323.88	4172797.11	2406.5848	3261.76214	949.22856	7572.79284	1250.76815	2219.24807	2401.16429	1875.14122	527.85827	5522.10707	4446.95603	2817.63412	0.35581	0.36325	1.50E-04	1.89E-04	5.49E-05	3.75E-04	7.81E-05	1.39E-04	2.36E-04	3.84E-04	1.08E-04	3.78E-04	2.09E-04	1.32E-04	4.98E-06	6.16E-06	2.4444E-03
551955.01	4173205.79	4827.05793	3359.40559	572.31029	2534.5756	494.00964	5640.76166	4967.89098	1918.08606	335.17038	2515.62501	1188.40654	6867.45414	0.39872	0.39186	3.01E-04	1.94E-04	3.31E-05	1.26E-04	3.09E-05	3.52E-04	4.88E-04	3.93E-04	6.87E-05	1.72E-04	5.58E-05	3.23E-04	5.58E-06	6.64E-06	2.5503E-03
551387.79	4172641.64	2517.26665	2985.9753	1021.01363	7714.53377	1440.36411	1914.46259	2510.28732	1718.93634	564.39838	5424.11063	4876.7172	2470.08699	0.31823	0.32467	1.57E-04	1.73E-04	5.90E-05	3.82E-04	9.00E-05	1.20E-04	2.47E-04	3.52E-04	1.16E-04	3.71E-04	2.29E-04	1.16E-04	4.45E-06	5.50E-06	2.4215E-03
551651.45	4173353.8	3841.98006	3605.76876	717.36317	3249.47296	636.34761	5387.20342	3902.76374	2142.82959	416.3174	3139.37891	1562.3872	6497.4863	2.70508	2.83332	2.40E-04	2.08E-04	4.15E-05	1.61E-04	3.97E-05	3.36E-04	3.84E-04	4.39E-04	8.53E-05	2.15E-04	7.34E-05	3.05E-04	3.79E-05	4.80E-05	2.6144E-03
551313.57	4172846.32	2433.23248	3374.70567	924.1046	7397.79288	1159.0291	2295.90464	2429.62111	1940.36517	516.13595	5577.29954	4132.17056	2913.11466	0.35496	0.3616	1.52E-04	1.95E-04	5.34E-05	3.67E-04	7.24E-05	1.43E-04	2.39E-04	3.98E-04	1.06E-04	3.81E-04	1.94E-04	1.37E-04	4.97E-06	6.13E-06	2.4487E-03
551304.32	4172967.46	2571.05321	3886.2348	843.43496	6517.84941	959.87994	2766.61077	2575.10249	2257.26565	477.83664	5423.23228	3289.51868	3490.31218	0.35747	0.36266	1.61E-04	2.25E-04	4.88E-05	3.23E-04	6.00E-05	1.73E-04	2.53E-04	4.63E-04	9.79E-05	3.71E-04	1.55E-04	1.64E-04	5.00E-06	6.15E-06	2.5040E-03
551664.64	4173351.88	3973.09165	3551.48383	713.53445	3187.42321	630.30184	5357.76711	4038.35068	2102.77257	414.71918	3062.29926	1538.26592	6475.70623	3.92974	4.18403	2.48E-04	2.05E-04	4.13E-05	1.58E-04	3.94E-05	3.35E-04	3.97E-04	4.31E-04	8.50E-05	2.09E-04	7.23E-05	3.04E-04	5.50E-05	7.09E-05	2.6513E-03
551561.27	4173340.55	3241.57557	3848.73075	716.74643	3891.58633	690.78789	5079.51063	3284.35685	2317.02681	411.60655	3672.08073	1795.32837	6089.16871	0.80732	0.81751	2.02E-04	2.23E-04	4.14E-05	1.93E-04	4.31E-05	3.17E-04	3.23E-04	4.75E-04	8.44E-05	2.51E-04	8.43E-05	2.86E-04	1.13E-05	1.39E-05	2.5484E-03
551638.27	4173355.72	3714.8314	3645.30834	717.95013	3304.5546	640.89312	5369.9759	3771.64288	2172.72603	416.01512	3208.7494	1583.39918	6466.40606	1.96946	2.04756	2.32E-04	2.11E-04	4.15E-05	1.64E-04	4.00E-05	3.35E-04	3.71E-04	4.45E-04	8.53E-05	2.19E-04	7.44E-05	3.04E-04	2.76E-05	3.47E-05	2.5846E-03
551498.32	4173305.62	3034.62616	3911.00912	714.85018	4333.43563	738.8779	4748.14279	3066.56375	2354.58527	409.36762	3951.63533	2018.10283	5718.95106	0.57849	0.58361	1.89E-04	2.26E-04	4.13E-05	2.15E-04	4.61E-05	2.97E-04	3.01E-04	4.83E-04	8.39E-05	2.70E-04	9.48E-05	2.69E-04	8.09E-06	9.89E-06	2.5340E-03
551399.76	4172622.17	2564.6168	2914.26491	1048.50023	7623.75824	1484.71516	1868.08879	2556.28168	1679.83329	579.83918	5349.38298	4906.7541	2412.4958	0.30995	0.31597	1.60E-04	1.68E-04	6.06E-05	3.78E-04	9.27E-05	1.17E-04	2.51E-04	3.44E-04	1.19E-04	3.66E-04	2.30E-04	1.13E-04	4.34E-06	5.35E-06	2.4103E-03
551342.86	4172745.67	2386.03346	3195.94892	956.14402	7519.60592	1311.58154	2144.31688	2380.24776	1836.72816	529.44117	5423.67307	4558.17994	2730.91473	0.34327	0.35066	1.49E-04	1.85E-04	5.53E-05	3.73E-04	8.19E-05	1.34E-04	2.34E-04	3.76E-04	1.09E-04	3.71E-04	2.14E-04	1.28E-04	4.80E-06	5.94E-06	2.4206E-03
551311.19	4173015.62	2611.46342	4045.51692	794.51698	6091.13033	909.30171	3053.53409	2620.56238	2376.32312	450.66112	5129.65389	3056.70311	3833.22506	0.35809	0.36277	1.63E-04	2.34E-04	4.59E-05	3.02E-04	5.68E-05	1.91E-04	2.58E-04	4.87E-04	9.24E-05	3.51E-04	1.44E-04	1.80E-04	5.01E-06	6.15E-06	2.5149E-03
551583.68	4173349.48	3335.45332	3799.38129	717.72058	3707.78239	672.40212	5178.8031	3381.41051	2284.20109	413.08948	3534.46772	1718.01229	6209.43003	0.95281	0.96712	2.08E-04	2.20E-04	4.15E-05	1.84E-04	4.20E-05	3.23E-04	3.32E-04	4.68E-04	8.47E-05	2.42E-04	8.07E-05	2.92E-04	1.33E-05	1.64E-05	2.5477E-03
551428.05	4173250.63	2822.07999	4038.32432	754.09089	4822.69642	788.46581	4244.06971	2843.58759	2417.8856	430.71416	4337.54714	2254.97525	5166.85016	0.45654	0.45983	1.76E-04	2.33E-04	4.36E-05	2.39E-04	4.92E-05	2.65E-04	2.80E-04	4.96E-04	8.83E-05	2.97E-04	1.06E-04	2.43E-04	6.39E-06	7.79E-06	2.5295E-03
551325.99	4172787.28	2386.8404	3220.34512	944.56034	7493.52019	1253.88086	2192.41181	2381.3234	1851.51004	524.84224	5449.3693	4435.15335	2784.29272	0.35041	0.35777	1.49E-04	1.86E-04	5.46E-05	3.71E-04	7.83E-05	1.37E-04	2.34E-04	3.80E-04	1.08E-04	3.73E-04	2.08E-04	1.31E-04	4.90E-06	6.06E-06	2.4204E-03
551366.97	4173171.75	2655.90562	3952.34515	766.29084	5304.65953	837.61605	3936.11379	2675.53461	2331.47296	433.96815	4639.84782	2518.80779	4809.28925	0.39671	0.40063	1.66E-04	2.29E-04	4.43E-05	2.63E-04	5.23E-05	2.46E-04	2.63E-04	4.78E-04	8.90E-05	3.17E-04	1.18E-04	2.26E-04	5.55E-06	6.79E-06	2.5034E-03
551391.69	4173211.35	2720.21543	4007.3058	765.53552	5086.51079	812.53285	4047.5506	2739.93121	2371.79664	435.44225	4562.18768	2368.77703	4939.14469	0.41336	0.41615	1.70E-04	2.32E-04	4.43E-05	2.52E-04	5.07E-05	2.53E-04	2.69E-04	4.86E-04	8.93E-05	3.12E-04	1.11E-04	2.32E-04	5.78E-06	7.05E-06	2.5143E-03
551367.01	4172683.76	2418.89382	3088.53113	970.40217	7594.19607	1361.40673	2005.31659	2413.27484	1773.89373	536.24877	5416.91799	4675.71948	2575.4586	0.32678	0.33364	1.51E-04	1.79E-04	5.61E-05	3.76E-04	8.50E-05	1.25E-04	2.37E-04	3.64E-04	1.10E-04	3.70E-04	2.20E-04	1.21E-04	4.57E-06	5.65E-06	2.4044E-03
551677.83	4173349.97	4097.63768	3479.88521	706.19348	3118.66997	622.69716	5276.45936	4167.69749	2052.3341	410.99438	2977.79602	1511.36923	6392.95294	6.3722	7.002	2.56E-04	2.01E-04	4.08E-05	1.55E-04	3.89E-05	3.30E-04	4.10E-04	4.21E-04	8.42E-05	2.04E-04	7.10E-05	3.00E-04	8.92E-05	1.19E-04	2.7182E-03
551595	4173353.05	3378.93363	3752.70555	715.95457	3611.54326	663.01752	5197.91139	3426.3522	2254.40289	412.56178	3452.89241	1681.49562	6234.79758	1.0498	1.06524	2.11E-04	2.17E-04	4.14E-05	1.79E-04	4.14E-05	3.25E-04	3.37E-04	4.62E-04	8.46E-05	2.36E-04	7.90E-05	2.93E-04	1.47E-05	1.81E-05	2.5386E-03
551436.62	4173259.69	2833.04981	4000.00976	744.28796	4734.39819	778.46352	4270.68893	2855.28065	2401.41219	425.4612	4249.43139	2220.48396	5194.18781	0.46482	0.46815	1.77E-04	2.31E-04	4.30E-05	2.35E-04	4.86E-05	2.67E-04	2.81E-04	4.92E-04	8.72E-05	2.91E-04	1.04E-04	2.44E-04	6.50E-06	7.93E-06	2.5146E-03
551307.96	4173006.66	2586.02353	3982.13153	796.52193	6103.39603	909.57404	2967.58586	2594.06196	2333.74117	451.80554	5136.75803	3065.28669	3729.31266	0.35415	0.35871	1.61E-04	2.30E-04	4.61E-05	3.03E-04	5.68E-05	1.85E-04	2.55E-04	4.78E-04	9.26E-05	3.51E-04	1.44E-04	1.75E-04	4.96E-06	6.08E-06	2.4898E-03
551507.88	4173314.63	3042.16827	3855.5431	707.65839	4227.12813	725.37269	4746.47322	3075.67065	2320.01509	405.25694	3873.24103	1964.20674	5711.86256	0.59647	0.60172	1.90E-04	2.23E-04	4.09E-05	2.10E-04	4.53E-05	2.96E-04	3.02E-04	4.76E-04	8.31E-05	2.65E-04	9.23E-05	2.68E-04	8.35E-06	1.02E-05	2.5100E-03
551691.01	4173348.05	4247.48525	3415.36075	696.84666	3047.44179	614.1863	5187.51832	4323.55408	2003.56121	406.12715	2899.16652	1480.82169	6305.73106	12.69787	14.71007	2.65E-04	1.97E-04	4.03E-05	1.51E-04	3.84E-05	3.24E-04	4.25E-04	4.11E-04	8.32E-05	1.98E-04	6.96E-05	2.96E-04	1.78E-04	2.49E-04	2.9262E-03
551307.63	4172870.26	2432.02558	3424.17865	902.516	7167.07315	1099.0667	2332.41382	2429.66706	1969.62948	505.19652	5527.806	3895.37751	2958.81283	0.34959	0.35577	1.52E-04	1.98E-04	5.22E-05	3.55E-04	6.86E-05	1.46E-04	2.39E-04	4.04E-04	1.04E-04	3.78E-04	1.83E-04	1.39E-04	4.89E-06	6.03E-06	2.4286E-03
551338.54	4172754.07	2369.07285	3173.33805	946.15584	7424.66211	1288.53507	2142.75988	2363.38588	1824.46434	524.28576	5367.95767	4483.70463	2726.30166	0.34082	0.34808	1.48E-04	1.83E-04	5.47E-05	3.68E-04	8.05E-05	1.34E-04	2.32E-04	3.74E-04	1.07E-04	3.67E-04	2.11E-04	1.28E-04	4.77E-06	5.90E-06	2.3986E-03
551688.08	4172578.4	4759.04146	2083.53994	1728.55995	4599.34502	2595.55742	1413.11658	4710.46878	1240.25737	919.01063	3579.74973	5070.1397	1900.1364	0.17836	0.18057	2.97E-04	1.20E-04	9.99E-05	2.28E-04	1.62E-04	8.83E-05	4.63E-04	2.54E-04	1.88E-04	2.45E-04	2.38E-04	8.92E-05	2.50E-06	3.06E-06	2.4793E-03
551301.1	4172958.5	2531.20433	3787.54393	841.83238	6492.70003	959.87661	2680.40968	2534.42064	2196.41881	476.54258	5376.32133	3294.9	3384.52281	0.35178	0.3569	1.58E-04	2.19E-04	4.87E-05	3.22E-04	6.00E-05	1.67E-04	2.49E-04	4.50E-04	9.77E-05	3.68E-04	1.55E-04	1.59E-04	4.92E-06	6.05E-06	2.4643E-03
551370.06	4173180.34	2646.17627	3921.82052	761.91668	5223.10458	828.4336	3915.99972	2665.61769	2314.0578	431.74272	4586.81582	2473.30816	4783.274	0.39655	0.39969	1.65E-04	2.27E-04	4.40E-05	2.59E-04	5.17E-05	2.45E-04	2.62E-04	4.74E-04	8.85E-05	3.14E-04	1.16E-04	2.25E-04	5.55E-06	6.77E-06	2.4829E-03
551539.98	4173332.68	3123.78545	3806.34842	705.82612	4006.04618	701.38713	4875.99872	3162.70964	2292.58887	404.62712	3728.57234	1852.10838	5850.50979	0.69835	0.70462	1.95E-04	2.20E-04	4.08E-05	1.99E-04	4.38E-05	3.05E-04	3.11E-04	4.70E-04	8.29E-05	2.55E-04	8.70E-05	2.75E-04	9.77E-06	1.19E-05	2.5051E-03
551327.74	4173090.65	2592.3605	3954.45343	746.70675	5557.70321	863.31716	3497.82737	2608.85896	2342.46919	422.38595	4682.11012	2769.39608	4333.1247	0.36216	0.36638	1.62E-04	2.29E-04	4.32E-05	2.75E-04	5.39E-05	2.18E-04	2.56E-04	4.80E-04	8.66E-05	3.20E-04	1.30E-04	2.04E-04	5.07E-06	6.21E-06	2.4698E-03
551304.74	4172997.69	2561.21917	3916.81884	799.65807	6124.0444	911.50121	2885.72493	2568.21985	2290.22386	453.5304	5146.49075	3078.1198	3630.09867	0.35051	0.3551	1.60E-04	2.26E-04	4.62E-05	3.04E-04	5.69E-05	1.80E-04	2.52E-04	4.69E-04	9.30E-05	3.52E-04	1.45E-04	1.71E-04	4.90E-06	6.02E-06	2.4661E-03
551465.59	4173286.98	2901.34078	3898.47394	717.5806	4464.85172	750.59072	4434.2108	2927.37727	2347.26648	410.82172	4028.49849	2101.68278	5370.2051	0.50243	0.50663	1.81E-04	2.25E-04	4.15E-05	2.21E-04	4.69E-05	2.77E-04	2.88E-04	4.81E-04	8.42E-05	2.75E-04	9.87E-05	2.52E-04	7.03E-06	8.59E-06	2.4883E-03
551324.52	4173081.7	2590.27131	3965.00122	747.54245	5589.50274	865.16268	3435.23639	2606.00527	2349.44479	423.00061	4702.90093	2792.98088	4264.10869	0.35834	0.36259	1.62E-04	2.29E-04	4.32E-05	2.77E-04	5.40E-05	2.15E-04	2.56E-04	4.82E-04	8.67E-05	3.22E-04	1.31E-04	2.00E-04	5.01E-06	6.14E-06	2.4685E-03
551336.34	4173114.81	2589.27068	3904.29776	745.30029	5454.99531	852.92277	3631.75286	2607.25934	2308.69431	421.31009	4626.80677	2696.04633	4475.50547	0.36784	0.37189	1.62E-04	2.26E-04	4.31E-05	2.70E-04	5.33E-05	2.27E-04	2.56E-04	4.73E-04	8.64E-05	3.16E-04	1.27E-04	2.10E-04	5.15E-06	6.30E-06	2.4616E-03
551394.78	4173219.93	2698.51196	3946.82217	755.882	4974.45164	800.38617	3991.10664	2717.96078	2339.18515	430.33613	4447.56934	2322.35746	4870.99914	0.41158	0.41452	1.68E-04	2.28E-04	4.37E-05	2.47E-04	5.00E-05	2.49E-04	2.67E-04	4.79E-04	8.82E-05	3.04E-04	1.09E-04	2.29E-04	5.76E-06	7.02E-06	2.4759E-03
551339.29	4173123.18	2590.2774	3891.10606	746.28664	5421.63539	848.44868	3669.71501	2608.62181	2298.81523	421.82476	4616.62003	2660.83716	4515.2915	0.36981	0.37379	1.62E-04	2.25E-04	4.31E-05	2.69E-04	5.30E-05	2.29E-04	2.56E-04	4.71E-04	8.65E-05	3.16E-04	1.25E-04	2.12E-04	5.17E-06	6.33E-06	2.4591E-03
551373.15	4173188.92	2641.78561	3900.70534	757.84041	5145.83645	818.33659	3899.05895	2661.01713	2301.98915	429.74665	4538.59416	2425.91736	4762.47347	0.39527	0.39876	1.65E-04	2.26E-04	4.38E-05	2.55E-04	5.11E-05	2.44E-04	2.62E-04	4.72E-04	8.81E-05	3.10E-04	1.14E-04	2.24E-04	5.53E-06	6.76E-06	2.4658E-03
551321.3	4173072.75	2586.96825	3971.03908	748.91098	5621.30985	866.69401	3368.41681	2601.8309	2352.85402	423.90503	4726.69952	2815.82151	4189.40359	0.35616	0.36048	1.62E-04	2.30E-04	4.33E-05	2.79E-04	5.41E-05	2.10E-04	2.56E-04	4.82E-04	8.69E-05	3.23E-04	1.32E-04	1.97E-04	4.98E-06	6.11E-06	2.4658E-03
551611.89	4173359.55	3454.43962	3655.85922	708.58585	3387.77168	644.90419	5172.3609	3504.11312	2188.75546	409.19618	3307.52534	1615.98875	6217.07444	1.23666	1.25926	2.16E-04	2.11E-04	4.10E-05	1.68E-04	4.03E-05	3.23E-04	3.44E-04	4.49E-04	8.39E-05	2.26E-04	7.59E-05	2.92E-04	1.73E-05	2.13E-05	2.5090E-03
551517.44	4173323.63	3044.54334	3797.01793	700.64788	4116.00942	711.14811	4726.98077	3079.55627	2284.02842	401.31272	3790.97325	1909.44321	5684.95369	0.61467	0.62044	1.90E-04	2.20E-04	4.05E-05	2.04E-04	4.44E-05	2.95E-04	3.03E-04	4.68E-04	8.23E-05	2.59E-04	8.97E-05	2.67E-04	8.60E-06	1.05E-05	2.4820E-03
551390.07	4172628.57	2493.07989	2887.40176	1010.20744	7460.0137	1423.24474	1856.41024	2485.8188	1663.68447	558.64122	5253.39953	4747.39165	2396.02018	0.30522	0.3112	1.56E-04	1.67E-04	5.84E-05	3.70E-04	8.89E-05	1.16E-04	2.44E-04	3.41E-04	1.15E-04	3.59E-04	2.23E-04	1.13E-04	4.27E-06	5.27E-06	2.3598E-03
551570.97	4173349.68	3222.57578	3741.68581	705.40769	3738.32243	671.4885	4978.83484	3265.77642	2250.69307	405.4269	3541.81047	1730.79777	5972.95606	0.8371	0.84614	2.01E-04	2.16E-04	4.08E-05	1.85E-04	4.19E-05	3.11E-04	3.21E-04	4.61E-04	8.31E-05	2.42E-04	8.13E-05	2.81E-04	1.17E-05	1.43E-05	2.4921E-03
551318.07	4173063.8	2583.84558	3974.39278	751.48816	5658.61489	868.66627	3300.28351	2597.76098	2353.62141	425.52286	4758.09592	2839.03662	4112.43519	0.35419	0.35821	1.61E-04	2.30E-04	4.34E-05	2.80E-04	5.43E-05	2.06E-04	2.55E-04	4.82E-04	8.72E-05	3.25E-04	1.33E-04	1.93E-04	4.96E-06	6.07E-06	2.4634E-03
551360.83	4172690.65	2376.12749	3060.49294	949.96171	7415.63548	1328.93322	1999.80315	2370.7188	1757.76837	525.00651	5314.98191	4548.88908	2564.7424	0.32201	0.32873	1.48E-04	1.77E-04	5.49E-05	3.68E-04	8.30E-05	1.25E-04	2.33E-04	3.60E-04	1.08E-04	3.63E-04	2.14E-04	1.20E-04	4.51E-06	5.57E-06	2.3643E-03
551345.21	4173139.92	2592.19886	3867.30689	748.20959	5354.10707	838.62155	3726.54251	2610.90532	2280.87213	423.0216	4593.44506	2583.8279	4573.76349	0.37387	0.37775	1.62E-04	2.24E-04	4.33E-05	2.65E-04	5.24E-05	2.33E-04	2.57E-04	4.68E-04	8.67E-05	3.14E-04	1.21E-04	2.15E-04	5.23E-06	6.40E-06	2.4520E-03
551377.91	4172648.17	2429.85388	2931.31714	975.85665	7421.22345	1369.53654	1890.97387	2423.78824	1686.93183	539.55017	5253.33495	4642.4669	2437.37494	0.30856	0.31476	1.52E-04	1.69E-04	5.64E-05	3.68E-04	8.55E-05	1.18E-04	2.38E-04	3.46E-04	1.11E-04	3.59E-04	2.18E-04	1.14E-04	4.32E-06	5.33E-06	2.3452E-03
551301.51	4172988.73	2530.94964	3839.60977	800.99861	6127.14602	911.96382	2801.98851	2536.9526	2240.40685	454.19089	5138.17718	3085.74487	3528.05587	0.34578	0.35097	1.58E-04	2.22E-04	4.63E-05	3.04E-04	5.70E-05	1.75E-04	2.49E-04	4.59E-04	9.31E-05	3.51E-04	1.45E-04	1.66E-04	4.84E-06	5.95E-06	2.4365E-03
551305.95	4172859.97	2387.77455	3321.5437	891.6895	7066.07153	1099.6282	2266.82055	2385.05122	1910.75117	498.64168	5403.24723	3888.31275	2876.08326	0.34181	0.3479	1.49E-04	1.92E-04	5.16E-05	3.50E-04	6.87E-05	1.42E-04	2.34E-04	3.92E-04	1.02E-04	3.69E-04	1.83E-04	1.35E-04	4.78E-06	5.90E-06	2.3794E-03
551314.85	4173054.85	2567.17543	3949.46175	750.20242	5661.13295	866.78471	3216.69375	2580.13892	2337.58806	424.94539	4759.05413	2853.8752	4015.09898	0.35023	0.35468	1.60E-04	2.28E-04	4.34E-05	2.81E-04	5.41E-05	2.01E-04	2.54E-04	4.79E-04	8.71E-05	3.25E-04	1.34E-04	1.89E-04	4.90E-06	6.01E-06	2.4465E-03
551346.11	4172718.26	2337.78283	3084.96642	934.87819	7298.95227	1298.21397	2049.09721	2332.2996	1772.1054	516.97864	5260.58543	4452.00058	2616.74706	0.3267	0.33363	1.46E-04	1.78E-04	5.40E-05	3.62E-04	8.11E-05	1.28E-04	2.29E-04	3.63E-04	1.06E-04	3.60E-04	2.09E-04	1.23E-04	4.57E-06	5.65E-06	2.3497E-03
551297.87	4172949.53	2485.38806	3681.06011	836.75189	6436.19158	956.70956	2592.78299	2487.87299	2131.55037	473.28855	5303.69335	3288.0509	3276.94664	0.3453	0.35035	1.55E-04	2.13E-04	4.84E-05	3.19E-04	5.98E-05	1.62E-04	2.45E-04	4.37E-04	9.70E-05	3.63E-04	1.54E-04	1.54E-04	4.83E-06	5.94E-06	2.4174E-03
551350.39	4172709.93	2343.38684	3074.79291	936.42157	7306.91628	1303.78319	2032.55198	2337.97438	1766.06938	517.68529	5263.04721	4462.80406	2598.71846	0.32425	0.33108	1.46E-04	1.78E-04	5.41E-05	3.62E-04	8.14E-05	1.27E-04	2.30E-04	3.62E-04	1.06E-04	3.60E-04	2.10E-04	1.22E-04	4.54E-06	5.61E-06	2.3485E-03
551354.68	4172701.6	2350.2195	3061.28121	938.36099	7317.44545	1308.85835	2014.53421	2344.87994	1758.29106	518.67517	5264.78226	4474.9555	2578.92688	0.32172	0.32846	1.47E-04	1.77E-04	5.43E-05	3.63E-04	8.17E-05	1.26E-04	2.30E-04	3.60E-04	1.06E-04	3.60E-04	2.10E-04	1.21E-04	4.50E-06	5.57E-06	2.3469E-03
551475.25	4173296.07	2899.09735	3817.35328	704.23104	4352.12077	738.45994	4438.5329	2926.41657	2299.41767	403.1734	3926.90226	2050.39805	5365.77717	0.5139	0.51818	1.81E-04	2.21E-04	4.07E-05	2.16E-04	4.61E-05	2.77E-04	2.88E-04	4.71E-04	8.26E-05	2.69E-04	9.63E-05	2.52E-04	7.19E-06	8.78E-06	2.4560E-03
551376.24	4173197.51	2630.54824	3865.99909	750.74275	5058.44436	807.56078	3868.27225	2649.53972	2282.7711	426.59426	4475.6109	2380.38938	4724.81017	0.39323	0.39613	1.64E-04	2.24E-04	4.34E-05	2.51E-04	5.04E-05	2.42E-04	2.60E-04	4.68E-04	8.74E-05	3.06E-04	1.12E-04	2.22E-04	5.50E-06	6.71E-06	2.4417E-03
551311.62	4173045.89	2557.30059	3933.11931	752.66335	5690.32262	867.83181	3141.67981	2569.23697	2324.74644	426.51513	4785.85893	2873.9612	3927.91439	0.34759	0.35211	1.60E-04	2.27E-04	4.35E-05	2.82E-04	5.42E-05	1.96E-04	2.53E-04	4.77E-04	8.74E-05	3.27E-04	1.35E-04	1.84E-04	4.86E-06	5.97E-06	2.4371E-03
551549.44	4173341.59	3104.84781	3718.70222	696.403	3871.02339	684.27798	4797.84884	3144.5851	2239.74995	399.4051	3618.27782	1792.63789	5757.01922	0.71954	0.72633	1.94E-04	2.15E-04	4.03E-05	1.92E-04	4.27E-05	3.00E-04	3.09E-04	4.59E-04	8.19E-05	2.47E-04	8.42E-05	2.70E-04	1.01E-05	1.23E-05	2.4579E-03
551311.5	4172827.8	2352.92239	3199.58981	901.02256	7136.24494	1150.10292	2189.36721	2348.86621	1840.77442	502.62866	5322.60186	4063.80032	2778.26333	0.3391	0.34558	1.47E-04	1.85E-04	5.21E-05	3.54E-04	7.18E-05	1.37E-04	2.31E-04	3.77E-04	1.03E-04	3.64E-04	1.91E-04	1.30E-04	4.74E-06	5.86E-06	2.3535E-03
551707.63	4172588.66	4835.96186	1996.77387	1640.97848	4518.07181	2412.44176	1357.60729	4787.40744	1185.27129	873.34544	3422.90509	4922.69487	1826.06655	0.18506	0.18804	3.02E-04	1.15E-04	9.49E-05	2.24E-04	1.51E-04	8.48E-05	4.71E-04	2.43E-04	1.79E-04	2.34E-04	2.31E-04	8.58E-05	2.59E-06	3.19E-06	2.4211E-03
551351.13	4173156.66	2570.06164	3801.47735	742.66814	5219.63122	824.1075	3725.70832	2588.81896	2240.99369	420.02674	4513.4133	2508.26658	4563.43571	0.37438	0.37765	1.60E-04	2.20E-04	4.29E-05	2.59E-04	5.15E-05	2.33E-04	2.54E-04	4.59E-04	8.61E-05	3.09E-04	1.18E-04	2.14E-04	5.24E-06	6.40E-06	2.4184E-03
551299.99	4172883.77	2390.33767	3378.04946	872.9504	6846.97452	1047.52452	2312.38162	2388.83325	1945.02625	489.3818	5356.0291	3679.93715	2932.4582	0.33868	0.34446	1.49E-04	1.95E-04	5.05E-05	3.39E-04	6.54E-05	1.44E-04	2.35E-04	3.99E-04	1.00E-04	3.66E-04	1.73E-04	1.38E-04	4.74E-06	5.84E-06	2.3655E-03
551308.4	4173036.94	2540.18284	3899.58725	753.59759	5703.0866	867.21125	3060.90229	2551.14089	2301.22308	427.18358	4798.46928	2875.73592	3832.57605	0.344	0.34856	1.59E-04	2.25E-04	4.36E-05	2.83E-04	5.42E-05	1.91E-04	2.51E-04	4.72E-04	8.76E-05	3.28E-04	1.35E-04	1.80E-04	4.81E-06	5.91E-06	2.4196E-03
551341.83	4172726.58	2317.19326	3065.37724	924.3551	7192.43221	1276.83689	2050.70616	2311.78787	1761.66827	511.4343	5196.75383	4376.87046	2615.58409	0.32423	0.33106	1.45E-04	1.77E-04	5.34E-05	3.57E-04	7.97E-05	1.28E-04	2.27E-04	3.61E-04	1.05E-04	3.55E-04	2.06E-04	1.23E-04	4.54E-06	5.61E-06	2.3268E-03
551379.33	4173206.1	2620.34206	3831.98406	743.91883	4970.54818	796.38295	3836.14437	2639.10416	2264.05889	422.70762	4428.92135	2334.45519	4686.19365	0.39055	0.39438	1.64E-04	2.22E-04	4.30E-05	2.46E-04	4.97E-05	2.40E-04	2.59E-04	4.64E-04	8.66E-05	3.03E-04	1.10E-04	2.20E-04	5.46E-06	6.68E-06	2.4188E-03
551298.28	4172979.76	2496.72452	3753.6709	800.70943	6115.20705	911.19837	2717.52956	2501.80702	2186.15971	453.86758	5113.18655	3088.97472	3424.76688	0.34058	0.34542	1.56E-04	2.17E-04	4.63E-05	3.03E-04	5.69E-05	1.70E-04	2.46E-04	4.48E-04	9.30E-05	3.50E-04	1.45E-04	1.61E-04	4.77E-06	5.85E-06	2.4023E-03
551598.7	4173361.47	3303.11953	3606.21182	696.9836	3477.91371	643.76093	4972.93647	3349.23581	2164.2264	401.72057	3323.694	1627.85276	5974.21623	1.02507	1.03902	2.06E-04	2.08E-04	4.03E-05	1.72E-04	4.02E-05	3.11E-04	3.29E-04	4.44E-04	8.23E-05	2.27E-04	7.65E-05	2.81E-04	1.43E-05	1.76E-05	2.4497E-03
551646.87	4173363.43	3656.46205	3461.0574	694.2488	3155.90708	618.86419	5070.19639	3712.71911	2058.50714	402.51571	3049.59309	1523.09571	6121.48022	2.14883	2.23647	2.28E-04	2.00E-04	4.01E-05	1.56E-04	3.87E-05	3.17E-04	3.65E-04	4.22E-04	8.25E-05	2.09E-04	7.15E-05	2.88E-04	3.01E-05	3.79E-05	2.4853E-03
551484.9	4173305.17	2897.41561	3742.12203	692.72614	4244.09429	726.08208	4436.86292	2926.27859	2253.77717	396.52489	3835.04661	1998.71399	5355.16076	0.52651	0.53086	1.81E-04	2.16E-04	4.00E-05	2.10E-04	4.53E-05	2.77E-04	2.88E-04	4.62E-04	8.13E-05	2.62E-04	9.39E-05	2.52E-04	7.37E-06	9.00E-06	2.4251E-03
551312.18	4172818.59	2331.80522	3150.16253	897.56474	7082.0139	1154.83178	2159.16937	2327.50227	1812.43692	500.35337	5255.60226	4069.31389	2740.19845	0.33518	0.34168	1.46E-04	1.82E-04	5.19E-05	3.51E-04	7.21E-05	1.35E-04	2.29E-04	3.72E-04	1.03E-04	3.59E-04	1.91E-04	1.29E-04	4.69E-06	5.79E-06	2.3302E-03
551659.73	4173361.56	3768.3411	3410.73325	691.25737	3099.79293	613.53848	5048.51712	3828.33639	2022.60331	401.31999	2978.13301	1501.61415	6105.90336	2.98095	3.12873	2.35E-04	1.97E-04	4.00E-05	1.54E-04	3.83E-05	3.15E-04	3.76E-04	4.15E-04	8.23E-05	2.04E-04	7.05E-05	2.87E-04	4.17E-05	5.30E-05	2.5086E-03
551634	4173365.3	3549.70152	3499.38149	694.53229	3205.9361	622.89331	5054.55427	3602.67278	2085.73175	402.10963	3114.22177	1541.59783	6095.18219	1.63135	1.67693	2.22E-04	2.02E-04	4.02E-05	1.59E-04	3.89E-05	3.16E-04	3.54E-04	4.28E-04	8.24E-05	2.13E-04	7.24E-05	2.86E-04	2.28E-05	2.84E-05	2.4646E-03
551365.52	4172670.68	2356.84912	2954.28098	938.6973	7243.31806	1311.94204	1923.45456	2351.59484	1698.31476	518.96932	5178.5905	4463.81888	2472.5015	0.30819	0.31444	1.47E-04	1.71E-04	5.43E-05	3.59E-04	8.19E-05	1.20E-04	2.31E-04	3.48E-04	1.06E-04	3.54E-04	2.10E-04	1.16E-04	4.31E-06	5.33E-06	2.3086E-03
551305.17	4173027.99	2523.63682	3862.73222	756.02053	5724.56408	867.92406	2983.21657	2533.56406	2275.06608	428.70577	4818.2248	2886.97755	3740.14337	0.34073	0.34532	1.58E-04	2.23E-04	4.37E-05	2.84E-04	5.42E-05	1.86E-04	2.49E-04	4.66E-04	8.79E-05	3.29E-04	1.36E-04	1.76E-04	4.77E-06	5.85E-06	2.4035E-03
551294.65	4172940.57	2442.00777	3580.46466	832.64588	6388.01676	955.6604	2511.80332	2443.81764	2071.30786	470.48038	5235.79565	3288.12581	3176.71532	0.33925	0.34459	1.52E-04	2.07E-04	4.81E-05	3.17E-04	5.97E-05	1.57E-04	2.40E-04	4.25E-04	9.64E-05	3.58E-04	1.54E-04	1.49E-04	4.75E-06	5.84E-06	2.3743E-03
551380.39	4172634.97	2419.65322	2853.5287	972.19513	7262.79401	1363.81121	1841.76547	2413.29595	1643.46612	537.63776	5138.19535	4574.66062	2375.50893	0.29922	0.30509	1.51E-04	1.65E-04	5.62E-05	3.60E-04	8.52E-05	1.15E-04	2.37E-04	3.37E-04	1.10E-04	3.51E-04	2.15E-04	1.12E-04	4.19E-06	5.17E-06	2.3040E-03
551494.56	4173314.26	2917.63871	3709.19324	687.69565	4159.86406	714.60641	4466.57899	2948.0882	2231.74221	393.65746	3778.64203	1950.71072	5385.86887	0.54309	0.547	1.82E-04	2.14E-04	3.98E-05	2.06E-04	4.46E-05	2.79E-04	2.90E-04	4.57E-04	8.07E-05	2.58E-04	9.16E-05	2.53E-04	7.60E-06	9.27E-06	2.4140E-03
551672.59	4173359.69	3888.01687	3352.89388	685.70028	3038.6441	607.00554	4995.52063	3952.30408	1980.82434	398.64052	2903.37462	1477.25965	6055.53659	4.45229	4.77234	2.43E-04	1.94E-04	3.96E-05	1.51E-04	3.79E-05	3.12E-04	3.89E-04	4.06E-04	8.17E-05	1.99E-04	6.94E-05	2.84E-04	6.23E-05	8.09E-05	2.5486E-03
551354.61	4173166.5	2550.70695	3752.58076	737.42411	5130.36098	814.04127	3704.68109	2569.35324	2212.56051	417.19285	4451.16522	2464.19791	4533.41122	0.37334	0.37651	1.59E-04	2.17E-04	4.26E-05	2.54E-04	5.08E-05	2.31E-04	2.53E-04	4.54E-04	8.55E-05	3.04E-04	1.16E-04	2.13E-04	5.22E-06	6.38E-06	2.3916E-03
551580.67	4173358.82	3189.11593	3613.87629	691.35345	3580.47992	651.41741	4842.14232	3232.32697	2172.20829	397.65707	3400.25449	1666.98338	5814.5691	0.86357	0.87274	1.99E-04	2.09E-04	4.00E-05	1.77E-04	4.07E-05	3.02E-04	3.18E-04	4.45E-04	8.15E-05	2.33E-04	7.83E-05	2.73E-04	1.21E-05	1.48E-05	2.4239E-03
551400.53	4173235.69	2652.55196	3821.1078	735.17835	4763.58292	776.25947	3876.41343	2671.53981	2271.84517	418.72351	4260.81974	2239.16825	4732.24612	0.40827	0.41174	1.66E-04	2.21E-04	4.25E-05	2.36E-04	4.85E-05	2.42E-04	2.63E-04	4.66E-04	8.58E-05	2.91E-04	1.05E-04	2.22E-04	5.71E-06	6.98E-06	2.4014E-03
551304.27	4172849.69	2337.3503	3210.53451	876.87346	6915.95719	1093.00334	2197.85434	2334.34766	1847.44513	489.99497	5251.0358	3847.92487	2788.8803	0.33199	0.33794	1.46E-04	1.86E-04	5.07E-05	3.43E-04	6.83E-05	1.37E-04	2.29E-04	3.79E-04	1.00E-04	3.59E-04	1.81E-04	1.31E-04	4.65E-06	5.73E-06	2.3204E-03
551295.06	4172970.8	2464.16694	3671.00311	801.45356	6112.12842	912.61991	2638.52855	2468.37953	2134.32143	454.06185	5090.51581	3098.86034	3328.14084	0.33582	0.34088	1.54E-04	2.12E-04	4.63E-05	3.03E-04	5.70E-05	1.65E-04	2.43E-04	4.37E-04	9.31E-05	3.48E-04	1.46E-04	1.56E-04	4.70E-06	5.78E-06	2.3709E-03
551746.97	4172609.18	4789.55099	1871.64418	1444.3401	4913.2376	2158.50182	1262.68923	4744.99708	1103.52627	773.61624	3349.58994	5055.34972	1694.34469	0.22266	0.22773	2.99E-04	1.08E-04	8.35E-05	2.44E-04	1.35E-04	7.89E-05	4.66E-04	2.26E-04	1.59E-04	2.29E-04	2.37E-04	7.96E-05	3.12E-06	3.86E-06	2.3522E-03
551558.9	4173350.5	3089.4777	3633.54171	687.39405	3735.79947	666.98485	4722.32102	3129.77505	2187.46697	394.49721	3508.02254	1733.87899	5668.77861	0.7412	0.74932	1.93E-04	2.10E-04	3.97E-05	1.85E-04	4.17E-05	2.95E-04	3.08E-04	4.48E-04	8.09E-05	2.40E-04	8.14E-05	2.66E-04	1.04E-05	1.27E-05	2.4120E-03
551312.87	4172809.38	2309.87677	3102.14332	893.23274	7016.0002	1157.63188	2129.89288	2305.37486	1785.02932	497.57487	5184.80091	4066.03678	2703.21831	0.33075	0.33724	1.44E-04	1.79E-04	5.16E-05	3.48E-04	7.23E-05	1.33E-04	2.27E-04	3.66E-04	1.02E-04	3.55E-04	1.91E-04	1.27E-04	4.63E-06	5.71E-06	2.3057E-03
551685.45	4173357.82	4003.34651	3283.68923	677.2504	2972.50861	599.19003	4905.82291	4072.27028	1932.22226	394.21078	2824.68303	1450.4781	5961.90558	7.64129	8.53488	2.50E-04	1.90E-04	3.92E-05	1.47E-04	3.74E-05	3.06E-04	4.00E-04	3.96E-04	8.08E-05	1.93E-04	6.81E-05	2.80E-04	1.07E-04	1.45E-04	2.6402E-03
551301.92	4173018.96	2499.60894	3808.61512	756.59695	5727.25547	866.69511	2900.40173	2508.52122	2238.64341	429.09048	4821.30485	2891.03065	3640.43932	0.33641	0.34108	1.56E-04	2.20E-04	4.37E-05	2.84E-04	5.41E-05	1.81E-04	2.47E-04	4.59E-04	8.80E-05	3.30E-04	1.36E-04	1.71E-04	4.71E-06	5.78E-06	2.3796E-03
551382.42	4173214.68	2601.13003	3781.15299	735.67577	4870.72846	785.36861	3787.92522	2619.61728	2236.60115	418.59801	4330.18963	2291.49281	4627.67218	0.38913	0.39246	1.62E-04	2.19E-04	4.25E-05	2.41E-04	4.91E-05	2.37E-04	2.58E-04	4.58E-04	8.58E-05	2.96E-04	1.08E-04	2.17E-04	5.44E-06	6.65E-06	2.3856E-03
551504.21	4173323.36	2927.96599	3665.14381	681.90944	4065.24097	702.04061	4470.08062	2960.00424	2203.87543	390.36255	3712.15538	1900.40146	5386.03803	0.55914	0.56312	1.83E-04	2.12E-04	3.94E-05	2.02E-04	4.38E-05	2.79E-04	2.91E-04	4.52E-04	8.00E-05	2.54E-04	8.93E-05	2.53E-04	7.82E-06	9.54E-06	2.3949E-03
551316.02	4172786.87	2291.50641	3056.68727	898.38171	7029.55539	1187.32383	2096.2764	2286.48	1758.57839	499.38494	5138.71327	4152.61817	2661.68197	0.32856	0.33524	1.43E-04	1.77E-04	5.19E-05	3.48E-04	7.42E-05	1.31E-04	2.25E-04	3.60E-04	1.02E-04	3.51E-04	1.95E-04	1.25E-04	4.60E-06	5.68E-06	2.2946E-03
551357.7	4173175.09	2538.68785	3719.89315	733.65043	5056.19946	805.60689	3686.80068	2557.17823	2193.67511	415.24803	4403.27639	2424.28963	4509.06352	0.37299	0.37606	1.59E-04	2.15E-04	4.24E-05	2.51E-04	5.03E-05	2.30E-04	2.51E-04	4.50E-04	8.51E-05	3.01E-04	1.14E-04	2.12E-04	5.22E-06	6.37E-06	2.3717E-03
551314.14	4172795.64	2293.64372	3064.71283	894.42594	7005.00759	1172.99393	2104.03178	2288.81708	1763.37597	497.60092	5141.48019	4108.81306	2670.94895	0.32852	0.33511	1.43E-04	1.77E-04	5.17E-05	3.47E-04	7.33E-05	1.31E-04	2.25E-04	3.61E-04	1.02E-04	3.52E-04	1.93E-04	1.25E-04	4.60E-06	5.68E-06	2.2928E-03
551298.31	4172873.53	2344.83554	3273.47814	861.58275	6750.85653	1045.65098	2242.91178	2342.9671	1884.4097	482.46192	5234.50043	3666.49494	2845.35096	0.33022	0.33588	1.46E-04	1.89E-04	4.98E-05	3.35E-04	6.53E-05	1.40E-04	2.30E-04	3.86E-04	9.89E-05	3.58E-04	1.72E-04	1.34E-04	4.62E-06	5.69E-06	2.3151E-03
551337.54	4172734.91	2284.92218	3021.48263	906.79308	7010.14081	1243.36428	2039.43061	2279.71792	1737.6699	502.08994	5085.34148	4252.4665	2598.04652	0.31786	0.32443	1.43E-04	1.75E-04	5.24E-05	3.47E-04	7.77E-05	1.27E-04	2.24E-04	3.56E-04	1.03E-04	3.48E-04	2.00E-04	1.22E-04	4.45E-06	5.50E-06	2.2850E-03
551698.32	4173355.95	4142.12505	3223.92509	667.15803	2904.73341	590.72466	4815.9376	4216.86614	1886.92317	388.81375	2753.35576	1420.08169	5872.29975	8.8191	13.39336	2.59E-04	1.86E-04	3.86E-05	1.44E-04	3.69E-05	3.01E-04	4.15E-04	3.87E-04	7.97E-05	1.88E-04	6.67E-05	2.76E-04	1.23E-04	2.27E-04	2.7274E-03
551333.26	4172743.24	2275.11944	3011.33376	901.50975	6964.41179	1229.38478	2043.75603	2269.92573	1732.27369	499.44796	5057.63665	4213.50521	2601.12685	0.31775	0.3243	1.42E-04	1.74E-04	5.21E-05	3.45E-04	7.68E-05	1.28E-04	2.23E-04	3.55E-04	1.02E-04	3.46E-04	1.98E-04	1.22E-04	4.45E-06	5.50E-06	2.2744E-03
551455.56	4173289.72	2777.33895	3715.27633	694.37977	4323.52332	731.07128	4149.40614	2801.15967	2236.78603	397.38551	3880.74406	2055.54206	5034.28107	0.46662	0.46973	1.73E-04	2.15E-04	4.01E-05	2.14E-04	4.57E-05	2.59E-04	2.75E-04	4.58E-04	8.15E-05	2.65E-04	9.65E-05	2.36E-04	6.53E-06	7.96E-06	2.3757E-03
551360.79	4173183.67	2532.29477	3697.87143	730.52954	4985.98158	797.5851	3671.53048	2550.6018	2180.95136	413.73199	4361.67873	2382.38962	4489.42936	0.37277	0.37627	1.58E-04	2.14E-04	4.22E-05	2.47E-04	4.98E-05	2.29E-04	2.51E-04	4.47E-04	8.48E-05	2.98E-04	1.12E-04	2.11E-04	5.22E-06	6.38E-06	2.3556E-03
551685.07	4172569.12	4508.28532	2005.039	1627.20696	4356.60719	2422.0862	1366.90347	4463.82066	1193.24043	867.12414	3417.5994	4722.19049	1836.25668	0.16628	0.16808	2.81E-04	1.16E-04	9.41E-05	2.16E-04	1.51E-04	8.54E-05	4.39E-04	2.45E-04	1.78E-04	2.34E-04	2.22E-04	8.62E-05	2.33E-06	2.85E-06	2.3521E-03
551298.69	4173009.99	2475.27309	3750.53111	757.94253	5733.90924	866.36562	2820.75455	2483.20128	2199.75962	429.87311	4825.12126	2896.43171	3544.14882	0.33276	0.33727	1.55E-04	2.17E-04	4.38E-05	2.84E-04	5.41E-05	1.76E-04	2.44E-04	4.51E-04	8.81E-05	3.30E-04	1.36E-04	1.66E-04	4.66E-06	5.72E-06	2.3557E-03
551766.78	4172619.45	4551.80599	1802.32835	1326.68304	5261.69247	2097.51776	1205.70019	4512.70008	1058.28836	713.18093	3375.16326	5254.79213	1614.23457	0.24321	0.24902	2.84E-04	1.04E-04	7.67E-05	2.61E-04	1.31E-04	7.53E-05	4.44E-04	2.17E-04	1.46E-04	2.31E-04	2.47E-04	7.58E-05	3.40E-06	4.22E-06	2.3000E-03
551359.34	4172677.58	2311.30357	2925.72258	916.62022	7062.19701	1277.58026	1916.70332	2306.33175	1681.75563	506.80238	5075.47762	4332.50482	2460.47624	0.30317	0.30927	1.44E-04	1.69E-04	5.30E-05	3.50E-04	7.98E-05	1.20E-04	2.27E-04	3.45E-04	1.04E-04	3.47E-04	2.03E-04	1.16E-04	4.24E-06	5.24E-06	2.2670E-03
551291.83	4172961.83	2428.18362	3583.89911	800.55147	6094.21721	913.15799	2559.85334	2431.60807	2080.18524	453.21653	5052.65753	3105.21368	3231.91515	0.3309	0.33526	1.52E-04	2.07E-04	4.63E-05	3.02E-04	5.70E-05	1.60E-04	2.39E-04	4.26E-04	9.29E-05	3.46E-04	1.46E-04	1.52E-04	4.63E-06	5.68E-06	2.3359E-03
551291.42	4172931.6	2392.77804	3471.75319	824.73028	6305.81631	950.31113	2428.48643	2394.03541	2007.03594	465.48234	5143.36386	3271.87943	3073.13924	0.33079	0.336	1.49E-04	2.01E-04	4.77E-05	3.13E-04	5.94E-05	1.52E-04	2.35E-04	4.11E-04	9.54E-05	3.52E-04	1.54E-04	1.44E-04	4.63E-06	5.69E-06	2.3236E-03
551608.28	4173369.04	3295.07787	3487.47321	683.40898	3334.79943	625.61644	4839.96946	3341.43602	2088.37571	394.31597	3193.43532	1571.07697	5825.50846	1.07993	1.09726	2.06E-04	2.02E-04	3.95E-05	1.65E-04	3.91E-05	3.02E-04	3.28E-04	4.28E-04	8.08E-05	2.18E-04	7.38E-05	2.74E-04	1.51E-05	1.86E-05	2.3904E-03
551751.51	4173330.29	4648.76558	3035.38432	640.67515	2757.32967	575.44878	4557.23751	4748.57122	1763.20855	374.19864	2563.37859	1367.27012	5579.92799	2.51468	2.31116	2.90E-04	1.75E-04	3.70E-05	1.37E-04	3.59E-05	2.85E-04	4.67E-04	3.61E-04	7.67E-05	1.75E-04	6.42E-05	2.62E-04	3.52E-05	3.92E-05	2.4409E-03
551315.25	4173085.04	2484.17811	3739.27901	715.81598	5299.36951	829.00346	3251.04169	2499.20165	2214.56665	405.00021	4452.64687	2662.16873	4036.23898	0.33815	0.34205	1.55E-04	2.16E-04	4.14E-05	2.63E-04	5.18E-05	2.03E-04	2.46E-04	4.54E-04	8.30E-05	3.04E-04	1.25E-04	1.90E-04	4.73E-06	5.80E-06	2.3424E-03
551318.48	4173093.99	2481.85135	3721.84354	713.68385	5261.8713	826.5088	3302.32196	2497.57896	2203.93386	403.67476	4424.08126	2638.97572	4091.81208	0.34128	0.34478	1.55E-04	2.15E-04	4.13E-05	2.61E-04	5.16E-05	2.06E-04	2.46E-04	4.52E-04	8.27E-05	3.03E-04	1.24E-04	1.92E-04	4.78E-06	5.84E-06	2.3394E-03
551385.51	4173223.27	2577.66176	3721.743	726.89995	4765.68222	773.91854	3731.3727	2595.86818	2204.84724	413.25285	4240.2951	2249.48463	4559.07507	0.38876	0.39151	1.61E-04	2.15E-04	4.20E-05	2.36E-04	4.83E-05	2.33E-04	2.55E-04	4.52E-04	8.47E-05	2.90E-04	1.06E-04	2.14E-04	5.44E-06	6.63E-06	2.3494E-03
551363.88	4173192.26	2524.45945	3672.8841	726.41814	4912.03578	789.04519	3650.143	2542.55772	2166.82626	411.65381	4313.71458	2340.39418	4462.92765	0.37244	0.37523	1.58E-04	2.12E-04	4.20E-05	2.43E-04	4.93E-05	2.28E-04	2.50E-04	4.44E-04	8.44E-05	2.95E-04	1.10E-04	2.10E-04	5.21E-06	6.36E-06	2.3373E-03
551302.59	4172839.4	2292.93818	3113.89741	864.31948	6782.68353	1088.68071	2138.00355	2289.66427	1792.30615	482.66489	5116.9247	3815.34595	2713.14394	0.3238	0.32967	1.43E-04	1.80E-04	5.00E-05	3.36E-04	6.80E-05	1.34E-04	2.25E-04	3.67E-04	9.89E-05	3.50E-04	1.79E-04	1.27E-04	4.53E-06	5.59E-06	2.2690E-03
551295.47	4173001.03	2449.30543	3686.71605	759.28207	5739.08621	866.30888	2742.61101	2456.28826	2157.65563	430.59882	4824.32019	2901.90853	3449.33042	0.32893	0.33368	1.53E-04	2.13E-04	4.39E-05	2.84E-04	5.41E-05	1.71E-04	2.41E-04	4.42E-04	8.83E-05	3.30E-04	1.36E-04	1.62E-04	4.60E-06	5.65E-06	2.3303E-03
551312.03	4173076.09	2475.97751	3735.48704	715.13269	5311.94947	828.61824	3184.79479	2490.20787	2212.79443	404.74164	4459.56299	2678.78767	3961.31058	0.33562	0.33923	1.55E-04	2.16E-04	4.13E-05	2.63E-04	5.18E-05	1.99E-04	2.45E-04	4.54E-04	8.30E-05	3.05E-04	1.26E-04	1.86E-04	4.70E-06	5.75E-06	2.3345E-03
551513.87	4173332.45	2905.90141	3576.84878	670.91759	3945.69728	694.25563	4407.16764	2939.12164	2151.62712	384.04562	3611.99638	1845.51445	5305.39608	0.57196	0.57669	1.81E-04	2.07E-04	3.88E-05	1.96E-04	4.34E-05	2.75E-04	2.89E-04	4.41E-04	7.87E-05	2.47E-04	8.67E-05	2.49E-04	8.00E-06	9.77E-06	2.3505E-03
551324.69	4172759.9	2255.37176	2984.64819	889.2813	6864.875	1197.1812	2044.45382	2250.28139	1717.74884	493.30544	5000.90779	4122.715	2598.14826	0.31646	0.3229	1.41E-04	1.73E-04	5.14E-05	3.40E-04	7.48E-05	1.28E-04	2.21E-04	3.52E-04	1.01E-04	3.42E-04	1.94E-04	1.22E-04	4.43E-06	5.47E-06	2.2495E-03
551704.31	4172579.36	4620.982	1939.76609	1571.85901	4314.24279	2301.39458	1323.77958	4575.65447	1151.51856	837.66814	3305.06358	4652.18626	1779.19472	0.17355	0.17607	2.89E-04	1.12E-04	9.09E-05	2.14E-04	1.44E-04	8.27E-05	4.50E-04	2.36E-04	1.72E-04	2.26E-04	2.19E-04	8.36E-05	2.43E-06	2.98E-06	2.3228E-03
551465.01	4173298.62	2772.39506	3636.40728	680.77481	4217.04599	720.12396	4151.14404	2797.56653	2190.93593	389.59662	3781.80012	2007.66688	5027.10248	0.47551	0.47924	1.73E-04	2.10E-04	3.94E-05	2.09E-04	4.50E-05	2.59E-04	2.75E-04	4.49E-04	7.99E-05	2.59E-04	9.43E-05	2.36E-04	6.65E-06	8.12E-06	2.3437E-03
551318.14	4172777	2255.75737	2990.22257	884.26128	6848.77988	1174.37294	2056.89281	2250.80885	1721.15702	491.22402	5008.23186	4071.90813	2611.85646	0.3184	0.32481	1.41E-04	1.73E-04	5.11E-05	3.39E-04	7.33E-05	1.28E-04	2.21E-04	3.53E-04	1.01E-04	3.42E-04	1.91E-04	1.23E-04	4.46E-06	5.50E-06	2.2473E-03
551568.36	4173359.41	3062.58	3530.74819	676.15599	3594.61871	648.95597	4619.91061	3103.03934	2124.74818	388.30416	3386.41526	1674.74832	5549.18913	0.76139	0.76969	1.91E-04	2.04E-04	3.91E-05	1.78E-04	4.05E-05	2.89E-04	3.05E-04	4.36E-04	7.96E-05	2.32E-04	7.87E-05	2.61E-04	1.07E-05	1.30E-05	2.3564E-03
551370.7	4172641.37	2338.10371	2801.96897	930.62493	6994.43678	1299.18885	1819.27383	2332.57053	1613.28083	514.75495	4980.286	4362.24101	2344.294	0.29038	0.29603	1.46E-04	1.62E-04	5.38E-05	3.47E-04	8.11E-05	1.14E-04	2.29E-04	3.31E-04	1.06E-04	3.41E-04	2.05E-04	1.10E-04	4.06E-06	5.02E-06	2.2334E-03
551308.8	4173067.14	2465.56402	3725.38706	714.64053	5321.52336	827.70869	3114.65925	2478.93893	2206.49629	404.6094	4466.57419	2694.25409	3881.03346	0.33254	0.33658	1.54E-04	2.15E-04	4.13E-05	2.64E-04	5.17E-05	1.95E-04	2.44E-04	4.52E-04	8.29E-05	3.05E-04	1.27E-04	1.82E-04	4.65E-06	5.70E-06	2.3242E-03
551405.96	4173248.99	2612.31147	3707.58281	715.65795	4590.37394	754.10741	3781.69524	2631.06353	2211.58768	407.99094	4095.49886	2172.5758	4616.7844	0.40298	0.40629	1.63E-04	2.14E-04	4.14E-05	2.28E-04	4.71E-05	2.36E-04	2.59E-04	4.53E-04	8.36E-05	2.80E-04	1.02E-04	2.17E-04	5.64E-06	6.88E-06	2.3367E-03
551546.13	4173350.65	2981.5459	3541.18282	671.57372	3734.38789	663.00405	4507.64798	3019.26568	2131.49816	384.99458	3478.7312	1737.63709	5416.74575	0.66505	0.67102	1.86E-04	2.05E-04	3.88E-05	1.85E-04	4.14E-05	2.82E-04	2.97E-04	4.37E-04	7.89E-05	2.38E-04	8.16E-05	2.54E-04	9.31E-06	1.14E-05	2.3450E-03
551327.05	4173118.09	2458.45123	3638.63803	706.19867	5130.81922	815.54779	3396.17381	2475.55175	2152.82072	399.1271	4329.83203	2564.42992	4185.93055	0.34387	0.34757	1.53E-04	2.10E-04	4.08E-05	2.54E-04	5.09E-05	2.12E-04	2.43E-04	4.41E-04	8.18E-05	2.96E-04	1.20E-04	1.97E-04	4.81E-06	5.89E-06	2.3124E-03
551296.64	4172863.28	2297.45696	3167.59691	848.54293	6630.28234	1041.11648	2174.67227	2295.27273	1823.62524	474.71202	5101.41385	3639.45999	2759.33068	0.3212	0.32672	1.43E-04	1.83E-04	4.91E-05	3.29E-04	6.50E-05	1.36E-04	2.26E-04	3.74E-04	9.73E-05	3.49E-04	1.71E-04	1.30E-04	4.49E-06	5.54E-06	2.2613E-03
551353.15	4172684.48	2271.2714	2899.02142	897.89516	6900.42551	1248.38155	1911.25824	2266.48097	1666.42502	496.48373	4981.54956	4219.47154	2450.05587	0.29893	0.30493	1.42E-04	1.68E-04	5.19E-05	3.42E-04	7.80E-05	1.19E-04	2.23E-04	3.42E-04	1.02E-04	3.41E-04	1.98E-04	1.15E-04	4.18E-06	5.17E-06	2.2301E-03
551320.41	4172768.23	2245.27799	2969.92363	882.17749	6809.73907	1179.20959	2041.27031	2240.2911	1709.54399	489.72077	4971.70407	4070.15803	2592.79519	0.31528	0.32164	1.40E-04	1.72E-04	5.10E-05	3.38E-04	7.36E-05	1.27E-04	2.20E-04	3.50E-04	1.00E-04	3.40E-04	1.91E-04	1.22E-04	4.41E-06	5.45E-06	2.2354E-03
551332.97	4173134.83	2458.33389	3612.42813	708.24469	5074.34181	807.23986	3454.42226	2475.92582	2133.77233	400.19357	4313.83467	2515.84372	4245.78712	0.34761	0.35121	1.53E-04	2.09E-04	4.09E-05	2.52E-04	5.04E-05	2.16E-04	2.43E-04	4.37E-04	8.20E-05	2.95E-04	1.18E-04	1.99E-04	4.86E-06	5.95E-06	2.3072E-03
551292.24	4172992.06	2425.26641	3623.87499	762.11113	5756.48523	868.43548	2669.14253	2431.28306	2116.45022	432.10208	4828.55339	2914.01706	3360.13112	0.32524	0.3296	1.51E-04	2.10E-04	4.41E-05	2.85E-04	5.42E-05	1.67E-04	2.39E-04	4.34E-04	8.86E-05	3.30E-04	1.37E-04	1.58E-04	4.55E-06	5.59E-06	2.3077E-03
551366.97	4173200.84	2513.88082	3642.23648	721.14028	4833.19618	779.41275	3621.49026	2531.73751	2149.91251	408.9215	4257.91048	2298.95334	4427.92021	0.37141	0.37414	1.57E-04	2.11E-04	4.17E-05	2.40E-04	4.87E-05	2.26E-04	2.49E-04	4.41E-04	8.38E-05	2.91E-04	1.08E-04	2.08E-04	5.20E-06	6.34E-06	2.3157E-03
551288.61	4172952.87	2385.56589	3487.56926	796.00137	6042.82856	909.99963	2479.04705	2388.3006	2021.49542	450.31222	4988.28962	3097.96141	3132.6229	0.32507	0.32965	1.49E-04	2.02E-04	4.60E-05	3.00E-04	5.68E-05	1.55E-04	2.35E-04	4.14E-04	9.23E-05	3.41E-04	1.46E-04	1.47E-04	4.55E-06	5.59E-06	2.2931E-03
551341.06	4172706.98	2247.14458	2927.67961	890.09469	6847.92934	1233.05593	1953.88696	2242.2039	1682.84052	492.27238	4962.13825	4174.42282	2496.17223	0.30425	0.31046	1.40E-04	1.69E-04	5.15E-05	3.39E-04	7.70E-05	1.22E-04	2.20E-04	3.45E-04	1.01E-04	3.39E-04	1.96E-04	1.17E-04	4.26E-06	5.26E-06	2.2279E-03
551335.93	4173143.2	2458.38095	3600.92083	709.34644	5041.32432	802.53939	3474.63584	2476.09315	2125.22296	400.82435	4305.0029	2482.43542	4266.07365	0.34916	0.35269	1.53E-04	2.08E-04	4.10E-05	2.50E-04	5.01E-05	2.17E-04	2.43E-04	4.36E-04	8.22E-05	2.94E-04	1.17E-04	2.00E-04	4.89E-06	5.98E-06	2.3031E-03
551763.57	4173325.59	4673.16137	2964.05506	628.27552	2705.18096	567.45645	4435.84846	4776.15339	1721.34923	366.93083	2508.31053	1346.66932	5432.95286	1.85972	1.73618	2.92E-04	1.71E-04	3.63E-05	1.34E-04	3.54E-05	2.77E-04	4.69E-04	3.53E-04	7.52E-05	1.72E-04	6.33E-05	2.55E-04	2.60E-05	2.94E-05	2.3890E-03
551638.09	4173373.67	3464.12516	3344.69388	672.84664	3082.81377	603.50418	4788.82887	3515.59389	1990.72035	389.63131	2987.15022	1490.45245	5786.81844	1.5908	1.63257	2.16E-04	1.93E-04	3.89E-05	1.53E-04	3.77E-05	2.99E-04	3.46E-04	4.08E-04	7.99E-05	2.04E-04	7.00E-05	2.72E-04	2.23E-05	2.77E-05	2.3677E-03
551651.09	4173371.78	3565.41815	3302.17973	671.42328	3032.24522	599.07294	4786.99764	3620.07236	1961.03045	389.31461	2921.88829	1471.49605	5792.46613	2.10937	2.18742	2.23E-04	1.91E-04	3.88E-05	1.50E-04	3.74E-05	2.99E-04	3.56E-04	4.02E-04	7.98E-05	2.00E-04	6.91E-05	2.72E-04	2.95E-05	3.71E-05	2.3842E-03
551383.43	4172621.39	2378.07301	2730.80622	950.48807	6912.17098	1327.57588	1772.39275	2371.66678	1574.77005	525.99955	4908.44122	4377.22485	2286.46094	0.28215	0.28745	1.48E-04	1.58E-04	5.50E-05	3.43E-04	8.29E-05	1.11E-04	2.33E-04	3.23E-04	1.08E-04	3.36E-04	2.06E-04	1.07E-04	3.95E-06	4.87E-06	2.2188E-03
551664.08	4173369.89	3684.58412	3257.64331	667.94445	2977.39355	593.62576	4765.39121	3743.214	1927.55223	387.86127	2855.02507	1449.27684	5778.55779	2.94852	3.08196	2.30E-04	1.88E-04	3.86E-05	1.48E-04	3.71E-05	2.98E-04	3.68E-04	3.95E-04	7.95E-05	1.95E-04	6.81E-05	2.71E-04	4.13E-05	5.22E-05	2.4101E-03
551305.58	4173058.18	2450.13514	3703.79931	713.25059	5320.31336	825.4548	3038.9763	2462.6387	2192.49232	403.98201	4466.16391	2707.04373	3793.18193	0.32884	0.33293	1.53E-04	2.14E-04	4.12E-05	2.64E-04	5.16E-05	1.90E-04	2.42E-04	4.49E-04	8.28E-05	3.05E-04	1.27E-04	1.78E-04	4.60E-06	5.64E-06	2.3087E-03
551474.46	4173307.51	2773.37433	3570.84189	669.94243	4121.80799	704.94932	4157.6944	2799.82121	2151.076	383.34787	3699.93116	1961.68947	5026.92219	0.4856	0.48889	1.73E-04	2.06E-04	3.87E-05	2.04E-04	4.40E-05	2.60E-04	2.75E-04	4.41E-04	7.86E-05	2.53E-04	9.21E-05	2.36E-04	6.79E-06	8.28E-06	2.3174E-03
551288.19	4172922.64	2341.01941	3360.16071	814.37599	6209.04576	942.44448	2345.56425	2341.80861	1941.52121	459.0657	5036.37058	3246.0131	2969.77602	0.32167	0.32674	1.46E-04	1.94E-04	4.71E-05	3.08E-04	5.89E-05	1.46E-04	2.30E-04	3.98E-04	9.41E-05	3.44E-04	1.52E-04	1.39E-04	4.50E-06	5.54E-06	2.2693E-03
551523.52	4173341.55	2897.83106	3515.57717	663.81728	3836.9497	673.12772	4364.98713	2932.21338	2114.69211	380.08345	3529.76436	1792.5453	5252.77865	0.5874	0.59188	1.81E-04	2.03E-04	3.84E-05	1.90E-04	4.20E-05	2.73E-04	2.88E-04	4.33E-04	7.79E-05	2.41E-04	8.42E-05	2.47E-04	8.22E-06	1.00E-05	2.3176E-03
551595.42	4173370.91	3153.50916	3435.23856	671.73958	3364.70083	624.21289	4652.79522	3196.67189	2061.78184	386.86774	3203.51512	1581.46181	5597.2726	0.91162	0.92306	1.97E-04	1.99E-04	3.88E-05	1.67E-04	3.90E-05	2.91E-04	3.14E-04	4.23E-04	7.93E-05	2.19E-04	7.43E-05	2.63E-04	1.28E-05	1.56E-05	2.3315E-03

551483.91	4173316.41	2776.15723	3513.73999	661.20024	4032.27236	695.41587	4160.5002	2804.03422	2115.61225	378.2854	3628.18772	1915.90205	5023.72612	0.49398	0.49781	1.73E-04	2.03E-04	3.82E-05	2.00E-04	4.34E-05	2.60E-04	2.76E-04	4.34E-04	7.75E-05	2.48E-04	9.00E-05	2.36E-04	6.91E-06	8.44E-06	2.2941E-03
551493.36	4173325.31	2802.23262	3500.0509	659.03344	3966.94936	689.32209	4197.46798	2831.71172	2104.86076	377.07679	3591.63279	1873.18984	5065.07967	0.51304	0.51639	1.75E-04	2.02E-04	3.81E-05	1.97E-04	4.31E-05	2.62E-04	2.78E-04	4.31E-04	7.73E-05	2.46E-04	8.80E-05	2.38E-04	7.18E-06	8.75E-06	2.2918E-03
551690.08	4173366.11	3904.36107	3129.15757	652.16968	2851.60088	578.80815	4607.38929	3971.67233	1837.22284	379.61135	2705.47706	1397.74742	5614.79742	8.02417	9.0061	2.44E-04	1.81E-04	3.77E-05	1.41E-04	3.62E-05	2.88E-04	3.90E-04	3.77E-04	7.78E-05	1.85E-04	6.57E-05	2.64E-04	1.12E-04	1.53E-04	2.5517E-03
551299.13	4173040.28	2417.9516	3647.70945	713.22841	5328.33414	822.29158	2890.399	2428.62769	2154.04944	404.28681	4480.37038	2710.64375	3618.3506	0.32215	0.32594	1.51E-04	2.11E-04	4.12E-05	2.64E-04	5.14E-05	1.81E-04	2.39E-04	4.42E-04	8.29E-05	3.06E-04	1.27E-04	1.70E-04	4.51E-06	5.52E-06	2.2759E-03
551555.69	4173359.66	2960.38096	3456.64288	662.30197	3604.93219	646.31475	4428.38034	2998.47909	2080.18473	379.89383	3372.07857	1681.09428	5323.34202	0.68168	0.68687	1.85E-04	2.00E-04	3.83E-05	1.79E-04	4.04E-05	2.77E-04	2.95E-04	4.26E-04	7.79E-05	2.31E-04	7.90E-05	2.50E-04	9.54E-06	1.16E-05	2.2984E-03
551724.04	4173352.21	4250.81691	3019.94773	637.58991	2752.42002	569.09673	4470.42914	4333.18945	1759.68785	371.90782	2578.26047	1359.36014	5471.89622	8.92044	7.61388	2.65E-04	1.75E-04	3.69E-05	1.36E-04	3.55E-05	2.79E-04	4.26E-04	3.61E-04	7.62E-05	1.76E-04	6.38E-05	2.57E-04	1.25E-04	1.29E-04	2.5419E-03
551410.14	4173258.81	2579.58012	3615.47353	699.7014	4463.44324	737.7338	3709.83943	2598.22786	2162.13628	399.15818	3966.42306	2123.95531	4528.41096	0.39949	0.40207	1.61E-04	2.09E-04	4.05E-05	2.21E-04	4.61E-05	2.32E-04	2.55E-04	4.43E-04	8.18E-05	2.71E-04	9.98E-05	2.13E-04	5.59E-06	6.81E-06	2.2861E-03
551612.09	4173377.45	3230.12871	3355.43399	665.20888	3212.02295	607.50795	4633.86705	3275.37653	2006.09203	383.96828	3075.88447	1520.91652	5587.93185	1.05254	1.06551	2.02E-04	1.94E-04	3.85E-05	1.59E-04	3.79E-05	2.89E-04	3.22E-04	4.11E-04	7.87E-05	2.10E-04	7.14E-05	2.62E-04	1.47E-05	1.81E-05	2.3096E-03
551743.56	4172599.88	4590.53092	1813.63087	1387.99415	4571.33056	2041.52714	1230.30863	4548.64646	1069.93805	743.93796	3194.83682	4680.97104	1650.11882	0.20407	0.20847	2.87E-04	1.05E-04	8.02E-05	2.27E-04	1.28E-04	7.68E-05	4.47E-04	2.19E-04	1.52E-04	2.18E-04	2.20E-04	7.75E-05	2.86E-06	3.53E-06	2.2438E-03
551294.97	4172853.03	2249.98402	3063.86508	834.72239	6495.52547	1034.95982	2109.18767	2247.51981	1764.30556	466.64236	4962.88759	3602.70003	2676.58349	0.31217	0.31756	1.40E-04	1.77E-04	4.83E-05	3.22E-04	6.46E-05	1.32E-04	2.21E-04	3.62E-04	9.57E-05	3.39E-04	1.69E-04	1.26E-04	4.37E-06	5.38E-06	2.2065E-03
551302.38	4172818.06	2228.87901	2972.59485	848.95802	6591.74805	1088.41129	2051.79489	2225.08225	1711.51319	473.43408	4918.71649	3784.64921	2604.05778	0.31167	0.31749	1.39E-04	1.72E-04	4.91E-05	3.27E-04	6.80E-05	1.28E-04	2.19E-04	3.51E-04	9.70E-05	3.36E-04	1.78E-04	1.22E-04	4.36E-06	5.38E-06	2.1957E-03
551345.35	4173169.84	2424.74777	3507.85249	702.15949	4874.78094	781.12379	3457.12216	2442.34634	2069.07474	396.95942	4195.8864	2373.39579	4232.97308	0.34936	0.35251	1.51E-04	2.03E-04	4.06E-05	2.42E-04	4.88E-05	2.16E-04	2.40E-04	4.24E-04	8.14E-05	2.87E-04	1.11E-04	1.99E-04	4.89E-06	5.97E-06	2.2548E-03
551577.82	4173368.33	3026.11306	3413.65589	663.01885	3449.97284	630.37116	4493.8275	3066.39079	2053.51209	381.00573	3256.68399	1615.70924	5402.12746	0.77838	0.78662	1.89E-04	1.97E-04	3.83E-05	1.71E-04	3.94E-05	2.81E-04	3.01E-04	4.21E-04	7.81E-05	2.23E-04	7.59E-05	2.54E-04	1.09E-05	1.33E-05	2.2927E-03
551332.45	4172723.72	2204.43483	2884.15918	868.75169	6633.16944	1191.73309	1953.19743	2199.65595	1659.40192	480.95168	4830.68772	4027.31793	2489.21967	0.29895	0.30496	1.38E-04	1.67E-04	5.02E-05	3.29E-04	7.44E-05	1.22E-04	2.16E-04	3.40E-04	9.86E-05	3.30E-04	1.89E-04	1.17E-04	4.18E-06	5.17E-06	2.1806E-03
551285.79	4172974.13	2362.31623	3470.40449	761.87502	5737.0484	867.98592	2517.37467	2366.66724	2019.32415	431.63857	4782.80406	2921.73605	3174.83246	0.31586	0.32046	1.47E-04	2.01E-04	4.40E-05	2.84E-04	5.42E-05	1.57E-04	2.33E-04	4.14E-04	8.85E-05	3.27E-04	1.37E-04	1.49E-04	4.42E-06	5.43E-06	2.2463E-03
551361.01	4172647.76	2266.41302	2756.78777	895.78959	6755.88443	1246.39309	1800.56855	2261.45115	1586.61859	495.54214	4840.12718	4180.41724	2317.52093	0.28311	0.28859	1.42E-04	1.59E-04	5.18E-05	3.35E-04	7.78E-05	1.12E-04	2.22E-04	3.25E-04	1.02E-04	3.31E-04	1.96E-04	1.09E-04	3.96E-06	4.89E-06	2.1720E-03
551502.8	4173334.21	2806.99315	3457.02039	653.465	3880.11952	680.44864	4189.84188	2837.86441	2078.066	373.90786	3530.02158	1826.55562	5052.60614	0.52603	0.52986	1.75E-04	2.00E-04	3.78E-05	1.92E-04	4.25E-05	2.62E-04	2.79E-04	4.26E-04	7.66E-05	2.41E-04	8.58E-05	2.37E-04	7.36E-06	8.98E-06	2.2718E-03
551373.15	4173218.02	2479.70537	3555.79843	706.63275	4656.66911	758.09393	3537.42399	2497.03298	2103.27345	401.17709	4117.3627	2219.10316	4325.70339	0.36726	0.3704	1.55E-04	2.06E-04	4.09E-05	2.31E-04	4.73E-05	2.21E-04	2.45E-04	4.31E-04	8.22E-05	2.82E-04	1.04E-04	2.03E-04	5.14E-06	6.28E-06	2.2596E-03
551373.65	4172627.86	2308.74348	2698.88539	915.25269	6732.97576	1273.24757	1758.20508	2303.17162	1555.72036	506.50738	4802.38713	4221.00328	2266.75056	0.27667	0.28187	1.44E-04	1.56E-04	5.29E-05	3.34E-04	7.95E-05	1.10E-04	2.26E-04	3.19E-04	1.04E-04	3.28E-04	1.98E-04	1.06E-04	3.87E-06	4.78E-06	2.1671E-03
551441.95	4173289.08	2647.94479	3546.68266	674.30494	4204.88933	714.48045	3863.54986	2669.44163	2135.27158	385.68814	3754.31793	2020.74136	4697.47503	0.42988	0.43314	1.65E-04	2.05E-04	3.90E-05	2.08E-04	4.46E-05	2.41E-04	2.62E-04	4.38E-04	7.91E-05	2.57E-04	9.49E-05	2.21E-04	6.02E-06	7.34E-06	2.2685E-03
551295.91	4173031.33	2394.84248	3601.76346	712.0356	5316.83807	819.05959	2812.02104	2404.61337	2123.42763	403.72531	4475.35294	2707.93875	3524.42225	0.31829	0.32234	1.50E-04	2.08E-04	4.12E-05	2.64E-04	5.12E-05	1.76E-04	2.36E-04	4.35E-04	8.28E-05	3.06E-04	1.27E-04	1.66E-04	4.45E-06	5.46E-06	2.2523E-03
551351.67	4172671.41	2226.59881	2799.38787	876.13149	6672.35842	1216.06756	1845.58058	2222.03788	1609.8758	484.57953	4820.04442	4085.19501	2368.41621	0.28616	0.29176	1.39E-04	1.62E-04	5.07E-05	3.31E-04	7.60E-05	1.15E-04	2.18E-04	3.30E-04	9.93E-05	3.30E-04	1.92E-04	1.11E-04	4.00E-06	4.94E-06	2.1629E-03
551328.15	4172732.09	2190.92292	2868.76528	861.9067	6567.89827	1176.40119	1954.81274	2186.1686	1651.09443	477.41695	4789.76367	3979.29772	2488.76278	0.29792	0.30389	1.37E-04	1.66E-04	4.98E-05	3.26E-04	7.35E-05	1.22E-04	2.15E-04	3.38E-04	9.79E-05	3.28E-04	1.87E-04	1.17E-04	4.17E-06	5.15E-06	2.1655E-03
551348.44	4173178.42	2410.52724	3473.46858	698.4532	4806.24979	773.12206	3435.69027	2427.9682	2049.36489	394.97481	4149.91387	2337.88132	4204.45285	0.34869	0.35177	1.51E-04	2.01E-04	4.04E-05	2.38E-04	4.83E-05	2.15E-04	2.39E-04	4.20E-04	8.10E-05	2.84E-04	1.10E-04	1.97E-04	4.88E-06	5.96E-06	2.2344E-03
551282.15	4172934.94	2303.61788	3304.28708	787.45005	5947.26804	907.22313	2330.43211	2305.1414	1912.02737	444.52555	4859.70337	3094.38007	2948.5735	0.31252	0.31729	1.44E-04	1.91E-04	4.55E-05	2.95E-04	5.67E-05	1.46E-04	2.27E-04	3.92E-04	9.11E-05	3.32E-04	1.45E-04	1.38E-04	4.37E-06	5.38E-06	2.2130E-03
551394.65	4173247.36	2516.00647	3554.24868	697.29942	4479.51877	737.82845	3580.69919	2533.60865	2115.89066	397.10598	3982.56555	2132.71229	4376.5707	0.38024	0.3833	1.57E-04	2.05E-04	4.03E-05	2.22E-04	4.61E-05	2.24E-04	2.49E-04	4.34E-04	8.14E-05	2.72E-04	1.00E-04	2.06E-04	5.32E-06	6.50E-06	2.2487E-03
551451.49	4173298.06	2654.72251	3492.41562	663.17047	4117.19012	698.96251	3887.4072	2677.50431	2104.22902	379.39725	3674.25686	1979.35791	4718.72618	0.43853	0.44182	1.66E-04	2.02E-04	3.83E-05	2.04E-04	4.37E-05	2.43E-04	2.63E-04	4.31E-04	7.78E-05	2.51E-04	9.30E-05	2.22E-04	6.14E-06	7.49E-06	2.2483E-03
551292.65	4173022.29	2375.14689	3557.67906	713.10789	5323.53719	818.16026	2738.74457	2383.95059	2093.15693	404.40052	4483.48048	2711.05277	3436.53222	0.3151	0.31916	1.48E-04	2.06E-04	4.12E-05	2.64E-04	5.11E-05	1.71E-04	2.34E-04	4.29E-04	8.29E-05	3.07E-04	1.27E-04	1.61E-04	4.41E-06	5.41E-06	2.2327E-03
551282.56	4172965.17	2328.97798	3392.08529	761.09332	5720.83438	868.33536	2444.91097	2332.5838	1970.38823	430.92368	4749.66567	2926.57562	3086.48456	0.31112	0.31567	1.45E-04	1.96E-04	4.40E-05	2.84E-04	5.42E-05	1.53E-04	2.29E-04	4.04E-04	8.83E-05	3.25E-04	1.37E-04	1.45E-04	4.35E-06	5.35E-06	2.2145E-03
551351.53	4173187.01	2410.41732	3464.97399	697.56245	4748.58748	766.38127	3428.51742	2427.67017	2044.06005	394.73159	4125.87421	2298.98564	4195.32926	0.34978	0.35248	1.50E-04	2.00E-04	4.03E-05	2.35E-04	4.79E-05	2.14E-04	2.39E-04	4.19E-04	8.09E-05	2.82E-04	1.08E-04	1.97E-04	4.89E-06	5.97E-06	2.2251E-03
551284.64	4172910.4	2270.79747	3211.01046	797.39296	6062.20476	928.6158	2237.55737	2271.08321	1854.33767	448.77415	4878.12022	3190.53022	2834.9704	0.3084	0.31325	1.42E-04	1.86E-04	4.61E-05	3.01E-04	5.80E-05	1.40E-04	2.23E-04	3.80E-04	9.20E-05	3.34E-04	1.50E-04	1.33E-04	4.32E-06	5.31E-06	2.1933E-03
551303.1	4172808.44	2198.28044	2909.79411	840.08491	6475.15492	1083.43143	2014.99662	2194.34546	1675.97829	468.17831	4817.74718	3749.07753	2557.20264	0.30483	0.31055	1.37E-04	1.68E-04	4.86E-05	3.21E-04	6.77E-05	1.26E-04	2.16E-04	3.44E-04	9.60E-05	3.29E-04	1.76E-04	1.20E-04	4.27E-06	5.26E-06	2.1589E-03
551289.43	4173013.33	2361.6087	3521.03985	717.76255	5359.34329	821.34872	2674.47499	2369.47782	2066.95257	407.05675	4511.5105	2726.11376	3359.58228	0.3124	0.31648	1.47E-04	2.04E-04	4.15E-05	2.66E-04	5.13E-05	1.67E-04	2.33E-04	4.24E-04	8.34E-05	3.09E-04	1.28E-04	1.58E-04	4.37E-06	5.36E-06	2.2206E-03
551376.24	4173226.6	2459.41738	3505.5517	698.02191	4564.03783	746.43973	3488.34823	2476.46846	2076.50719	396.50844	4038.22815	2179.73023	4266.26321	0.36502	0.36748	1.54E-04	2.03E-04	4.04E-05	2.26E-04	4.66E-05	2.18E-04	2.43E-04	4.26E-04	8.13E-05	2.76E-04	1.02E-04	2.00E-04	5.11E-06	6.23E-06	2.2279E-03
551763.31	4172610.15	4370.73132	1740.50486	1270.432	4821.78136	1943.84649	1172.82628	4333.89242	1023.00535	683.58395	3180.04131	4783.17197	1569.67728	0.22123	0.22638	2.73E-04	1.01E-04	7.34E-05	2.39E-04	1.21E-04	7.33E-05	4.26E-04	2.10E-04	1.40E-04	2.17E-04	2.25E-04	7.37E-05	3.10E-06	3.84E-06	2.1793E-03
551655.39	4173380.11	3491.54696	3161.02862	649.90589	2916.16273	580.26366	4536.60607	3545.04248	1873.01873	376.93176	2805.03987	1421.56259	5503.23456	2.0659	2.12692	2.18E-04	1.83E-04	3.76E-05	1.45E-04	3.62E-05	2.83E-04	3.48E-04	3.84E-04	7.73E-05	1.92E-04	6.68E-05	2.58E-04	2.89E-05	3.60E-05	2.2941E-03
551293.3	4172842.79	2208.39511	2973.49997	823.08322	6376.19446	1031.08591	2052.45813	2205.64916	1712.59232	459.8461	4841.02625	3573.82496	2604.82858	0.30471	0.31002	1.38E-04	1.72E-04	4.76E-05	3.16E-04	6.44E-05	1.28E-04	2.17E-04	3.51E-04	9.43E-05	3.31E-04	1.68E-04	1.22E-04	4.26E-06	5.25E-06	2.1589E-03
551599.09	4173379.34	3084.40313	3306.06661	654.35932	3244.23887	606.54683	4459.59296	3126.37413	1982.35481	376.94152	3087.64821	1532.48414	5372.85168	0.88318	0.89288	1.93E-04	1.91E-04	3.78E-05	1.61E-04	3.79E-05	2.79E-04	3.07E-04	4.06E-04	7.73E-05	2.11E-04	7.20E-05	2.52E-04	1.24E-05	1.51E-05	2.2527E-03
551642.26	4173382.02	3379.90905	3196.90656	651.72761	2965.4744	584.80357	4536.98996	3429.92449	1900.25253	377.43433	2865.7822	1441.42881	5493.64548	1.54121	1.57801	2.11E-04	1.85E-04	3.77E-05	1.47E-04	3.65E-05	2.83E-04	3.37E-04	3.90E-04	7.74E-05	1.96E-04	6.77E-05	2.58E-04	2.16E-05	2.67E-05	2.2745E-03
551461.03	4173307.04	2664.73468	3443.93195	653.72746	4036.72626	689.86332	3913.26717	2688.7134	2074.64091	373.98808	3605.60065	1938.51938	4742.77441	0.44785	0.45137	1.66E-04	1.99E-04	3.78E-05	2.00E-04	4.31E-05	2.44E-04	2.64E-04	4.25E-04	7.67E-05	2.47E-04	9.11E-05	2.23E-04	6.27E-06	7.65E-06	2.2314E-03
551512.25	4173343.11	2786.40166	3381.24025	644.00329	3773.44024	668.99039	4131.67171	2818.30203	2033.26599	368.47659	3442.6011	1776.43301	4978.78249	0.53708	0.54054	1.74E-04	1.95E-04	3.72E-05	1.87E-04	4.18E-05	2.58E-04	2.77E-04	4.17E-04	7.55E-05	2.35E-04	8.34E-05	2.34E-04	7.52E-06	9.16E-06	2.2323E-03
551319.54	4172748.83	2168.8702	2838.43708	849.53307	6461.06005	1146.32454	1953.91632	2164.18009	1634.41297	471.11751	4723.76479	3891.46223	2483.71053	0.29629	0.30215	1.35E-04	1.64E-04	4.91E-05	3.20E-04	7.16E-05	1.22E-04	2.13E-04	3.35E-04	9.66E-05	3.23E-04	1.83E-04	1.17E-04	4.15E-06	5.12E-06	2.1386E-03
551668.51	4173378.2	3599.49522	3110.74847	645.15756	2860.92555	574.41806	4497.24764	3656.74465	1836.85307	374.67411	2737.23623	1399.22209	5467.18229	2.88781	3.00264	2.25E-04	1.80E-04	3.73E-05	1.42E-04	3.59E-05	2.81E-04	3.59E-04	3.77E-04	7.68E-05	1.87E-04	6.57E-05	2.57E-04	4.04E-05	5.09E-05	2.3142E-03
551302.76	4173079.42	2370.55975	3517.73184	683.09328	5023.01492	792.48616	3013.64472	2384.19959	2083.4619	386.56885	4210.80339	2550.52162	3748.72894	0.31623	0.31991	1.48E-04	2.03E-04	3.95E-05	2.49E-04	4.95E-05	1.88E-04	2.34E-04	4.27E-04	7.92E-05	2.88E-04	1.20E-04	1.76E-04	4.42E-06	5.42E-06	2.2119E-03
551736.9	4173350.34	4257.27543	2906.84395	620.25596	2673.38276	557.03146	4273.88359	4342.22393	1692.234	361.83051	2489.308	1327.88251	5237.97751	4.6195	4.06234	2.66E-04	1.68E-04	3.59E-05	1.33E-04	3.48E-05	2.67E-04	4.27E-04	3.47E-04	7.42E-05	1.70E-04	6.24E-05	2.46E-04	6.46E-05	6.88E-05	2.3639E-03
551305.99	4173088.38	2367.05733	3500.88529	679.94717	4984.76957	790.0309	3060.73955	2381.42751	2073.97243	384.66404	4177.21335	2529.70228	3800.05911	0.31761	0.32086	1.48E-04	2.02E-04	3.93E-05	2.47E-04	4.93E-05	1.91E-04	2.34E-04	4.25E-04	7.88E-05	2.86E-04	1.19E-04	1.78E-04	4.44E-06	5.44E-06	2.2080E-03
551565.25	4173368.66	2918.31463	3345.22569	649.6188	3466.3153	628.63789	4308.64416	2956.29358	2013.70007	372.78563	3248.41564	1623.55379	5181.37179	0.69536	0.69997	1.82E-04	1.93E-04	3.76E-05	1.72E-04	3.93E-05	2.69E-04	2.91E-04	4.13E-04	7.64E-05	2.22E-04	7.63E-05	2.43E-04	9.73E-06	1.19E-05	2.2365E-03
551756.95	4173338.46	4411.60742	2852.45802	611.1526	2633.08611	552.89478	4203.16671	4504.94093	1658.54629	356.67201	2437.88741	1314.1722	5153.40959	2.22776	2.04322	2.75E-04	1.65E-04	3.53E-05	1.31E-04	3.45E-05	2.63E-04	4.43E-04	3.40E-04	7.31E-05	1.67E-04	6.17E-05	2.42E-04	3.12E-05	3.46E-05	2.2955E-03
551354.62	4173195.59	2397.51528	3433.31876	693.13928	4676.85508	757.79163	3400.31461	2414.5456	2026.44801	392.41021	4075.76673	2262.21101	4160.24223	0.34882	0.35144	1.50E-04	1.98E-04	4.01E-05	2.32E-04	4.73E-05	2.12E-04	2.37E-04	4.15E-04	8.04E-05	2.79E-04	1.06E-04	1.95E-04	4.88E-06	5.96E-06	2.2042E-03
551345.47	4172678.32	2187.59509	2771.91781	858.02785	6516.70162	1188.15424	1839.32189	2183.20918	1594.17572	474.59626	4728.14243	3977.803	2357.0852	0.28201	0.2875	1.37E-04	1.60E-04	4.96E-05	3.23E-04	7.42E-05	1.15E-04	2.15E-04	3.27E-04	9.73E-05	3.23E-04	1.87E-04	1.11E-04	3.95E-06	4.87E-06	2.1269E-03
551363.86	4172634.32	2246.2089	2671.19594	885.09186	6567.91337	1228.21002	1746.72357	2241.23294	1538.89532	489.81733	4705.74286	4083.23054	2250.16397	0.27214	0.27726	1.40E-04	1.54E-04	5.12E-05	3.26E-04	7.67E-05	1.09E-04	2.20E-04	3.15E-04	1.00E-04	3.22E-04	1.92E-04	1.06E-04	3.81E-06	4.70E-06	2.1212E-03
551306.29	4172785.36	2168.71348	2846.35397	838.59402	6416.74356	1100.56094	1974.08296	2164.3554	1639.57821	466.42008	4731.05105	3784.02786	2505.68518	0.2993	0.30506	1.35E-04	1.65E-04	4.85E-05	3.18E-04	6.87E-05	1.23E-04	2.13E-04	3.36E-04	9.56E-05	3.24E-04	1.78E-04	1.18E-04	4.19E-06	5.17E-06	2.1313E-03
551286.2	4173004.36	2338.49988	3464.63922	718.95187	5364.30575	821.00626	2603.10639	2345.468	2029.46542	407.70594	4511.56567	2729.76002	3273.14245	0.30851	0.31279	1.46E-04	2.00E-04	4.16E-05	2.66E-04	5.13E-05	1.63E-04	2.31E-04	4.16E-04	8.36E-05	3.09E-04	1.28E-04	1.54E-04	4.32E-06	5.30E-06	2.1979E-03
551315.24	4172757.2	2157.9732	2821.5891	842.67994	6405.39566	1129.66875	1949.98354	2153.35491	1625.0509	467.62331	4691.36972	3842.46303	2477.2791	0.29507	0.30085	1.35E-04	1.63E-04	4.87E-05	3.18E-04	7.06E-05	1.22E-04	2.12E-04	3.33E-04	9.59E-05	3.21E-04	1.80E-04	1.16E-04	4.13E-06	5.10E-06	2.1239E-03
551701.81	4172570.12	4371.44783	1860.25561	1476.34925	4053.89661	2140.26148	1276.87471	4330.11422	1104.04437	788.46306	3138.85716	4305.65374	1714.71778	0.1603	0.16235	2.73E-04	1.08E-04	8.54E-05	2.01E-04	1.34E-04	7.97E-05	4.26E-04	2.26E-04	1.62E-04	2.15E-04	2.02E-04	8.05E-05	2.24E-06	2.75E-06	2.1962E-03
551309.21	4173097.33	2353.40446	3463.95098	674.20725	4924.4916	785.11444	3093.15483	2368.42205	2052.65755	381.29127	4123.90578	2503.47749	3832.40706	0.3176	0.32118	1.47E-04	2.00E-04	3.90E-05	2.44E-04	4.90E-05	1.93E-04	2.33E-04	4.21E-04	7.82E-05	2.82E-04	1.18E-04	1.80E-04	4.44E-06	5.44E-06	2.1937E-03
551720.56	4173360.82	4081.83898	2933.13745	623.18487	2692.72045	557.22489	4292.37101	4158.88357	1710.62492	363.2905	2523.14171	1332.61197	5257.21257	12.80412	10.63619	2.55E-04	1.70E-04	3.60E-05	1.33E-04	3.48E-05	2.68E-04	4.09E-04	3.51E-04	7.45E-05	1.73E-04	6.26E-05	2.47E-04	1.79E-04	1.80E-04	2.5722E-03
551299.54	4173070.47	2355.16604	3499.05878	680.4201	5012.63718	789.41509	2943.75242	2368.03801	2072.53745	385.20382	4200.86725	2560.63352	3668.1109	0.31281	0.31617	1.47E-04	2.02E-04	3.93E-05	2.48E-04	4.93E-05	1.84E-04	2.33E-04	4.25E-04	7.90E-05	2.87E-04	1.20E-04	1.72E-04	4.38E-06	5.36E-06	2.1964E-03
551279.34	4172956.2	2290.9478	3307.35892	757.94176	5681.99236	866.33372	2371.79297	2293.88517	1918.78489	428.83407	4698.43769	2922.97866	2996.51086	0.30649	0.311	1.43E-04	1.91E-04	4.38E-05	2.82E-04	5.41E-05	1.48E-04	2.25E-04	3.93E-04	8.79E-05	3.21E-04	1.37E-04	1.41E-04	4.29E-06	5.27E-06	2.1776E-03
551470.56	4173316.03	2666.46013	3385.05929	643.84186	3950.1768	680.21274	3920.02068	2691.79634	2038.45489	368.2761	3532.21146	1895.66847	4743.71323	0.45485	0.45771	1.66E-04	1.96E-04	3.72E-05	1.96E-04	4.25E-05	2.45E-04	2.65E-04	4.18E-04	7.55E-05	2.42E-04	8.90E-05	2.23E-04	6.36E-06	7.76E-06	2.2080E-03
551304.4	4172794.17	2166.81457	2846.41436	832.93776	6373.04335	1084.75946	1976.41537	2162.67713	1639.90183	463.66465	4718.7868	3732.27242	2508.25872	0.2982	0.30386	1.35E-04	1.65E-04	4.82E-05	3.16E-04	6.78E-05	1.23E-04	2.13E-04	3.36E-04	9.50E-05	3.23E-04	1.75E-04	1.18E-04	4.17E-06	5.15E-06	2.1240E-03
551681.64	4173376.3	3686.01848	3039.40778	637.12273	2799.2177	567.09472	4408.97257	3746.86958	1789.60999	370.39231	2660.17236	1375.0977	5370.63031	4.44266	4.73685	2.30E-04	1.76E-04	3.68E-05	1.39E-04	3.54E-05	2.75E-04	3.68E-04	3.67E-04	7.59E-05	1.82E-04	6.46E-05	2.52E-04	6.22E-05	8.03E-05	2.3445E-03
551357.71	4173204.18	2391.09197	3412.77485	689.48264	4608.89765	749.59981	3378.14292	2407.87629	2015.12572	390.60573	4032.94886	2223.63667	4133.4625	0.34806	0.35101	1.49E-04	1.97E-04	3.99E-05	2.28E-04	4.68E-05	2.11E-04	2.37E-04	4.13E-04	8.01E-05	2.76E-04	1.04E-04	1.94E-04	4.87E-06	5.95E-06	2.1877E-03
551278.93	4172925.97	2252.36136	3197.86382	776.54481	5846.02368	897.56104	2250.41329	2253.45242	1849.50566	437.86962	4754.5366	3062.11594	2848.89682	0.3035	0.30815	1.41E-04	1.85E-04	4.49E-05	2.90E-04	5.61E-05	1.41E-04	2.22E-04	3.79E-04	8.98E-05	3.25E-04	1.44E-04	1.34E-04	4.25E-06	5.22E-06	2.1594E-03
551282.98	4172995.4	2320.49928	3415.63224	723.28347	5395.32714	824.81481	2539.6766	2326.55179	1996.54005	410.07098	4528.12465	2746.25084	3196.51385	0.30557	0.30985	1.45E-04	1.97E-04	4.18E-05	2.67E-04	5.15E-05	1.59E-04	2.29E-04	4.09E-04	8.41E-05	3.10E-04	1.29E-04	1.50E-04	4.28E-06	5.25E-06	2.1821E-03
551296.31	4173061.52	2347.33542	3491.20241	681.37984	5028.0739	789.20566	2882.04971	2359.38284	2066.48552	385.90039	4216.76149	2575.01326	3597.38226	0.31035	0.31374	1.47E-04	2.02E-04	3.94E-05	2.49E-04	4.93E-05	1.80E-04	2.32E-04	4.24E-04	7.91E-05	2.88E-04	1.21E-04	1.69E-04	4.34E-06	5.32E-06	2.1889E-03
551521.7	4173352.01	2781.44926	3333.11709	638.45251	3678.15734	658.94563	4098.40427	2814.35832	2004.10813	365.42458	3373.4765	1728.13818	4937.74962	0.55029	0.55325	1.74E-04	1.93E-04	3.69E-05	1.82E-04	4.12E-05	2.56E-04	2.77E-04	4.11E-04	7.49E-05	2.31E-04	8.12E-05	2.32E-04	7.70E-06	9.38E-06	2.2059E-03
551616.01	4173385.84	3155.18038	3219.26902	646.49838	3092.8567	589.74327	4420.72536	3199.11422	1922.7884	373.2207	2958.5287	1473.0945	5339.79414	1.01549	1.02575	1.97E-04	1.86E-04	3.74E-05	1.53E-04	3.68E-05	2.76E-04	3.14E-04	3.94E-04	7.65E-05	2.02E-04	6.92E-05	2.51E-04	1.42E-05	1.74E-05	2.2257E-03
551380.19	4173237.45	2441.9766	3453.95027	687.77263	4453.56938	732.58108	3438.53996	2458.76579	2048.95806	391.02769	3947.4418	2128.26164	4206.78274	0.36218	0.36453	1.52E-04	2.00E-04	3.98E-05	2.21E-04	4.58E-05	2.15E-04	2.42E-04	4.20E-04	8.02E-05	2.70E-04	1.00E-04	1.98E-04	5.07E-06	6.18E-06	2.1938E-03
551281.17	4172889.17	2212.62332	3066.59126	793.1007	6055.17559	946.94655	2127.04761	2211.92648	1768.61139	444.89969	4776.32014	3257.52167	2697.53735	0.30066	0.30548	1.38E-04	1.77E-04	4.59E-05	3.00E-04	5.91E-05	1.33E-04	2.17E-04	3.63E-04	9.12E-05	3.27E-04	1.53E-04	1.27E-04	4.21E-06	5.18E-06	2.1403E-03
551340.35	4172687.25	2160.36235	2758.33539	845.36383	6403.43551	1167.54441	1843.01559	2156.08633	1586.70558	467.64847	4663.21888	3899.22538	2358.23603	0.2798	0.28523	1.35E-04	1.59E-04	4.89E-05	3.17E-04	7.29E-05	1.15E-04	2.12E-04	3.25E-04	9.59E-05	3.19E-04	1.83E-04	1.11E-04	3.92E-06	4.83E-06	2.1033E-03
551796.13	4173315.36	4534.73708	2745.02922	607.81914	2540.56242	539.14769	4054.3575	4638.24106	1595.78344	342.84719	2442.72598	1277.84588	4965.65567	1.12472	1.07364	2.83E-04	1.59E-04	3.51E-05	1.26E-04	3.37E-05	2.53E-04	4.56E-04	3.27E-04	7.03E-05	1.67E-04	6.00E-05	2.33E-04	1.57E-05	1.82E-05	2.2373E-03
551720.55	4172580.32	4423.44596	1805.99178	1410.49093	4096.36424	2028.84992	1237.59195	4382.44327	1069.03142	754.53259	3072.34875	4277.38104	1661.21512	0.17084	0.17367	2.76E-04	1.04E-04	8.15E-05	2.03E-04	1.27E-04	7.73E-05	4.31E-04	2.19E-04	1.55E-04	2.10E-04	2.01E-04	7.80E-05	2.39E-06	2.94E-06	2.1682E-03
551480.1	4173325.01	2666.72763	3329.40573	635.31634	3866.12038	671.09969	3917.60145	2693.40907	2003.94838	363.32161	3464.32948	1852.36385	4734.63157	0.46448	0.46779	1.67E-04	1.92E-04	3.67E-05	1.92E-04	4.19E-05	2.45E-04	2.65E-04	4.11E-04	7.45E-05	2.37E-04	8.70E-05	2.22E-04	6.50E-06	7.93E-06	2.1847E-03
551308.42	4172775.46	2144.0733	2800.656	829.93951	6305.59415	1095.74984	1946.44674	2139.72082	1613.71697	461.28756	4644.31342	3741.30535	2470.78939	0.29275	0.29836	1.34E-04	1.62E-04	4.80E-05	3.13E-04	6.84E-05	1.22E-04	2.10E-04	3.31E-04	9.46E-05	3.18E-04	1.76E-04	1.16E-04	4.10E-06	5.06E-06	2.1005E-03
551331.71	4172704.06	2142.54247	2767.0164	839.19677	6348.69467	1154.84773	1867.75635	2138.16222	1592.12564	464.37633	4634.48551	3860.13682	2384.08884	0.28227	0.2878	1.34E-04	1.60E-04	4.85E-05	3.15E-04	7.21E-05	1.17E-04	2.10E-04	3.26E-04	9.52E-05	3.17E-04	1.81E-04	1.12E-04	3.95E-06	4.88E-06	2.0965E-03
551552.49	4173368.83	2843.33682	3297.19475	639.19365	3482.33517	626.74079	4168.621	2879.44472	1983.21409	366.47214	3246.69096	1630.99254	5018.02777	0.62787	0.63261	1.78E-04	1.91E-04	3.70E-05	1.73E-04	3.91E-05	2.60E-04	2.83E-04	4.07E-04	7.51E-05	2.22E-04	7.66E-05	2.36E-04	8.79E-06	1.07E-05	2.1957E-03
551694.77	4173374.39	3785.29344	2972.02878	627.35672	2735.53621	559.0237	4313.13686	3850.41965	1743.0332	365.09508	2587.09653	1348.16934	5267.64304	8.36623	9.40756	2.36E-04	1.72E-04	3.63E-05	1.36E-04	3.49E-05	2.69E-04	3.78E-04	3.57E-04	7.48E-05	1.77E-04	6.33E-05	2.47E-04	1.17E-04	1.59E-04	2.4591E-03
551279.75	4172986.43	2296.74021	3355.73004	725.61929	5407.67988	826.95392	2473.4367	2301.94637	1957.72467	411.26451	4526.20722	2757.25926	3116.03985	0.30216	0.30607	1.43E-04	1.94E-04	4.20E-05	2.68E-04	5.16E-05	1.54E-04	2.26E-04	4.01E-04	8.43E-05	3.10E-04	1.30E-04	1.46E-04	4.23E-06	5.19E-06	2.1602E-03
551293.09	4173052.57	2329.34481	3462.78466	679.584	5017.5083	786.01476	2810.41222	2340.57749	2048.10727	385.05295	4211.7245	2567.07394	3513.13311	0.30648	0.31028	1.45E-04	2.00E-04	3.93E-05	2.49E-04	4.91E-05	1.76E-04	2.30E-04	4.20E-04	7.89E-05	2.88E-04	1.21E-04	1.65E-04	4.29E-06	5.26E-06	2.1702E-03
551769.09	4173333.75	4403.89001	2775.99237	598.08224	2581.50161	544.92076	4076.37999	4499.08934	1614.73495	348.97001	2380.05229	1294.53142	4997.95931	1.67151	1.55865	2.75E-04	1.60E-04	3.46E-05	1.28E-04	3.40E-05	2.55E-04	4.42E-04	3.31E-04	7.15E-05	1.63E-04	6.08E-05	2.35E-04	2.34E-05	2.64E-05	2.2395E-03
551310.93	4172765.57	2137.24368	2787.69138	829.94589	6289.90197	1103.86343	1935.31916	2132.81534	1606.09483	460.92979	4622.49424	3754.27457	2457.4536	0.29081	0.29642	1.33E-04	1.61E-04	4.80E-05	3.12E-04	6.89E-05	1.21E-04	2.10E-04	3.29E-04	9.45E-05	3.16E-04	1.76E-04	1.15E-04	4.07E-06	5.02E-06	2.0945E-03
551336.03	4172695.66	2142.37634	2750.78266	837.284	6327.43075	1153.45791	1849.43448	2138.14118	1582.78859	463.26817	4619.28117	3847.28694	2363.32094	0.27886	0.28426	1.34E-04	1.59E-04	4.84E-05	3.14E-04	7.20E-05	1.16E-04	2.10E-04	3.24E-04	9.50E-05	3.16E-04	1.81E-04	1.11E-04	3.90E-06	4.82E-06	2.0883E-03
551360.8	4173212.77	2375.4328	3375.47851	683.4051	4530.81364	739.93253	3340.66141	2391.95488	1995.00756	387.3774	3971.96064	2186.74089	4087.72319	0.34619	0.34915	1.48E-04	1.95E-04	3.95E-05	2.25E-04	4.62E-05	2.09E-04	2.35E-04	4.09E-04	7.94E-05	2.72E-04	1.03E-04	1.92E-04	4.84E-06	5.92E-06	2.1630E-03
551291.8	4172827.76	2156.52723	2862.6696	809.17488	6220.77425	1026.53887	1983.65725	2153.42494	1649.03575	451.69372	4686.6969	3537.15683	2517.81683	0.29525	0.3005	1.35E-04	1.66E-04	4.68E-05	3.08E-04	6.41E-05	1.24E-04	2.12E-04	3.38E-04	9.26E-05	3.20E-04	1.66E-04	1.18E-04	4.13E-06	5.09E-06	2.0997E-03
551401.32	4173263.22	2469.57534	3426.19686	674.30603	4263.47054	713.64181	3479.16191	2486.96253	2047.71162	384.44266	3795.27401	2059.19279	4251.90733	0.37467	0.37694	1.54E-04	1.98E-04	3.90E-05	2.11E-04	4.46E-05	2.17E-04	2.44E-04	4.20E-04	7.88E-05	2.60E-04	9.67E-05	2.00E-04	5.24E-06	6.39E-06	2.1751E-03
551408.99	4173270.22	2485.89228	3422.14824	670.14623	4216.84972	709.85923	3513.88739	2503.77051	2050.54418	382.39718	3752.63363	2044.28698	4290.9522	0.38135	0.38422	1.55E-04	1.98E-04	3.87E-05	2.09E-04	4.43E-05	2.19E-04	2.46E-04	4.20E-04	7.84E-05	2.57E-04	9.60E-05	2.02E-04	5.34E-06	6.51E-06	2.1755E-03
551276.11	4172947.24	2251.14489	3220.91847	753.64437	5632.5418	863.51235	2299.95354	2253.48477	1866.96135	426.00974	4638.64687	2916.01373	2907.69081	0.30034	0.30478	1.41E-04	1.86E-04	4.36E-05	2.79E-04	5.39E-05	1.44E-04	2.22E-04	3.83E-04	8.73E-05	3.17E-04	1.37E-04	1.37E-04	4.20E-06	5.16E-06	2.1388E-03
551531.15	4173360.91	2774.72011	3283.60808	632.88172	3578.87374	636.22429	4060.12668	2808.42569	1973.98407	362.39326	3300.5589	1679.43642	4891.86799	0.56217	0.5656	1.73E-04	1.90E-04	3.66E-05	1.77E-04	3.97E-05	2.54E-04	2.76E-04	4.05E-04	7.43E-05	2.26E-04	7.89E-05	2.30E-04	7.87E-06	9.58E-06	2.1772E-03
551418.61	4173279.28	2503.20717	3403.28717	662.61804	4148.27715	703.83978	3553.08358	2521.80188	2044.8996	378.4706	3688.96616	2015.74818	4333.80243	0.38929	0.39212	1.56E-04	1.97E-04	3.83E-05	2.06E-04	4.40E-05	2.22E-04	2.48E-04	4.19E-04	7.76E-05	2.52E-04	9.47E-05	2.04E-04	5.45E-06	6.64E-06	2.1701E-03
551489.64	4173333.99	2670.78692	3286.3943	629.25426	3788.71257	663.12523	3914.97298	2698.78009	1976.93772	359.8127	3407.64875	1809.18748	4727.06009	0.47566	0.47897	1.67E-04	1.90E-04	3.64E-05	1.88E-04	4.14E-05	2.45E-04	2.65E-04	4.05E-04	7.38E-05	2.33E-04	8.50E-05	2.22E-04	6.66E-06	8.12E-06	2.1659E-03
551586.09	4173381.23	2935.26477	3227.80537	639.35402	3259.75854	603.84444	4245.90316	2974.17518	1940.3278	367.5654	3077.38456	1538.24708	5112.56535	0.76163	0.76646	1.83E-04	1.87E-04	3.70E-05	1.62E-04	3.77E-05	2.65E-04	2.92E-04	3.98E-04	7.53E-05	2.10E-04	7.22E-05	2.40E-04	1.07E-05	1.30E-05	2.1832E-03
551729.08	4173360.44	4074.41631	2850.66856	610.5884	2634.64368	548.19241	4149.54298	4152.71651	1661.40809	355.95176	2458.07075	1309.25548	5087.38144	7.48843	6.33432	2.54E-04	1.65E-04	3.53E-05	1.31E-04	3.42E-05	2.59E-04	4.08E-04	3.41E-04	7.30E-05	1.68E-04	6.15E-05	2.39E-04	1.05E-04	1.07E-04	2.3809E-03
551289.87	4173043.62	2310.95605	3430.15025	678.56514	5009.7262	783.20774	2739.78131	2321.32696	2026.40126	384.59982	4210.55429	2565.96713	3429.3742	0.30323	0.30655	1.44E-04	1.98E-04	3.92E-05	2.48E-04	4.89E-05	1.71E-04	2.28E-04	4.15E-04	7.88E-05	2.88E-04	1.21E-04	1.61E-04	4.24E-06	5.19E-06	2.1516E-03
551749.77	4173348.47	4242.61526	2798.1655	602.25996	2594.6881	544.35277	4083.35215	4329.44547	1627.86962	351.29599	2405.43626	1295.36997	5010.10998	2.82508	2.54012	2.65E-04	1.62E-04	3.48E-05	1.29E-04	3.40E-05	2.55E-04	4.26E-04	3.34E-04	7.20E-05	1.64E-04	6.08E-05	2.35E-04	3.95E-05	4.30E-05	2.2536E-03
551740.16	4172590.59	4384.76557	1751.64702	1326.13382	4249.4862	1922.10738	1195.10157	4345.73387	1033.78821	711.49363	3039.92928	4321.59069	1602.09878	0.18648	0.19022	2.74E-04	1.01E-04	7.67E-05	2.11E-04	1.20E-04	7.46E-05	4.27E-04	2.12E-04	1.46E-04	2.08E-04	2.03E-04	7.52E-05	2.61E-06	3.22E-06	2.1339E-03
551354.07	4172640.78	2181.69511	2633.94921	854.5657	6368.35817	1182.78745	1731.45741	2177.20159	1516.73021	472.94831	4587.8837	3930.17378	2228.04227	0.2664	0.27139	1.36E-04	1.52E-04	4.94E-05	3.16E-04	7.39E-05	1.08E-04	2.14E-04	3.11E-04	9.69E-05	3.14E-04	1.85E-04	1.05E-04	3.73E-06	4.60E-06	2.0688E-03
551574.81	4173377.67	2881.24616	3236.53888	637.17809	3329.42304	610.88295	4192.48271	2918.93678	1947.90076	365.86115	3126.44794	1567.06988	5045.35134	0.70831	0.71271	1.80E-04	1.87E-04	3.68E-05	1.65E-04	3.82E-05	2.62E-04	2.87E-04	3.99E-04	7.50E-05	2.14E-04	7.36E-05	2.37E-04	9.91E-06	1.21E-05	2.1765E-03
551276.52	4172977.47	2269.61887	3290.41693	726.71062	5408.73282	828.47477	2406.99285	2274.04431	1916.05062	411.70239	4511.88262	2765.82939	3035.17356	0.29835	0.30225	1.42E-04	1.90E-04	4.20E-05	2.68E-04	5.17E-05	1.50E-04	2.24E-04	3.93E-04	8.44E-05	3.09E-04	1.30E-04	1.43E-04	4.17E-06	5.12E-06	2.1351E-03
551327.38	4172712.47	2121.56486	2744.97134	828.99771	6246.84081	1135.76731	1866.57024	2117.25401	1580.19956	458.94537	4570.89148	3791.95739	2379.69289	0.27976	0.28521	1.32E-04	1.59E-04	4.79E-05	3.10E-04	7.09E-05	1.17E-04	2.08E-04	3.24E-04	9.41E-05	3.13E-04	1.78E-04	1.12E-04	3.91E-06	4.83E-06	2.0736E-03
551292.5	4172818.38	2137.67517	2819.49597	806.24494	6173.82279	1029.83341	1957.50214	2134.33367	1624.40773	449.77534	4631.01964	3540.24415	2484.56341	0.29187	0.29714	1.33E-04	1.63E-04	4.66E-05	3.06E-04	6.43E-05	1.22E-04	2.10E-04	3.33E-04	9.22E-05	3.17E-04	1.66E-04	1.17E-04	4.08E-06	5.04E-06	2.0795E-03
551602.88	4173387.75	3018.51891	3182.56115	637.43091	3128.63288	589.4708	4275.78654	3059.34266	1906.37114	367.26878	2976.45748	1485.30709	5159.2315	0.85347	0.86125	1.88E-04	1.84E-04	3.69E-05	1.55E-04	3.68E-05	2.67E-04	3.01E-04	3.91E-04	7.53E-05	2.04E-04	6.98E-05	2.42E-04	1.19E-05	1.46E-05	2.1772E-03
551499.18	4173342.98	2681.88726	3260.05168	625.93715	3717.88263	656.17313	3918.8466	2711.2443	1959.85633	357.95655	3362.90164	1766.31315	4729.45883	0.4889	0.4918	1.67E-04	1.88E-04	3.62E-05	1.84E-04	4.10E-05	2.45E-04	2.67E-04	4.02E-04	7.34E-05	2.30E-04	8.30E-05	2.22E-04	6.84E-06	8.33E-06	2.1540E-03
551279.44	4172878.55	2169.63657	2972.05705	782.22669	5966.86985	943.50264	2061.81362	2168.59906	1713.62048	438.29688	4669.1637	3239.42719	2615.78977	0.29277	0.29747	1.35E-04	1.72E-04	4.52E-05	2.96E-04	5.89E-05	1.29E-04	2.13E-04	3.51E-04	8.98E-05	3.19E-04	1.52E-04	1.23E-04	4.10E-06	5.04E-06	2.0937E-03
551286.64	4173034.66	2295.81242	3399.58208	679.78303	5018.69558	782.52044	2674.07021	2305.30695	2004.99711	385.37386	4222.39398	2569.65304	3351.26547	0.30064	0.30398	1.43E-04	1.97E-04	3.93E-05	2.49E-04	4.89E-05	1.67E-04	2.27E-04	4.11E-04	7.90E-05	2.89E-04	1.21E-04	1.57E-04	4.21E-06	5.15E-06	2.1366E-03
551385.53	4173251.07	2413.23763	3373.96856	672.70291	4310.29999	714.17203	3368.05725	2429.74021	2006.7847	382.84935	3817.9202	2067.37091	4121.44876	0.35826	0.36047	1.51E-04	1.95E-04	3.89E-05	2.14E-04	4.46E-05	2.10E-04	2.39E-04	4.11E-04	7.85E-05	2.61E-04	9.71E-05	1.94E-04	5.01E-06	6.11E-06	2.1448E-03
551323.06	4172720.87	2110.35613	2734.46427	823.89101	6197.47456	1124.28466	1870.45093	2106.03428	1574.5929	456.31517	4539.34871	3757.00793	2382.19893	0.27949	0.28492	1.32E-04	1.58E-04	4.76E-05	3.07E-04	7.02E-05	1.17E-04	2.07E-04	3.23E-04	9.35E-05	3.10E-04	1.76E-04	1.12E-04	3.91E-06	4.83E-06	2.0626E-03
551312.44	4173106.28	2286.07775	3330.17725	650.38964	4724.33904	764.46966	3059.22181	2301.78242	1976.1846	367.68241	3940.77604	2442.7183	3780.40756	0.31178	0.31526	1.43E-04	1.93E-04	3.76E-05	2.34E-04	4.77E-05	1.91E-04	2.26E-04	4.05E-04	7.54E-05	2.69E-04	1.15E-04	1.78E-04	4.36E-06	5.34E-06	2.1241E-03
551363.89	4173221.35	2353.56514	3326.86787	675.63859	4446.35446	729.25542	3292.50503	2369.79574	1968.97603	383.15877	3898.25392	2150.76589	4029.01429	0.34392	0.34681	1.47E-04	1.92E-04	3.91E-05	2.20E-04	4.55E-05	2.06E-04	2.33E-04	4.04E-04	7.85E-05	2.67E-04	1.01E-04	1.89E-04	4.81E-06	5.88E-06	2.1326E-03
551650.74	4173389.75	3334.77638	3047.06536	630.65622	2838.78146	565.38372	4301.56564	3384.52817	1806.77748	365.4466	2732.1943	1388.03554	5222.39478	1.62475	1.65938	2.08E-04	1.76E-04	3.65E-05	1.41E-04	3.53E-05	2.69E-04	3.33E-04	3.70E-04	7.49E-05	1.87E-04	6.52E-05	2.45E-04	2.27E-05	2.81E-05	2.1917E-03
551447.48	4173306.47	2551.40519	3307.03158	636.4838	3937.32121	673.56548	3668.03174	2573.09498	1992.71498	364.02387	3499.92444	1910.44078	4455.45856	0.41149	0.41442	1.59E-04	1.91E-04	3.68E-05	1.95E-04	4.21E-05	2.29E-04	2.53E-04	4.08E-04	7.46E-05	2.39E-04	8.97E-05	2.09E-04	5.76E-06	7.02E-06	2.1408E-03
551663.58	4173387.88	3435.78469	3004.86648	627.02147	2788.93848	560.30437	4276.878	3488.92029	1776.03656	363.81736	2671.11353	1367.73258	5202.64411	2.17397	2.22468	2.15E-04	1.74E-04	3.63E-05	1.38E-04	3.50E-05	2.67E-04	3.43E-04	3.64E-04	7.46E-05	1.83E-04	6.42E-05	2.44E-04	3.04E-05	3.77E-05	2.2058E-03
551272.89	4172938.27	2211.71257	3136.12758	748.84658	5582.6797	861.16753	2230.97697	2213.51685	1816.47724	422.84796	4575.4675	2910.66113	2822.22179	0.29402	0.29838	1.38E-04	1.81E-04	4.33E-05	2.77E-04	5.38E-05	1.39E-04	2.18E-04	3.72E-04	8.67E-05	3.13E-04	1.37E-04	1.33E-04	4.11E-06	5.06E-06	2.1005E-03
551275.3	4172913.55	2188.04235	3063.50273	761.94306	5722.36431	886.50504	2150.48625	2188.61749	1770.67149	428.94181	4617.48295	3018.03819	2724.35525	0.29185	0.29631	1.37E-04	1.77E-04	4.41E-05	2.84E-04	5.54E-05	1.34E-04	2.15E-04	3.63E-04	8.79E-05	3.16E-04	1.42E-04	1.28E-04	4.08E-06	5.02E-06	2.0917E-03
551273.3	4172968.5	2240.44823	3222.35658	726.97201	5402.30332	829.87761	2341.70094	2244.15138	1873.30886	411.60585	4488.56408	2773.79608	2955.68047	0.29461	0.29824	1.40E-04	1.86E-04	4.20E-05	2.68E-04	5.18E-05	1.46E-04	2.21E-04	3.84E-04	8.44E-05	3.07E-04	1.30E-04	1.39E-04	4.12E-06	5.05E-06	2.1083E-03
551283.39	4173025.63	2278.69147	3361.95639	681.07059	5027.29985	781.9691	2607.91032	2287.28293	1978.97154	386.16654	4232.18805	2572.9001	3272.03937	0.29749	0.3012	1.42E-04	1.94E-04	3.94E-05	2.49E-04	4.88E-05	1.63E-04	2.25E-04	4.06E-04	7.92E-05	2.89E-04	1.21E-04	1.54E-04	4.16E-06	5.10E-06	2.1198E-03
551759.87	4172600.85	4218.95906	1690.90176	1227.90693	4481.80176	1836.50794	1146.0891	4183.86532	994.649	661.01846	3031.28949	4426.77015	1533.39694	0.20353	0.20809	2.63E-04	9.78E-05	7.10E-05	2.22E-04	1.15E-04	7.16E-05	4.11E-04	2.04E-04	1.35E-04	2.07E-04	2.08E-04	7.20E-05	2.85E-06	3.53E-06	2.0849E-03
551293.2	4172809	2113.64795	2769.43214	800.31033	6093.37221	1028.1695	1927.83733	2110.14287	1596.01104	446.17973	4555.87049	3521.69103	2446.75277	0.2869	0.29211	1.32E-04	1.60E-04	4.63E-05	3.02E-04	6.42E-05	1.20E-04	2.07E-04	3.27E-04	9.15E-05	3.12E-04	1.65E-04	1.15E-04	4.01E-06	4.95E-06	2.0519E-03
551508.71	4173351.96	2677.73372	3215.3249	620.46217	3632.65197	647.29321	3891.92268	2708.19808	1932.76933	354.86209	3301.51161	1721.00707	4695.03332	0.50002	0.50328	1.67E-04	1.86E-04	3.59E-05	1.80E-04	4.04E-05	2.43E-04	2.66E-04	3.96E-04	7.27E-05	2.26E-04	8.08E-05	2.21E-04	7.00E-06	8.53E-06	2.1303E-03
551676.42	4173386.02	3527.50936	2948.58736	620.67624	2733.99819	553.9597	4216.46368	3584.11189	1737.26914	360.53935	2603.76457	1345.45219	5139.90955	3.07647	3.18919	2.20E-04	1.70E-04	3.59E-05	1.36E-04	3.46E-05	2.63E-04	3.52E-04	3.56E-04	7.39E-05	1.78E-04	6.32E-05	2.41E-04	4.30E-05	5.40E-05	2.2221E-03
551625.05	4173393.49	3128.95036	3091.66694	629.98568	2921.19096	571.95996	4250.28077	3172.79978	1842.67652	363.99201	2832.7392	1421.48929	5145.13362	1.04803	1.05721	1.95E-04	1.79E-04	3.64E-05	1.45E-04	3.57E-05	2.65E-04	3.12E-04	3.78E-04	7.46E-05	1.94E-04	6.68E-05	2.42E-04	1.47E-05	1.79E-05	2.1554E-03
551314.42	4172737.68	2089.93818	2707.95458	813.4531	6104.62543	1099.36868	1871.78955	2085.62699	1560.02999	450.99816	4479.73595	3685.04661	2379.94422	0.27857	0.28394	1.30E-04	1.57E-04	4.70E-05	3.03E-04	6.87E-05	1.17E-04	2.05E-04	3.20E-04	9.24E-05	3.06E-04	1.73E-04	1.12E-04	3.90E-06	4.81E-06	2.0394E-03
551280.16	4173016.66	2265.24867	3327.52078	684.82251	5055.40822	784.27924	2547.7533	2272.97047	1954.54246	388.31278	4254.59098	2584.38491	3200.00479	0.29488	0.29847	1.41E-04	1.92E-04	3.96E-05	2.51E-04	4.90E-05	1.59E-04	2.23E-04	4.01E-04	7.96E-05	2.91E-04	1.21E-04	1.50E-04	4.13E-06	5.06E-06	2.1076E-03
551457.1	4173315.53	2555.97284	3253.85688	626.45593	3857.66093	664.29186	3683.3498	2578.903	1960.30291	358.24702	3429.97265	1871.48361	4466.96361	0.41954	0.42245	1.60E-04	1.88E-04	3.62E-05	1.91E-04	4.15E-05	2.30E-04	2.54E-04	4.02E-04	7.34E-05	2.35E-04	8.79E-05	2.10E-04	5.87E-06	7.16E-06	2.1207E-03
551562.15	4173377.92	2794.33767	3185.00267	626.02654	3348.02908	627.3623	4044.98771	2830.15358	1916.94531	359.04268	3125.08622	1575.40631	4870.42889	0.63819	0.64169	1.74E-04	1.84E-04	3.62E-05	1.66E-04	3.92E-05	2.53E-04	2.78E-04	3.93E-04	7.36E-05	2.14E-04	7.40E-05	2.29E-04	8.93E-06	1.09E-05	2.1336E-03
551366.98	4173229.94	2342.24595	3295.20617	669.30388	4369.30702	719.5459	3258.63467	2358.24383	1952.21824	379.83383	3838.5024	2112.60317	3988.61587	0.3423	0.3451	1.46E-04	1.91E-04	3.87E-05	2.17E-04	4.49E-05	2.04E-04	2.32E-04	4.00E-04	7.79E-05	2.62E-04	9.92E-05	1.87E-04	4.79E-06	5.85E-06	2.1100E-03
551277.7	4172867.93	2129.80964	2884.15713	772.21005	5882.62778	941.82477	2002.4621	2128.44325	1662.80201	432.25994	4567.5112	3225.9884	2541.11958	0.28584	0.29045	1.33E-04	1.67E-04	4.46E-05	2.92E-04	5.88E-05	1.25E-04	2.09E-04	3.41E-04	8.86E-05	3.12E-04	1.52E-04	1.19E-04	4.00E-06	4.92E-06	2.0507E-03
551276.93	4173007.7	2250.56108	3288.48009	688.93863	5085.3936	787.34428	2488.6528	2257.40654	1927.48385	390.60657	4275.07582	2598.10592	3128.92674	0.2922	0.29581	1.41E-04	1.90E-04	3.98E-05	2.52E-04	4.92E-05	1.55E-04	2.22E-04	3.95E-04	8.01E-05	2.92E-04	1.22E-04	1.47E-04	4.09E-06	5.01E-06	2.0947E-03
551518.25	4173360.94	2675.60634	3176.74794	616.02196	3546.93826	638.29339	3866.31531	2707.00787	1909.21435	352.4463	3241.9908	1675.54129	4663.62658	0.51356	0.5164	1.67E-04	1.84E-04	3.56E-05	1.76E-04	3.99E-05	2.41E-04	2.66E-04	3.91E-04	7.22E-05	2.22E-04	7.87E-05	2.19E-04	7.19E-06	8.75E-06	2.1086E-03
551742.08	4173358.55	4064.30005	2740.58502	593.24063	2558.14535	536.26695	3962.06096	4144.50986	1596.39525	345.83236	2371.98899	1278.58495	4862.57297	3.90264	3.40777	2.54E-04	1.58E-04	3.43E-05	1.27E-04	3.35E-05	2.47E-04	4.07E-04	3.27E-04	7.09E-05	1.62E-04	6.01E-05	2.28E-04	5.46E-05	5.77E-05	2.2228E-03
551326.64	4173146.48	2243.04058	3193.64989	643.74629	4559.82914	752.49062	3133.65064	2259.89367	1891.93341	363.40159	3831.51298	2340.00442	3842.13752	0.31513	0.31782	1.40E-04	1.85E-04	3.72E-05	2.26E-04	4.70E-05	1.96E-04	2.22E-04	3.88E-04	7.45E-05	2.62E-04	1.10E-04	1.80E-04	4.41E-06	5.39E-06	2.0773E-03
551310.1	4172746.09	2075.90935	2685.82398	805.45771	6034.18736	1081.88439	1865.4685	2071.67053	1547.69394	446.85007	4435.75504	3630.55717	2370.35359	0.27666	0.28194	1.30E-04	1.55E-04	4.66E-05	2.99E-04	6.76E-05	1.17E-04	2.04E-04	3.17E-04	9.16E-05	3.03E-04	1.71E-04	1.11E-04	3.87E-06	4.78E-06	2.0210E-03
551270.07	4172959.54	2203.75459	3143.30717	723.56547	5361.71971	827.16183	2272.87299	2206.85069	1825.1375	409.41628	4439.19177	2767.47204	2870.95127	0.28961	0.29374	1.38E-04	1.82E-04	4.18E-05	2.66E-04	5.17E-05	1.42E-04	2.17E-04	3.74E-04	8.39E-05	3.04E-04	1.30E-04	1.35E-04	4.05E-06	4.98E-06	2.0729E-03
551689.27	4173384.15	3604.61169	2879.22685	611.79667	2674.5339	546.48605	4123.30552	3664.58548	1691.52174	355.70882	2531.35161	1321.46932	5036.65475	4.94296	5.27681	2.25E-04	1.66E-04	3.54E-05	1.33E-04	3.41E-05	2.58E-04	3.60E-04	3.47E-04	7.29E-05	1.73E-04	6.21E-05	2.37E-04	6.92E-05	8.94E-05	2.2613E-03
551589.76	4173389.66	2883.87253	3123.98861	625.04882	3150.81022	587.68367	4099.69883	2921.88343	1875.58469	359.46593	2977.25395	1492.69108	4943.73114	0.73699	0.7423	1.80E-04	1.81E-04	3.61E-05	1.56E-04	3.67E-05	2.56E-04	2.87E-04	3.84E-04	7.37E-05	2.04E-04	7.01E-05	2.32E-04	1.03E-05	1.26E-05	2.1199E-03
551342.54	4172652.12	2113.07196	2600.62808	822.76138	6146.52195	1135.70523	1723.71248	2109.00103	1496.82253	455.32939	4460.51232	3763.85393	2213.68689	0.26102	0.26589	1.32E-04	1.50E-04	4.76E-05	3.05E-04	7.09E-05	1.08E-04	2.07E-04	3.07E-04	9.33E-05	3.05E-04	1.77E-04	1.04E-04	3.65E-06	4.51E-06	2.0145E-03
551320.72	4173129.74	2240.86976	3212.47024	638.37227	4575.76474	752.33356	3093.78344	2257.51919	1905.42817	360.53717	3821.81495	2370.34773	3802.81868	0.31187	0.31469	1.40E-04	1.86E-04	3.69E-05	2.27E-04	4.70E-05	1.93E-04	2.22E-04	3.91E-04	7.39E-05	2.61E-04	1.11E-04	1.79E-04	4.36E-06	5.33E-06	2.0770E-03
551612.2	4173395.36	3011.62104	3079.95974	624.63655	3003.51042	573.05376	4157.60816	3052.59549	1840.55527	360.27643	2863.29804	1434.82414	5026.98567	0.88152	0.88679	1.88E-04	1.78E-04	3.61E-05	1.49E-04	3.58E-05	2.60E-04	3.00E-04	3.77E-04	7.38E-05	1.96E-04	6.74E-05	2.36E-04	1.23E-05	1.50E-05	2.1244E-03
551317.77	4173121.37	2241.512	3226.46324	636.5659	4584.03729	751.64187	3067.93221	2257.91637	1914.85814	359.64034	3822.37951	2384.57118	3777.02309	0.31059	0.31324	1.40E-04	1.87E-04	3.68E-05	2.27E-04	4.69E-05	1.92E-04	2.22E-04	3.93E-04	7.37E-05	2.61E-04	1.12E-04	1.77E-04	4.35E-06	5.31E-06	2.0777E-03
551466.72	4173324.59	2555.76846	3197.01139	616.89513	3777.02927	655.12242	3685.67408	2579.97928	1925.15537	352.70631	3361.07823	1831.31802	4463.01825	0.42766	0.4301	1.60E-04	1.85E-04	3.57E-05	1.87E-04	4.09E-05	2.30E-04	2.54E-04	3.95E-04	7.23E-05	2.30E-04	8.60E-05	2.10E-04	5.98E-06	7.29E-06	2.0977E-03
551332.56	4173163.22	2245.09324	3179.67039	648.86648	4526.44648	748.64827	3152.47698	2261.8739	1882.2894	366.25678	3836.68829	2292.82138	3858.82164	0.31791	0.32051	1.40E-04	1.84E-04	3.75E-05	2.24E-04	4.68E-05	1.97E-04	2.22E-04	3.86E-04	7.51E-05	2.62E-04	1.08E-04	1.81E-04	4.45E-06	5.43E-06	2.0740E-03
551273.71	4172998.73	2233.0936	3242.9765	692.55194	5110.54568	790.42279	2429.3224	2239.08953	1896.94129	392.58449	4288.20174	2611.6988	3057.23589	0.28932	0.29326	1.39E-04	1.87E-04	4.00E-05	2.53E-04	4.94E-05	1.52E-04	2.20E-04	3.89E-04	8.05E-05	2.93E-04	1.23E-04	1.44E-04	4.05E-06	4.97E-06	2.0793E-03
551762.63	4173346.6	4192.62486	2687.9099	583.48622	2516.09992	531.26801	3891.66125	4280.0529	1563.88779	340.26045	2322.78884	1262.85135	4778.14936	1.94315	1.7794	2.62E-04	1.55E-04	3.37E-05	1.25E-04	3.32E-05	2.43E-04	4.21E-04	3.21E-04	6.97E-05	1.59E-04	5.93E-05	2.24E-04	2.72E-05	3.02E-05	2.1628E-03
551269.66	4172929.31	2167.14365	3044.11764	740.58065	5507.74507	854.7828	2159.48769	2168.50959	1762.17003	417.71242	4491.11486	2889.83576	2733.34041	0.28654	0.29079	1.35E-04	1.76E-04	4.28E-05	2.73E-04	5.34E-05	1.35E-04	2.13E-04	3.61E-04	8.56E-05	3.07E-04	1.36E-04	1.28E-04	4.01E-06	4.93E-06	2.0556E-03
551336.08	4173173.17	2245.34617	3172.26095	651.06091	4495.3041	744.22543	3153.11038	2261.95963	1877.05929	367.57394	3832.16017	2262.72151	3857.67047	0.31877	0.32179	1.40E-04	1.83E-04	3.76E-05	2.23E-04	4.65E-05	1.97E-04	2.22E-04	3.85E-04	7.53E-05	2.62E-04	1.06E-04	1.81E-04	4.46E-06	5.45E-06	2.0694E-03
551977.46	4173223.99	3910.90441	2758.6652	501.22957	2216.02776	440.01705	4474.21114	4012.71667	1599.42721	292.80301	2179.24966	1059.49096	5458.16957	0.35229	0.34593	2.44E-04	1.59E-04	2.90E-05	1.10E-04	2.75E-05	2.79E-04	3.94E-04	3.28E-04	6.00E-05	1.49E-04	4.98E-05	2.56E-04	4.93E-06	5.86E-06	2.0977E-03
551330.56	4172685.2	2077.45899	2640.96561	806.99056	6042.27449	1109.81236	1780.04269	2073.52169	1520.05635	446.55929	4423.4005	3672.85968	2275.62329	0.26492	0.26993	1.30E-04	1.53E-04	4.67E-05	3.00E-04	6.93E-05	1.11E-04	2.04E-04	3.12E-04	9.15E-05	3.02E-04	1.73E-04	1.07E-04	3.71E-06	4.57E-06	2.0062E-03
551476.34	4173333.65	2565.97225	3162.81818	611.42631	3711.95984	648.92974	3699.37374	2591.50501	1902.88556	349.52199	3314.14341	1792.29533	4474.80021	0.43768	0.44012	1.60E-04	1.83E-04	3.53E-05	1.84E-04	4.05E-05	2.31E-04	2.55E-04	3.90E-04	7.16E-05	2.27E-04	8.42E-05	2.10E-04	6.12E-06	7.46E-06	2.0850E-03
551271.85	4172892.42	2127.23767	2920.88844	754.79161	5685.84468	897.41354	2040.07692	2126.92964	1685.95699	423.60812	4506.30782	3055.71178	2587.25337	0.28279	0.28717	1.33E-04	1.69E-04	4.36E-05	2.82E-04	5.60E-05	1.27E-04	2.09E-04	3.46E-04	8.68E-05	3.08E-04	1.44E-04	1.22E-04	3.96E-06	4.87E-06	2.0342E-03
551270.48	4172989.77	2212.66181	3191.46122	695.49746	5128.57431	793.32101	2369.68734	2217.84559	1863.29567	394.1251	4292.09174	2624.65282	2984.90053	0.28649	0.28986	1.38E-04	1.85E-04	4.02E-05	2.54E-04	4.95E-05	1.48E-04	2.18E-04	3.82E-04	8.08E-05	2.94E-04	1.23E-04	1.40E-04	4.01E-06	4.91E-06	2.0613E-03
551294.66	4172792.7	2073.28456	2690.06468	789.30414	5950.19504	1024.10724	1880.70762	2069.58156	1550.94419	439.51593	4428.02034	3481.23773	2386.70644	0.27819	0.28328	1.29E-04	1.56E-04	4.56E-05	2.95E-04	6.40E-05	1.17E-04	2.03E-04	3.18E-04	9.01E-05	3.03E-04	1.64E-04	1.12E-04	3.89E-06	4.80E-06	2.0055E-03
551339.17	4173181.76	2239.22187	3155.18874	650.58134	4450.96037	738.43163	3140.78876	2255.65018	1866.91159	367.3766	3810.80569	2233.63821	3841.25929	0.31934	0.3218	1.40E-04	1.82E-04	3.76E-05	2.21E-04	4.61E-05	1.96E-04	2.22E-04	3.83E-04	7.53E-05	2.61E-04	1.05E-04	1.80E-04	4.47E-06	5.45E-06	2.0583E-03
551392.37	4173267.32	2373.73499	3263.8523	651.95614	4107.78744	691.718	3281.14574	2390.05246	1948.49955	371.48022	3648.79774	1996.96949	4014.89687	0.35293	0.35551	1.48E-04	1.89E-04	3.77E-05	2.04E-04	4.32E-05	2.05E-04	2.35E-04	3.99E-04	7.61E-05	2.50E-04	9.38E-05	1.89E-04	4.94E-06	6.02E-06	2.0797E-03
551702.11	4173382.28	3686.165	2812.1385	601.35731	2613.30381	538.36568	4022.89917	3749.96585	1646.28266	349.93705	2462.34946	1295.14397	4925.98667	10.14508	11.42872	2.30E-04	1.63E-04	3.48E-05	1.30E-04	3.36E-05	2.51E-04	3.69E-04	3.37E-04	7.17E-05	1.68E-04	6.08E-05	2.31E-04	1.42E-04	1.94E-04	2.4159E-03
551404.72	4173278.38	2396.64536	3255.76914	645.38542	4036.6095	686.40997	3330.65487	2413.68555	1952.0141	368.23566	3582.55949	1974.80925	4070.03183	0.36274	0.36482	1.50E-04	1.88E-04	3.73E-05	2.00E-04	4.29E-05	2.08E-04	2.37E-04	4.00E-04	7.55E-05	2.45E-04	9.28E-05	1.91E-04	5.08E-06	6.18E-06	2.0792E-03
551571.8	4173387.02	2784.77762	3111.70285	617.80482	3227.54893	593.37842	3980.40346	2820.64843	1870.58814	354.63688	3026.96322	1523.00171	4797.86798	0.64642	0.65056	1.74E-04	1.80E-04	3.57E-05	1.60E-04	3.71E-05	2.49E-04	2.77E-04	3.83E-04	7.27E-05	2.07E-04	7.15E-05	2.25E-04	9.05E-06	1.10E-05	2.0925E-03
551527.79	4173369.93	2671.09643	3135.40654	611.33606	3455.93425	628.39782	3835.15694	2703.21861	1883.87962	349.927	3177.32937	1629.38847	4626.56212	0.52356	0.52624	1.67E-04	1.81E-04	3.53E-05	1.71E-04	3.92E-05	2.40E-04	2.66E-04	3.86E-04	7.17E-05	2.17E-04	7.65E-05	2.17E-04	7.33E-06	8.92E-06	2.0844E-03
551485.96	4173342.71	2574.74626	3132.26149	607.10586	3646.76109	641.75985	3704.55216	2601.6322	1883.16735	347.02416	3270.05809	1752.27664	4477.62298	0.44789	0.45072	1.61E-04	1.81E-04	3.51E-05	1.81E-04	4.01E-05	2.31E-04	2.56E-04	3.86E-04	7.11E-05	2.24E-04	8.23E-05	2.10E-04	6.27E-06	7.64E-06	2.0722E-03
551414.42	4173287.52	2414.38632	3238.50323	638.06658	3972.99242	680.82685	3369.43041	2432.08313	1946.5602	364.40155	3523.52555	1944.61483	4112.85712	0.37007	0.37211	1.51E-04	1.87E-04	3.69E-05	1.97E-04	4.25E-05	2.10E-04	2.39E-04	3.99E-04	7.47E-05	2.41E-04	9.13E-05	1.93E-04	5.18E-06	6.31E-06	2.0745E-03
551326.27	4172693.54	2059.80133	2629.76435	799.07087	5966.38945	1096.04687	1783.97392	2055.90101	1514.11306	442.27996	4377.47049	3622.51089	2277.76677	0.26373	0.26871	1.29E-04	1.52E-04	4.62E-05	2.96E-04	6.85E-05	1.11E-04	2.02E-04	3.10E-04	9.07E-05	2.99E-04	1.70E-04	1.07E-04	3.69E-06	4.55E-06	1.9903E-03
551336.33	4172659.06	2078.4468	2581.42406	807.04993	6024.3601	1112.34316	1720.49203	2074.53291	1485.63495	446.61945	4389.19652	3677.2443	2206.66515	0.25814	0.26295	1.30E-04	1.49E-04	4.67E-05	2.99E-04	6.95E-05	1.07E-04	2.04E-04	3.05E-04	9.15E-05	3.00E-04	1.73E-04	1.04E-04	3.61E-06	4.46E-06	1.9858E-03
551357.01	4172627.28	2133.2573	2512.40445	827.99192	6043.60605	1138.08688	1660.26698	2129.07132	1448.95219	458.60428	4368.42623	3738.30461	2137.64951	0.24979	0.25425	1.33E-04	1.45E-04	4.79E-05	3.00E-04	7.11E-05	1.04E-04	2.09E-04	2.97E-04	9.40E-05	2.99E-04	1.76E-04	1.00E-04	3.50E-06	4.31E-06	1.9835E-03
551370.99	4173240.97	2307.54459	3218.93635	656.55265	4222.3202	704.59648	3185.68841	2323.18967	1911.79105	372.82568	3725.76667	2066.53102	3899.38315	0.3381	0.34077	1.44E-04	1.86E-04	3.80E-05	2.09E-04	4.40E-05	1.99E-04	2.28E-04	3.92E-04	7.64E-05	2.55E-04	9.71E-05	1.83E-04	4.73E-06	5.77E-06	2.0626E-03
551266.85	4172950.57	2166.2777	3064.02045	719.54086	5315.5514	824.22222	2205.84059	2168.81409	1777.49974	406.77346	4384.84188	2759.98115	2788.15044	0.28391	0.28798	1.35E-04	1.77E-04	4.16E-05	2.63E-04	5.15E-05	1.38E-04	2.13E-04	3.64E-04	8.34E-05	3.00E-04	1.30E-04	1.31E-04	3.97E-06	4.88E-06	2.0370E-03
551342.26	4173190.34	2233.17651	3138.79304	649.67128	4403.02136	731.95338	3124.52024	2249.38942	1857.32965	366.97044	3785.99133	2203.74842	3820.88919	0.31996	0.32306	1.39E-04	1.81E-04	3.76E-05	2.18E-04	4.57E-05	1.95E-04	2.21E-04	3.81E-04	7.52E-05	2.59E-04	1.04E-04	1.79E-04	4.48E-06	5.47E-06	2.0464E-03
551305.77	4172754.5	2052.07983	2646.69013	791.75754	5906.82837	1055.29783	1848.43865	2048.01923	1525.82656	439.59498	4356.88604	3538.903	2347.35254	0.27188	0.27697	1.28E-04	1.53E-04	4.58E-05	2.93E-04	6.59E-05	1.15E-04	2.01E-04	3.13E-04	9.01E-05	2.98E-04	1.66E-04	1.10E-04	3.80E-06	4.69E-06	1.9882E-03
551296.56	4172783.87	2059.50935	2662.78748	786.21578	5901.2437	1026.03305	1864.52266	2055.719	1535.38003	437.50864	4381.77837	3473.88899	2366.21857	0.2749	0.27993	1.29E-04	1.54E-04	4.55E-05	2.93E-04	6.41E-05	1.16E-04	2.02E-04	3.15E-04	8.97E-05	3.00E-04	1.63E-04	1.11E-04	3.85E-06	4.74E-06	1.9901E-03
551267.26	4172980.8	2189.1212	3134.69678	697.38821	5137.15808	795.77687	2309.73199	2193.55615	1826.90429	395.03203	4285.10384	2635.96318	2911.97006	0.28302	0.28691	1.37E-04	1.81E-04	4.03E-05	2.55E-04	4.97E-05	1.44E-04	2.16E-04	3.74E-04	8.10E-05	2.93E-04	1.24E-04	1.37E-04	3.96E-06	4.86E-06	2.0403E-03
551321.98	4172701.88	2047.66724	2622.72275	794.04717	5916.9329	1086.25369	1789.79656	2043.74699	1510.48993	439.6162	4346.70723	3589.91202	2282.58637	0.26359	0.26856	1.28E-04	1.52E-04	4.59E-05	2.93E-04	6.78E-05	1.12E-04	2.01E-04	3.10E-04	9.01E-05	2.97E-04	1.69E-04	1.07E-04	3.69E-06	4.55E-06	1.9803E-03
551281.95	4172827.81	2068.42484	2715.96393	768.93155	5832.24342	972.69116	1892.47292	2065.72288	1565.47731	429.3619	4414.34599	3314.69379	2402.34702	0.27678	0.28154	1.29E-04	1.57E-04	4.45E-05	2.89E-04	6.08E-05	1.18E-04	2.03E-04	3.21E-04	8.80E-05	3.02E-04	1.56E-04	1.13E-04	3.87E-06	4.77E-06	1.9897E-03
551599.36	4173397.22	2883.55066	3040.39552	615.30088	3034.03557	572.49392	4018.72914	2921.74345	1821.85629	354.23554	2875.69468	1445.25	4854.18848	0.75591	0.75876	1.80E-04	1.76E-04	3.56E-05	1.50E-04	3.58E-05	2.51E-04	2.87E-04	3.73E-04	7.26E-05	1.97E-04	6.79E-05	2.28E-04	1.06E-05	1.29E-05	2.0778E-03
551642.02	4173399.98	3158.06924	2947.6858	612.4688	2777.47029	552.21308	4080.88689	3203.53093	1750.34731	354.46575	2678.2936	1361.05106	4955.95453	1.21303	1.223	1.97E-04	1.70E-04	3.54E-05	1.38E-04	3.45E-05	2.55E-04	3.15E-04	3.59E-04	7.27E-05	1.83E-04	6.39E-05	2.33E-04	1.70E-05	2.07E-05	2.0940E-03
551774.6	4173341.91	4178.06795	2621.02649	571.45763	2468.55074	523.69092	3782.8153	4266.8259	1525.53896	333.17585	2271.58041	1244.03062	4644.47876	1.49395	1.39242	2.61E-04	1.52E-04	3.30E-05	1.22E-04	3.27E-05	2.36E-04	4.19E-04	3.13E-04	6.83E-05	1.55E-04	5.84E-05	2.18E-04	2.09E-05	2.36E-05	2.1136E-03
551654.98	4173398.1	3251.44965	2912.25551	610.32513	2732.46329	547.89173	4072.73261	3299.82343	1724.69244	353.67753	2622.19482	1342.89889	4954.2453	1.54209	1.56322	2.03E-04	1.68E-04	3.53E-05	1.35E-04	3.42E-05	2.54E-04	3.24E-04	3.54E-04	7.25E-05	1.79E-04	6.31E-05	2.33E-04	2.16E-05	2.65E-05	2.1042E-03
551718.55	4172571.11	4177.15852	1725.6643	1320.41049	3815.98948	1877.42731	1190.05526	4139.97909	1021.21767	707.79984	2901.77593	3928.07604	1596.1423	0.15644	0.15877	2.61E-04	9.98E-05	7.63E-05	1.89E-04	1.17E-04	7.43E-05	4.07E-04	2.09E-04	1.45E-04	1.98E-04	1.84E-04	7.50E-05	2.19E-06	2.69E-06	2.0418E-03
551298.69	4172773.93	2048.01109	2641.25569	784.3516	5865.40679	1030.61513	1850.67021	2044.13682	1522.99339	436.14501	4345.0919	3475.46255	2348.89901	0.27218	0.27718	1.28E-04	1.53E-04	4.53E-05	2.91E-04	6.44E-05	1.16E-04	2.01E-04	3.12E-04	8.94E-05	2.97E-04	1.63E-04	1.10E-04	3.81E-06	4.70E-06	1.9783E-03
551345.35	4173198.93	2228.87986	3125.59813	648.6612	4354.43965	725.06223	3107.38703	2244.84684	1849.76739	366.56661	3760.51857	2173.66845	3800.13159	0.32115	0.32421	1.39E-04	1.81E-04	3.75E-05	2.16E-04	4.53E-05	1.94E-04	2.21E-04	3.79E-04	7.51E-05	2.57E-04	1.02E-04	1.78E-04	4.49E-06	5.49E-06	2.0353E-03
551736.78	4172581.29	4187.50874	1691.46572	1266.03931	3967.10947	1812.75192	1160.52005	4151.19485	998.55082	679.97606	2896.92858	4003.20163	1554.93476	0.17098	0.17414	2.61E-04	9.78E-05	7.32E-05	1.97E-04	1.13E-04	7.25E-05	4.08E-04	2.05E-04	1.39E-04	1.98E-04	1.88E-04	7.30E-05	2.39E-06	2.95E-06	2.0314E-03
551290.27	4173073.81	2213.95664	3227.52341	634.41192	4614.42989	739.83784	2745.44199	2226.4595	1913.8879	359.19113	3859.64715	2393.44982	3420.05611	0.29056	0.29362	1.38E-04	1.87E-04	3.67E-05	2.29E-04	4.62E-05	1.71E-04	2.19E-04	3.92E-04	7.36E-05	2.64E-04	1.12E-04	1.61E-04	4.07E-06	4.98E-06	2.0387E-03
551734.15	4173368.66	3905.1267	2694.82904	585.00823	2523.92141	528.32721	3860.92958	3979.5142	1570.94946	340.85364	2346.11757	1261.4753	4740.62996	6.0677	5.05361	2.44E-04	1.56E-04	3.38E-05	1.25E-04	3.30E-05	2.41E-04	3.91E-04	3.22E-04	6.99E-05	1.60E-04	5.93E-05	2.23E-04	8.49E-05	8.56E-05	2.2286E-03
551667.95	4173396.21	3348.24162	2869.04975	605.89879	2682.9253	542.573	4039.95429	3399.92044	1693.44097	351.56892	2562.13417	1322.28316	4924.67664	2.05283	2.08182	2.09E-04	1.66E-04	3.50E-05	1.33E-04	3.39E-05	2.52E-04	3.34E-04	3.47E-04	7.21E-05	1.75E-04	6.21E-05	2.31E-04	2.87E-05	3.53E-05	2.1152E-03
551495.58	4173351.78	2570.83245	3088.16728	601.327	3569.68124	633.69637	3682.93182	2598.8634	1856.31143	343.70576	3213.67204	1709.91483	4448.58153	0.45726	0.46002	1.61E-04	1.79E-04	3.48E-05	1.77E-04	3.96E-05	2.30E-04	2.55E-04	3.81E-04	7.05E-05	2.20E-04	8.03E-05	2.09E-04	6.40E-06	7.80E-06	2.0500E-03

551629.05	4173401.87	3056.93375	2965.5894	611.72921	2816.11149	555.23525	4050.6441	3099.59206	1765.59396	353.49286	2724.88433	1377.11017	4911.96844	0.99962	1.00498	1.91E-04	1.71E-04	3.54E-05	1.40E-04	3.47E-05	2.53E-04	3.05E-04	3.62E-04	7.25E-05	1.86E-04	6.47E-05	2.31E-04	1.40E-05	1.70E-05	2.0767E-03
551283.82	4173055.91	2210.85211	3231.20982	640.83686	4672.51237	742.89869	2647.12722	2221.79122	1912.49533	363.08934	3920.74821	2415.45736	3308.29482	0.28774	0.29069	1.38E-04	1.87E-04	3.70E-05	2.32E-04	4.64E-05	1.65E-04	2.18E-04	3.92E-04	7.44E-05	2.68E-04	1.13E-04	1.55E-04	4.03E-06	4.93E-06	2.0360E-03
551755.08	4173356.66	4043.43383	2641.59723	575.97477	2483.09303	523.85823	3791.28871	4125.11369	1537.66803	335.73508	2294.72079	1246.54905	4658.12187	2.41642	2.16465	2.52E-04	1.53E-04	3.33E-05	1.23E-04	3.27E-05	2.37E-04	4.05E-04	3.15E-04	6.88E-05	1.57E-04	5.85E-05	2.19E-04	3.38E-05	3.67E-05	2.1253E-03
551725.69	4173374.32	3824.2668	2705.52153	586.10521	2531.38811	528.08613	3866.62625	3895.15292	1578.45966	341.36359	2360.73408	1263.05138	4746.22284	11.13553	8.82643	2.39E-04	1.56E-04	3.39E-05	1.25E-04	3.30E-05	2.41E-04	3.83E-04	3.24E-04	7.00E-05	1.61E-04	5.93E-05	2.23E-04	1.56E-04	1.50E-04	2.3545E-03
551270.13	4172881.85	2086.94084	2833.85117	744.8262	5606.57048	894.10164	1978.71879	2086.3056	1635.28249	417.52501	4410.06542	3038.94433	2510.35903	0.27552	0.27979	1.30E-04	1.64E-04	4.31E-05	2.78E-04	5.58E-05	1.24E-04	2.05E-04	3.35E-04	8.56E-05	3.02E-04	1.43E-04	1.18E-04	3.86E-06	4.74E-06	1.9912E-03
551293.5	4173082.76	2204.57733	3202.78515	628.62542	4561.99213	735.59845	2781.91215	2217.82156	1900.44012	355.7836	3809.7504	2373.55765	3458.92487	0.29156	0.29475	1.38E-04	1.85E-04	3.63E-05	2.26E-04	4.59E-05	1.74E-04	2.18E-04	3.90E-04	7.29E-05	2.61E-04	1.11E-04	1.62E-04	4.08E-06	4.99E-06	2.0290E-03
551443.53	4173314.93	2457.014	3140.43267	611.96256	3771.91004	649.91891	3471.88172	2477.77091	1892.13612	349.89922	3341.5593	1845.8434	4220.00827	0.38951	0.3921	1.53E-04	1.82E-04	3.54E-05	1.87E-04	4.06E-05	2.17E-04	2.44E-04	3.88E-04	7.17E-05	2.29E-04	8.67E-05	1.98E-04	5.45E-06	6.64E-06	2.0434E-03
551301.45	4172762.9	2035.75788	2619.95042	781.70419	5820.8161	1034.48743	1836.05675	2031.83911	1510.80869	434.33486	4305.32992	3471.0751	2330.7699	0.26891	0.27387	1.27E-04	1.51E-04	4.52E-05	2.89E-04	6.46E-05	1.15E-04	2.00E-04	3.10E-04	8.90E-05	2.94E-04	1.63E-04	1.09E-04	3.76E-06	4.64E-06	1.9654E-03
551296.72	4173091.71	2200.30498	3184.75111	625.77169	4531.78645	734.11032	2821.96187	2214.1919	1890.01211	354.01652	3779.46479	2360.01003	3501.95465	0.29255	0.29526	1.37E-04	1.84E-04	3.62E-05	2.25E-04	4.59E-05	1.76E-04	2.18E-04	3.87E-04	7.26E-05	2.58E-04	1.11E-04	1.64E-04	4.09E-06	5.00E-06	2.0249E-03
551537.32	4173378.91	2650.82523	3072.78694	603.94549	3353.11519	616.74027	3775.71311	2683.26084	1846.45275	345.82329	3095.78466	1581.59086	4555.42886	0.53082	0.53396	1.66E-04	1.78E-04	3.49E-05	1.66E-04	3.85E-05	2.36E-04	2.64E-04	3.78E-04	7.09E-05	2.12E-04	7.43E-05	2.14E-04	7.43E-06	9.05E-06	2.0482E-03
551559.49	4173387.61	2705.57402	3063.34188	607.34439	3241.23805	591.59962	3847.42692	2739.75377	1841.27551	348.26877	3023.2234	1528.99117	4640.16573	0.58772	0.58964	1.69E-04	1.77E-04	3.51E-05	1.61E-04	3.69E-05	2.40E-04	2.69E-04	3.77E-04	7.14E-05	2.07E-04	7.18E-05	2.18E-04	8.22E-06	9.99E-06	2.0519E-03
551264.03	4172971.84	2159.52471	3068.8141	696.49157	5121.61897	795.66143	2246.91178	2163.28702	1785.45397	394.31835	4256.95836	2638.65206	2835.49742	0.27891	0.28248	1.35E-04	1.77E-04	4.03E-05	2.54E-04	4.97E-05	1.40E-04	2.13E-04	3.66E-04	8.08E-05	2.91E-04	1.24E-04	1.33E-04	3.90E-06	4.79E-06	2.0128E-03
551282.63	4172818.65	2049.12806	2673.04538	765.28014	5779.26688	973.82752	1866.55711	2046.21565	1541.04088	427.0826	4357.7657	3310.28346	2369.32923	0.2732	0.27796	1.28E-04	1.55E-04	4.42E-05	2.86E-04	6.08E-05	1.17E-04	2.01E-04	3.16E-04	8.75E-05	2.98E-04	1.55E-04	1.11E-04	3.82E-06	4.71E-06	1.9685E-03
551287.05	4173064.86	2201.69108	3212.44931	632.85586	4604.96554	736.4972	2685.06924	2213.48561	1904.01014	358.44856	3858.52968	2391.14388	3350.17494	0.28795	0.29104	1.37E-04	1.86E-04	3.66E-05	2.28E-04	4.60E-05	1.68E-04	2.18E-04	3.90E-04	7.35E-05	2.64E-04	1.12E-04	1.57E-04	4.03E-06	4.93E-06	2.0256E-03
551265.97	4172916.7	2109.10096	2924.35549	728.54731	5407.95338	846.82902	2067.76677	2109.93875	1691.62211	410.25886	4375.10464	2857.8805	2619.22795	0.27648	0.28059	1.32E-04	1.69E-04	4.21E-05	2.68E-04	5.29E-05	1.29E-04	2.07E-04	3.47E-04	8.41E-05	2.99E-04	1.34E-04	1.23E-04	3.87E-06	4.75E-06	1.9963E-03
551280.6	4173046.95	2199.89464	3212.17904	641.86923	4680.92649	741.97856	2588.77098	2210.00571	1898.72886	363.77172	3933.84163	2417.95775	3239.77424	0.28499	0.28858	1.37E-04	1.86E-04	3.71E-05	2.32E-04	4.63E-05	1.62E-04	2.17E-04	3.89E-04	7.46E-05	2.69E-04	1.14E-04	1.52E-04	3.99E-06	4.89E-06	2.0249E-03
551680.91	4173394.32	3431.85693	2811.53876	598.82874	2628.57071	536.05441	3972.84717	3486.83541	1654.36259	347.83185	2495.98201	1299.99891	4853.02266	2.89989	2.96762	2.14E-04	1.63E-04	3.46E-05	1.30E-04	3.35E-05	2.48E-04	3.43E-04	3.39E-04	7.13E-05	1.71E-04	6.11E-05	2.28E-04	4.06E-05	5.03E-05	2.1271E-03
551330.11	4172665.99	2043.14775	2555.67865	791.04925	5889.22521	1088.19802	1714.34081	2039.37713	1470.97235	437.77638	4307.40208	3585.8044	2195.76773	0.25459	0.25931	1.28E-04	1.48E-04	4.57E-05	2.92E-04	6.80E-05	1.07E-04	2.00E-04	3.02E-04	8.97E-05	2.95E-04	1.68E-04	1.03E-04	3.56E-06	4.39E-06	1.9538E-03
551505.2	4173360.84	2574.48508	3060.34159	598.0638	3498.62377	626.5161	3671.19328	2603.58631	1838.99596	341.91226	3167.92297	1668.00016	4433.33316	0.46837	0.47067	1.61E-04	1.77E-04	3.46E-05	1.73E-04	3.91E-05	2.29E-04	2.56E-04	3.77E-04	7.01E-05	2.17E-04	7.83E-05	2.08E-04	6.55E-06	7.98E-06	2.0348E-03
551277.38	4173038	2194.36299	3199.25793	646.12989	4715.2968	744.53724	2537.17193	2203.63083	1887.7801	366.26252	3966.47509	2430.08704	3179.27766	0.28311	0.28672	1.37E-04	1.85E-04	3.74E-05	2.34E-04	4.65E-05	1.58E-04	2.17E-04	3.87E-04	7.51E-05	2.71E-04	1.14E-04	1.49E-04	3.96E-06	4.86E-06	2.0202E-03
551274.12	4173028.96	2189.91913	3184.99353	652.00044	4762.19672	749.05009	2487.55783	2198.29934	1875.52111	369.61851	4007.03022	2447.83607	3120.88214	0.28144	0.28508	1.37E-04	1.84E-04	3.77E-05	2.36E-04	4.68E-05	1.55E-04	2.16E-04	3.84E-04	7.58E-05	2.74E-04	1.15E-04	1.47E-04	3.94E-06	4.83E-06	2.0174E-03
551616.08	4173403.75	2948.28924	2963.20223	607.85441	2896.34781	556.83688	3980.57921	2988.22853	1768.7178	350.68318	2759.53227	1390.87265	4820.89425	0.84471	0.84762	1.84E-04	1.71E-04	3.51E-05	1.44E-04	3.48E-05	2.49E-04	2.94E-04	3.63E-04	7.19E-05	1.89E-04	6.53E-05	2.26E-04	1.18E-05	1.44E-05	2.0523E-03
551376.41	4173254.79	2288.94348	3161.37152	644.10651	4092.98738	688.49308	3133.0686	2304.32212	1881.83283	366.2192	3618.74243	2007.32827	3836.26061	0.33508	0.33762	1.43E-04	1.83E-04	3.72E-05	2.03E-04	4.30E-05	1.96E-04	2.27E-04	3.86E-04	7.51E-05	2.47E-04	9.43E-05	1.80E-04	4.69E-06	5.72E-06	2.0242E-03
551348.44	4173207.51	2210.72616	3087.6439	643.44761	4278.51816	715.75507	3068.90603	2226.42234	1828.93152	363.74975	3704.87944	2137.52374	3752.68433	0.31987	0.32194	1.38E-04	1.79E-04	3.72E-05	2.12E-04	4.47E-05	1.92E-04	2.19E-04	3.75E-04	7.46E-05	2.53E-04	1.00E-04	1.76E-04	4.48E-06	5.46E-06	2.0105E-03
551347.13	4172633.8	2079.72969	2487.89933	803.80306	5898.92652	1103.44695	1650.84997	2075.89829	1433.92921	445.1798	4283.28274	3625.28764	2123.40441	0.2462	0.2506	1.30E-04	1.44E-04	4.65E-05	2.92E-04	6.89E-05	1.03E-04	2.04E-04	2.94E-04	9.13E-05	2.93E-04	1.70E-04	9.97E-05	3.44E-06	4.25E-06	1.9444E-03
551263.62	4172941.61	2122.77673	2976.31569	711.85849	5241.06826	816.81582	2135.53996	2124.83779	1725.4696	402.07788	4308.29333	2736.81156	2700.93705	0.27664	0.28061	1.33E-04	1.72E-04	4.12E-05	2.60E-04	5.10E-05	1.33E-04	2.09E-04	3.54E-04	8.24E-05	2.95E-04	1.29E-04	1.27E-04	3.87E-06	4.76E-06	1.9936E-03
551299.95	4173100.67	2183.58232	3143.57837	619.20687	4469.96429	728.78756	2845.41649	2198.09065	1865.97956	350.18225	3723.27153	2335.4902	3523.61353	0.2928	0.29587	1.36E-04	1.82E-04	3.58E-05	2.22E-04	4.55E-05	1.78E-04	2.16E-04	3.82E-04	7.18E-05	2.55E-04	1.10E-04	1.66E-04	4.10E-06	5.01E-06	2.0079E-03
551270.89	4173020	2179.94909	3158.42495	656.47779	4796.24234	752.30843	2434.58509	2187.49699	1856.08491	372.16787	4034.51712	2461.58198	3057.70564	0.27944	0.28275	1.36E-04	1.83E-04	3.80E-05	2.38E-04	4.70E-05	1.52E-04	2.15E-04	3.80E-04	7.63E-05	2.76E-04	1.16E-04	1.44E-04	3.91E-06	4.79E-06	2.0091E-03
551309.12	4172726.89	2013.52672	2583.90055	778.28317	5766.64629	1052.121	1793.58531	2009.59398	1489.33255	431.43931	4248.83748	3485.11999	2281.00851	0.26192	0.26683	1.26E-04	1.49E-04	4.50E-05	2.86E-04	6.57E-05	1.12E-04	1.98E-04	3.05E-04	8.84E-05	2.91E-04	1.64E-04	1.07E-04	3.66E-06	4.52E-06	1.9445E-03
551756.43	4172591.55	4053.18651	1636.09336	1178.5504	4153.77872	1727.06747	1115.70818	4020.13488	962.98853	634.94321	2880.38796	4078.21558	1492.21492	0.18626	0.19022	2.53E-04	9.46E-05	6.81E-05	2.06E-04	1.08E-04	6.97E-05	3.95E-04	1.97E-04	1.30E-04	1.97E-04	1.92E-04	7.01E-05	2.61E-06	3.22E-06	1.9864E-03
551283.32	4172809.5	2031.39471	2634.87098	762.0871	5731.28159	975.29493	1843.59262	2028.29032	1519.30435	425.0298	4305.98719	3306.96605	2340.03515	0.26989	0.27464	1.27E-04	1.52E-04	4.41E-05	2.84E-04	6.09E-05	1.15E-04	1.99E-04	3.11E-04	8.71E-05	2.94E-04	1.55E-04	1.10E-04	3.78E-06	4.65E-06	1.9494E-03
551514.83	4173369.9	2583.35522	3041.7	596.18693	3427.43208	619.23058	3666.74681	2613.42093	1826.78592	340.99936	3125.41426	1626.03826	4428.39484	0.48119	0.48337	1.61E-04	1.76E-04	3.45E-05	1.70E-04	3.87E-05	2.29E-04	2.57E-04	3.74E-04	6.99E-05	2.14E-04	7.64E-05	2.08E-04	6.73E-06	8.19E-06	2.0235E-03
551453.23	4173324.06	2452.2145	3076.17104	600.37702	3687.52333	639.74618	3470.68787	2474.14534	1853.32154	343.20268	3263.84808	1807.88557	4211.41515	0.39547	0.39803	1.53E-04	1.78E-04	3.47E-05	1.83E-04	4.00E-05	2.17E-04	2.43E-04	3.80E-04	7.03E-05	2.23E-04	8.49E-05	1.98E-04	5.53E-06	6.74E-06	2.0168E-03
551586.51	4173399.09	2777.068	2999.03802	605.16622	3056.43144	571.04367	3881.36877	2813.03626	1799.28789	347.86712	2882.28454	1451.77122	4687.1441	0.66593	0.66927	1.73E-04	1.73E-04	3.50E-05	1.52E-04	3.57E-05	2.42E-04	2.77E-04	3.69E-04	7.13E-05	1.97E-04	6.82E-05	2.20E-04	9.32E-06	1.13E-05	2.0341E-03
551267.67	4173011.03	2168.12464	3126.40223	661.05899	4830.06918	756.0086	2381.79221	2174.83545	1833.50879	374.72982	4058.71189	2476.76358	2994.36974	0.27727	0.28038	1.35E-04	1.81E-04	3.82E-05	2.39E-04	4.72E-05	1.49E-04	2.14E-04	3.76E-04	7.68E-05	2.78E-04	1.16E-04	1.41E-04	3.88E-06	4.75E-06	1.9993E-03
551989.27	4173224.29	3761.26861	2677.8902	485.62459	2154.80865	427.14605	4255.03407	3858.99211	1546.00409	283.59372	2117.1503	1030.10006	5197.36068	0.33345	0.32751	2.35E-04	1.55E-04	2.81E-05	1.07E-04	2.67E-05	2.66E-04	3.79E-04	3.17E-04	5.81E-05	1.45E-04	4.84E-05	2.44E-04	4.67E-06	5.55E-06	2.0188E-03
551693.88	4173392.44	3503.59717	2744.37696	589.51047	2570.41423	528.50477	3880.10746	3561.8255	1610.143	342.71494	2426.55805	1275.88202	4749.64488	4.71007	4.91077	2.19E-04	1.59E-04	3.41E-05	1.27E-04	3.30E-05	2.42E-04	3.50E-04	3.30E-04	7.02E-05	1.66E-04	5.99E-05	2.23E-04	6.59E-05	8.32E-05	2.1628E-03
551260.8	4172962.87	2126.03712	2997.75396	693.78697	5088.77453	793.7814	2183.65068	2129.20219	1741.91871	392.5569	4214.80931	2635.05758	2757.77089	0.27501	0.27855	1.33E-04	1.73E-04	4.01E-05	2.52E-04	4.96E-05	1.36E-04	2.09E-04	3.57E-04	8.05E-05	2.88E-04	1.24E-04	1.30E-04	3.85E-06	4.72E-06	1.9813E-03
551304.83	4172735.23	2002.56603	2567.07322	772.45604	5715.80625	1038.9621	1790.17687	1998.65724	1479.93798	428.44155	4215.97686	3446.23737	2275.1501	0.26095	0.2658	1.25E-04	1.48E-04	4.47E-05	2.83E-04	6.49E-05	1.12E-04	1.96E-04	3.03E-04	8.78E-05	2.88E-04	1.62E-04	1.07E-04	3.65E-06	4.50E-06	1.9310E-03
551268.4	4172871.28	2049.93428	2753.0847	735.74277	5533.35397	892.8429	1922.92649	2048.98272	1588.46123	412.0024	4319.17705	3027.76138	2440.25033	0.26923	0.27342	1.28E-04	1.59E-04	4.25E-05	2.74E-04	5.58E-05	1.20E-04	2.01E-04	3.26E-04	8.45E-05	2.95E-04	1.42E-04	1.15E-04	3.77E-06	4.63E-06	1.9519E-03
551264.44	4173002.07	2152.76288	3086.70241	664.79906	4856.40539	759.32134	2327.73879	2158.66798	1806.66739	376.78732	4073.6657	2490.55084	2929.12501	0.27453	0.27817	1.34E-04	1.78E-04	3.84E-05	2.41E-04	4.74E-05	1.45E-04	2.12E-04	3.70E-04	7.72E-05	2.79E-04	1.17E-04	1.38E-04	3.84E-06	4.71E-06	1.9863E-03
552063.28	4173187.41	4028.05389	2728.26746	473.88895	2173.8017	408.36169	3908.2441	4136.93824	1566.78557	277.73427	2148.08477	1000.74299	4823.54307	0.25594	0.25222	2.51E-04	1.58E-04	2.74E-05	1.08E-04	2.55E-05	2.44E-04	4.07E-04	3.21E-04	5.69E-05	1.47E-04	4.70E-05	2.27E-04	3.58E-06	4.27E-06	2.0270E-03
551284	4172800.34	2014.13943	2599.46085	758.74107	5682.7249	976.52463	1822.26351	2010.87364	1499.12259	422.87063	4255.399	3301.74702	2312.82841	0.2666	0.27133	1.26E-04	1.50E-04	4.39E-05	2.82E-04	6.10E-05	1.14E-04	1.98E-04	3.07E-04	8.67E-05	2.91E-04	1.55E-04	1.09E-04	3.73E-06	4.60E-06	1.9311E-03
551351.53	4173216.1	2192.19841	3048.83102	637.6354	4199.49129	705.91134	3027.69987	2207.60983	1807.86518	360.62727	3645.38543	2100.68041	3702.34515	0.316	0.31868	1.37E-04	1.76E-04	3.69E-05	2.08E-04	4.41E-05	1.89E-04	2.17E-04	3.71E-04	7.39E-05	2.49E-04	9.87E-05	1.74E-04	4.42E-06	5.40E-06	1.9845E-03
551462.93	4173333.2	2454.21609	3027.80487	592.09394	3616.86313	631.6726	3475.49823	2477.3676	1822.88363	338.37533	3204.87	1770.74018	4211.40213	0.40303	0.40511	1.53E-04	1.75E-04	3.42E-05	1.79E-04	3.95E-05	2.17E-04	2.44E-04	3.74E-04	6.94E-05	2.19E-04	8.32E-05	1.98E-04	5.64E-06	6.86E-06	1.9975E-03
551472.63	4173342.34	2473.88491	3013.21002	589.54957	3569.68913	627.1116	3504.01313	2498.44375	1811.9584	336.8966	3177.46259	1735.48536	4242.27426	0.41296	0.41543	1.54E-04	1.74E-04	3.41E-05	1.77E-04	3.92E-05	2.19E-04	2.46E-04	3.71E-04	6.91E-05	2.17E-04	8.15E-05	1.99E-04	5.78E-06	7.04E-06	1.9947E-03
551334.88	4172645.94	2029.55035	2481.00126	782.79599	5778.69224	1074.75324	1656.16366	2025.92352	1428.75973	433.41137	4217.93978	3528.82231	2126.16555	0.24523	0.24965	1.27E-04	1.43E-04	4.53E-05	2.86E-04	6.71E-05	1.03E-04	1.99E-04	2.93E-04	8.88E-05	2.88E-04	1.66E-04	9.99E-05	3.43E-06	4.23E-06	1.9150E-03
551303.17	4173109.62	2151.6863	3074.65988	607.80195	4368.01686	718.48918	2847.10172	2166.71483	1825.67759	343.59447	3633.9786	2297.05947	3517.64666	0.29178	0.29502	1.34E-04	1.78E-04	3.51E-05	2.17E-04	4.49E-05	1.78E-04	2.13E-04	3.74E-04	7.04E-05	2.49E-04	1.08E-04	1.65E-04	4.08E-06	5.00E-06	1.9748E-03
551568.94	4173396.51	2684.55195	2984.26749	598.06627	3125.66526	576.14869	3770.59963	2718.57361	1792.59389	343.17904	2925.41886	1479.51514	4551.43042	0.59217	0.59498	1.68E-04	1.73E-04	3.46E-05	1.55E-04	3.60E-05	2.36E-04	2.67E-04	3.67E-04	7.03E-05	2.00E-04	6.95E-05	2.14E-04	8.29E-06	1.01E-05	2.0079E-03
551747.27	4173366.75	3883.40889	2590.02816	567.957	2450.30296	516.53623	3685.53616	3959.19922	1509.35175	330.88586	2264.07279	1231.52165	4529.43987	3.2092	2.78168	2.42E-04	1.50E-04	3.28E-05	1.21E-04	3.23E-05	2.30E-04	3.89E-04	3.09E-04	6.78E-05	1.55E-04	5.78E-05	2.13E-04	4.49E-05	4.71E-05	2.0928E-03
551603.12	4173405.64	2824.62292	2931.60832	599.85182	2929.47363	556.78806	3861.00249	2861.80867	1754.92469	345.41595	2775.90586	1402.00137	4670.46512	0.72539	0.72666	1.76E-04	1.69E-04	3.47E-05	1.45E-04	3.48E-05	2.41E-04	2.81E-04	3.60E-04	7.08E-05	1.90E-04	6.59E-05	2.19E-04	1.02E-05	1.23E-05	2.0110E-03
551261.22	4172993.1	2134.98599	3041.93441	668.12467	4877.97349	762.7077	2273.66789	2140.11655	1777.22139	378.54895	4081.5067	2504.6414	2863.61467	0.27213	0.27548	1.33E-04	1.76E-04	3.86E-05	2.42E-04	4.76E-05	1.42E-04	2.10E-04	3.64E-04	7.76E-05	2.79E-04	1.18E-04	1.35E-04	3.81E-06	4.67E-06	1.9712E-03
551262.53	4172895.66	2052.61715	2794.79595	722.26213	5377.03198	856.74469	1964.57073	2052.61029	1614.41332	405.4816	4277.25556	2891.8157	2491.32124	0.26818	0.27222	1.28E-04	1.62E-04	4.18E-05	2.67E-04	5.35E-05	1.23E-04	2.02E-04	3.31E-04	8.31E-05	2.92E-04	1.36E-04	1.17E-04	3.75E-06	4.61E-06	1.9437E-03
551524.45	4173378.96	2571.8894	2995.51644	590.68036	3338.38211	609.43228	3626.60901	2602.49761	1799.00652	337.97996	3059.6947	1581.41738	4380.0744	0.48841	0.49063	1.61E-04	1.73E-04	3.42E-05	1.65E-04	3.81E-05	2.27E-04	2.56E-04	3.69E-04	6.93E-05	2.09E-04	7.43E-05	2.06E-04	6.83E-06	8.31E-06	1.9962E-03
551395.25	4173281.64	2302.02603	3105.53203	625.04475	3896.84384	666.64199	3141.10848	2317.95858	1860.20563	356.39068	3450.79949	1919.12648	3843.05939	0.3415	0.34383	1.44E-04	1.80E-04	3.61E-05	1.93E-04	4.16E-05	1.96E-04	2.28E-04	3.81E-04	7.31E-05	2.36E-04	9.01E-05	1.81E-04	4.78E-06	5.83E-06	1.9898E-03
551414.29	4173299.57	2339.19471	3079.32078	611.97304	3785.7527	648.5344	3218.82961	2356.47289	1852.53301	349.56202	3348.47276	1866.19101	3929.84744	0.35459	0.35647	1.46E-04	1.78E-04	3.54E-05	1.88E-04	4.05E-05	2.01E-04	2.32E-04	3.80E-04	7.17E-05	2.29E-04	8.77E-05	1.85E-04	4.96E-06	6.04E-06	1.9839E-03
551706.84	4173390.55	3562.30148	2671.37342	578.41829	2509.57897	520.11095	3769.82028	3623.68685	1563.05683	336.46872	2356.43159	1250.32279	4624.06506	9.76219	6.2883	2.22E-04	1.54E-04	3.34E-05	1.24E-04	3.25E-05	2.35E-04	3.56E-04	3.20E-04	6.90E-05	1.61E-04	5.87E-05	2.17E-04	1.37E-04	1.07E-04	2.2284E-03
551260.39	4172932.64	2076.71709	2885.13731	702.0924	5154.8384	807.42284	2064.5625	2078.3852	1671.68718	396.19461	4219.37586	2703.23064	2612.69172	0.26867	0.27253	1.30E-04	1.67E-04	4.06E-05	2.56E-04	5.04E-05	1.29E-04	2.04E-04	3.43E-04	8.12E-05	2.89E-04	1.27E-04	1.23E-04	3.76E-06	4.62E-06	1.9467E-03
551768.07	4173354.76	3982.78834	2537.59743	557.76251	2407.82599	511.09136	3614.35235	4064.51736	1477.4883	325.00624	2216.33462	1215.01462	4443.11932	1.6892	1.5452	2.49E-04	1.47E-04	3.22E-05	1.19E-04	3.19E-05	2.26E-04	4.00E-04	3.03E-04	6.66E-05	1.52E-04	5.71E-05	2.09E-04	2.36E-05	2.62E-05	2.0408E-03
551646.22	4173408.33	3083.80139	2823.40563	593.69171	2676.46684	535.67908	3878.00266	3128.06304	1674.51695	343.61433	2574.13921	1317.88174	4718.28686	1.14547	1.14936	1.93E-04	1.63E-04	3.43E-05	1.33E-04	3.35E-05	2.42E-04	3.07E-04	3.43E-04	7.04E-05	1.76E-04	6.19E-05	2.22E-04	1.60E-05	1.95E-05	2.0146E-03
551404.77	4173290.61	2311.46692	3080.66206	616.90333	3828.47703	653.96016	3165.27593	2327.94137	1851.18545	352.09917	3385.15233	1890.53701	3868.07459	0.3468	0.34928	1.44E-04	1.78E-04	3.57E-05	1.90E-04	4.08E-05	1.98E-04	2.29E-04	3.79E-04	7.22E-05	2.31E-04	8.88E-05	1.82E-04	4.85E-06	5.92E-06	1.9796E-03
551316.93	4172690.6	1984.84934	2518.38945	764.84317	5648.33528	1045.15642	1721.98251	1981.24486	1450.79679	423.45946	4161.67591	3425.82617	2197.16082	0.25023	0.25483	1.24E-04	1.46E-04	4.42E-05	2.80E-04	6.53E-05	1.08E-04	1.95E-04	2.97E-04	8.68E-05	2.85E-04	1.61E-04	1.03E-04	3.50E-06	4.32E-06	1.9020E-03
551659.3	4173406.43	3172.92681	2785.93494	590.68122	2631.39969	531.10014	3860.13929	3220.05002	1647.67685	342.308	2518.27764	1299.42485	4704.91417	1.44708	1.45448	1.98E-04	1.61E-04	3.42E-05	1.30E-04	3.32E-05	2.41E-04	3.17E-04	3.38E-04	7.02E-05	1.72E-04	6.10E-05	2.21E-04	2.02E-05	2.46E-05	2.0216E-03
551257.99	4172984.14	2113.28444	2990.337	670.03651	4887.28415	765.18178	2218.24665	2117.69888	1744.13699	379.48072	4076.48664	2515.6889	2796.18866	0.26897	0.27258	1.32E-04	1.73E-04	3.87E-05	2.42E-04	4.78E-05	1.39E-04	2.08E-04	3.58E-04	7.78E-05	2.79E-04	1.18E-04	1.31E-04	3.76E-06	4.62E-06	1.9523E-03
551328.66	4172652.88	2002.66697	2471.01203	771.44083	5696.46281	1058.61264	1657.21612	1999.11804	1422.77005	427.06951	4170.50778	3470.0185	2124.8444	0.24396	0.24837	1.25E-04	1.43E-04	4.46E-05	2.82E-04	6.61E-05	1.04E-04	1.97E-04	2.92E-04	8.75E-05	2.85E-04	1.63E-04	9.98E-05	3.41E-06	4.21E-06	1.8958E-03
551482.33	4173351.47	2467.97203	2964.77854	582.71071	3496.52357	619.17506	3484.21432	2493.65827	1782.2962	332.90806	3120.4901	1695.85175	4214.40015	0.42065	0.42264	1.54E-04	1.71E-04	3.37E-05	1.73E-04	3.87E-05	2.18E-04	2.45E-04	3.65E-04	6.82E-05	2.13E-04	7.97E-05	1.98E-04	5.89E-06	7.16E-06	1.9715E-03
551633.14	4173410.23	2987.07165	2845.09433	593.9332	2715.74342	539.03341	3860.91136	3028.58669	1692.04894	343.26885	2621.63593	1334.36261	4689.89748	0.94785	0.94927	1.87E-04	1.64E-04	3.43E-05	1.35E-04	3.37E-05	2.41E-04	2.98E-04	3.47E-04	7.04E-05	1.79E-04	6.27E-05	2.20E-04	1.33E-05	1.61E-05	2.0012E-03
551354.62	4173224.69	2173.30795	3008.91364	631.17943	4117.71518	695.53066	2984.58436	2188.42502	1786.44159	357.16052	3582.07747	2063.38358	3649.88932	0.31432	0.31642	1.36E-04	1.74E-04	3.65E-05	2.04E-04	4.34E-05	1.86E-04	2.15E-04	3.66E-04	7.32E-05	2.45E-04	9.69E-05	1.71E-04	4.40E-06	5.36E-06	1.9577E-03
551308.48	4173124.65	2125.89073	3007.62984	600.97509	4289.76093	712.62487	2870.16202	2141.51407	1785.31274	339.50762	3567.62545	2259.89118	3534.13882	0.29236	0.29517	1.33E-04	1.74E-04	3.47E-05	2.13E-04	4.45E-05	1.79E-04	2.11E-04	3.66E-04	6.96E-05	2.44E-04	1.06E-04	1.66E-04	4.09E-06	5.00E-06	1.9490E-03
551300.54	4172743.57	1977.61373	2526.46926	758.75928	5587.74404	1013.1713	1772.63705	1973.86952	1457.25081	421.15261	4134.51394	3357.05565	2251.4022	0.25615	0.26083	1.23E-04	1.46E-04	4.39E-05	2.77E-04	6.33E-05	1.11E-04	1.94E-04	2.99E-04	8.63E-05	2.83E-04	1.58E-04	1.06E-04	3.58E-06	4.42E-06	1.8976E-03
551383.41	4173271.42	2258.19468	3071.64681	625.60596	3923.47117	668.26329	3062.4539	2273.40285	1834.84258	356.1865	3469.7083	1937.04342	3749.86674	0.3313	0.33315	1.41E-04	1.78E-04	3.62E-05	1.94E-04	4.17E-05	1.91E-04	2.23E-04	3.76E-04	7.30E-05	2.37E-04	9.10E-05	1.76E-04	4.64E-06	5.65E-06	1.9695E-03
551284.93	4172791.23	1988.7822	2551.44213	750.53485	5583.95915	970.63472	1794.2131	1985.45684	1471.8736	418.0433	4173.7899	3264.41583	2277.02209	0.26095	0.26557	1.24E-04	1.48E-04	4.34E-05	2.77E-04	6.06E-05	1.12E-04	1.95E-04	3.02E-04	8.57E-05	2.85E-04	1.53E-04	1.07E-04	3.65E-06	4.50E-06	1.9010E-03
551266.68	4172860.72	2014.24299	2675.67017	726.5581	5454.55079	891.33581	1870.69193	2012.98919	1543.71417	406.54137	4227.70909	3013.37472	2374.46772	0.26329	0.26742	1.26E-04	1.55E-04	4.20E-05	2.70E-04	5.57E-05	1.17E-04	1.98E-04	3.16E-04	8.33E-05	2.89E-04	1.42E-04	1.12E-04	3.68E-06	4.53E-06	1.9134E-03
551423.81	4173308.54	2346.94199	3040.58337	602.13172	3715.19661	639.63888	3242.26756	2365.15016	1831.88623	344.12219	3281.24869	1835.43262	3952.67385	0.35811	0.35999	1.47E-04	1.76E-04	3.48E-05	1.84E-04	3.99E-05	2.03E-04	2.32E-04	3.75E-04	7.05E-05	2.24E-04	8.62E-05	1.86E-04	5.01E-06	6.10E-06	1.9696E-03
551257.58	4172953.91	2083.54815	2914.03544	686.4791	5013.51147	785.81441	2114.94544	2086.24817	1691.83849	388.15327	4143.89459	2610.34463	2672.67776	0.2683	0.27204	1.30E-04	1.68E-04	3.97E-05	2.49E-04	4.91E-05	1.32E-04	2.05E-04	3.47E-04	7.96E-05	2.83E-04	1.23E-04	1.26E-04	3.75E-06	4.61E-06	1.9392E-03
551672.38	4173404.53	3258.89029	2738.4661	585.31098	2581.7859	525.42714	3815.37736	3309.09217	1614.56243	339.58557	2457.69919	1278.79105	4659.82279	1.89814	1.90205	2.03E-04	1.58E-04	3.38E-05	1.28E-04	3.28E-05	2.38E-04	3.25E-04	3.31E-04	6.96E-05	1.68E-04	6.01E-05	2.19E-04	2.66E-05	3.22E-05	2.0264E-03
551620.06	4173412.14	2883.23037	2848.29136	591.17702	2792.89837	541.03323	3806.70236	2922.08596	1698.46112	341.11278	2658.37393	1348.53759	4617.58459	0.8041	0.80457	1.80E-04	1.65E-04	3.42E-05	1.38E-04	3.38E-05	2.38E-04	2.87E-04	3.48E-04	6.99E-05	1.82E-04	6.33E-05	2.17E-04	1.13E-05	1.36E-05	1.9811E-03
551590.15	4173407.52	2722.64453	2898.90707	590.9986	2955.29755	555.93815	3741.75039	2757.67252	1737.65112	339.80132	2787.4191	1409.58344	4524.41965	0.64083	0.64125	1.70E-04	1.68E-04	3.42E-05	1.46E-04	3.47E-05	2.34E-04	2.71E-04	3.56E-04	6.97E-05	1.91E-04	6.62E-05	2.13E-04	8.97E-06	1.09E-05	1.9727E-03
551254.76	4172975.17	2088.92092	2934.89763	670.91144	4887.63248	767.16895	2162.71685	2092.68197	1709.0514	379.76104	4061.55336	2525.21173	2728.52559	0.26581	0.26913	1.30E-04	1.70E-04	3.88E-05	2.42E-04	4.79E-05	1.35E-04	2.06E-04	3.50E-04	7.78E-05	2.78E-04	1.19E-04	1.28E-04	3.72E-06	4.56E-06	1.9308E-03
551492.03	4173360.61	2466.12903	2929.0966	578.08538	3429.183	612.20971	3466.89409	2492.89698	1760.44701	330.25628	3073.39983	1656.20568	4191.14384	0.42866	0.43093	1.54E-04	1.69E-04	3.34E-05	1.70E-04	3.82E-05	2.17E-04	2.45E-04	3.61E-04	6.77E-05	2.10E-04	7.78E-05	1.97E-04	6.00E-06	7.30E-06	1.9532E-03
551260.82	4172885.14	2015.08378	2715.2735	713.14155	5306.66809	853.59531	1907.12072	2014.76954	1567.9642	399.89038	4191.23223	2876.46957	2419.42732	0.26152	0.26547	1.26E-04	1.57E-04	4.12E-05	2.63E-04	5.33E-05	1.19E-04	1.98E-04	3.21E-04	8.20E-05	2.87E-04	1.35E-04	1.14E-04	3.66E-06	4.50E-06	1.9044E-03
551534.07	4173388.03	2543.17723	2927.34549	582.31071	3237.33352	597.92479	3557.08244	2573.94928	1758.86129	333.27285	2976.72263	1535.00127	4296.15358	0.49431	0.49577	1.59E-04	1.69E-04	3.37E-05	1.60E-04	3.73E-05	2.22E-04	2.53E-04	3.61E-04	6.83E-05	2.04E-04	7.21E-05	2.02E-04	6.92E-06	8.40E-06	1.9563E-03
551296.25	4172751.91	1961.27372	2499.45862	749.29741	5505.61172	993.97974	1760.48202	1957.6453	1442.08347	416.18408	4083.33915	3295.07429	2235.00661	0.25337	0.25793	1.22E-04	1.45E-04	4.33E-05	2.73E-04	6.21E-05	1.10E-04	1.92E-04	2.96E-04	8.53E-05	2.79E-04	1.55E-04	1.05E-04	3.55E-06	4.37E-06	1.8755E-03
551780.12	4173350.07	3963.33665	2478.43419	546.46166	2362.69941	503.56696	3519.31057	4046.00562	1443.37007	318.37098	2170.32194	1196.26775	4326.4543	1.32794	1.23835	2.47E-04	1.43E-04	3.16E-05	1.17E-04	3.15E-05	2.20E-04	3.98E-04	2.96E-04	6.53E-05	1.48E-04	5.62E-05	2.03E-04	1.86E-05	2.10E-05	1.9969E-03
551314.4	4173141.39	2097.98484	2936.99355	595.56725	4210.74544	706.76734	2878.00141	2113.94874	1742.62409	336.21917	3507.81783	2217.18815	3532.3673	0.2927	0.29539	1.31E-04	1.70E-04	3.44E-05	2.09E-04	4.41E-05	1.80E-04	2.08E-04	3.57E-04	6.89E-05	2.40E-04	1.04E-04	1.66E-04	4.10E-06	5.01E-06	1.9208E-03
551288.97	4172772.4	1962.79551	2502.57275	744.84361	5494.01094	974.62672	1765.34928	1959.31045	1443.97169	414.33073	4090.13017	3252.12068	2240.4035	0.25493	0.25946	1.23E-04	1.45E-04	4.31E-05	2.72E-04	6.09E-05	1.10E-04	1.93E-04	2.96E-04	8.49E-05	2.80E-04	1.53E-04	1.05E-04	3.57E-06	4.40E-06	1.8729E-03
551322.43	4172659.82	1970.01417	2447.41055	756.93647	5575.46253	1037.04787	1651.77766	1966.58455	1409.34066	419.03799	4096.45452	3388.96191	2115.0081	0.2409	0.24523	1.23E-04	1.41E-04	4.38E-05	2.76E-04	6.48E-05	1.03E-04	1.93E-04	2.89E-04	8.59E-05	2.80E-04	1.59E-04	9.93E-05	3.37E-06	4.16E-06	1.8668E-03
551357.71	4173233.27	2154.03646	2967.63238	624.03529	4033.56801	684.65814	2940.23242	2168.86549	1764.48467	353.33195	3515.03843	2025.80586	3596.05746	0.31191	0.31443	1.34E-04	1.72E-04	3.61E-05	2.00E-04	4.28E-05	1.84E-04	2.13E-04	3.62E-04	7.24E-05	2.40E-04	9.52E-05	1.69E-04	4.36E-06	5.33E-06	1.9299E-03
551760.4	4173364.84	3859.49096	2501.80237	559.20784	2379.03584	504.37417	3535.03406	3936.45339	1456.66704	321.34569	2194.23533	1199.89393	4349.27608	2.03268	1.81704	2.41E-04	1.45E-04	3.23E-05	1.18E-04	3.15E-05	2.21E-04	3.87E-04	2.99E-04	6.59E-05	1.50E-04	5.64E-05	2.04E-04	2.84E-05	3.08E-05	2.0095E-03
551256.63	4172919.84	2029.47785	2786.0416	694.89774	5097.59749	806.00599	1984.81816	2030.57493	1612.88803	391.43781	4136.40892	2695.50263	2513.83369	0.26109	0.26486	1.27E-04	1.61E-04	4.02E-05	2.53E-04	5.03E-05	1.24E-04	2.00E-04	3.31E-04	8.02E-05	2.83E-04	1.27E-04	1.18E-04	3.65E-06	4.49E-06	1.9011E-03
551291.97	4172760.25	1954.71368	2488.75662	744.6028	5474.65795	982.12098	1755.44082	1951.14785	1435.97767	413.83421	4066.431	3262.93928	2228.15176	0.25289	0.25741	1.22E-04	1.44E-04	4.30E-05	2.71E-04	6.13E-05	1.10E-04	1.92E-04	2.94E-04	8.48E-05	2.78E-04	1.53E-04	1.05E-04	3.54E-06	4.36E-06	1.8662E-03
551268.11	4173041.34	2110.73154	3034.58907	619.57966	4476.82272	714.27108	2421.0721	2119.72312	1790.96059	351.1591	3763.7463	2316.4678	3033.76675	0.26869	0.27167	1.32E-04	1.75E-04	3.58E-05	2.22E-04	4.46E-05	1.51E-04	2.08E-04	3.67E-04	7.20E-05	2.57E-04	1.09E-04	1.42E-04	3.76E-06	4.60E-06	1.9253E-03
551271.33	4173050.29	2111.81361	3038.95552	614.04318	4432.61719	710.20004	2464.42686	2121.60288	1796.57285	347.95909	3723.22471	2300.59752	3084.06775	0.27007	0.27301	1.32E-04	1.76E-04	3.55E-05	2.20E-04	4.44E-05	1.54E-04	2.09E-04	3.68E-04	7.13E-05	2.55E-04	1.08E-04	1.45E-04	3.78E-06	4.63E-06	1.9251E-03
551501.73	4173369.75	2466.20519	2901.10813	574.76308	3362.83063	605.48199	3450.47094	2493.94511	1743.36396	328.42198	3030.25928	1616.18447	4170.26278	0.43768	0.43947	1.54E-04	1.68E-04	3.32E-05	1.67E-04	3.78E-05	2.16E-04	2.45E-04	3.57E-04	6.73E-05	2.07E-04	7.59E-05	1.96E-04	6.12E-06	7.45E-06	1.9374E-03
551264.85	4173032.3	2107.33583	3023.34875	625.23232	4521.37453	718.67942	2376.06475	2115.49594	1780.91981	354.38547	3802.50421	2333.23848	2980.92023	0.26685	0.2702	1.32E-04	1.75E-04	3.61E-05	2.24E-04	4.49E-05	1.48E-04	2.08E-04	3.65E-04	7.26E-05	2.60E-04	1.10E-04	1.40E-04	3.73E-06	4.58E-06	1.9235E-03
551274.56	4173059.24	2111.41163	3037.96436	608.97109	4391.38527	706.7424	2507.09037	2121.98895	1798.56134	345.01172	3683.57544	2286.23182	3132.9848	0.27109	0.27436	1.32E-04	1.76E-04	3.52E-05	2.18E-04	4.41E-05	1.57E-04	2.09E-04	3.69E-04	7.07E-05	2.52E-04	1.07E-04	1.47E-04	3.79E-06	4.65E-06	1.9239E-03
551735.28	4172572.1	3965.17384	1618.83732	1190.09313	3694.70912	1684.76328	1117.09652	3932.07603	955.45496	640.2541	2740.03621	3682.25431	1495.68171	0.15688	0.15955	2.48E-04	9.36E-05	6.88E-05	1.83E-04	1.05E-04	6.98E-05	3.87E-04	1.96E-04	1.31E-04	1.87E-04	1.73E-04	7.03E-05	2.20E-06	2.70E-06	1.9172E-03
551254.35	4172944.94	2045.61489	2837.90848	680.83924	4958.96479	780.94148	2051.90426	2047.84929	1646.47445	384.61724	4082.9707	2595.9408	2594.63732	0.2622	0.26587	1.28E-04	1.64E-04	3.94E-05	2.46E-04	4.88E-05	1.28E-04	2.01E-04	3.37E-04	7.88E-05	2.79E-04	1.22E-04	1.22E-04	3.67E-06	4.51E-06	1.9027E-03
551277.78	4173068.2	2109.3489	3031.22908	604.28185	4352.54313	703.73126	2548.24713	2120.70062	1796.5345	342.23184	3644.93602	2272.82903	3179.44312	0.27243	0.27567	1.32E-04	1.75E-04	3.49E-05	2.16E-04	4.40E-05	1.59E-04	2.08E-04	3.68E-04	7.02E-05	2.49E-04	1.07E-04	1.49E-04	3.81E-06	4.67E-06	1.9214E-03
551281.01	4173077.15	2106.30785	3020.2146	600.28809	4317.9783	701.38656	2588.09556	2118.37807	1791.39723	339.84541	3609.46435	2260.71458	3223.68413	0.27382	0.27676	1.32E-04	1.75E-04	3.47E-05	2.14E-04	4.38E-05	1.62E-04	2.08E-04	3.67E-04	6.97E-05	2.47E-04	1.06E-04	1.51E-04	3.83E-06	4.69E-06	1.9184E-03
551261.63	4173023.33	2099.83319	3002.56774	630.07071	4558.15497	722.45621	2328.8759	2107.19323	1765.23512	357.13361	3832.50658	2348.03148	2924.83237	0.26526	0.26832	1.31E-04	1.74E-04	3.64E-05	2.26E-04	4.51E-05	1.45E-04	2.07E-04	3.62E-04	7.32E-05	2.62E-04	1.10E-04	1.37E-04	3.71E-06	4.55E-06	1.9178E-03
551304.01	4172715.72	1943.27925	2471.41364	746.02926	5465.44584	1008.55993	1721.37888	1939.69957	1425.12727	413.51594	4042.08778	3304.97649	2189.83282	0.24706	0.25156	1.21E-04	1.43E-04	4.31E-05	2.71E-04	6.30E-05	1.08E-04	1.91E-04	2.92E-04	8.48E-05	2.76E-04	1.55E-04	1.03E-04	3.46E-06	4.26E-06	1.8585E-03
551511.43	4173378.88	2482.55614	2897.55317	574.90577	3304.89315	599.85123	3460.5361	2511.22257	1739.88583	328.68247	3002.13285	1577.25551	4183.44406	0.44898	0.45065	1.55E-04	1.68E-04	3.32E-05	1.64E-04	3.75E-05	2.16E-04	2.47E-04	3.57E-04	6.74E-05	2.05E-04	7.41E-05	1.96E-04	6.28E-06	7.64E-06	1.9338E-03
551264.95	4172850.15	1977.45504	2597.8131	716.2332	5358.07555	887.28064	1819.44809	1975.93363	1498.76147	400.52883	4128.27913	2987.42044	2309.8494	0.25696	0.26102	1.23E-04	1.50E-04	4.14E-05	2.66E-04	5.54E-05	1.14E-04	1.94E-04	3.07E-04	8.21E-05	2.82E-04	1.40E-04	1.08E-04	3.60E-06	4.42E-06	1.8724E-03
551753.01	4172582.25	3901.51366	1586.88237	1134.93809	3881.83751	1637.81299	1088.02395	3870.28528	934.45401	611.83751	2752.33721	3790.82557	1454.66244	0.17163	0.17506	2.44E-04	9.17E-05	6.56E-05	1.92E-04	1.02E-04	6.80E-05	3.80E-04	1.92E-04	1.25E-04	1.88E-04	1.78E-04	6.83E-05	2.40E-06	2.97E-06	1.9010E-03
551606.98	4173414.04	2769.99752	2828.58215	584.93002	2829.22789	541.6468	3712.20065	2806.27274	1691.31876	336.90479	2680.68312	1360.33957	4497.30826	0.69481	0.69457	1.73E-04	1.64E-04	3.38E-05	1.40E-04	3.38E-05	2.32E-04	2.76E-04	3.47E-04	6.91E-05	1.83E-04	6.39E-05	2.11E-04	9.72E-06	1.18E-05	1.9478E-03
551284.23	4173086.1	2100.43379	3002.11613	596.1967	4281.43266	698.87406	2623.79201	2113.17165	1781.50073	337.41555	3572.54552	2247.24677	3262.193	0.27494	0.27783	1.31E-04	1.74E-04	3.45E-05	2.12E-04	4.36E-05	1.64E-04	2.08E-04	3.65E-04	6.92E-05	2.44E-04	1.06E-04	1.53E-04	3.85E-06	4.71E-06	1.9126E-03
551258.4	4173014.37	2089.26077	2974.42308	634.45358	4590.27286	726.03823	2280.43056	2095.83066	1745.27816	359.58904	3855.90396	2362.30485	2866.78621	0.26309	0.26616	1.30E-04	1.72E-04	3.67E-05	2.28E-04	4.53E-05	1.42E-04	2.06E-04	3.58E-04	7.37E-05	2.64E-04	1.11E-04	1.35E-04	3.68E-06	4.51E-06	1.9094E-03
551452.36	4173335.43	2363.27022	2911.34853	575.2568	3517.6103	615.46066	3290.4154	2384.69679	1752.9747	328.70941	3103.96856	1738.4876	3993.79515	0.37623	0.37845	1.48E-04	1.68E-04	3.33E-05	1.74E-04	3.84E-05	2.06E-04	2.34E-04	3.59E-04	6.74E-05	2.12E-04	8.17E-05	1.88E-04	5.26E-06	6.41E-06	1.9217E-03
551316.23	4172670.86	1945.94684	2437.1517	746.65471	5486.47273	1021.1408	1657.84775	1942.56394	1403.80687	413.34794	4043.71986	3329.58806	2119.09013	0.2398	0.24412	1.21E-04	1.41E-04	4.32E-05	2.72E-04	6.38E-05	1.04E-04	1.91E-04	2.88E-04	8.47E-05	2.77E-04	1.56E-04	9.95E-05	3.36E-06	4.14E-06	1.8482E-03
551320.31	4173158.13	2074.53957	2878.44555	592.94014	4142.19521	701.45473	2869.9456	2090.51577	1707.30238	334.56707	3464.42937	2173.70765	3514.32751	0.29239	0.29479	1.30E-04	1.66E-04	3.43E-05	2.05E-04	4.38E-05	1.79E-04	2.05E-04	3.50E-04	6.86E-05	2.37E-04	1.02E-04	1.65E-04	4.09E-06	5.00E-06	1.8958E-03
551287.46	4173095.05	2091.60362	2977.1712	591.87661	4241.8834	696.03065	2654.40486	2104.9458	1767.06949	334.83663	3533.73481	2231.98597	3293.87233	0.27576	0.2786	1.31E-04	1.72E-04	3.42E-05	2.10E-04	4.35E-05	1.66E-04	2.07E-04	3.62E-04	6.86E-05	2.42E-04	1.05E-04	1.55E-04	3.86E-06	4.72E-06	1.9040E-03
551259.1	4172874.62	1981.33517	2642.36361	705.172	5245.4026	852.94722	1855.38943	1980.71577	1525.55236	395.00781	4112.17382	2868.6609	2354.52262	0.25594	0.25982	1.24E-04	1.53E-04	4.08E-05	2.60E-04	5.33E-05	1.16E-04	1.95E-04	3.13E-04	8.10E-05	2.81E-04	1.35E-04	1.11E-04	3.58E-06	4.40E-06	1.8693E-03
551543.69	4173397.09	2534.45115	2880.95886	576.94112	3143.6807	586.91138	3518.65077	2565.39017	1730.07409	330.39214	2906.51985	1490.24976	4252.03508	0.49859	0.49976	1.58E-04	1.67E-04	3.34E-05	1.56E-04	3.67E-05	2.20E-04	2.52E-04	3.55E-04	6.77E-05	1.99E-04	7.00E-05	2.00E-04	6.98E-06	8.47E-06	1.9289E-03
551565.94	4173405.86	2589.46152	2865.17286	579.33817	3030.11111	559.90262	3577.72979	2621.76289	1719.85077	332.30539	2829.97504	1438.59282	4324.36739	0.54345	0.54525	1.62E-04	1.66E-04	3.35E-05	1.50E-04	3.50E-05	2.23E-04	2.58E-04	3.53E-04	6.81E-05	1.94E-04	6.76E-05	2.03E-04	7.60E-06	9.24E-06	1.9289E-03
551577.19	4173409.41	2625.39823	2853.01124	580.37772	2970.66625	553.84918	3608.45178	2658.48282	1711.52026	333.23263	2786.86861	1413.83564	4363.19119	0.57343	0.57374	1.64E-04	1.65E-04	3.36E-05	1.47E-04	3.46E-05	2.25E-04	2.61E-04	3.51E-04	6.83E-05	1.91E-04	6.64E-05	2.05E-04	8.02E-06	9.72E-06	1.9298E-03
551255.18	4173005.4	2075.77623	2939.82271	638.25895	4617.1857	729.49089	2231.14688	2081.57633	1721.70491	361.691	3872.1884	2376.07653	2807.37139	0.26088	0.26425	1.30E-04	1.70E-04	3.69E-05	2.29E-04	4.56E-05	1.39E-04	2.05E-04	3.53E-04	7.41E-05	2.65E-04	1.12E-04	1.32E-04	3.65E-06	4.48E-06	1.8983E-03
551273.53	4172808.67	1949.23123	2501.15314	724.96555	5382.58209	924.94599	1759.42193	1946.48674	1443.05605	404.44121	4061.44348	3103.8881	2233.38891	0.25338	0.2577	1.22E-04	1.45E-04	4.19E-05	2.67E-04	5.78E-05	1.10E-04	1.91E-04	2.96E-04	8.29E-05	2.78E-04	1.46E-04	1.05E-04	3.55E-06	4.37E-06	1.8491E-03
551251.54	4172966.21	2045.29959	2851.35035	662.42973	4805.67245	757.72123	2093.33813	2048.59973	1658.06144	374.85304	3986.49019	2496.40232	2643.17688	0.26044	0.26368	1.28E-04	1.65E-04	3.83E-05	2.38E-04	4.73E-05	1.31E-04	2.01E-04	3.40E-04	7.68E-05	2.73E-04	1.17E-04	1.24E-04	3.64E-06	4.47E-06	1.8873E-03
551290.68	4173104	2081.27701	2948.43129	587.90516	4203.4822	693.35311	2680.63653	2095.16663	1750.10776	332.4666	3496.88122	2216.20446	3319.77529	0.27647	0.27925	1.30E-04	1.70E-04	3.40E-05	2.08E-04	4.33E-05	1.67E-04	2.06E-04	3.59E-04	6.81E-05	2.39E-04	1.04E-04	1.56E-04	3.87E-06	4.73E-06	1.8941E-03
551299.71	4172724.09	1927.21849	2447.01839	737.92742	5389.78679	992.58094	1714.26847	1923.69201	1411.52881	409.24192	3992.36658	3252.91453	2179.09955	0.24494	0.24936	1.20E-04	1.41E-04	4.27E-05	2.67E-04	6.20E-05	1.07E-04	1.89E-04	2.89E-04	8.39E-05	2.73E-04	1.53E-04	1.02E-04	3.43E-06	4.23E-06	1.8388E-03
551253.21	4172898.89	1986.28542	2683.35413	694.12417	5113.28152	822.71818	1897.64198	1986.52599	1551.18853	389.76619	4078.77417	2755.6848	2406.14006	0.25591	0.25967	1.24E-04	1.55E-04	4.01E-05	2.53E-04	5.14E-05	1.19E-04	1.95E-04	3.18E-04	7.99E-05	2.79E-04	1.29E-04	1.13E-04	3.58E-06	4.40E-06	1.8651E-03
551461.88	4173344.4	2363.37881	2867.35986	567.9355	3454.10426	608.19327	3289.68712	2385.95723	1725.14264	324.416	3051.77564	1704.09033	3987.90661	0.38274	0.38449	1.48E-04	1.66E-04	3.28E-05	1.71E-04	3.80E-05	2.05E-04	2.35E-04	3.54E-04	6.65E-05	2.09E-04	8.00E-05	1.87E-04	5.36E-06	6.52E-06	1.9034E-03
551293.91	4173112.96	2070.62096	2918.53558	584.64014	4168.61952	691.12324	2703.06067	2084.9482	1732.17325	330.47114	3464.38985	2200.58005	3340.88042	0.2772	0.27992	1.29E-04	1.69E-04	3.38E-05	2.07E-04	4.32E-05	1.69E-04	2.05E-04	3.55E-04	6.77E-05	2.37E-04	1.03E-04	1.57E-04	3.88E-06	4.74E-06	1.8840E-03
551251.95	4172996.44	2057.72379	2896.65243	640.65131	4631.2953	731.82905	2179.62682	2062.81451	1693.41419	362.93669	3875.36965	2386.4335	2744.87441	0.25838	0.26146	1.28E-04	1.67E-04	3.70E-05	2.30E-04	4.57E-05	1.36E-04	2.03E-04	3.47E-04	7.44E-05	2.65E-04	1.12E-04	1.29E-04	3.62E-06	4.43E-06	1.8827E-03
551361.8	4173244.48	2126.54531	2908.26504	613.15443	3917.37098	669.43866	2878.97356	2141.01186	1733.0932	347.48726	3418.80747	1976.09629	3521.64463	0.30918	0.31112	1.33E-04	1.68E-04	3.54E-05	1.94E-04	4.18E-05	1.80E-04	2.10E-04	3.55E-04	7.12E-05	2.34E-04	9.28E-05	1.65E-04	4.33E-06	5.27E-06	1.8907E-03
551471.4	4173353.36	2374.11099	2845.54961	564.66461	3406.21712	603.33777	3301.12612	2397.90581	1710.58217	322.49619	3020.78483	1670.52993	3998.45582	0.39043	0.39249	1.48E-04	1.65E-04	3.26E-05	1.69E-04	3.77E-05	2.06E-04	2.36E-04	3.51E-04	6.61E-05	2.07E-04	7.85E-05	1.88E-04	5.46E-06	6.65E-06	1.8955E-03
551521.13	4173388.02	2462.84496	2845.52129	568.43374	3217.44116	590.14276	3409.82666	2491.90352	1709.16692	325.07532	2934.71408	1534.00796	4121.89937	0.45495	0.4564	1.54E-04	1.65E-04	3.29E-05	1.59E-04	3.69E-05	2.13E-04	2.45E-04	3.50E-04	6.66E-05	2.01E-04	7.21E-05	1.94E-04	6.37E-06	7.73E-06	1.9028E-03
551251.13	4172935.98	2006.98563	2761.30782	674.08608	4899.79376	775.64003	1989.95901	2008.8091	1601.07029	380.43917	4015.5251	2577.77364	2517.81775	0.25592	0.25951	1.25E-04	1.60E-04	3.90E-05	2.43E-04	4.84E-05	1.24E-04	1.97E-04	3.28E-04	7.80E-05	2.75E-04	1.21E-04	1.18E-04	3.58E-06	4.40E-06	1.8651E-03
551593.9	4173415.94	2671.07648	2802.77607	577.18561	2857.78138	541.27671	3608.28205	2705.23164	1678.41926	331.94946	2696.01089	1368.85752	4368.92636	0.61548	0.61485	1.67E-04	1.62E-04	3.34E-05	1.42E-04	3.38E-05	2.25E-04	2.66E-04	3.44E-04	6.80E-05	1.84E-04	6.43E-05	2.05E-04	8.61E-06	1.04E-05	1.9139E-03
551400.56	4173298.82	2232.00051	2937.8416	594.69793	3671.13857	631.86985	3010.02537	2247.75771	1766.07236	339.38269	3238.36386	1826.25439	3680.80977	0.32831	0.33045	1.39E-04	1.70E-04	3.44E-05	1.82E-04	3.95E-05	1.88E-04	2.21E-04	3.62E-04	6.96E-05	2.21E-04	8.58E-05	1.73E-04	4.59E-06	5.60E-06	1.8959E-03
551274.24	4172799.15	1930.60205	2463.62968	720.76327	5326.46187	924.54773	1736.99464	1927.71098	1421.66915	401.82615	4006.65099	3092.38258	2204.73734	0.24977	0.25405	1.21E-04	1.42E-04	4.17E-05	2.64E-04	5.77E-05	1.08E-04	1.89E-04	2.91E-04	8.24E-05	2.74E-04	1.45E-04	1.04E-04	3.49E-06	4.31E-06	1.8288E-03
551390.96	4173289.78	2205.64824	2934.67741	599.05306	3710.8814	637.11445	2961.24964	2220.73762	1760.90919	341.52328	3273.19747	1847.26986	3624.17169	0.32376	0.32531	1.38E-04	1.70E-04	3.46E-05	1.84E-04	3.98E-05	1.85E-04	2.18E-04	3.61E-04	7.00E-05	2.24E-04	8.68E-05	1.70E-04	4.53E-06	5.51E-06	1.8908E-03
551410.15	4173307.86	2249.10959	2920.25939	587.52898	3617.38747	624.86907	3046.36762	2265.65984	1758.25943	335.5515	3188.1581	1801.12511	3720.82807	0.33425	0.33637	1.40E-04	1.69E-04	3.40E-05	1.79E-04	3.90E-05	1.90E-04	2.23E-04	3.60E-04	6.88E-05	2.18E-04	8.46E-05	1.75E-04	4.68E-06	5.70E-06	1.8915E-03
551624.12	4173420.51	2818.85761	2737.27205	574.79024	2693.55107	525.76646	3639.32315	2856.68327	1630.82083	331.71154	2560.89035	1307.86694	4421.28233	0.76128	0.75936	1.76E-04	1.58E-04	3.32E-05	1.34E-04	3.28E-05	2.27E-04	2.81E-04	3.34E-04	6.80E-05	1.75E-04	6.14E-05	2.08E-04	1.07E-05	1.29E-05	1.9120E-03
551329.91	4173185.09	2047.3766	2811.59327	592.40046	4037.76927	690.95632	2830.39658	2062.87779	1667.75263	334.12831	3412.14861	2099.04429	3459.5306	0.29252	0.29448	1.28E-04	1.63E-04	3.42E-05	2.00E-04	4.32E-05	1.77E-04	2.03E-04	3.42E-04	6.85E-05	2.33E-04	9.86E-05	1.62E-04	4.09E-06	4.99E-06	1.8613E-03
551299.19	4173127.93	2048.56764	2861.20148	579.13643	4105.36832	686.69209	2725.06578	2063.43306	1697.59728	327.14959	3409.73705	2169.99506	3357.36342	0.27754	0.28044	1.28E-04	1.65E-04	3.35E-05	2.04E-04	4.29E-05	1.70E-04	2.03E-04	3.48E-04	6.71E-05	2.33E-04	1.02E-04	1.58E-04	3.88E-06	4.75E-06	1.8627E-03
551257.38	4172864.1	1946.13033	2567.62405	695.81102	5167.37326	850.25025	1804.08329	1945.22681	1482.27648	389.4562	4023.84207	2850.50037	2289.99368	0.24998	0.25379	1.22E-04	1.48E-04	4.02E-05	2.56E-04	5.31E-05	1.13E-04	1.91E-04	3.04E-04	7.98E-05	2.75E-04	1.34E-04	1.08E-04	3.50E-06	4.30E-06	1.8314E-03
551480.91	4173362.33	2374.76523	2814.27187	560.40299	3348.76369	597.33571	3291.55523	2399.65154	1691.09601	320.02215	2980.711	1634.81051	3984.21038	0.39756	0.39951	1.48E-04	1.63E-04	3.24E-05	1.66E-04	3.73E-05	2.06E-04	2.36E-04	3.47E-04	6.56E-05	2.04E-04	7.68E-05	1.87E-04	5.56E-06	6.77E-06	1.8805E-03
551326.23	4173174.87	2039.30015	2803.62438	586.43256	4034.89733	690.58466	2826.50148	2055.01023	1663.32971	330.75563	3391.99174	2115.79361	3455.45364	0.29149	0.29422	1.27E-04	1.62E-04	3.39E-05	2.00E-04	4.31E-05	1.77E-04	2.02E-04	3.41E-04	6.78E-05	2.32E-04	9.94E-05	1.62E-04	4.08E-06	4.99E-06	1.8564E-03
551295.4	4172732.46	1906.12601	2413.08865	726.79197	5286.85462	971.62887	1700.53828	1902.71069	1392.55173	403.32344	3925.35566	3182.06861	2160.16682	0.24138	0.24567	1.19E-04	1.40E-04	4.20E-05	2.62E-04	6.07E-05	1.06E-04	1.87E-04	2.85E-04	8.27E-05	2.68E-04	1.49E-04	1.01E-04	3.38E-06	4.16E-06	1.8115E-03
551248.72	4172987.47	2031.70728	2840.64036	639.66298	4617.25742	730.84802	2122.99143	2036.17921	1657.73224	362.2807	3854.06579	2386.11883	2675.80741	0.25462	0.25793	1.27E-04	1.64E-04	3.70E-05	2.29E-04	4.56E-05	1.33E-04	2.00E-04	3.40E-04	7.43E-05	2.64E-04	1.12E-04	1.26E-04	3.56E-06	4.37E-06	1.8586E-03
551419.75	4173316.89	2252.56575	2876.53371	576.9052	3546.07137	615.55225	3062.03955	2269.93935	1734.24897	329.63206	3118.50981	1772.00342	3734.57972	0.33919	0.34085	1.41E-04	1.66E-04	3.34E-05	1.76E-04	3.84E-05	1.91E-04	2.23E-04	3.55E-04	6.76E-05	2.13E-04	8.32E-05	1.75E-04	4.75E-06	5.78E-06	1.8744E-03
551327.22	4172639.75	1932.64844	2343.12833	735.75346	5351.50903	1002.30627	1579.24487	1929.60633	1350.56784	407.64742	3936.43924	3255.10946	2026.31581	0.22691	0.23081	1.21E-04	1.35E-04	4.25E-05	2.65E-04	6.26E-05	9.86E-05	1.90E-04	2.77E-04	8.36E-05	2.69E-04	1.53E-04	9.52E-05	3.18E-06	3.91E-06	1.7996E-03
551275.19	4172789.77	1909.68054	2423.93916	714.69458	5251.9376	921.41092	1713.59307	1906.69676	1399.0009	398.18883	3941.83754	3068.3965	2174.90801	0.24537	0.24957	1.19E-04	1.40E-04	4.13E-05	2.60E-04	5.75E-05	1.07E-04	1.87E-04	2.87E-04	8.16E-05	2.70E-04	1.44E-04	1.02E-04	3.43E-06	4.23E-06	1.8049E-03
551610.93	4173422.42	2720.40236	2731.60062	570.50986	2733.18278	527.02443	3572.53337	2755.88618	1631.1277	328.71249	2590.09981	1320.1526	4335.0918	0.66325	0.663	1.70E-04	1.58E-04	3.30E-05	1.35E-04	3.29E-05	2.23E-04	2.71E-04	3.34E-04	6.74E-05	1.77E-04	6.20E-05	2.04E-04	9.28E-06	1.12E-05	1.8882E-03
551333	4173193.68	2032.21109	2780.83836	589.63454	3981.66218	684.33769	2801.01184	2047.46931	1650.06934	332.58753	3376.04332	2068.04946	3422.77262	0.2917	0.29431	1.27E-04	1.61E-04	3.41E-05	1.97E-04	4.27E-05	1.75E-04	2.01E-04	3.38E-04	6.82E-05	2.31E-04	9.71E-05	1.61E-04	4.08E-06	4.99E-06	1.8423E-03
551530.83	4173397.16	2444.41371	2794.97004	562.22914	3128.40226	580.04271	3361.06703	2473.64758	1678.97658	321.63634	2866.21197	1490.66943	4063.66002	0.46023	0.46171	1.53E-04	1.62E-04	3.25E-05	1.55E-04	3.62E-05	2.10E-04	2.43E-04	3.44E-04	6.59E-05	1.96E-04	7.00E-05	1.91E-04	6.44E-06	7.82E-06	1.8723E-03
551429.34	4173325.93	2262.90775	2842.6832	568.48216	3488.12247	608.10835	3087.46434	2281.26343	1713.72129	324.85413	3065.38213	1743.60397	3760.31264	0.34454	0.34658	1.41E-04	1.64E-04	3.29E-05	1.73E-04	3.80E-05	1.93E-04	2.24E-04	3.51E-04	6.66E-05	2.10E-04	8.19E-05	1.77E-04	4.82E-06	5.87E-06	1.8632E-03
551248.31	4172957.24	1996.41436	2761.0479	651.27018	4698.92483	743.64413	2021.52583	1999.33271	1604.29608	368.37327	3896.69722	2451.00433	2553.96284	0.25217	0.25559	1.25E-04	1.60E-04	3.77E-05	2.33E-04	4.64E-05	1.26E-04	1.97E-04	3.29E-04	7.55E-05	2.66E-04	1.15E-04	1.20E-04	3.53E-06	4.33E-06	1.8379E-03
551251.5	4172888.41	1943.50503	2598.10367	681.91484	5015.82727	813.35685	1836.12898	1943.49393	1501.39051	382.51829	3977.85864	2717.5841	2329.23657	0.24774	0.25137	1.21E-04	1.50E-04	3.94E-05	2.49E-04	5.08E-05	1.15E-04	1.91E-04	3.08E-04	7.84E-05	2.72E-04	1.28E-04	1.09E-04	3.47E-06	4.26E-06	1.8191E-03
551320.98	4172646.71	1915.23089	2344.5484	729.50463	5314.20422	994.64142	1585.7537	1912.17373	1350.96849	404.08555	3916.58708	3227.38249	2032.3131	0.22743	0.23138	1.20E-04	1.36E-04	4.22E-05	2.63E-04	6.21E-05	9.90E-05	1.88E-04	2.77E-04	8.28E-05	2.68E-04	1.52E-04	9.55E-05	3.18E-06	3.92E-06	1.7916E-03
551490.43	4173371.29	2368.72203	2778.80368	555.81721	3285.69015	590.6962	3267.96644	2394.52955	1669.73795	317.3964	2935.78557	1597.73769	3953.76621	0.40407	0.40588	1.48E-04	1.61E-04	3.21E-05	1.63E-04	3.69E-05	2.04E-04	2.35E-04	3.42E-04	6.51E-05	2.01E-04	7.50E-05	1.86E-04	5.65E-06	6.88E-06	1.8613E-03
551291.1	4172740.83	1892.27509	2390.13661	719.17933	5221.14874	955.94179	1690.9313	1888.92806	1379.65214	399.33739	3883.16847	3133.23231	2146.95919	0.2394	0.2436	1.18E-04	1.38E-04	4.16E-05	2.59E-04	5.97E-05	1.06E-04	1.86E-04	2.83E-04	8.19E-05	2.66E-04	1.47E-04	1.01E-04	3.35E-06	4.13E-06	1.7934E-03
551580.82	4173417.84	2575.90542	2763.56219	567.55601	2876.43059	539.7036	3488.15629	2608.13854	1656.57543	325.93723	2699.68454	1373.97739	4222.63025	0.55054	0.5516	1.61E-04	1.60E-04	3.28E-05	1.43E-04	3.37E-05	2.18E-04	2.56E-04	3.40E-04	6.68E-05	1.85E-04	6.45E-05	1.98E-04	7.70E-06	9.35E-06	1.8749E-03
551305.11	4173144.67	2021.37708	2794.95458	573.74952	4032.45525	681.2251	2729.49525	2036.53578	1657.7119	323.88088	3353.21868	2131.39965	3352.54078	0.27779	0.28058	1.26E-04	1.62E-04	3.32E-05	2.00E-04	4.25E-05	1.70E-04	2.00E-04	3.40E-04	6.64E-05	2.29E-04	1.00E-04	1.57E-04	3.89E-06	4.75E-06	1.8358E-03
551367.29	4173258.51	2105.58094	2853.31048	601.24445	3791.98163	651.88633	2823.88941	2119.7146	1705.03688	341.21601	3315.81094	1918.60185	3455.41991	0.30607	0.30834	1.31E-04	1.65E-04	3.48E-05	1.88E-04	4.07E-05	1.76E-04	2.08E-04	3.49E-04	6.99E-05	2.27E-04	9.01E-05	1.62E-04	4.28E-06	5.23E-06	1.8527E-03
551245.5	4172978.51	2006.68287	2786.9116	639.34652	4607.85766	731.14965	2069.66727	2010.55653	1623.65295	361.92911	3834.08747	2389.70478	2611.00017	0.25128	0.25457	1.25E-04	1.61E-04	3.70E-05	2.28E-04	4.57E-05	1.29E-04	1.98E-04	3.33E-04	7.42E-05	2.62E-04	1.12E-04	1.23E-04	3.52E-06	4.31E-06	1.8363E-03
551262.25	4172827.77	1910.57009	2459.64692	698.49171	5171.96334	879.2335	1730.68268	1908.54205	1419.28798	390.2236	3946.34942	2938.21364	2197.47514	0.24551	0.2495	1.19E-04	1.42E-04	4.04E-05	2.56E-04	5.49E-05	1.08E-04	1.88E-04	2.91E-04	8.00E-05	2.70E-04	1.38E-04	1.03E-04	3.44E-06	4.23E-06	1.7985E-03
551247.29	4172922.99	1961.23771	2668.04636	667.11301	4844.03308	773.78648	1913.63259	1962.51655	1545.67674	375.84076	3937.53347	2568.90866	2423.26742	0.24873	0.25223	1.22E-04	1.54E-04	3.86E-05	2.40E-04	4.83E-05	1.20E-04	1.93E-04	3.17E-04	7.70E-05	2.69E-04	1.21E-04	1.14E-04	3.48E-06	4.27E-06	1.8215E-03
551262.07	4173053.63	2036.74138	2892.54688	591.236	4229.59419	683.88682	2356.52589	2046.21037	1709.90976	334.97436	3550.43052	2201.72934	2949.22649	0.25666	0.25973	1.27E-04	1.67E-04	3.42E-05	2.10E-04	4.27E-05	1.47E-04	2.01E-04	3.50E-04	6.87E-05	2.43E-04	1.03E-04	1.39E-04	3.59E-06	4.40E-06	1.8412E-03
551258.84	4173044.68	2035.36304	2888.30966	596.14909	4268.13047	687.43092	2316.05934	2044.07999	1704.76914	337.81998	3586.14297	2215.41882	2902.28386	0.25528	0.25837	1.27E-04	1.67E-04	3.45E-05	2.12E-04	4.29E-05	1.45E-04	2.01E-04	3.49E-04	6.92E-05	2.45E-04	1.04E-04	1.36E-04	3.57E-06	4.38E-06	1.8409E-03
551336.09	4173202.26	2024.15065	2762.84293	588.84511	3938.79896	678.74072	2778.08745	2039.15065	1639.98016	332.20454	3352.47527	2040.49034	3394.75386	0.29133	0.29318	1.26E-04	1.60E-04	3.40E-05	1.95E-04	4.24E-05	1.74E-04	2.00E-04	3.36E-04	6.81E-05	2.29E-04	9.58E-05	1.59E-04	4.08E-06	4.97E-06	1.8296E-03
551265.29	4173062.58	2035.81335	2890.30294	586.39817	4190.91149	680.53835	2395.24401	2046.01473	1710.82179	332.16197	3513.18079	2188.26927	2993.46961	0.25791	0.26072	1.27E-04	1.67E-04	3.39E-05	2.08E-04	4.25E-05	1.50E-04	2.01E-04	3.51E-04	6.81E-05	2.40E-04	1.03E-04	1.41E-04	3.61E-06	4.42E-06	1.8395E-03
551255.59	4173035.63	2031.40895	2877.13601	600.97989	4305.51238	691.06977	2273.64794	2039.34383	1695.20787	340.57897	3619.1214	2229.40477	2852.45503	0.25371	0.25682	1.27E-04	1.66E-04	3.47E-05	2.13E-04	4.32E-05	1.42E-04	2.00E-04	3.47E-04	6.98E-05	2.47E-04	1.05E-04	1.34E-04	3.55E-06	4.35E-06	1.8383E-03
551279.48	4172769.77	1887.844	2382.68142	711.23642	5185.76965	928.2029	1689.62921	1884.66276	1375.46759	395.71712	3874.77379	3069.08862	2144.30614	0.24059	0.24474	1.18E-04	1.38E-04	4.11E-05	2.57E-04	5.80E-05	1.06E-04	1.85E-04	2.82E-04	8.11E-05	2.65E-04	1.44E-04	1.01E-04	3.37E-06	4.15E-06	1.7830E-03
551268.52	4173071.53	2032.83721	2882.03324	581.67741	4152.73552	677.37722	2431.98154	2043.75425	1707.61707	329.38053	3475.48276	2175.14491	3034.69387	0.25905	0.26181	1.27E-04	1.67E-04	3.36E-05	2.06E-04	4.23E-05	1.52E-04	2.01E-04	3.50E-04	6.75E-05	2.38E-04	1.02E-04	1.43E-04	3.62E-06	4.44E-06	1.8361E-03
551286.79	4172749.21	1883.22334	2374.92534	713.72444	5179.48358	943.41641	1683.91774	1879.92813	1371.03907	396.54319	3857.65214	3097.66695	2137.44415	0.23841	0.24256	1.18E-04	1.37E-04	4.13E-05	2.57E-04	5.89E-05	1.05E-04	1.85E-04	2.81E-04	8.13E-05	2.64E-04	1.45E-04	1.00E-04	3.34E-06	4.11E-06	1.7812E-03
551252.36	4173026.67	2024.59351	2858.81429	605.48608	4339.29983	694.59735	2230.10327	2031.78043	1681.32081	343.13897	3646.93533	2242.92853	2800.75933	0.25223	0.25505	1.26E-04	1.65E-04	3.50E-05	2.15E-04	4.34E-05	1.39E-04	2.00E-04	3.45E-04	7.03E-05	2.49E-04	1.05E-04	1.32E-04	3.53E-06	4.32E-06	1.8333E-03
551314.75	4172653.66	1892.98248	2334.35588	720.69374	5246.06225	982.46241	1586.72827	1889.94153	1345.05069	399.15123	3874.98214	3181.88801	2031.0102	0.22655	0.23049	1.18E-04	1.35E-04	4.17E-05	2.60E-04	6.14E-05	9.91E-05	1.86E-04	2.76E-04	8.18E-05	2.65E-04	1.49E-04	9.54E-05	3.17E-06	3.91E-06	1.7755E-03
551499.95	4173380.26	2366.21126	2752.74546	552.72646	3225.14124	584.52335	3249.00595	2392.80621	1654.04507	315.69841	2896.48948	1560.45658	3930.06081	0.41122	0.41255	1.48E-04	1.59E-04	3.20E-05	1.60E-04	3.65E-05	2.03E-04	2.35E-04	3.39E-04	6.47E-05	1.98E-04	7.33E-05	1.85E-04	5.75E-06	6.99E-06	1.8458E-03
551271.74	4173080.48	2028.39061	2868.9524	577.41738	4116.97766	674.63294	2466.70863	2039.97133	1701.08606	326.85073	3439.37569	2162.72315	3072.87308	0.26015	0.26287	1.27E-04	1.66E-04	3.34E-05	2.04E-04	4.21E-05	1.54E-04	2.01E-04	3.49E-04	6.70E-05	2.35E-04	1.02E-04	1.44E-04	3.64E-06	4.45E-06	1.8316E-03
551255.67	4172853.58	1910.27927	2492.83367	685.53412	5074.56372	845.62073	1754.02499	1909.12563	1438.9899	383.49123	3928.92382	2823.31404	2226.96532	0.2438	0.24753	1.19E-04	1.44E-04	3.96E-05	2.52E-04	5.28E-05	1.10E-04	1.88E-04	2.95E-04	7.86E-05	2.69E-04	1.33E-04	1.05E-04	3.41E-06	4.19E-06	1.7917E-03
551298.94	4172704.48	1874.9712	2363.1664	714.4029	5176.74423	965.02977	1651.65194	1871.75419	1363.30356	395.97333	3843.79345	3129.98027	2101.78114	0.2329	0.23702	1.17E-04	1.37E-04	4.13E-05	2.57E-04	6.03E-05	1.03E-04	1.84E-04	2.79E-04	8.12E-05	2.63E-04	1.47E-04	9.87E-05	3.26E-06	4.02E-06	1.7755E-03
551339.18	4173210.85	2020.58732	2752.73489	588.97291	3902.01828	673.36023	2759.03177	2035.31132	1634.63235	332.38302	3334.65564	2014.42529	3372.03581	0.29088	0.29336	1.26E-04	1.59E-04	3.41E-05	1.93E-04	4.21E-05	1.72E-04	2.00E-04	3.35E-04	6.81E-05	2.28E-04	9.46E-05	1.58E-04	4.07E-06	4.97E-06	1.8205E-03
551274.97	4173089.44	2022.74011	2851.97058	573.62861	4084.05828	672.34536	2499.14469	2034.94442	1691.69259	324.60021	3405.71927	2150.85661	3107.72749	0.26124	0.26391	1.26E-04	1.65E-04	3.32E-05	2.02E-04	4.20E-05	1.56E-04	2.00E-04	3.47E-04	6.65E-05	2.33E-04	1.01E-04	1.46E-04	3.66E-06	4.47E-06	1.8262E-03
551597.75	4173424.34	2620.02267	2708.72736	563.50472	2763.46236	526.99558	3477.82648	2653.33438	1620.6131	324.1481	2607.01499	1329.39529	4216.61151	0.58949	0.58785	1.64E-04	1.57E-04	3.26E-05	1.37E-04	3.29E-05	2.17E-04	2.61E-04	3.32E-04	6.64E-05	1.78E-04	6.24E-05	1.98E-04	8.25E-06	9.96E-06	1.8563E-03
551249.13	4173017.7	2014.69591	2833.33567	609.48181	4368.2483	697.84823	2185.12276	2021.14061	1663.24802	345.383	3668.29373	2255.76593	2746.89138	0.25017	0.25301	1.26E-04	1.64E-04	3.52E-05	2.17E-04	4.36E-05	1.36E-04	1.99E-04	3.41E-04	7.08E-05	2.51E-04	1.06E-04	1.29E-04	3.50E-06	4.29E-06	1.8254E-03
551242.27	4172969.54	1981.68258	2733.54665	639.17987	4599.05994	732.27319	2018.61833	1984.97629	1590.56057	361.63405	3812.50373	2395.64909	2548.50022	0.24857	0.25159	1.24E-04	1.58E-04	3.70E-05	2.28E-04	4.57E-05	1.26E-04	1.95E-04	3.26E-04	7.41E-05	2.61E-04	1.13E-04	1.20E-04	3.48E-06	4.26E-06	1.8145E-03
551245.09	4172948.28	1965.28829	2697.73146	648.20836	4668.85059	741.98976	1966.50604	1967.72221	1566.34492	366.29492	3854.16855	2446.91966	2486.06838	0.24737	0.25073	1.23E-04	1.56E-04	3.75E-05	2.31E-04	4.63E-05	1.23E-04	1.93E-04	3.21E-04	7.51E-05	2.64E-04	1.15E-04	1.17E-04	3.46E-06	4.25E-06	1.8093E-03
551249.79	4172877.94	1913.78359	2534.02838	675.44888	4969.47505	814.16962	1789.19945	1913.46562	1463.96593	378.48486	3912.24688	2715.96142	2270.46271	0.24307	0.24666	1.19E-04	1.47E-04	3.91E-05	2.46E-04	5.09E-05	1.12E-04	1.88E-04	3.00E-04	7.76E-05	2.68E-04	1.28E-04	1.07E-04	3.40E-06	4.18E-06	1.7891E-03
551540.53	4173406.29	2430.88529	2747.55465	556.52812	3038.73009	569.54225	3318.62984	2460.17771	1650.02095	318.53534	2797.84432	1447.5983	4014.16901	0.46478	0.46557	1.52E-04	1.59E-04	3.22E-05	1.51E-04	3.56E-05	2.07E-04	2.42E-04	3.38E-04	6.53E-05	1.91E-04	6.80E-05	1.89E-04	6.50E-06	7.89E-06	1.8439E-03

551278.19	4173098.39	2014.75618	2829.52446	569.80584	4049.84717	669.93322	2527.12551	2027.51383	1678.66772	322.32044	3371.48571	2137.86824	3136.6243	0.2621	0.26472	1.26E-04	1.64E-04	3.29E-05	2.01E-04	4.18E-05	1.58E-04	1.99E-04	3.44E-04	6.61E-05	2.31E-04	1.00E-04	1.47E-04	3.67E-06	4.49E-06	1.8187E-03
551282.49	4172757.58	1873.74612	2359.40735	707.65229	5134.22369	929.88865	1675.44105	1870.53265	1362.2339	393.41656	3830.98178	3058.05896	2126.34608	0.23715	0.24124	1.17E-04	1.36E-04	4.09E-05	2.55E-04	5.81E-05	1.05E-04	1.84E-04	2.79E-04	8.06E-05	2.62E-04	1.44E-04	9.99E-05	3.32E-06	4.09E-06	1.7682E-03
551311.03	4173161.41	1993.83764	2731.92099	569.34785	3957.41624	675.00027	2713.88477	2008.99558	1619.99785	321.23225	3301.5036	2088.47049	3325.89517	0.27767	0.28034	1.24E-04	1.58E-04	3.29E-05	1.96E-04	4.22E-05	1.70E-04	1.97E-04	3.32E-04	6.58E-05	2.26E-04	9.81E-05	1.56E-04	3.89E-06	4.75E-06	1.8073E-03
551370.83	4173266.98	2089.26529	2811.62404	592.22219	3708.68224	640.30462	2787.1097	2103.2342	1683.46291	336.3796	3243.44824	1883.45976	3410.72748	0.30409	0.30584	1.30E-04	1.63E-04	3.42E-05	1.84E-04	4.00E-05	1.74E-04	2.07E-04	3.45E-04	6.90E-05	2.22E-04	8.85E-05	1.60E-04	4.25E-06	5.18E-06	1.8258E-03
551509.47	4173389.22	2368.36878	2735.00786	550.85725	3165.25414	578.46346	3237.68738	2395.62233	1643.001	314.7477	2860.69187	1523.06538	3916.71673	0.41867	0.41983	1.48E-04	1.58E-04	3.18E-05	1.57E-04	3.61E-05	2.02E-04	2.35E-04	3.37E-04	6.45E-05	1.96E-04	7.15E-05	1.84E-04	5.86E-06	7.11E-06	1.8340E-03
551245.91	4173008.74	2002.01411	2801.74373	612.92638	4392.25207	700.95324	2139.33276	2007.73799	1641.72163	347.28583	3683.02768	2268.05235	2691.6821	0.24807	0.2512	1.25E-04	1.62E-04	3.54E-05	2.18E-04	4.38E-05	1.34E-04	1.97E-04	3.37E-04	7.12E-05	2.52E-04	1.07E-04	1.26E-04	3.47E-06	4.26E-06	1.8151E-03
551306.44	4172668.8	1869.37981	2329.27189	711.61489	5168.67215	968.78662	1598.88355	1866.32365	1342.52943	394.09129	3829.05781	3131.33215	2041.96327	0.2267	0.23067	1.17E-04	1.35E-04	4.11E-05	2.56E-04	6.05E-05	9.99E-05	1.83E-04	2.75E-04	8.08E-05	2.62E-04	1.47E-04	9.59E-05	3.17E-06	3.91E-06	1.7604E-03
551243.89	4172902.11	1919.53881	2572.26097	665.89515	4853.3228	787.95961	1830.54935	1920.01261	1488.04369	374.03347	3882.84344	2618.92209	2320.77184	0.24357	0.24706	1.20E-04	1.49E-04	3.85E-05	2.41E-04	4.92E-05	1.14E-04	1.89E-04	3.05E-04	7.67E-05	2.66E-04	1.23E-04	1.09E-04	3.41E-06	4.19E-06	1.7867E-03
551281.42	4173107.34	2005.18779	2803.39453	566.20073	4016.03046	667.60499	2550.83841	2018.45035	1663.22926	320.16358	3338.42971	2124.25788	3159.97031	0.26283	0.2654	1.25E-04	1.62E-04	3.27E-05	1.99E-04	4.17E-05	1.59E-04	1.98E-04	3.41E-04	6.56E-05	2.28E-04	9.98E-05	1.48E-04	3.68E-06	4.50E-06	1.8097E-03
551294.62	4172712.89	1860.9275	2342.81337	707.77355	5114.18722	952.0849	1646.86488	1857.72775	1351.97506	392.47966	3801.82997	3088.22162	2093.97128	0.23142	0.23548	1.16E-04	1.35E-04	4.09E-05	2.54E-04	5.95E-05	1.03E-04	1.83E-04	2.77E-04	8.04E-05	2.60E-04	1.45E-04	9.84E-05	3.24E-06	3.99E-06	1.7592E-03
551810.67	4173342.58	3752.89472	2297.09903	529.48116	2217.10318	476.76912	3217.60595	3831.76925	1339.29827	297.02081	2116.85236	1131.93143	3956.13553	0.88716	0.84288	2.34E-04	1.33E-04	3.06E-05	1.10E-04	2.98E-05	2.01E-04	3.77E-04	2.75E-04	6.09E-05	1.45E-04	5.32E-05	1.86E-04	1.24E-05	1.43E-05	1.8609E-03
551985.01	4173243.64	3395.29407	2395.70838	456.73639	2006.02794	406.26459	3779.30803	3475.70596	1392.40324	266.26254	1957.51489	976.94807	4615.40683	0.33125	0.32489	2.12E-04	1.39E-04	2.64E-05	9.94E-05	2.54E-05	2.36E-04	3.42E-04	2.85E-04	5.46E-05	1.34E-04	4.59E-05	2.17E-04	4.64E-06	5.51E-06	1.8261E-03
551284.64	4173116.29	1994.69354	2775.19969	563.00199	3983.72542	665.45209	2570.14982	2008.3565	1646.35015	318.21759	3307.83845	2110.1791	3177.80479	0.26322	0.26601	1.25E-04	1.60E-04	3.25E-05	1.97E-04	4.16E-05	1.61E-04	1.97E-04	3.37E-04	6.52E-05	2.26E-04	9.91E-05	1.49E-04	3.68E-06	4.51E-06	1.8000E-03
551242.68	4172999.77	1984.09537	2760.64249	614.65306	4401.28858	702.55049	2090.51182	1989.15251	1614.85162	348.16716	3683.22815	2275.76307	2632.40769	0.24556	0.24841	1.24E-04	1.60E-04	3.55E-05	2.18E-04	4.39E-05	1.31E-04	1.96E-04	3.31E-04	7.14E-05	2.52E-04	1.07E-04	1.24E-04	3.44E-06	4.21E-06	1.7996E-03
551241.86	4172939.31	1939.12205	2642.36821	647.02455	4657.25011	744.64882	1917.57124	1941.08364	1533.14707	365.19854	3821.72667	2456.89578	2425.74915	0.24373	0.24705	1.21E-04	1.53E-04	3.74E-05	2.31E-04	4.65E-05	1.20E-04	1.91E-04	3.14E-04	7.49E-05	2.61E-04	1.15E-04	1.14E-04	3.41E-06	4.19E-06	1.7866E-03
551302.14	4172677.15	1855.10719	2318.65349	705.65239	5112.19935	958.90196	1601.49658	1852.05366	1336.8437	390.8478	3792.99199	3095.66341	2042.92462	0.22596	0.22992	1.16E-04	1.34E-04	4.08E-05	2.53E-04	5.99E-05	1.00E-04	1.82E-04	2.74E-04	8.01E-05	2.59E-04	1.45E-04	9.60E-05	3.16E-06	3.90E-06	1.7480E-03
551467.71	4173362.08	2280.35513	2701.09683	542.71643	3268.4392	582.51331	3116.99384	2303.16231	1623.23152	309.81833	2886.77494	1618.13614	3778.21112	0.36783	0.36955	1.42E-04	1.56E-04	3.14E-05	1.62E-04	3.64E-05	1.95E-04	2.26E-04	3.33E-04	6.35E-05	1.97E-04	7.60E-05	1.77E-04	5.15E-06	6.26E-06	1.8079E-03
551584.56	4173426.26	2528.24042	2676.803	554.96434	2785.25571	525.96886	3371.96461	2559.66547	1603.27591	318.78143	2615.09681	1335.43419	4086.81328	0.52911	0.52939	1.58E-04	1.55E-04	3.21E-05	1.38E-04	3.29E-05	2.11E-04	2.52E-04	3.29E-04	6.53E-05	1.79E-04	6.27E-05	1.92E-04	7.40E-06	8.97E-06	1.8217E-03
551396.41	4173307.09	2141.70771	2780.37512	569.98577	3500.46701	607.99467	2844.0568	2156.70419	1673.56362	325.22996	3075.52107	1761.71751	3479.1156	0.31153	0.31346	1.34E-04	1.61E-04	3.30E-05	1.74E-04	3.80E-05	1.78E-04	2.12E-04	3.43E-04	6.67E-05	2.10E-04	8.27E-05	1.63E-04	4.36E-06	5.31E-06	1.8044E-03
551518.99	4173398.19	2352.08165	2693.14089	545.61561	3088.50468	570.00168	3196.29344	2379.62858	1618.21921	311.84431	2803.63853	1483.32877	3866.78469	0.42341	0.42435	1.47E-04	1.56E-04	3.15E-05	1.53E-04	3.56E-05	2.00E-04	2.34E-04	3.32E-04	6.39E-05	1.92E-04	6.97E-05	1.82E-04	5.92E-06	7.19E-06	1.8081E-03
551406.07	4173316.2	2161.66723	2768.5108	563.67582	3455.53595	601.8195	2883.53643	2177.44803	1668.24958	321.87385	3033.84656	1739.36028	3523.64602	0.31736	0.31885	1.35E-04	1.60E-04	3.26E-05	1.71E-04	3.76E-05	1.80E-04	2.14E-04	3.42E-04	6.60E-05	2.07E-04	8.17E-05	1.66E-04	4.44E-06	5.40E-06	1.8031E-03
551342.27	4173219.44	1988.65312	2694.14764	579.73153	3799.55562	660.74489	2700.1928	2003.04933	1601.60455	327.23522	3253.68182	1970.28806	3299.76959	0.28863	0.29075	1.24E-04	1.56E-04	3.35E-05	1.88E-04	4.13E-05	1.69E-04	1.97E-04	3.28E-04	6.71E-05	2.22E-04	9.25E-05	1.55E-04	4.04E-06	4.93E-06	1.7830E-03
551248.08	4172867.46	1880.32617	2464.05349	666.5343	4897.67641	811.36646	1740.1545	1879.7472	1423.35613	373.18277	3830.71363	2698.1397	2208.85645	0.23745	0.24096	1.17E-04	1.42E-04	3.85E-05	2.43E-04	5.07E-05	1.09E-04	1.85E-04	2.92E-04	7.65E-05	2.62E-04	1.27E-04	1.04E-04	3.32E-06	4.08E-06	1.7534E-03
551289.91	4173131.22	1972.59826	2720.41783	557.38643	3923.61871	661.03552	2587.35903	1986.74836	1613.46202	314.84607	3254.83659	2082.15852	3189.34507	0.26395	0.26637	1.23E-04	1.57E-04	3.22E-05	1.94E-04	4.13E-05	1.62E-04	1.95E-04	3.31E-04	6.45E-05	2.23E-04	9.78E-05	1.50E-04	3.69E-06	4.51E-06	1.7790E-03
551477.31	4173371.11	2284.47893	2678.92536	539.85724	3220.99252	577.70681	3113.29816	2308.34016	1609.24419	308.15885	2856.5454	1584.93432	3771.53497	0.37452	0.37579	1.43E-04	1.55E-04	3.12E-05	1.60E-04	3.61E-05	1.94E-04	2.27E-04	3.30E-04	6.32E-05	1.95E-04	7.44E-05	1.77E-04	5.24E-06	6.37E-06	1.7974E-03
552035.98	4173220.4	3443.1992	2431.21044	439.70003	1980.75841	387.75475	3628.84387	3533.74791	1397.27135	256.69875	1942.77063	941.32379	4453.61338	0.27385	0.26931	2.15E-04	1.41E-04	2.54E-05	9.82E-05	2.42E-05	2.27E-04	3.47E-04	2.86E-04	5.26E-05	1.33E-04	4.42E-05	2.09E-04	3.83E-06	4.56E-06	1.8110E-03
551290.29	4172721.29	1840.44241	2310.60395	697.38435	5017.86454	933.02004	1634.3063	1837.3323	1333.91116	386.94108	3737.9818	3023.82166	2076.49433	0.22821	0.23216	1.15E-04	1.34E-04	4.03E-05	2.49E-04	5.83E-05	1.02E-04	1.81E-04	2.73E-04	7.93E-05	2.56E-04	1.42E-04	9.75E-05	3.19E-06	3.93E-06	1.7335E-03
551316.95	4173178.15	1962.5179	2666.38439	564.00126	3866.10569	666.02876	2675.09356	1977.42215	1581.44183	318.07241	3240.85867	2037.72856	3273.447	0.27688	0.27913	1.23E-04	1.54E-04	3.26E-05	1.92E-04	4.16E-05	1.67E-04	1.94E-04	3.24E-04	6.52E-05	2.22E-04	9.57E-05	1.54E-04	3.87E-06	4.73E-06	1.7730E-03
551297.85	4172685.5	1838.69203	2301.17312	698.39925	5042.28909	946.47919	1600.07409	1835.66825	1327.27694	386.93535	3747.10355	3051.50266	2038.8975	0.22447	0.22839	1.15E-04	1.33E-04	4.04E-05	2.50E-04	5.91E-05	9.99E-05	1.80E-04	2.72E-04	7.93E-05	2.56E-04	1.43E-04	9.58E-05	3.14E-06	3.87E-06	1.7314E-03
551242.19	4172891.68	1884.42844	2502.06644	656.94504	4786.2336	783.03442	1777.79956	1884.63424	1446.76389	368.59575	3806.08615	2598.3256	2255.032	0.23734	0.24074	1.18E-04	1.45E-04	3.80E-05	2.37E-04	4.89E-05	1.11E-04	1.85E-04	2.97E-04	7.56E-05	2.60E-04	1.22E-04	1.06E-04	3.32E-06	4.08E-06	1.7505E-03
551239.46	4172990.81	1952.78898	2699.01588	610.43528	4361.40216	697.6879	2031.91684	1957.30477	1575.73985	345.73541	3643.73943	2262.8775	2560.91088	0.24136	0.24394	1.22E-04	1.56E-04	3.53E-05	2.16E-04	4.36E-05	1.27E-04	1.92E-04	3.23E-04	7.09E-05	2.49E-04	1.06E-04	1.20E-04	3.38E-06	4.13E-06	1.7694E-03
551528.5	4173407.15	2351.74312	2669.59597	542.99003	3017.98257	562.1553	3180.17347	2379.5575	1603.21703	310.51814	2757.33304	1444.61165	3849.02742	0.42955	0.43024	1.47E-04	1.54E-04	3.14E-05	1.50E-04	3.51E-05	1.99E-04	2.34E-04	3.29E-04	6.36E-05	1.89E-04	6.79E-05	1.81E-04	6.01E-06	7.29E-06	1.7926E-03
551345.36	4173228.02	1981.75447	2677.97298	577.72491	3749.82631	653.35818	2674.25849	1995.8601	1593.31412	326.28016	3221.79728	1940.85376	3268.98448	0.28805	0.29011	1.24E-04	1.55E-04	3.34E-05	1.86E-04	4.08E-05	1.67E-04	1.96E-04	3.27E-04	6.69E-05	2.20E-04	9.12E-05	1.54E-04	4.03E-06	4.92E-06	1.7693E-03
551486.9	4173380.15	2284.44585	2655.78591	537.05005	3169.374	572.46188	3100.51112	2309.20346	1595.15325	306.57212	2823.69991	1550.45003	3754.69767	0.38085	0.38199	1.43E-04	1.54E-04	3.10E-05	1.57E-04	3.58E-05	1.94E-04	2.27E-04	3.27E-04	6.28E-05	1.93E-04	7.28E-05	1.76E-04	5.33E-06	6.47E-06	1.7846E-03
551374.58	4173275.79	2054.74538	2737.62928	577.67101	3591.37807	624.53584	2724.62112	2068.5104	1643.53138	328.37549	3134.65398	1830.70678	3334.09324	0.29975	0.30184	1.28E-04	1.58E-04	3.34E-05	1.78E-04	3.90E-05	1.70E-04	2.03E-04	3.37E-04	6.73E-05	2.14E-04	8.60E-05	1.57E-04	4.19E-06	5.11E-06	1.7809E-03
551415.74	4173325.3	2161.40132	2721.22045	552.3923	3383.49975	592.12753	2892.71274	2178.00398	1641.42504	315.55141	2962.59365	1711.83934	3529.63384	0.32098	0.32283	1.35E-04	1.57E-04	3.19E-05	1.68E-04	3.70E-05	1.81E-04	2.14E-04	3.36E-04	6.47E-05	2.03E-04	8.04E-05	1.66E-04	4.49E-06	5.47E-06	1.7836E-03
551237.96	4172926.13	1898.15971	2559.63472	641.9351	4617.10809	744.96833	1847.69361	1899.57277	1483.84916	361.70151	3757.8775	2456.76762	2339.34453	0.23765	0.24091	1.19E-04	1.48E-04	3.71E-05	2.29E-04	4.65E-05	1.15E-04	1.87E-04	3.04E-04	7.41E-05	2.57E-04	1.15E-04	1.10E-04	3.33E-06	4.08E-06	1.7491E-03
551425.41	4173334.41	2175.87496	2696.64246	545.50256	3336.69668	586.01546	2923.47039	2193.47686	1625.70704	311.63478	2921.08539	1686.1786	3562.43214	0.32637	0.32817	1.36E-04	1.56E-04	3.15E-05	1.65E-04	3.66E-05	1.83E-04	2.16E-04	3.33E-04	6.39E-05	2.00E-04	7.92E-05	1.67E-04	4.57E-06	5.56E-06	1.7770E-03
551239.05	4172960.58	1923.08865	2631.91068	622.79223	4448.74855	710.85072	1941.35447	1926.11354	1530.27485	352.30961	3694.49174	2326.16302	2452.13157	0.23915	0.2423	1.20E-04	1.52E-04	3.60E-05	2.21E-04	4.44E-05	1.21E-04	1.89E-04	3.14E-04	7.22E-05	2.53E-04	1.09E-04	1.15E-04	3.35E-06	4.11E-06	1.7542E-03
551295.83	4173147.96	1947.20522	2660.08379	552.46459	3859.43189	656.33833	2590.11735	1961.61156	1577.1942	311.84669	3204.04817	2048.34611	3183.53318	0.264	0.2666	1.22E-04	1.54E-04	3.19E-05	1.91E-04	4.10E-05	1.62E-04	1.93E-04	3.23E-04	6.39E-05	2.19E-04	9.62E-05	1.50E-04	3.69E-06	4.52E-06	1.7545E-03
551293.56	4172693.84	1822.0133	2280.1598	690.8397	4969.37829	933.09988	1596.00582	1819.02245	1315.65079	382.8821	3698.47087	3005.13857	2031.72254	0.22269	0.22655	1.14E-04	1.32E-04	3.99E-05	2.46E-04	5.83E-05	9.97E-05	1.79E-04	2.70E-04	7.85E-05	2.53E-04	1.41E-04	9.54E-05	3.12E-06	3.84E-06	1.7132E-03
552054.51	4173212.58	3417.08661	2421.3867	434.84755	1974.17259	382.05118	3537.98392	3507.26835	1392.22772	254.08112	1937.8978	931.18371	4351.42708	0.25713	0.25306	2.13E-04	1.40E-04	2.51E-05	9.79E-05	2.39E-05	2.21E-04	3.45E-04	2.85E-04	5.21E-05	1.33E-04	4.37E-05	2.04E-04	3.60E-06	4.29E-06	1.7919E-03
551285.97	4172729.7	1824.81876	2285.03658	689.27763	4945.71394	917.23435	1623.69753	1821.7723	1319.54371	382.66073	3690.33329	2973.30453	2061.88508	0.22595	0.22982	1.14E-04	1.32E-04	3.99E-05	2.45E-04	5.73E-05	1.01E-04	1.79E-04	2.70E-04	7.84E-05	2.52E-04	1.40E-04	9.68E-05	3.16E-06	3.89E-06	1.7137E-03
551320.64	4173188.43	1944.13447	2629.46783	560.91436	3807.48706	659.71629	2644.66	1958.79776	1559.898	316.28731	3203.23161	2004.85149	3234.57169	0.27606	0.27822	1.21E-04	1.52E-04	3.24E-05	1.89E-04	4.12E-05	1.65E-04	1.93E-04	3.20E-04	6.48E-05	2.19E-04	9.42E-05	1.52E-04	3.86E-06	4.71E-06	1.7518E-03
551236.23	4172981.84	1933.06856	2655.33969	611.92746	4367.16977	699.99113	1985.68668	1936.99568	1547.91077	346.41168	3636.84839	2272.46281	2504.69484	0.23889	0.24149	1.21E-04	1.54E-04	3.54E-05	2.16E-04	4.37E-05	1.24E-04	1.90E-04	3.17E-04	7.10E-05	2.49E-04	1.07E-04	1.18E-04	3.34E-06	4.09E-06	1.7530E-03
551246.37	4172856.98	1850.12206	2400.3487	658.654	4829.97716	809.60035	1696.15758	1849.27644	1386.3482	368.54765	3755.48724	2683.58002	2153.53809	0.2326	0.23607	1.16E-04	1.39E-04	3.81E-05	2.39E-04	5.06E-05	1.06E-04	1.82E-04	2.84E-04	7.55E-05	2.57E-04	1.26E-04	1.01E-04	3.25E-06	4.00E-06	1.7211E-03
551571.37	4173428.18	2437.45535	2630.35021	544.49315	2796.46362	523.78746	3250.52731	2467.17154	1576.7175	312.3382	2610.33868	1338.67481	3939.37622	0.48035	0.48054	1.52E-04	1.52E-04	3.15E-05	1.39E-04	3.27E-05	2.03E-04	2.43E-04	3.23E-04	6.40E-05	1.79E-04	6.29E-05	1.85E-04	6.72E-06	8.14E-06	1.7811E-03
551496.5	4173389.18	2280.28455	2630.75989	534.04441	3112.74217	566.64093	3080.41977	2305.75471	1580.24271	304.91197	2786.91419	1514.91433	3729.66636	0.38638	0.38766	1.42E-04	1.52E-04	3.09E-05	1.54E-04	3.54E-05	1.92E-04	2.27E-04	3.24E-04	6.25E-05	1.91E-04	7.12E-05	1.75E-04	5.41E-06	6.57E-06	1.7694E-03
551386.74	4173297.99	2078.1581	2716.96178	565.25156	3477.83118	605.90398	2741.21526	2092.28782	1635.95837	322.15028	3043.7127	1772.18458	3354.52872	0.30184	0.30376	1.30E-04	1.57E-04	3.27E-05	1.72E-04	3.78E-05	1.71E-04	2.06E-04	3.35E-04	6.60E-05	2.08E-04	8.32E-05	1.58E-04	4.22E-06	5.15E-06	1.7663E-03
551435.07	4173343.51	2182.12399	2660.79324	537.79455	3282.96816	579.24311	2939.12814	2200.79548	1602.69766	307.16843	2873.56558	1658.15383	3576.55274	0.33152	0.33287	1.36E-04	1.54E-04	3.11E-05	1.63E-04	3.62E-05	1.84E-04	2.16E-04	3.29E-04	6.30E-05	1.97E-04	7.79E-05	1.68E-04	4.64E-06	5.64E-06	1.7641E-03
551235.82	4172951.61	1903.09667	2587.18344	624.52826	4459.00937	716.02959	1897.93003	1905.59824	1503.03775	352.90888	3681.76378	2345.41506	2398.96404	0.23656	0.23969	1.19E-04	1.50E-04	3.61E-05	2.21E-04	4.47E-05	1.19E-04	1.87E-04	3.08E-04	7.23E-05	2.52E-04	1.10E-04	1.13E-04	3.31E-06	4.06E-06	1.7385E-03
551267.6	4172778.27	1824.06686	2284.23752	679.56149	4914.79965	878.47268	1626.08727	1821.2897	1319.21631	378.46488	3694.89043	2888.87762	2063.8092	0.22882	0.23262	1.14E-04	1.32E-04	3.93E-05	2.44E-04	5.49E-05	1.02E-04	1.79E-04	2.70E-04	7.76E-05	2.53E-04	1.36E-04	9.69E-05	3.20E-06	3.94E-06	1.7047E-03
551348.45	4173236.61	1964.21266	2643.19531	571.78923	3674.3691	642.88534	2633.29853	1978.02073	1574.50709	323.12229	3164.42174	1904.17549	3219.5587	0.28598	0.28796	1.23E-04	1.53E-04	3.31E-05	1.82E-04	4.02E-05	1.64E-04	1.94E-04	3.23E-04	6.62E-05	2.16E-04	8.94E-05	1.51E-04	4.00E-06	4.88E-06	1.7446E-03
551233	4172972.88	1911.52511	2609.11876	612.70499	4366.6191	702.05366	1939.75859	1914.89049	1519.11444	346.65703	3623.14244	2281.24218	2448.5389	0.23628	0.23907	1.19E-04	1.51E-04	3.54E-05	2.16E-04	4.38E-05	1.21E-04	1.88E-04	3.11E-04	7.11E-05	2.48E-04	1.07E-04	1.15E-04	3.31E-06	4.05E-06	1.7350E-03
551323.73	4173197.01	1930.12717	2601.82636	558.64041	3758.76039	654.1164	2617.37497	1944.56038	1543.9208	314.99958	3172.65887	1977.03271	3200.50136	0.27536	0.27775	1.21E-04	1.50E-04	3.23E-05	1.86E-04	4.09E-05	1.63E-04	1.91E-04	3.16E-04	6.46E-05	2.17E-04	9.29E-05	1.50E-04	3.85E-06	4.71E-06	1.7348E-03
551281.65	4172738.1	1811.12405	2262.13001	681.86757	4882.68218	902.3403	1612.97909	1808.14412	1306.63989	378.76556	3649.36367	2926.98774	2047.47086	0.22398	0.22777	1.13E-04	1.31E-04	3.94E-05	2.42E-04	5.64E-05	1.01E-04	1.78E-04	2.68E-04	7.76E-05	2.50E-04	1.37E-04	9.62E-05	3.13E-06	3.86E-06	1.6958E-03
551240.48	4172881.24	1848.85116	2430.69705	647.28985	4711.79951	777.55911	1725.91064	1848.80671	1405.17193	362.82407	3724.05693	2573.69788	2190.04251	0.23101	0.23432	1.15E-04	1.41E-04	3.74E-05	2.34E-04	4.86E-05	1.08E-04	1.82E-04	2.88E-04	7.44E-05	2.55E-04	1.21E-04	1.03E-04	3.23E-06	3.97E-06	1.7131E-03
551444.74	4173352.62	2187.23947	2626.93832	531.34747	3232.69892	573.22986	2949.2885	2206.98635	1580.63327	303.39223	2831.84915	1637.80033	3584.46841	0.33655	0.3382	1.37E-04	1.52E-04	3.07E-05	1.60E-04	3.58E-05	1.84E-04	2.17E-04	3.24E-04	6.22E-05	1.94E-04	7.69E-05	1.68E-04	4.71E-06	5.73E-06	1.7519E-03
551269.51	4172769.36	1813.03723	2264.73231	677.0454	4877.62446	879.5347	1615.01956	1810.19983	1308.14971	376.85104	3661.46927	2882.2023	2049.58722	0.22642	0.23019	1.13E-04	1.31E-04	3.91E-05	2.42E-04	5.49E-05	1.01E-04	1.78E-04	2.68E-04	7.72E-05	2.50E-04	1.35E-04	9.63E-05	3.17E-06	3.90E-06	1.6933E-03
552092.91	4173195.34	3487.90612	2399.38075	429.68923	1974.25648	373.79512	3340.53346	3578.56215	1381.3289	251.46635	1939.81732	918.17191	4128.93726	0.22768	0.22439	2.18E-04	1.39E-04	2.48E-05	9.79E-05	2.33E-05	2.09E-04	3.52E-04	2.83E-04	5.15E-05	1.33E-04	4.31E-05	1.94E-04	3.19E-06	3.80E-06	1.7743E-03
551301.74	4173164.7	1920.46375	2600.85209	548.0771	3790.63813	650.67946	2573.38501	1934.85912	1541.83605	309.21053	3155.52918	2009.57848	3156.28126	0.26384	0.26633	1.20E-04	1.50E-04	3.17E-05	1.88E-04	4.06E-05	1.61E-04	1.90E-04	3.16E-04	6.34E-05	2.16E-04	9.44E-05	1.48E-04	3.69E-06	4.51E-06	1.7275E-03
551253.13	4172818.03	1821.2649	2307.66744	663.65324	4839.78297	837.57952	1634.33977	1819.31997	1332.48295	370.66183	3693.28254	2767.71651	2075.27383	0.22882	0.23247	1.14E-04	1.33E-04	3.84E-05	2.40E-04	5.23E-05	1.02E-04	1.79E-04	2.73E-04	7.60E-05	2.53E-04	1.30E-04	9.75E-05	3.20E-06	3.94E-06	1.6949E-03
551506.09	4173398.22	2269.14734	2598.66964	530.03565	3048.20323	559.76147	3049.29787	2295.07004	1561.29057	302.69756	2741.86869	1478.03037	3691.77131	0.39106	0.39213	1.42E-04	1.50E-04	3.06E-05	1.51E-04	3.50E-05	1.90E-04	2.26E-04	3.20E-04	6.20E-05	1.88E-04	6.94E-05	1.73E-04	5.47E-06	6.64E-06	1.7492E-03
551277.33	4172746.51	1803.40929	2248.95409	677.25965	4848.99112	891.54995	1606.1522	1800.46769	1299.19726	376.41375	3628.69755	2897.29848	2038.36739	0.22325	0.227	1.13E-04	1.30E-04	3.92E-05	2.40E-04	5.57E-05	1.00E-04	1.77E-04	2.66E-04	7.72E-05	2.48E-04	1.36E-04	9.57E-05	3.12E-06	3.85E-06	1.6855E-03
551232.59	4172942.65	1876.77524	2533.69988	622.6699	4441.42174	717.15376	1850.68312	1878.84949	1470.99211	351.46922	3647.68104	2350.23299	2340.70824	0.23284	0.23593	1.17E-04	1.46E-04	3.60E-05	2.20E-04	4.48E-05	1.16E-04	1.85E-04	3.02E-04	7.20E-05	2.49E-04	1.10E-04	1.10E-04	3.26E-06	4.00E-06	1.7155E-03
551234.57	4172905.33	1850.08766	2458.34227	636.39919	4587.28257	750.59071	1761.18614	1850.80175	1423.06566	357.60716	3682.93004	2474.71227	2232.65153	0.23063	0.23383	1.16E-04	1.42E-04	3.68E-05	2.27E-04	4.69E-05	1.10E-04	1.82E-04	2.92E-04	7.33E-05	2.52E-04	1.16E-04	1.05E-04	3.23E-06	3.96E-06	1.7058E-03
551326.82	4173205.6	1918.68572	2579.15668	556.97416	3713.2104	648.52571	2590.90968	1932.86446	1531.06152	314.0906	3145.23602	1949.84672	3167.92729	0.2748	0.27684	1.20E-04	1.49E-04	3.22E-05	1.84E-04	4.05E-05	1.62E-04	1.90E-04	3.14E-04	6.44E-05	2.15E-04	9.16E-05	1.49E-04	3.85E-06	4.69E-06	1.7197E-03
551990.2	4173248.87	3241.32125	2290.91204	442.3876	1941.96617	395.03312	3576.14836	3316.22498	1333.20408	257.75376	1890.94378	949.97959	4369.89849	0.32073	0.31452	2.02E-04	1.32E-04	2.56E-05	9.63E-05	2.47E-05	2.23E-04	3.26E-04	2.73E-04	5.28E-05	1.29E-04	4.46E-05	2.05E-04	4.49E-06	5.33E-06	1.7458E-03
551581.23	4173435.71	2433.36997	2571.89545	537.56658	2705.91532	511.79274	3200.74214	2463.09189	1540.09668	308.62078	2533.79886	1300.66341	3883.32203	0.48263	0.48094	1.52E-04	1.49E-04	3.11E-05	1.34E-04	3.20E-05	2.00E-04	2.42E-04	3.16E-04	6.33E-05	1.73E-04	6.11E-05	1.82E-04	6.75E-06	8.15E-06	1.7504E-03
551273.01	4172754.92	1796.98511	2238.48458	672.96835	4820.73312	881.12603	1599.69684	1794.09556	1293.23379	374.24296	3612.74072	2869.41318	2030.02283	0.22269	0.2264	1.12E-04	1.29E-04	3.89E-05	2.39E-04	5.50E-05	9.99E-05	1.76E-04	2.65E-04	7.67E-05	2.47E-04	1.35E-04	9.53E-05	3.12E-06	3.84E-06	1.6767E-03
551297.11	4172665.83	1791.85578	2217.85847	675.92161	4848.19105	915.49058	1536.7111	1789.15293	1279.25598	374.4894	3611.36784	2931.96377	1961.07431	0.21318	0.21679	1.12E-04	1.28E-04	3.91E-05	2.40E-04	5.72E-05	9.60E-05	1.76E-04	2.62E-04	7.68E-05	2.47E-04	1.38E-04	9.21E-05	2.98E-06	3.67E-06	1.6710E-03
551253.86	4172808.38	1802.70996	2269.2791	659.37696	4785.43345	836.03384	1611.09167	1800.59987	1310.5795	368.06755	3640.54556	2754.18629	2045.57215	0.22533	0.22895	1.13E-04	1.31E-04	3.81E-05	2.37E-04	5.22E-05	1.01E-04	1.77E-04	2.69E-04	7.54E-05	2.49E-04	1.29E-04	9.61E-05	3.15E-06	3.88E-06	1.6744E-03
551301.42	4172657.45	1792.87531	2207.77734	674.75829	4837.49329	913.43143	1523.71358	1790.28585	1273.40308	373.88974	3603.84715	2924.17341	1946.52399	0.21099	0.21453	1.12E-04	1.28E-04	3.90E-05	2.40E-04	5.71E-05	9.52E-05	1.76E-04	2.61E-04	7.66E-05	2.46E-04	1.37E-04	9.14E-05	2.95E-06	3.64E-06	1.6660E-03
551352.6	4173248	1945.81601	2603.81171	564.31833	3581.5584	629.3349	2585.86645	1959.2303	1553.90711	319.23462	3093.08686	1857.87377	3162.66613	0.28421	0.28569	1.21E-04	1.51E-04	3.26E-05	1.78E-04	3.93E-05	1.62E-04	1.93E-04	3.19E-04	6.54E-05	2.12E-04	8.73E-05	1.49E-04	3.98E-06	4.84E-06	1.7157E-03
551292.81	4172674.21	1783.11149	2213.18508	672.90576	4818.74216	910.33921	1541.77628	1780.36442	1276.8531	372.85276	3591.78485	2914.21733	1965.47455	0.21349	0.21712	1.11E-04	1.28E-04	3.89E-05	2.39E-04	5.69E-05	9.63E-05	1.75E-04	2.62E-04	7.64E-05	2.46E-04	1.37E-04	9.23E-05	2.99E-06	3.68E-06	1.6648E-03
551515.68	4173407.26	2258.9275	2568.36956	526.29784	2981.47089	552.54359	3020.30166	2285.12051	1543.19572	300.66748	2695.67006	1440.74074	3657.13623	0.39544	0.39601	1.41E-04	1.48E-04	3.04E-05	1.48E-04	3.45E-05	1.89E-04	2.25E-04	3.16E-04	6.16E-05	1.84E-04	6.77E-05	1.72E-04	5.53E-06	6.71E-06	1.7295E-03
551329.91	4173214.18	1907.87385	2557.89427	555.14981	3665.85559	642.36187	2563.34979	1921.77804	1519.16354	313.11317	3116.08427	1921.99823	3134.44831	0.27413	0.27611	1.19E-04	1.48E-04	3.21E-05	1.82E-04	4.01E-05	1.60E-04	1.89E-04	3.11E-04	6.42E-05	2.13E-04	9.03E-05	1.47E-04	3.84E-06	4.68E-06	1.7046E-03
551238.78	4172870.81	1818.00737	2366.85204	639.25624	4649.58711	775.37603	1680.05566	1817.70467	1368.01236	358.02106	3651.61944	2558.91694	2132.52693	0.22594	0.22918	1.14E-04	1.37E-04	3.70E-05	2.30E-04	4.84E-05	1.05E-04	1.79E-04	2.80E-04	7.34E-05	2.50E-04	1.20E-04	1.00E-04	3.16E-06	3.88E-06	1.6807E-03
551473.73	4173379.93	2201.47655	2556.51888	520.94224	3102.37965	559.33095	2952.59293	2224.38372	1535.13599	297.24857	2742.81411	1537.52907	3579.96316	0.35354	0.35452	1.37E-04	1.48E-04	3.01E-05	1.54E-04	3.49E-05	1.84E-04	2.19E-04	3.15E-04	6.09E-05	1.88E-04	7.22E-05	1.68E-04	4.95E-06	6.01E-06	1.7216E-03
551307.66	4173181.44	1893.20525	2544.40415	543.92376	3714.62734	643.49317	2539.55537	1907.35906	1508.59443	306.7258	3106.1611	1965.67099	3110.54534	0.26345	0.26553	1.18E-04	1.47E-04	3.14E-05	1.84E-04	4.02E-05	1.59E-04	1.87E-04	3.09E-04	6.29E-05	2.12E-04	9.23E-05	1.46E-04	3.69E-06	4.50E-06	1.6983E-03
551307.05	4172647.52	1795.77115	2193.24793	673.96678	4827.02915	911.1222	1507.02612	1793.30692	1265.12798	373.55503	3594.50507	2916.58817	1927.78486	0.20834	0.21177	1.12E-04	1.27E-04	3.90E-05	2.39E-04	5.69E-05	9.41E-05	1.76E-04	2.59E-04	7.66E-05	2.46E-04	1.37E-04	9.05E-05	2.92E-06	3.59E-06	1.6602E-03
551232.87	4172894.93	1825.05484	2406.0581	632.03199	4560.24858	752.35495	1719.25479	1825.4681	1392.10758	354.71732	3636.44914	2479.24539	2180.53882	0.22688	0.23005	1.14E-04	1.39E-04	3.65E-05	2.26E-04	4.70E-05	1.07E-04	1.79E-04	2.85E-04	7.27E-05	2.49E-04	1.16E-04	1.02E-04	3.17E-06	3.90E-06	1.6821E-03
551402.05	4173324.59	2076.61407	2623.73871	540.33578	3299.20396	579.28295	2729.70985	2091.72905	1582.08884	308.50124	2885.01935	1680.70513	3336.94912	0.30098	0.30267	1.30E-04	1.52E-04	3.12E-05	1.64E-04	3.62E-05	1.70E-04	2.06E-04	3.24E-04	6.32E-05	1.97E-04	7.89E-05	1.57E-04	4.21E-06	5.13E-06	1.7182E-03
551229.78	4172963.91	1868.95542	2533.26673	603.50444	4279.17578	690.92702	1878.34397	1871.96344	1473.69572	341.31624	3549.35822	2246.59774	2372.27297	0.22999	0.23295	1.17E-04	1.46E-04	3.49E-05	2.12E-04	4.32E-05	1.17E-04	1.84E-04	3.02E-04	7.00E-05	2.43E-04	1.06E-04	1.11E-04	3.22E-06	3.95E-06	1.6935E-03
551525.28	4173416.29	2267.62098	2558.9268	525.57579	2921.8317	546.08386	3020.49738	2294.12499	1536.22897	300.45384	2661.84905	1404.55817	3659.477	0.40127	0.40187	1.42E-04	1.48E-04	3.04E-05	1.45E-04	3.41E-05	1.89E-04	2.26E-04	3.15E-04	6.16E-05	1.82E-04	6.60E-05	1.72E-04	5.61E-06	6.81E-06	1.7218E-03
551483.4	4173389.03	2206.16418	2543.225	519.5977	3060.55056	555.2792	2948.30989	2229.96297	1526.89842	296.51465	2719.90833	1505.41891	3573.69237	0.3593	0.36015	1.38E-04	1.47E-04	3.00E-05	1.52E-04	3.47E-05	1.84E-04	2.19E-04	3.13E-04	6.08E-05	1.86E-04	7.07E-05	1.68E-04	5.03E-06	6.10E-06	1.7140E-03
551288.5	4172682.58	1769.24844	2197.72637	667.03457	4762.13101	900.20359	1540.59918	1766.50391	1268.35602	369.69064	3553.72617	2879.02414	1962.0146	0.21245	0.21605	1.10E-04	1.27E-04	3.86E-05	2.36E-04	5.62E-05	9.62E-05	1.74E-04	2.60E-04	7.58E-05	2.43E-04	1.35E-04	9.22E-05	2.97E-06	3.66E-06	1.6510E-03
551228.62	4172929.27	1837.5603	2456.35425	617.95334	4404.03484	717.3805	1784.28443	1839.09756	1424.85544	348.23046	3588.73744	2350.46836	2258.67271	0.22716	0.23021	1.15E-04	1.42E-04	3.57E-05	2.18E-04	4.48E-05	1.11E-04	1.81E-04	2.92E-04	7.14E-05	2.45E-04	1.10E-04	1.06E-04	3.18E-06	3.90E-06	1.6802E-03
551411.78	4173333.76	2083.66526	2590.25282	531.23552	3242.18146	571.45257	2749.23727	2099.61069	1562.40323	303.39992	2830.07471	1656.36616	3356.45922	0.3051	0.30673	1.30E-04	1.50E-04	3.07E-05	1.61E-04	3.57E-05	1.72E-04	2.06E-04	3.20E-04	6.22E-05	1.94E-04	7.78E-05	1.58E-04	4.27E-06	5.20E-06	1.7060E-03
551641.3	4173444.89	2674.33943	2431.54183	528.22138	2403.91061	481.86792	3193.81148	2710.32619	1442.50708	305.11807	2280.99134	1188.96027	3900.86763	0.6613	0.65264	1.67E-04	1.41E-04	3.05E-05	1.19E-04	3.01E-05	1.99E-04	2.66E-04	2.96E-04	6.25E-05	1.56E-04	5.58E-05	1.83E-04	9.25E-06	1.11E-05	1.7268E-03
551280.69	4172718.88	1765.82503	2194.84586	663.45302	4714.69058	883.61975	1564.71944	1763.03007	1267.8618	368.26369	3527.85901	2838.31534	1987.35624	0.2147	0.21829	1.10E-04	1.27E-04	3.84E-05	2.34E-04	5.52E-05	9.77E-05	1.73E-04	2.60E-04	7.55E-05	2.41E-04	1.33E-04	9.33E-05	3.00E-06	3.70E-06	1.6454E-03
551702.32	4173427.06	3051.75587	2310.60487	516.13797	2243.0615	469.05148	3120.65287	3100.48179	1354.8539	299.57432	2099.20064	1131.94674	3839.29163	1.60353	1.48359	1.91E-04	1.34E-04	2.98E-05	1.11E-04	2.93E-05	1.95E-04	3.05E-04	2.78E-04	6.14E-05	1.44E-04	5.32E-05	1.80E-04	2.24E-05	2.51E-05	1.7579E-03
551654.44	4173442.98	2752.58292	2406.73475	526.22535	2344.02753	478.16799	3188.74713	2790.89882	1423.71096	304.3616	2237.2583	1173.14472	3901.67652	0.754	0.74078	1.72E-04	1.39E-04	3.04E-05	1.16E-04	2.99E-05	1.99E-04	2.74E-04	2.92E-04	6.24E-05	1.53E-04	5.51E-05	1.83E-04	1.06E-05	1.26E-05	1.7297E-03
551333	4173222.77	1893.32599	2530.30943	551.6395	3606.43711	634.45319	2529.25142	1906.94573	1503.76058	311.21342	3075.48572	1890.46815	3093.15109	0.27281	0.275	1.18E-04	1.46E-04	3.19E-05	1.79E-04	3.96E-05	1.58E-04	1.87E-04	3.08E-04	6.38E-05	2.10E-04	8.88E-05	1.45E-04	3.82E-06	4.66E-06	1.6851E-03
551311.37	4173191.76	1877.27205	2512.73589	541.57631	3665.30644	638.33489	2512.98577	1891.19624	1490.09685	305.34593	3075.65115	1936.81508	3076.61547	0.26289	0.2649	1.17E-04	1.45E-04	3.13E-05	1.82E-04	3.99E-05	1.57E-04	1.86E-04	3.05E-04	6.26E-05	2.10E-04	9.10E-05	1.45E-04	3.68E-06	4.49E-06	1.6802E-03
551421.52	4173342.93	2096.4714	2565.42526	524.45348	3197.80196	565.5854	2776.35898	2113.37176	1546.34227	299.53305	2790.48332	1631.19667	3385.04864	0.30984	0.31142	1.31E-04	1.48E-04	3.03E-05	1.59E-04	3.53E-05	1.73E-04	2.08E-04	3.17E-04	6.14E-05	1.91E-04	7.66E-05	1.59E-04	4.34E-06	5.28E-06	1.6989E-03
551493.07	4173398.14	2201.85853	2520.8687	516.90662	3008.37762	549.90195	2929.3748	2226.28465	1513.62144	295.03544	2686.6617	1471.5536	3550.18079	0.36417	0.36486	1.37E-04	1.46E-04	2.99E-05	1.49E-04	3.43E-05	1.83E-04	2.19E-04	3.10E-04	6.05E-05	1.84E-04	6.91E-05	1.67E-04	5.10E-06	6.18E-06	1.7000E-03
551226.55	4172954.95	1844.23691	2483.5211	602.35706	4264.91935	691.62197	1832.8232	1846.78935	1443.62092	340.36847	3521.94395	2250.67032	2316.28431	0.22648	0.22941	1.15E-04	1.44E-04	3.48E-05	2.11E-04	4.32E-05	1.14E-04	1.82E-04	2.96E-04	6.98E-05	2.41E-04	1.06E-04	1.09E-04	3.17E-06	3.89E-06	1.6723E-03
551237.08	4172860.37	1789.31343	2307.08552	631.72794	4587.40491	773.5797	1637.89311	1788.75524	1333.2027	353.58555	3582.0677	2545.04223	2079.60753	0.22136	0.22457	1.12E-04	1.33E-04	3.65E-05	2.27E-04	4.83E-05	1.02E-04	1.76E-04	2.73E-04	7.25E-05	2.45E-04	1.20E-04	9.77E-05	3.10E-06	3.81E-06	1.6503E-03
551667.58	4173441.07	2816.42958	2366.84969	521.76383	2302.81733	473.38102	3154.20339	2856.79453	1396.79453	302.10209	2185.90492	1155.92712	3865.81182	0.86093	0.84006	1.76E-04	1.37E-04	3.02E-05	1.14E-04	2.96E-05	1.97E-04	2.81E-04	2.86E-04	6.19E-05	1.49E-04	5.43E-05	1.82E-04	1.20E-05	1.42E-05	1.7243E-03
551377.08	4173288.89	1977.81927	2587.88317	549.39538	3382.03975	595.59725	2589.26748	1991.11988	1558.7139	312.58227	2940.15636	1745.97626	3168.45386	0.28899	0.2905	1.23E-04	1.50E-04	3.18E-05	1.68E-04	3.72E-05	1.62E-04	1.96E-04	3.20E-04	6.41E-05	2.01E-04	8.20E-05	1.49E-04	4.04E-06	4.92E-06	1.6916E-03
552001.38	4173247.62	3145.98149	2241.66323	432.13954	1904.53738	386.28145	3466.46487	3218.90209	1305.48034	251.75075	1854.12023	930.36318	4239.22314	0.3054	0.29961	1.96E-04	1.30E-04	2.50E-05	9.44E-05	2.41E-05	2.17E-04	3.16E-04	2.68E-04	5.16E-05	1.27E-04	4.37E-05	1.99E-04	4.27E-06	5.08E-06	1.7006E-03
551284.19	4172690.96	1753.06781	2176.10036	659.76239	4692.72651	887.43784	1535.26529	1750.35418	1256.31709	365.78973	3506.78873	2835.23622	1953.44259	0.21068	0.21422	1.09E-04	1.26E-04	3.81E-05	2.33E-04	5.54E-05	9.59E-05	1.72E-04	2.58E-04	7.50E-05	2.40E-04	1.33E-04	9.18E-05	2.95E-06	3.63E-06	1.6332E-03
551431.25	4173352.1	2100.17367	2528.61367	516.68533	3145.47321	558.92711	2787.13445	2118.1113	1522.7275	295.01747	2743.78867	1606.38271	3393.58574	0.31419	0.31533	1.31E-04	1.46E-04	2.99E-05	1.56E-04	3.49E-05	1.74E-04	2.08E-04	3.12E-04	6.05E-05	1.88E-04	7.55E-05	1.59E-04	4.40E-06	5.34E-06	1.6851E-03
551358.17	4173262.22	1924.15307	2553.51694	553.42265	3463.18206	611.60476	2530.71543	1937.18348	1528.1582	313.5355	2997.90623	1800.23101	3096.43683	0.28109	0.2827	1.20E-04	1.48E-04	3.20E-05	1.72E-04	3.82E-05	1.58E-04	1.90E-04	3.13E-04	6.43E-05	2.05E-04	8.46E-05	1.45E-04	3.93E-06	4.79E-06	1.6793E-03
551231.17	4172884.53	1792.09351	2341.16301	623.24393	4494.19401	747.30483	1670.94014	1792.27308	1354.17946	349.43094	3563.3701	2457.31542	2120.11999	0.22112	0.22421	1.12E-04	1.35E-04	3.60E-05	2.23E-04	4.67E-05	1.04E-04	1.76E-04	2.78E-04	7.16E-05	2.44E-04	1.15E-04	9.96E-05	3.09E-06	3.80E-06	1.6480E-03
551314.46	4173200.35	1864.37216	2487.77609	539.62151	3622.08216	633.47587	2488.09579	1878.08629	1475.64852	304.22588	3049.09029	1911.67057	3045.52818	0.26228	0.26423	1.16E-04	1.44E-04	3.12E-05	1.80E-04	3.96E-05	1.55E-04	1.85E-04	3.02E-04	6.24E-05	2.09E-04	8.98E-05	1.43E-04	3.67E-06	4.48E-06	1.6649E-03
551242.56	4172827.74	1772.20761	2241.78861	638.31499	4627.56627	800.02222	1590.94322	1770.71747	1294.81657	356.75533	3555.43093	2628.5217	2020.52791	0.2198	0.22318	1.11E-04	1.30E-04	3.69E-05	2.29E-04	5.00E-05	9.94E-05	1.74E-04	2.65E-04	7.31E-05	2.43E-04	1.23E-04	9.49E-05	3.08E-06	3.78E-06	1.6368E-03
551336.09	4173231.36	1882.00304	2508.00773	548.67212	3551.71662	626.72445	2498.77487	1895.33513	1491.70322	309.66218	3038.44928	1860.36792	3056.51769	0.27169	0.27381	1.18E-04	1.45E-04	3.17E-05	1.76E-04	3.91E-05	1.56E-04	1.86E-04	3.06E-04	6.35E-05	2.08E-04	8.74E-05	1.44E-04	3.80E-06	4.64E-06	1.6682E-03
551680.72	4173439.16	2876.89872	2321.17224	515.51519	2258.55623	467.82186	3103.2588	2919.76207	1366.2114	298.77264	2132.21758	1136.95538	3810.4968	0.99976	0.96255	1.80E-04	1.34E-04	2.98E-05	1.12E-04	2.92E-05	1.94E-04	2.87E-04	2.80E-04	6.12E-05	1.46E-04	5.34E-05	1.79E-04	1.40E-05	1.63E-05	1.7154E-03
551392.32	4173315.42	2012.76653	2565.20518	535.18532	3270.36893	576.15512	2626.30025	2026.81589	1548.58737	305.31443	2848.24243	1678.44176	3212.74271	0.29156	0.29326	1.26E-04	1.48E-04	3.09E-05	1.62E-04	3.60E-05	1.64E-04	1.99E-04	3.17E-04	6.26E-05	1.95E-04	7.88E-05	1.51E-04	4.08E-06	4.97E-06	1.6798E-03
551276.39	4172727.22	1747.32879	2164.60523	653.93129	4630.33284	866.09719	1550.37089	1744.62209	1250.83179	363.18849	3471.80102	2780.84569	1968.16758	0.21176	0.21525	1.09E-04	1.25E-04	3.78E-05	2.30E-04	5.41E-05	9.68E-05	1.71E-04	2.56E-04	7.44E-05	2.37E-04	1.31E-04	9.24E-05	2.96E-06	3.65E-06	1.6219E-03
551223.33	4172945.98	1820.53261	2435.70956	601.24766	4253.2104	693.49075	1789.55721	1822.66358	1414.88054	339.37529	3494.02011	2258.16091	2263.02266	0.22327	0.22617	1.14E-04	1.41E-04	3.48E-05	2.11E-04	4.33E-05	1.12E-04	1.79E-04	2.90E-04	6.96E-05	2.39E-04	1.06E-04	1.06E-04	3.12E-06	3.83E-06	1.6522E-03
551502.73	4173407.24	2189.68315	2490.1661	512.98978	2947.53893	543.35922	2898.50306	2214.48272	1495.56594	292.87023	2644.13184	1436.30022	3512.57777	0.36748	0.36825	1.37E-04	1.44E-04	2.97E-05	1.46E-04	3.39E-05	1.81E-04	2.18E-04	3.07E-04	6.00E-05	1.81E-04	6.75E-05	1.65E-04	5.14E-06	6.24E-06	1.6803E-03
551440.99	4173361.27	2105.3236	2498.16355	510.90519	3100.56525	553.53519	2796.50246	2124.30454	1502.68681	291.60852	2707.01325	1582.83157	3400.84921	0.31871	0.32011	1.31E-04	1.44E-04	2.95E-05	1.54E-04	3.46E-05	1.75E-04	2.09E-04	3.08E-04	5.98E-05	1.85E-04	7.43E-05	1.60E-04	4.46E-06	5.42E-06	1.6740E-03
551450.72	4173370.43	2117.98374	2484.08004	508.57271	3069.6482	550.25931	2813.11557	2138.10084	1492.5318	290.18348	2687.84049	1561.86632	3417.94537	0.32446	0.32543	1.32E-04	1.44E-04	2.94E-05	1.52E-04	3.44E-05	1.76E-04	2.10E-04	3.06E-04	5.95E-05	1.84E-04	7.34E-05	1.61E-04	4.54E-06	5.51E-06	1.6708E-03
551715.36	4173425.16	3080.38232	2246.16207	505.59108	2190.50961	461.2744	3026.28438	3131.12517	1314.56549	293.58468	2038.85142	1109.30648	3729.11701	1.77243	1.57329	1.92E-04	1.30E-04	2.92E-05	1.09E-04	2.88E-05	1.89E-04	3.08E-04	2.69E-04	6.02E-05	1.39E-04	5.21E-05	1.75E-04	2.48E-05	2.67E-05	1.7334E-03
551361.76	4173270.8	1921.87517	2538.47766	548.89819	3411.62473	603.05345	2514.42939	1934.75014	1521.79555	311.30455	2957.19269	1772.02532	3077.38732	0.28041	0.28196	1.20E-04	1.47E-04	3.17E-05	1.69E-04	3.77E-05	1.57E-04	1.90E-04	3.12E-04	6.38E-05	2.02E-04	8.32E-05	1.45E-04	3.92E-06	4.78E-06	1.6669E-03
551279.88	4172699.34	1736.53657	2151.81078	652.08465	4620.75501	873.69518	1527.36206	1733.85878	1242.72304	361.69223	3457.90369	2789.08945	1941.82722	0.20863	0.21211	1.08E-04	1.24E-04	3.77E-05	2.29E-04	5.46E-05	9.54E-05	1.70E-04	2.55E-04	7.41E-05	2.36E-04	1.31E-04	9.12E-05	2.92E-06	3.59E-06	1.6140E-03
551317.55	4173208.93	1852.41534	2464.94474	537.75865	3578.15234	628.2163	2462.15606	1865.8922	1462.62318	303.19341	3022.30125	1885.9873	3013.55219	0.26163	0.26352	1.16E-04	1.43E-04	3.11E-05	1.77E-04	3.92E-05	1.54E-04	1.83E-04	3.00E-04	6.21E-05	2.07E-04	8.86E-05	1.42E-04	3.66E-06	4.47E-06	1.6499E-03
551243.27	4172818.3	1755.54099	2205.98554	634.8877	4583.81422	799.20177	1568.54865	1753.86967	1274.32776	354.68702	3510.54129	2619.56129	1991.99355	0.21681	0.22018	1.10E-04	1.28E-04	3.67E-05	2.27E-04	4.99E-05	9.80E-05	1.72E-04	2.61E-04	7.27E-05	2.40E-04	1.23E-04	9.36E-05	3.03E-06	3.73E-06	1.6187E-03
551339.18	4173239.94	1871.81086	2487.16026	545.45009	3496.84905	618.67854	2469.52415	1884.86796	1480.72088	308.0169	3000.2871	1830.34025	3021.5476	0.27052	0.27257	1.17E-04	1.44E-04	3.15E-05	1.73E-04	3.86E-05	1.54E-04	1.85E-04	3.04E-04	6.31E-05	2.05E-04	8.60E-05	1.42E-04	3.79E-06	4.62E-06	1.6518E-03
551257.87	4172776.78	1745.67732	2161.65423	644.25496	4596.38436	829.29327	1548.37514	1743.246	1249.2993	358.93335	3472.60349	2699.52295	1965.16657	0.21401	0.21743	1.09E-04	1.25E-04	3.72E-05	2.28E-04	5.18E-05	9.67E-05	1.71E-04	2.56E-04	7.36E-05	2.37E-04	1.27E-04	9.23E-05	2.99E-06	3.68E-06	1.6118E-03
551225.24	4172908.54	1785.40446	2353.12401	609.42374	4347.46617	716.81142	1696.81534	1786.3279	1363.04058	342.55977	3501.23693	2345.92169	2150.7474	0.21901	0.22197	1.11E-04	1.36E-04	3.52E-05	2.16E-04	4.48E-05	1.06E-04	1.76E-04	2.79E-04	7.02E-05	2.39E-04	1.10E-04	1.01E-04	3.06E-06	3.76E-06	1.6317E-03
551693.86	4173437.25	2918.40571	2263.57303	507.28186	2210.66226	461.33616	3028.83157	2963.30677	1329.69284	294.18378	2073.47649	1117.04466	3724.89623	1.13313	1.07066	1.82E-04	1.31E-04	2.93E-05	1.10E-04	2.88E-05	1.89E-04	2.91E-04	2.73E-04	6.03E-05	1.42E-04	5.25E-05	1.75E-04	1.59E-05	1.81E-05	1.6973E-03
551512.4	4173416.34	2177.53735	2460.05059	509.15286	2883.94682	536.42747	2868.47882	2202.52381	1477.7154	290.77024	2599.65348	1400.56063	3476.62029	0.37064	0.37117	1.36E-04	1.42E-04	2.94E-05	1.43E-04	3.35E-05	1.79E-04	2.17E-04	3.03E-04	5.96E-05	1.78E-04	6.58E-05	1.63E-04	5.19E-06	6.29E-06	1.6606E-03
551320.64	4173217.52	1841.85194	2444.82906	536.05836	3534.40275	622.62815	2436.30194	1855.0735	1451.30367	302.27352	2995.83266	1860.09282	2982.06279	0.26096	0.26279	1.15E-04	1.41E-04	3.10E-05	1.75E-04	3.89E-05	1.52E-04	1.82E-04	2.97E-04	6.20E-05	2.05E-04	8.74E-05	1.40E-04	3.65E-06	4.45E-06	1.6358E-03
551272.1	4172735.57	1728.18125	2133.17613	643.80221	4542.6743	847.56589	1533.97284	1725.5928	1233.114	357.78644	3414.09754	2720.08907	1946.63897	0.20855	0.21193	1.08E-04	1.23E-04	3.72E-05	2.25E-04	5.29E-05	9.58E-05	1.70E-04	2.53E-04	7.33E-05	2.33E-04	1.28E-04	9.14E-05	2.92E-06	3.59E-06	1.5973E-03
551229.47	4172874.14	1758.25911	2274.32664	613.48398	4418.22101	741.5261	1622.7524	1758.21609	1315.29285	343.68067	3483.2709	2429.61562	2059.71031	0.21519	0.21819	1.10E-04	1.31E-04	3.55E-05	2.19E-04	4.63E-05	1.01E-04	1.73E-04	2.70E-04	7.04E-05	2.38E-04	1.14E-04	9.67E-05	3.01E-06	3.70E-06	1.6121E-03
551223.55	4172898.18	1765.17288	2310.05209	607.02548	4336.69112	720.98215	1660.4507	1765.78963	1337.40442	340.77821	3468.53687	2359.34551	2105.68993	0.21632	0.21927	1.10E-04	1.34E-04	3.51E-05	2.15E-04	4.50E-05	1.04E-04	1.74E-04	2.74E-04	6.99E-05	2.37E-04	1.11E-04	9.89E-05	3.03E-06	3.72E-06	1.6138E-03
551243.97	4172808.86	1737.11926	2168.37307	630.31621	4528.4629	796.69399	1545.59154	1735.29591	1252.82341	351.95469	3458.50796	2603.22695	1962.68439	0.21334	0.21667	1.08E-04	1.25E-04	3.64E-05	2.24E-04	4.98E-05	9.65E-05	1.71E-04	2.57E-04	7.21E-05	2.37E-04	1.22E-04	9.22E-05	2.99E-06	3.67E-06	1.5982E-03
551259.79	4172767.85	1730.08313	2134.98157	639.26248	4537.16326	826.35398	1533.63507	1727.63131	1234.24086	355.97632	3424.80013	2677.74274	1946.1268	0.21066	0.21402	1.08E-04	1.23E-04	3.70E-05	2.25E-04	5.16E-05	9.58E-05	1.70E-04	2.53E-04	7.30E-05	2.34E-04	1.26E-04	9.14E-05	2.95E-06	3.63E-06	1.5945E-03
551275.58	4172707.71	1718.24625	2123.33119	643.24065	4539.64996	857.88879	1515.83586	1715.63185	1226.71233	356.96496	3403.06381	2736.29527	1925.85625	0.20602	0.20942	1.07E-04	1.23E-04	3.72E-05	2.25E-04	5.36E-05	9.47E-05	1.69E-04	2.51E-04	7.32E-05	2.33E-04	1.29E-04	9.05E-05	2.88E-06	3.55E-06	1.5919E-03
551267.81	4172743.92	1724.27904	2125.85615	641.24807	4527.99652	840.40405	1529.51701	1721.6986	1228.92357	356.53746	3405.49334	2703.09204	1940.81227	0.20858	0.21195	1.08E-04	1.23E-04	3.71E-05	2.24E-04	5.25E-05	9.55E-05	1.69E-04	2.52E-04	7.31E-05	2.33E-04	1.27E-04	9.12E-05	2.92E-06	3.59E-06	1.5918E-03
551479.92	4173397.94	2127.34939	2431.76949	502.08211	2952.90003	538.2553	2800.12204	2150.1898	1459.55487	286.42077	2616.52526	1461.80069	3397.03118	0.33879	0.33969	1.33E-04	1.41E-04	2.90E-05	1.46E-04	3.36E-05	1.75E-04	2.11E-04	2.99E-04	5.87E-05	1.79E-04	6.87E-05	1.60E-04	4.74E-06	5.76E-06	1.6442E-03
551645.56	4173453.23	2617.19783	2338.70322	513.14422	2300.41806	468.36909	3053.56538	2652.36538	1385.89421	296.44352	2199.38348	1153.68942	3735.47403	0.61511	0.605	1.63E-04	1.35E-04	2.97E-05	1.14E-04	2.93E-05	1.91E-04	2.61E-04	2.84E-04	6.08E-05	1.50E-04	5.42E-05	1.75E-04	8.61E-06	1.03E-05	1.6668E-03
551658.79	4173451.31	2691.65451	2312.17411	510.39986	2264.13224	464.50599	3041.62095	2729.09297	1366.07097	295.24796	2155.73505	1137.60953	3727.93422	0.69349	0.67826	1.68E-04	1.34E-04	2.95E-05	1.12E-04	2.90E-05	1.90E-04	2.68E-04	2.80E-04	6.05E-05	1.47E-04	5.34E-05	1.75E-04	9.70E-06	1.15E-05	1.6684E-03
551728.4	4173423.26	3095.09012	2180.45283	494.14426	2136.88821	452.96262	2926.63388	3147.56687	1274.00401	287.0083	1979.76985	1085.68779	3611.60968	1.70948	1.47538	1.93E-04	1.26E-04	2.86E-05	1.06E-04	2.83E-05	1.83E-04	3.09E-04	2.61E-04	5.88E-05	1.35E-04	5.10E-05	1.70E-04	2.39E-05	2.50E-05	1.6992E-03
551365.63	4173279.9	1901.70842	2491.3354	538.09528	3319.82762	589.3905	2472.93564	1914.39958	1496.80081	305.51537	2877.1859	1730.92777	3026.98767	0.27818	0.27975	1.19E-04	1.44E-04	3.11E-05	1.65E-04	3.68E-05	1.54E-04	1.88E-04	3.07E-04	6.26E-05	1.97E-04	8.13E-05	1.42E-04	3.89E-06	4.74E-06	1.6362E-03
551632.33	4173455.16	2534.77326	2352.36779	513.42989	2364.35676	471.25119	3039.79961	2567.72012	1398.18129	296.18362	2235.90155	1168.0275	3711.93733	0.55011	0.5431	1.58E-04	1.36E-04	2.97E-05	1.17E-04	2.94E-05	1.90E-04	2.52E-04	2.87E-04	6.07E-05	1.53E-04	5.49E-05	1.74E-04	7.70E-06	9.20E-06	1.6592E-03
551343.41	4173251.51	1857.06569	2456.03109	539.72005	3416.56644	606.66643	2428.91453	1869.74965	1464.59053	305.07764	2941.11016	1788.24865	2973.00133	0.26855	0.27051	1.16E-04	1.42E-04	3.12E-05	1.69E-04	3.79E-05	1.52E-04	1.84E-04	3.00E-04	6.25E-05	2.01E-04	8.40E-05	1.40E-04	3.76E-06	4.58E-06	1.6277E-03
551323.73	4173226.11	1830.0425	2422.71989	533.56298	3484.58853	616.01656	2407.50325	1843.00119	1438.95803	300.92815	2963.61094	1832.30601	2947.25602	0.25996	0.26173	1.14E-04	1.40E-04	3.08E-05	1.73E-04	3.85E-05	1.50E-04	1.81E-04	2.95E-04	6.17E-05	2.03E-04	8.61E-05	1.38E-04	3.64E-06	4.44E-06	1.6198E-03
551244.68	4172799.41	1724.5604	2142.18555	628.3463	4498.62829	797.92461	1529.55785	1722.57917	1237.74136	350.64368	3425.08442	2601.95781	1942.21337	0.21118	0.21449	1.08E-04	1.24E-04	3.63E-05	2.23E-04	4.98E-05	9.55E-05	1.69E-04	2.54E-04	7.19E-05	2.34E-04	1.22E-04	9.12E-05	2.95E-06	3.63E-06	1.5854E-03
551489.66	4173407.11	2127.64974	2418.27676	500.66923	2909.376	533.93685	2789.76571	2151.09194	1451.46244	285.68641	2592.08708	1430.07875	3384.13015	0.34344	0.34388	1.33E-04	1.40E-04	2.89E-05	1.44E-04	3.33E-05	1.74E-04	2.11E-04	2.98E-04	5.86E-05	1.77E-04	6.72E-05	1.59E-04	4.81E-06	5.83E-06	1.6349E-03
551749.44	4173411.24	3183.08773	2136.22797	487.21106	2105.41454	449.70161	2872.28563	3239.90117	1246.84064	283.11122	1935.96538	1074.10211	3546.69672	1.57921	1.35386	1.99E-04	1.24E-04	2.82E-05	1.04E-04	2.81E-05	1.79E-04	3.18E-04	2.56E-04	5.80E-05	1.32E-04	5.04E-05	1.67E-04	2.21E-05	2.29E-05	1.6888E-03
551263.52	4172752.26	1714.39286	2109.77098	635.32743	4483.70629	828.07173	1519.39742	1711.88817	1219.80416	353.45194	3378.25236	2666.46469	1927.86406	0.20718	0.21048	1.07E-04	1.22E-04	3.67E-05	2.22E-04	5.17E-05	9.49E-05	1.68E-04	2.50E-04	7.24E-05	2.31E-04	1.25E-04	9.05E-05	2.90E-06	3.57E-06	1.5787E-03
551411.18	4173345.38	2013.5855	2459.16436	508.7017	3093.57518	549.76112	2624.15779	2029.2702	1482.97812	290.47742	2691.85489	1588.94723	3204.10693	0.29161	0.29304	1.26E-04	1.42E-04	2.94E-05	1.53E-04	3.43E-05	1.64E-04	1.99E-04	3.04E-04	5.95E-05	1.84E-04	7.46E-05	1.50E-04	4.08E-06	4.97E-06	1.6301E-03
551672.03	4173449.39	2746.90487	2269.11737	505.23327	2222.78655	459.48533	2999.33809	2786.3703	1337.8097	292.52156	2103.9108	1120.40018	3681.86464	0.77332	0.75022	1.72E-04	1.31E-04	2.92E-05	1.10E-04	2.87E-05	1.87E-04	2.74E-04	2.74E-04	6.00E-05	1.44E-04	5.26E-05	1.73E-04	1.08E-05	1.27E-05	1.6592E-03
551707	4173435.34	2949.67917	2201.95486	497.67657	2160.67682	454.14612	2942.81234	2996.52298	1291.14232	288.74595	2014.02453	1095.8451	3624.74523	1.24985	1.15173	1.84E-04	1.27E-04	2.88E-05	1.07E-04	2.84E-05	1.84E-04	2.95E-04	2.65E-04	5.92E-05	1.38E-04	5.15E-05	1.70E-04	1.75E-05	1.95E-05	1.6744E-03
551619.1	4173457.08	2455.2207	2358.10852	511.72374	2403.51715	473.27349	3008.55591	2486.20111	1404.83003	294.76838	2267.00473	1180.12654	3668.7113	0.49963	0.49444	1.53E-04	1.36E-04	2.96E-05	1.19E-04	2.96E-05	1.88E-04	2.44E-04	2.88E-04	6.04E-05	1.55E-04	5.54E-05	1.72E-04	6.99E-06	8.38E-06	1.6467E-03
551420.75	4173354.39	2025.3588	2436.50443	502.81271	3055.13453	544.70118	2647.86849	2041.95332	1467.83076	287.0883	2658.41359	1569.18062	3228.84144	0.29585	0.29721	1.26E-04	1.41E-04	2.91E-05	1.51E-04	3.40E-05	1.65E-04	2.01E-04	3.01E-04	5.88E-05	1.82E-04	7.37E-05	1.52E-04	4.14E-06	5.04E-06	1.6240E-03
551382.58	4173306.25	1932.30779	2475.34291	524.79649	3204.82492	568.97679	2501.58401	1945.43655	1494.96991	299.02082	2779.33049	1665.82096	3061.5044	0.2817	0.28302	1.21E-04	1.43E-04	3.03E-05	1.59E-04	3.55E-05	1.56E-04	1.91E-04	3.06E-04	6.13E-05	1.90E-04	7.82E-05	1.44E-04	3.94E-06	4.80E-06	1.6245E-03
551219.29	4172932.41	1765.16466	2337.17435	587.95354	4145.79576	680.1236	1710.57521	1766.90666	1356.57473	331.48662	3389.89325	2209.51494	2164.97876	0.21415	0.21693	1.10E-04	1.35E-04	3.40E-05	2.06E-04	4.25E-05	1.07E-04	1.74E-04	2.78E-04	6.79E-05	2.32E-04	1.04E-04	1.02E-04	3.00E-06	3.68E-06	1.5978E-03
551221.86	4172887.82	1736.73895	2254.2362	600.04584	4286.87864	718.15071	1617.44887	1737.11714	1304.64432	336.50932	3409.26252	2346.18293	2052.03292	0.2116	0.21449	1.08E-04	1.30E-04	3.47E-05	2.12E-04	4.49E-05	1.01E-04	1.71E-04	2.67E-04	6.90E-05	2.33E-04	1.10E-04	9.64E-05	2.96E-06	3.63E-06	1.5853E-03
551227.78	4172863.74	1728.7786	2214.7245	605.26314	4351.48357	738.1995	1580.18062	1728.51008	1280.51291	338.86688	3412.11361	2410.37882	2006.37389	0.21034	0.21329	1.08E-04	1.28E-04	3.50E-05	2.16E-04	4.61E-05	9.87E-05	1.70E-04	2.62E-04	6.95E-05	2.33E-04	1.13E-04	9.42E-05	2.94E-06	3.61E-06	1.5807E-03
551326.82	4173234.69	1818.82439	2401.46707	530.80525	3433.2575	608.89905	2378.82779	1831.51746	1427.34699	299.46721	2929.45664	1804.05076	2912.69556	0.25886	0.26056	1.14E-04	1.39E-04	3.07E-05	1.70E-04	3.80E-05	1.49E-04	1.80E-04	2.93E-04	6.14E-05	2.00E-04	8.47E-05	1.37E-04	3.62E-06	4.42E-06	1.6038E-03
551283.46	4172671.28	1696.51949	2086.19731	632.65381	4460.69057	850.02028	1470.14048	1694.2133	1204.81202	350.7662	3347.59281	2691.9492	1872.61573	0.1981	0.20132	1.06E-04	1.21E-04	3.66E-05	2.21E-04	5.31E-05	9.18E-05	1.67E-04	2.47E-04	7.19E-05	2.29E-04	1.26E-04	8.80E-05	2.77E-06	3.41E-06	1.5640E-03
551430.32	4173363.41	2029.55635	2405.37192	496.4179	3010.97263	539.13718	2657.55797	2047.16538	1447.45178	283.32813	2620.29833	1547.23067	3236.50492	0.29984	0.30077	1.27E-04	1.39E-04	2.87E-05	1.49E-04	3.37E-05	1.66E-04	2.01E-04	2.97E-04	5.81E-05	1.79E-04	7.27E-05	1.52E-04	4.20E-06	5.10E-06	1.6126E-03
551279.14	4172679.69	1691.65219	2082.42795	631.47064	4446.89257	847.4088	1474.29908	1689.26888	1202.78826	350.15708	3336.99187	2684.51671	1876.34267	0.19881	0.20205	1.06E-04	1.20E-04	3.65E-05	2.20E-04	5.29E-05	9.21E-05	1.66E-04	2.47E-04	7.18E-05	2.28E-04	1.26E-04	8.81E-05	2.78E-06	3.42E-06	1.5610E-03
551685.26	4173447.46	2798.86157	2221.71017	498.4557	2178.89828	453.73782	2943.56125	2840.48455	1306.67168	288.8427	2050.65586	1101.56386	3619.80005	0.86904	0.83169	1.75E-04	1.28E-04	2.88E-05	1.08E-04	2.83E-05	1.84E-04	2.79E-04	2.68E-04	5.92E-05	1.40E-04	5.17E-05	1.70E-04	1.22E-05	1.41E-05	1.6467E-03
551499.39	4173416.28	2114.14845	2388.30162	496.75007	2851.53906	527.64334	2758.57425	2137.88321	1433.90813	283.51328	2551.3555	1396.29819	3346.1258	0.34608	0.34634	1.32E-04	1.38E-04	2.87E-05	1.41E-04	3.30E-05	1.72E-04	2.10E-04	2.94E-04	5.81E-05	1.74E-04	6.56E-05	1.57E-04	4.84E-06	5.87E-06	1.6155E-03
551439.9	4173372.42	2039.49153	2387.11029	493.01957	2979.44086	535.49393	2672.15982	2058.11964	1434.72735	281.28128	2597.51846	1527.95092	3250.94452	0.30413	0.30531	1.27E-04	1.38E-04	2.85E-05	1.48E-04	3.34E-05	1.67E-04	2.02E-04	2.94E-04	5.77E-05	1.78E-04	7.18E-05	1.53E-04	4.26E-06	5.17E-06	1.6075E-03
551401.61	4173336.36	1971.4244	2435.66932	507.67256	3089.07377	549.41648	2554.00575	1986.0048	1471.05085	289.83074	2681.33842	1595.84269	3121.50505	0.28449	0.28595	1.23E-04	1.41E-04	2.94E-05	1.53E-04	3.43E-05	1.60E-04	1.95E-04	3.02E-04	5.94E-05	1.83E-04	7.50E-05	1.47E-04	3.98E-06	4.85E-06	1.6101E-03
551349.04	4173265.94	1843.48452	2422.02595	532.097	3320.63906	591.63739	2387.00212	1855.79241	1447.95638	301.21887	2867.71961	1737.94373	2923.07761	0.26639	0.26824	1.15E-04	1.40E-04	3.08E-05	1.65E-04	3.70E-05	1.49E-04	1.82E-04	2.97E-04	6.17E-05	1.96E-04	8.16E-05	1.37E-04	3.73E-06	4.55E-06	1.6008E-03
551274.82	4172688.09	1682.5607	2070.28154	627.91387	4412.39343	840.63406	1473.01131	1680.14341	1196.00174	348.27929	3312.41454	2663.13476	1873.27215	0.19847	0.2017	1.05E-04	1.20E-04	3.63E-05	2.19E-04	5.25E-05	9.20E-05	1.65E-04	2.45E-04	7.14E-05	2.27E-04	1.25E-04	8.80E-05	2.78E-06	3.42E-06	1.5518E-03
551459.04	4173390.45	2060.56961	2367.35909	490.51716	2926.06558	530.11621	2692.48214	2081.21792	1420.53124	279.75055	2568.97759	1488.64013	3271.41354	0.31387	0.31483	1.29E-04	1.37E-04	2.84E-05	1.45E-04	3.31E-05	1.68E-04	2.05E-04	2.91E-04	5.73E-05	1.76E-04	6.99E-05	1.54E-04	4.39E-06	5.33E-06	1.6023E-03
551232.71	4172827.79	1704.59814	2137.09292	609.19774	4368.80642	761.58918	1523.56244	1703.36952	1235.00186	340.56395	3368.68764	2480.80156	1935.15771	0.20754	0.21064	1.06E-04	1.24E-04	3.52E-05	2.17E-04	4.76E-05	9.52E-05	1.67E-04	2.53E-04	6.98E-05	2.30E-04	1.17E-04	9.09E-05	2.90E-06	3.57E-06	1.5591E-03
551449.47	4173381.44	2044.94421	2367.38331	489.98444	2945.72814	531.76005	2676.16461	2064.59496	1421.63416	279.45691	2574.16872	1507.25735	3253.13125	0.30847	0.30953	1.28E-04	1.37E-04	2.83E-05	1.46E-04	3.32E-05	1.67E-04	2.03E-04	2.91E-04	5.73E-05	1.76E-04	7.08E-05	1.53E-04	4.32E-06	5.25E-06	1.6001E-03
552008.68	4173253.38	2972.51992	2120.22545	415.97942	1833.09603	373.47122	3252.47476	3039.37939	1241.42147	242.16354	1780.25006	899.81286	3980.02923	0.29282	0.28724	1.86E-04	1.23E-04	2.40E-05	9.09E-05	2.33E-05	2.03E-04	2.99E-04	2.54E-04	4.96E-05	1.22E-04	4.23E-05	1.87E-04	4.10E-06	4.87E-06	1.6123E-03
551329.91	4173243.28	1808.3768	2381.14531	527.76069	3380.92624	601.34738	2350.82362	1820.79892	1416.48434	297.88537	2893.60714	1775.50478	2879.09263	0.25766	0.2593	1.13E-04	1.38E-04	3.05E-05	1.68E-04	3.76E-05	1.47E-04	1.79E-04	2.90E-04	6.11E-05	1.98E-04	8.34E-05	1.35E-04	3.61E-06	4.39E-06	1.5879E-03
551720.14	4173433.43	2974.92192	2141.8216	487.20479	2109.82332	446.48168	2854.25382	3023.66666	1253.30996	282.78627	1957.29302	1073.28493	3521.53046	1.31232	1.17908	1.86E-04	1.24E-04	2.82E-05	1.05E-04	2.79E-05	1.78E-04	2.97E-04	2.57E-04	5.80E-05	1.34E-04	5.04E-05	1.65E-04	1.84E-05	2.00E-05	1.6486E-03
551372.85	4173297.09	1887.61033	2435.37536	522.93561	3196.61073	569.49595	2432.60359	1900.1791	1468.10592	297.51322	2769.95875	1669.35996	2978.45228	0.27489	0.27658	1.18E-04	1.41E-04	3.02E-05	1.58E-04	3.56E-05	1.52E-04	1.87E-04	3.01E-04	6.10E-05	1.89E-04	7.84E-05	1.40E-04	3.85E-06	4.69E-06	1.5998E-03
551245.96	4172785.4	1693.86891	2086.42039	618.95105	4391.53661	790.46509	1496.79005	1691.77165	1206.02833	345.13259	3335.75357	2562.27492	1900.19898	0.20516	0.20836	1.06E-04	1.21E-04	3.58E-05	2.18E-04	4.94E-05	9.35E-05	1.66E-04	2.47E-04	7.07E-05	2.28E-04	1.20E-04	8.93E-05	2.87E-06	3.53E-06	1.5511E-03
551741.45	4173421.37	3079.47462	2105.19004	481.41646	2081.10948	443.982	2812.32355	3132.83515	1229.47648	279.62042	1916.74355	1062.17212	3473.41348	1.45237	1.25672	1.92E-04	1.22E-04	2.78E-05	1.03E-04	2.77E-05	1.76E-04	3.08E-04	2.52E-04	5.73E-05	1.31E-04	4.99E-05	1.63E-04	2.03E-05	2.13E-05	1.6514E-03
551782.37	4173397.49	3184.70534	2029.00743	475.64608	2016.90522	434.93361	2816.83373	3244.42909	1229.59217	276.41252	1917.69393	1034.93797	3353.89943	0.9467	0.86945	1.99E-04	1.17E-04	2.75E-05	1.00E-04	2.72E-05	1.76E-04	3.19E-04	2.52E-04	5.67E-05	1.31E-04	4.86E-05	1.58E-04	1.32E-05	1.47E-05	1.6396E-03
551352.69	4173274.61	1838.24958	2404.0921	527.25349	3266.05195	582.76266	2367.51527	1850.38483	1439.74791	298.77422	2824.46165	1709.27474	2899.98756	0.26535	0.26712	1.15E-04	1.39E-04	3.05E-05	1.62E-04	3.64E-05	1.48E-04	1.82E-04	2.95E-04	6.12E-05	1.93E-04	8.03E-05	1.36E-04	3.71E-06	4.53E-06	1.5865E-03
551270.49	4172696.5	1671.41919	2053.44475	623.06778	4367.48948	831.49142	1468.0274	1668.99581	1186.52767	345.71792	3280.91926	2634.26836	1865.69991	0.19752	0.20072	1.04E-04	1.19E-04	3.60E-05	2.16E-04	5.19E-05	9.17E-05	1.64E-04	2.43E-04	7.09E-05	2.24E-04	1.24E-04	8.76E-05	2.76E-06	3.40E-06	1.5392E-03
551698.49	4173445.54	2833.91328	2164.70399	489.93281	2131.79486	447.18672	2868.52532	2877.41462	1270.81233	284.05491	1993.52624	1081.75598	3532.87031	0.9501	0.89433	1.77E-04	1.25E-04	2.83E-05	1.06E-04	2.79E-05	1.79E-04	2.83E-04	2.60E-04	5.82E-05	1.36E-04	5.08E-05	1.66E-04	1.33E-05	1.52E-05	1.6263E-03
551215.92	4172911.75	1722.41828	2251.81929	583.36729	4119.5032	684.01474	1634.44278	1723.53091	1305.17074	328.04168	3328.17326	2222.62659	2071.3675	0.2079	0.21063	1.08E-04	1.30E-04	3.37E-05	2.04E-04	4.27E-05	1.02E-04	1.69E-04	2.68E-04	6.72E-05	2.28E-04	1.04E-04	9.73E-05	2.91E-06	3.57E-06	1.5604E-03
551762.38	4173409.36	3149.85481	2065.65302	479.32012	2048.73017	439.82875	2761.82792	3206.99681	1205.17201	275.32919	1878.24869	1048.68602	3412.73039	1.19818	1.06185	1.97E-04	1.19E-04	2.77E-05	1.02E-04	2.75E-05	1.72E-04	3.15E-04	2.47E-04	5.64E-05	1.28E-04	4.93E-05	1.60E-04	1.68E-05	1.80E-05	1.6368E-03
551233.4	4172818.53	1689.98618	2105.37169	606.37692	4332.41846	761.20491	1503.42136	1688.57968	1216.79886	338.84913	3330.33009	2474.12457	1909.50825	0.20499	0.20808	1.06E-04	1.22E-04	3.51E-05	2.15E-04	4.75E-05	9.39E-05	1.66E-04	2.49E-04	6.95E-05	2.28E-04	1.16E-04	8.97E-05	2.87E-06	3.53E-06	1.5434E-03
551641.05	4173462.85	2513.24705	2264.08272	499.54587	2270.20246	457.58709	2921.50201	2546.24285	1342.65346	288.3608	2147.63617	1129.41721	3575.3077	0.53355	0.52565	1.57E-04	1.31E-04	2.89E-05	1.13E-04	2.86E-05	1.82E-04	2.50E-04	2.75E-04	5.91E-05	1.47E-04	5.30E-05	1.68E-04	7.47E-06	8.91E-06	1.6091E-03

551654.06	4173460.96	2584.06851	2242.0662	497.57697	2212.91421	454.14088	2916.37905	2619.13653	1325.866	287.58817
551220.17	4172877.45	1702.84125	2189.2495	589.96616	4209.75292	711.02319	1569.95547	1703.01831	1266.78249	330.59709
551214.23	4172901.42	1708.35787	2219.58635	583.60302	4130.22948	691.80313	1604.75013	1709.14679	1285.79591	327.71088
551628.04	4173464.74	2433.43828	2272.69882	499.10221	2310.35725	460.02191	2901.52264	2464.37021	1351.71128	287.69462
551392.04	4173327.34	1918.36694	2393.60548	504.13062	3065.4982	546.93534	2468.20654	1931.96584	1447.19682	287.66843
551667.07	4173459.07	2641.39182	2206.62931	493.37431	2175.46053	449.71247	2886.05436	2678.42532	1301.91153	285.45529
551334.21	4173255.03	1795.17474	2354.08095	522.94085	3307.53214	590.38106	2314.20783	1807.24429	1402.44179	295.42484
551356.69	4173284.01	1832.82247	2382.83614	521.21457	3206.0382	572.92414	2347.9288	1844.82463	1429.8332	295.69772
551248.06	4172775.64	1672.05639	2048.31538	611.38606	4306.5618	783.73724	1475.73033	1669.94714	1184.57489	340.7435
551234.09	4172809.28	1676.0252	2075.81922	603.63812	4296.31509	760.8186	1484.99963	1674.45315	1199.79647	337.15019
551615.03	4173466.64	2368.05946	2281.76451	497.63047	2347.03281	461.89159	2877.03464	2397.3864	1359.12164	286.48017
551266.17	4172704.9	1655.89127	2028.83641	615.70288	4301.23039	818.20433	1457.54249	1653.51029	1172.65963	341.78612
551733.28	4173431.52	2980.54123	2077.53701	475.77625	2057.60104	438.19829	2757.51604	3030.67734	1213.98497	276.22856
551487.75	4173417.5	2051.82006	2313.47954	483.9996	2804.28504	517.38145	2650.52821	2074.34153	1388.25997	276.09723
551234.78	4172800.03	1666.93937	2055.67499	603.08755	4281.22702	763.57637	1472.41063	1665.1994	1188.14515	336.64504
551680.09	4173457.18	2690.69718	2163.45734	487.44803	2134.88304	444.5163	2838.44599	2729.6557	1273.60253	282.26271
551711.73	4173443.61	2854.7847	2102.34274	480.05901	2082.68923	439.90769	2781.17922	2899.93237	1232.38388	278.43427
551382.47	4173318.33	1877.90221	2367.34773	503.9672	3061.80775	547.47038	2402.43359	1890.71395	1430.82801	287.30214
551754.49	4173419.47	3051.8487	2033.30322	468.39181	2025.73585	434.58827	2702.03652	3105.72558	1187.15046	272.02623
551602.02	4173468.53	2291.13419	2272.74206	493.43103	2376.22243	462.65566	2824.4241	2318.79162	1356.27249	283.6678
551212.54	4172891.09	1681.89356	2168.59983	577.26016	4085.99095	689.31473	1564.54236	1682.45764	1255.79132	323.82088
551250.16	4172765.88	1655.81806	2020.81514	606.11786	4245.91239	780.45694	1460.63702	1653.68757	1168.96198	337.6388
551218.48	4172867.09	1672.29014	2129.39341	580.97393	4137.86972	706.01543	1526.7657	1672.25933	1231.82247	325.35437
551372.9	4173309.31	1851.40049	2358.0755	507.2719	3083.90341	551.76992	2359.48442	1863.66495	1422.84845	288.80582
551497.32	4173426.51	2044.90639	2294.51456	481.63661	2756.26321	512.30048	2631.43023	2067.70903	1377.03918	274.8249

Construction Health Risk Assessment Files

Midway Village Project—All Off-site Receptors Scenario

All Off-site Receptors: Exposed to Phases 1+2+3+4 Demolition and Phases 1+2+3+4 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

Mitigated Concentrations

Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.94E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	3.12E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	3.12E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	2.73E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	1.28E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	1.28E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	5.90E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	3.86E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	3.86E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	7.50E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	4.93E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	4.93E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	4.69E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	4.74E-04

Maximum DPM (ug/m3)	**MIR UTM** X	Y
	Mitigated PM2.5 Concentrations	
1.9751E-01	551558.98	4172977.03
1.9674E-01	551763.51	4172840.85

UTM	551558.98	4172977.03
Latitude, Longitude	37°42'09.3"N 122°24'54.4"W	
UTM	551763.51	4172840.85
Latitude, Longitude	37°42'04.8"N 122°24'46.1"W	

X	Y	Unit Emissions Demolition Area 1A (Phase 1) AREA8	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) AREA9	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) AREA10	Unit Emissions Demolition Area 3A (Phase 3) AREA11	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Construction Area 1B (Phase 1) AREA2	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) AREA3	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) AREA4	Unit Emissions Construction Area 3B (Phase 3) AREA5	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Road Segment 1 LINE1	Unit Emissions Road Segment 2 LINE2	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	**Total** **PM2.5 (ug/m3)**
551763.51	4172840.85	64602.40637	13983.34295	65769.74448	58987.55675	40337.01297	5357.08967	61830.48958	8101.26788	27676.37478	52416.22872	87627.14487	7526.48473	0.87588	0.86566	1.25E-02	4.37E-03	2.05E-02	1.61E-02	5.18E-03	6.88E-04	3.65E-02	3.13E-03	1.07E-02	3.93E-02	4.32E-02	3.71E-03	4.11E-04	4.10E-04	1.9674E-01
551760.24	4172831.56	53670.68708	12353.06854	56620.45345	57660.10853	50770.23164	4979.1095	51644.11565	6940.80097	21234.25424	48622.61948	99583.36673	6983.56985	0.89425	0.88382	1.04E-02	3.86E-03	1.77E-02	1.58E-02	6.52E-03	6.40E-04	3.05E-02	2.68E-03	8.20E-03	3.65E-02	4.91E-02	3.44E-03	4.19E-04	4.19E-04	1.8602E-01
551785.57	4172857.1	84715.16033	17456.05793	45188.73925	50959.76905	20261.38392	6226.90249	80196.12675	10544.76826	26589.68961	49102.60533	46279.46112	8691.89029	0.76041	0.7526	1.64E-02	5.45E-03	1.41E-02	1.39E-02	2.60E-03	8.00E-04	4.73E-02	4.07E-03	1.03E-02	3.68E-02	2.28E-02	4.28E-03	3.56E-04	3.57E-04	1.7961E-01
551568.65	4173003.88	14589.91369	113158.5989	4489.87338	48624.12408	3752.77982	38156.84601	14676.38996	69908.17452	2570.385	74494.21139	11031.91488	49344.55997	12.06746	13.52869	2.83E-03	3.53E-02	1.40E-03	1.33E-02	4.82E-04	4.90E-03	8.66E-03	2.70E-02	9.92E-04	5.58E-02	5.43E-03	2.43E-02	5.66E-03	6.41E-03	1.9255E-01
551565.43	4172994.93	14467.87805	108774.6102	4613.40206	56349.10018	3969.76135	33720.81783	14536.9892	62431.58858	2638.7479	83877.88486	12040.77064	43646.06742	12.05368	13.54158	2.81E-03	3.40E-02	1.44E-03	1.54E-02	5.10E-04	4.33E-03	8.58E-03	2.41E-02	1.02E-03	6.29E-02	5.93E-03	2.15E-02	5.65E-03	6.42E-03	1.9455E-01
551562.21	4172985.98	14066.59961	102795.9946	4741.13472	65921.19248	4191.96335	29989.06749	14117.10949	54700.12339	2709.35668	92519.68259	13184.76867	38843.05428	11.99866	13.47263	2.73E-03	3.21E-02	1.48E-03	1.80E-02	5.39E-04	3.85E-03	8.33E-03	2.11E-02	1.05E-03	6.94E-02	6.49E-03	1.91E-02	5.62E-03	6.39E-03	1.9622E-01
551756.98	4172822.27	42121.234	10375.77459	38914.57823	55270.30929	61363.46572	4451.6105	40794.006	5741.86225	14494.50852	42766.24139	113485.7243	6228.55513	0.92281	0.91182	8.17E-03	3.24E-03	1.22E-02	1.51E-02	7.88E-03	5.72E-04	2.41E-02	2.22E-03	5.60E-03	3.21E-02	5.59E-02	3.07E-03	4.33E-04	4.32E-04	1.7092E-01
551558.98	4172977.03	13841.71438	95047.52039	4868.99275	77587.17648	4419.02431	26809.85554	13876.38617	47457.36852	2779.76878	99560.97041	14498.51234	34750.67984	11.92408	13.3595	2.69E-03	2.97E-02	1.52E-03	2.12E-02	5.68E-04	3.44E-03	8.19E-03	1.83E-02	1.07E-03	7.46E-02	7.14E-03	1.71E-02	5.59E-03	6.33E-03	1.9751E-01
551555.76	4172968.07	13572.44385	83764.12702	4992.92204	89279.52393	4652.18449	24072.07486	13591.84775	41103.93444	2848.07336	104513.4984	16036.98576	31220.24591	11.88962	13.30544	2.63E-03	2.62E-02	1.56E-03	2.44E-02	5.98E-04	3.09E-03	8.02E-03	1.59E-02	1.10E-03	7.84E-02	7.90E-03	1.54E-02	5.57E-03	6.31E-03	1.9694E-01
551552.53	4172959.12	13261.72429	73400.10118	5113.134	99370.84802	4887.46591	21703.38888	13266.81246	35703.70907	2913.8782	107586.6156	17848.0931	27901.4077	11.85687	13.24135	2.57E-03	2.29E-02	1.60E-03	2.72E-02	6.28E-04	2.79E-03	7.83E-03	1.38E-02	1.12E-03	8.07E-02	8.79E-03	1.37E-02	5.56E-03	6.28E-03	1.9543E-01
551782.31	4172847.81	67443.38143	15538.32949	47264.15042	50617.80712	24626.85985	5659.13668	64373.25066	9199.19041	25333.88133	47485.85795	53930.07467	7894.99939	0.77392	0.76597	1.31E-02	4.85E-03	1.48E-02	1.38E-02	3.16E-03	7.27E-04	3.80E-02	3.55E-03	9.78E-03	3.56E-02	2.66E-02	3.89E-03	3.63E-04	3.63E-04	1.6854E-01
551753.71	4172812.98	36018.56154	9159.85729	27632.38664	52318.79664	69380.53949	4158.98699	34987.66964	5089.38488	11137.84419	37957.97187	118267.5784	5803.01847	0.9526	0.93975	6.99E-03	2.86E-03	8.63E-03	1.43E-02	8.91E-03	5.34E-04	2.07E-02	1.96E-03	4.30E-03	2.85E-02	5.83E-02	2.86E-03	4.46E-04	4.45E-04	1.5961E-01
551572.47	4173027.61	13973.10185	96793.41386	3899.35237	34418.80583	3195.81892	49021.33777	14095.4356	65291.25079	2250.28627	47914.38351	8958.03968	62632.09772	9.93891	10.86632	2.71E-03	3.02E-02	1.22E-03	9.40E-03	4.11E-04	6.30E-03	8.32E-03	2.52E-02	8.69E-04	3.59E-02	4.41E-03	3.09E-02	4.66E-03	5.15E-03	1.6566E-01
551779.04	4172838.52	53879.43835	13365.9277	46661.53071	50279.81348	29930.58086	5099.40256	51794.98055	7869.97528	22327.28324	45319.01746	62323.64113	6989.5063	0.78825	0.78042	1.05E-02	4.17E-03	1.46E-02	1.37E-02	3.85E-03	6.55E-04	3.06E-02	3.04E-03	8.62E-03	3.40E-02	3.07E-02	3.44E-03	3.69E-04	3.70E-04	1.5854E-01
551750.44	4172803.69	32224.16239	8361.49007	20981.58636	49604.30544	75141.35912	3975.87284	31349.38408	4682.86528	9191.22965	34012.30132	119594.9011	5537.76763	0.97683	0.96346	6.25E-03	2.61E-03	6.55E-03	1.36E-02	9.65E-03	5.11E-04	1.85E-02	1.81E-03	3.55E-03	2.55E-02	5.89E-02	2.73E-03	4.58E-04	4.57E-04	1.5105E-01
551539.63	4172923.29	11848.7015	42652.36809	5414.50489	125369.9494	5651.08092	14865.25896	11808.20916	21352.69272	3064.05936	101686.2379	29248.70821	19263.40143	11.66643	12.89334	2.30E-03	1.33E-02	1.69E-03	3.43E-02	7.26E-04	1.91E-03	6.97E-03	8.24E-03	1.18E-03	7.62E-02	1.44E-02	9.49E-03	5.47E-03	6.11E-03	1.8231E-01
551541.27	4172931.47	12043.53645	46799.73111	5262.7598	117757.9058	5430.91084	15912.50431	12012.11485	23259.16713	2983.74615	100347.7183	25681.4551	20598.52733	11.0365	12.16801	2.34E-03	1.46E-02	1.64E-03	3.22E-02	6.98E-04	2.04E-03	7.09E-03	8.98E-03	1.15E-03	7.52E-02	1.27E-02	1.01E-02	5.17E-03	5.77E-03	1.7971E-01
551545.34	4172947.53	12474.89444	57300.20375	5010.50622	103351.2644	5062.159	18450.14811	12463.57799	28111.6998	2847.81739	97761.12853	20464.43357	23846.20381	10.28102	11.35393	2.42E-03	1.79E-02	1.57E-03	2.82E-02	6.50E-04	2.37E-03	7.36E-03	1.09E-02	1.10E-03	7.33E-02	1.01E-02	1.17E-02	4.82E-03	5.38E-03	1.7777E-01
551575.74	4173040.12	13644.33551	85993.53081	3643.22171	29697.18131	2968.52463	56216.1521	13783.90755	58168.15213	2103.60535	39292.01809	8152.40756	71026.55249	9.5404	10.34131	2.65E-03	2.69E-02	1.14E-03	8.11E-03	3.81E-04	7.22E-03	8.14E-03	2.25E-02	8.12E-04	2.95E-02	4.02E-03	3.50E-02	4.47E-03	4.90E-03	1.5560E-01
551536.4	4172914.33	11438.45559	37619.93679	5460.65545	127371.921	5807.16458	13648.66664	11390.81039	19079.22923	3082.86495	97723.36737	33916.95135	17692.80005	11.63266	12.82194	2.22E-03	1.18E-02	1.71E-03	3.48E-02	7.46E-04	1.75E-03	6.72E-03	7.37E-03	1.19E-03	7.33E-02	1.67E-02	8.72E-03	5.45E-03	6.08E-03	1.7847E-01
551542.38	4172939.89	12168.6601	51042.58679	5079.24934	108168.9525	5199.21687	17030.57916	12147.67025	25257.52197	2883.821	97076.18142	22605.63651	22016.18077	10.17198	11.1793	2.36E-03	1.59E-02	1.59E-03	2.96E-02	6.68E-04	2.19E-03	7.17E-03	9.75E-03	1.11E-03	7.28E-02	1.11E-02	1.08E-02	4.77E-03	5.30E-03	1.7516E-01
551775.78	4172829.23	44723.61502	11713.0739	42491.11998	49508.32417	35734.96967	4589.32296	43219.75223	6655.02738	18277.7983	42486.65568	70001.17261	6385.84206	0.79942	0.79165	8.68E-03	3.66E-03	1.33E-02	1.35E-02	4.59E-03	5.90E-04	2.55E-02	2.57E-03	7.06E-03	3.19E-02	3.45E-02	3.15E-03	3.75E-04	3.75E-04	1.4969E-01
551747.18	4172794.4	29122.03358	7714.44912	16720.32448	46615.5826	75814.58099	3819.66092	28365.1022	4359.86092	7761.86684	30291.22737	116699.2714	5311.45782	0.99253	0.98113	5.65E-03	2.41E-03	5.22E-03	1.27E-02	9.74E-03	4.91E-04	1.67E-02	1.68E-03	3.00E-03	2.27E-02	5.75E-02	2.62E-03	4.65E-04	4.65E-04	1.4142E-01

551589.37	4173120.8	10225.3179	25285.50968	2217.69523	13530.13008	1836.7308	60097.41947	10385.33955	15652.0475	1291.93808	14856.96266	4731.18476	67651.78985	5.85217	6.12435	1.98E-03	7.90E-03
551819.9	4172819.1	28695.79482	10759.81699	19959.26854	32809.68438	17334.84053	4203.92539	27584.98061	6434.18222	10383.22481	29231.51803	33715.72333	5771.6215	0.6099	0.6058	5.57E-03	3.36E-03
551715	4172753.51	19749.94235	6118.97361	10836.84028	32775.35942	35368.66486	3492.36629	19308.26449	3643.18558	5134.7141	16974.07369	67860.29679	4833.95208	1.29964	1.29859	3.83E-03	1.91E-03
551505.38	4172915.37	8740.21615	24039.815	3893.55462	62457.34516	4296.32993	10723.999	8712.17865	12878.31553	2200.15373	49510.68885	24242.73326	13729.92996	4.21032	4.4209	1.70E-03	7.51E-03
551668.12	4172745.39	16636.59623	7208.8456	12329.82452	31707.82735	36442.77016	4072.02882	16298.57228	4395.42632	6087.30295	17927.0401	65334.29581	5609.12507	1.89405	1.95931	3.23E-03	2.25E-03
551793.14	4172793.87	20238.08094	7330.38237	16833.22194	34870.73047	30176.11736	3169.36176	19799.50216	4109.20334	7380.26947	26245.94215	49536.26112	4345.34711	0.68914	0.68498	3.93E-03	2.29E-03
551525.14	4172999.33	9831.1499	39839.36006	3178.05312	37606.42911	3118.86749	20114.08565	9874.36697	22996.78809	1812.80744	39496.73749	10648.48631	25395.84294	3.49638	3.65366	1.91E-03	1.24E-02
551567.75	4173089.8	10194.56776	32460.2978	2490.88209	17429.25109	2130.2843	46859.10094	10328.70356	20307.97024	1440.14695	19607.63064	5749.47184	54747.54854	4.41425	4.57489	1.98E-03	1.01E-02
551528.37	4173008.28	9903.18838	40655.64831	3111.38982	34820.35709	3008.84584	21768.96616	9955.57152	23957.73972	1775.65646	37356.37935	9937.77111	27393.66961	3.51311	3.66885	1.92E-03	1.27E-02
551695.88	4172749.8	18504.81565	6413.51454	11720.6252	31476.03045	35621.15847	3686.53632	18102.66994	3872.94767	5566.14455	16171.38242	67221.44197	5101.43258	1.64785	1.68457	3.59E-03	2.00E-03
551527.61	4172782.74	7844.2331	11403.07825	4672.44247	70299.22278	8338.75559	5577.35774	7779.41389	6408.63489	2542.17051	32214.64283	58770.40892	7321.58155	5.12239	5.50009	1.52E-03	3.56E-03
551531.59	4173017.23	9956.93442	41039.20559	3045.06035	32103.08438	2897.75441	23577.72728	10018.37734	24633.93949	1738.96637	35159.81292	9283.4164	29551.77691	3.52999	3.68271	1.93E-03	1.28E-02
551521.92	4172990.38	9738.63007	37797.96829	3244.54872	40256.72362	3228.40706	18603.77807	9772.70523	21829.1439	1850.00046	41481.52304	11425.98907	23550.67767	3.4809	3.63842	1.89E-03	1.18E-02
551734.11	4172757.23	19903.88901	5832.76033	9341.08603	32737.3487	36437.62426	3260.65184	19467.35855	3408.004	4558.41445	17972.37776	65028.76662	4502.40171	1.01849	1.01386	3.86E-03	1.82E-03
551518.69	4172981.42	9622.7141	36203.81406	3310.34643	42849.68589	3337.31231	17220.62002	9647.70453	20528.98571	1886.91889	43210.97724	12279.52047	21573.36677	3.46522	3.62211	1.87E-03	1.13E-02
551515.47	4172972.47	9465.1816	34182.33092	3368.67125	45206.16603	3447.98726	15919.88638	9481.58015	19124.1612	1919.1978	44459.57304	13244.7049	19973.61316	3.4464	3.60493	1.84E-03	1.07E-02
551502.15	4172906.4	8444.1288	21985.15045	3886.32122	62099.50058	4374.96698	9976.13987	8412.60292	11830.37128	2190.18284	47545.87341	25702.29809	12779.79086	4.18436	4.39752	1.64E-03	6.87E-03
551498.51	4172867.21	7753.63061	16886.42191	4011.0997	67647.35659	5020.96594	7917.5985	7711.33121	9188.72298	2229.36447	42588.4936	37974.15362	10198.38875	5.24083	5.5538	1.50E-03	5.27E-03
551592.46	4173129.39	10002.92381	22956.32664	2121.22262	12600.56585	1752.16004	58526.94575	10162.4658	14157.16516	1236.91742	13748.57278	4483.87105	65721.37347	5.87395	6.15755	1.94E-03	7.17E-03
551540.62	4173042.59	9909.39199	39150.86853	2825.04292	25569.84395	2596.70028	29016.14517	9994.93374	24246.58961	1617.6213	28623.75589	7764.20941	35830.4815	3.54542	3.68495	1.92E-03	1.22E-02
551499.47	4172838.8	7352.12576	14222.07702	3978.82193	69638.18631	5633.73716	6818.82179	7306.70422	7811.38305	2193.38636	37188.45489	46060.00525	8822.88704	6.5143	7.20839	1.43E-03	4.44E-03
551773.67	4172774.52	18595.96842	5959.648	10517.63372	32914.52147	36339.32727	2945.34172	18240.42495	3346.48692	4833.78684	21685.65806	57446.00652	4035.98124	0.76764	0.76199	3.61E-03	1.86E-03
551570.84	4173098.38	10006.60046	29657.82193	2389.80896	16225.1879	2040.06777	47706.17374	10143.55891	18509.97552	1383.74094	18041.13614	5453.60175	55200.35043	4.4119	4.57152	1.94E-03	9.26E-03
551512.24	4172963.52	9298.18744	32048.81357	3381.70832	47548.37754	3554.86347	14600.89578	9306.18858	17438.9269	1923.64121	44172.93861	14282.67749	18539.76468	3.42189	3.57492	1.80E-03	1.00E-02

Construction Health Risk Assessment Files

551488.08	4173012.68	7197.69081	20371.60552	2262.58785	23183.03727	2369.06324	13306.71034	7233.22931	12234.84428	1288.30714	22122.63236	8298.06468	16336.46991	1.76485	1.81146	1.40E-03	6.36E-03	7.07E-04	6.33E-03	3.04E-04	1.71E-03	4.27E-03	4.72E-03	4.97E-04	1.66E-02	4.09E-03	8.05E-03	8.27E-04	8.58E-04	5.6711E-02
551782.91	4172743.95	12116.1019	4338.95022	5580.51263	23218.61717	19678.98461	2316.49925	11934.87757	2455.66209	2731.13673	14212.33016	34476.28585	3145.58762	0.69424	0.69325	2.35E-03	1.36E-03	1.74E-03	6.34E-03	2.53E-03	2.98E-04	7.05E-03	9.48E-04	1.05E-03	1.07E-02	1.70E-02	1.55E-03	3.25E-04	3.29E-04	5.3509E-02
551796.12	4172748.56	11410.01835	4480.53486	6323.51587	23330.88291	19501.32215	2276.42885	11240.43277	2521.19152	3003.70136	15059.24111	33643.63677	3085.6668	0.63834	0.63661	2.21E-03	1.40E-03	1.98E-03	6.37E-03	2.51E-03	2.92E-04	6.64E-03	9.73E-04	1.16E-03	1.13E-02	1.66E-02	1.52E-03	2.99E-04	3.02E-04	5.3513E-02
551558.96	4172725.14	7705.21744	7711.8707	4693.29938	33037.97201	9265.86134	4110.78139	7623.49596	4481.68205	2543.69524	19778.78525	28857.00423	5457.52142	1.35502	1.39737	1.50E-03	2.41E-03	1.47E-03	9.03E-03	1.19E-03	5.28E-04	4.50E-03	1.73E-03	9.82E-04	1.48E-02	1.42E-02	2.69E-03	6.35E-04	6.62E-04	5.6357E-02
551484.85	4173003.72	7141.49558	20018.86254	2271.02509	24097.1281	2426.9358	12343.76109	7171.56101	11705.08806	1291.231	22311.30589	8727.42672	15452.90116	1.7497	1.79712	1.39E-03	6.25E-03	7.09E-04	6.58E-03	3.12E-04	1.59E-03	4.23E-03	4.52E-03	4.98E-04	1.67E-02	4.30E-03	7.61E-03	8.20E-04	8.52E-04	5.6390E-02
551753.61	4173170.73	16050.15999	9688.2295	1366.30491	5713.5122	1060.11176	32261.97732	16742.46957	5476.54626	813.78814	5902.80569	2478.786	37167.70285	1.47536	1.44443	3.11E-03	3.03E-03	4.27E-04	1.56E-03	1.36E-04	4.14E-03	9.88E-03	2.11E-03	3.14E-04	4.43E-03	1.22E-03	1.83E-02	6.91E-04	6.85E-04	5.0052E-02
551476.45	4172802.4	5720.48149	9540.1581	2932.69081	39255.06774	4474.30962	5009.23202	5688.1718	5330.37981	1610.93768	22140.12645	26402.36314	6474.37845	2.43219	2.59596	1.11E-03	2.98E-03	9.16E-04	1.07E-02	5.75E-04	6.44E-04	3.36E-03	2.06E-03	6.22E-04	1.66E-02	1.30E-02	3.19E-03	1.14E-03	1.23E-03	5.8151E-02
551631.49	4173193.36	8892.90741	11899.7259	1513.58047	7564.89216	1243.07789	35173.292	9064.27906	7078.53531	889.1821	7898.14574	3037.53078	40280.35398	10.23233	11.05907	1.73E-03	3.72E-03	4.73E-04	2.07E-03	1.60E-04	4.52E-03	5.35E-03	2.73E-03	3.43E-04	5.92E-03	1.50E-03	1.98E-02	4.80E-03	5.24E-03	5.8384E-02
551481.63	4172994.77	7067.84829	19517.14436	2294.53131	24978.77974	2477.3617	11635.20425	7092.40839	11299.96153	1304.64198	22807.31984	9177.68056	14596.68289	1.73696	1.78496	1.37E-03	6.10E-03	7.17E-04	6.83E-03	3.18E-04	1.49E-03	4.19E-03	4.36E-03	5.04E-04	1.71E-02	4.52E-03	7.19E-03	8.14E-04	8.46E-04	5.6345E-02
551469.73	4172820.18	5715.48533	10031.78686	2880.42611	38838.41007	4191.73177	5288.58478	5685.05785	5593.60729	1587.38125	22718.68173	24872.97878	6808.57788	2.46529	2.61582	1.11E-03	3.13E-03	9.00E-04	1.06E-02	5.39E-04	6.79E-04	3.36E-03	2.16E-03	6.13E-04	1.70E-02	1.23E-02	3.35E-03	1.16E-03	1.24E-03	5.8134E-02
551586.17	4173169.3	8006.84939	14506.77635	1656.22023	9334.10045	1400.15193	31411.70237	8128.28909	8770.63314	966.61651	9898.89149	3571.49434	36548.47463	3.5755	3.69474	1.55E-03	4.53E-03	5.17E-04	2.55E-03	1.80E-04	4.04E-03	4.80E-03	3.39E-03	3.73E-04	7.42E-03	1.76E-03	1.80E-02	1.68E-03	1.75E-03	5.2536E-02
551478.41	4172985.82	7002.45737	18987.19608	2327.62986	25945.43416	2524.03852	11010.37922	7021.39932	10882.23403	1323.49558	23351.52674	9621.34223	13837.13663	1.73632	1.78439	1.36E-03	5.93E-03	7.27E-04	7.09E-03	3.24E-04	1.41E-03	4.14E-03	4.20E-03	5.11E-04	1.75E-02	4.74E-03	6.82E-03	8.14E-04	8.46E-04	5.6423E-02
551516.83	4172744.94	6363.03726	8166.41935	3516.49904	37405.04494	6111.31629	4297.20438	6314.07506	4646.22385	1918.0462	20445.29059	28707.23385	5631.92141	1.77137	1.83981	1.23E-03	2.55E-03	1.10E-03	1.02E-02	7.85E-04	5.52E-04	3.73E-03	1.79E-03	7.40E-04	1.53E-02	1.41E-02	2.77E-03	8.30E-04	8.72E-04	5.6648E-02
551552.31	4173134.14	7586.29717	16938.74983	1826.4473	11869.71012	1618.88369	26476.27386	7683.58078	10400.82023	1054.77865	12544.2553	4364.74306	30830.53587	2.41193	2.47447	1.47E-03	5.29E-03	5.70E-04	3.24E-03	2.08E-04	3.40E-03	4.54E-03	4.01E-03	4.07E-04	9.40E-03	2.15E-03	1.52E-02	1.13E-03	1.17E-03	5.2189E-02
551475.18	4172976.87	6917.69732	18330.99751	2358.49788	26841.29703	2567.50157	10409.4036	6931.27648	10414.50297	1341.05244	23757.18711	10082.02277	13102.36223	1.7315	1.78071	1.34E-03	5.73E-03	7.37E-04	7.33E-03	3.30E-04	1.34E-03	4.09E-03	4.02E-03	5.18E-04	1.78E-02	4.97E-03	6.45E-03	8.12E-04	8.44E-04	5.6322E-02
551623.41	4173191.97	8635.00418	12116.8852	1522.2861	7741.19128	1256.53734	34320.37238	8793.94353	7242.29948	893.3251	8100.10113	3089.25115	39186.40403	7.54986	8.02847	1.68E-03	3.78E-03	4.75E-04	2.12E-03	1.61E-04	4.41E-03	5.19E-03	2.80E-03	3.45E-04	6.07E-03	1.52E-03	1.93E-02	3.54E-03	3.80E-03	5.5195E-02
551472.13	4172810.81	5675.03556	9697.25016	2879.32257	38517.71947	4292.97717	5111.70702	5644.03496	5412.89875	1584.28334	22155.50907	25288.16479	6593.20672	2.36559	2.56046	1.10E-03	3.03E-03	8.99E-04	1.05E-02	5.52E-04	6.57E-04	3.33E-03	2.09E-03	6.12E-04	1.66E-02	1.25E-02	3.25E-03	1.11E-03	1.21E-03	5.7432E-02
551503.47	4173055.72	7197.11283	19729.17556	2081.21381	18514.07667	2081.56632	16922.41587	7256.61305	12110.25715	1187.52168	18210.17016	6549.89265	20765.01786	1.75904	1.80091	1.40E-03	6.16E-03	6.50E-04	5.06E-03	2.67E-04	2.17E-03	4.28E-03	4.67E-03	4.58E-04	1.37E-02	3.23E-03	1.02E-02	8.24E-04	8.53E-04	5.3912E-02
551570.84	4173156.57	7750.55226	15427.82767	1719.62225	10217.29276	1476.8118	29155.29461	7859.48607	9445.05402	1000.23131	10868.73436	3847.72194	33643.86411	2.93393	3.01947	1.50E-03	4.82E-03	5.37E-04	2.79E-03	1.90E-04	3.75E-03	4.64E-03	3.65E-03	3.86E-04	8.15E-03	1.90E-03	1.66E-02	1.38E-03	1.43E-03	5.1682E-02
551883.03	4172794.78	16630.62076	7915.22379	9025.73037	20261.20416	8814.87396	3427.72203	16120.13171	4824.36055	4871.37704	17850.81511	17567.97665	4700.05849	0.43756	0.436	3.23E-03	2.47E-03	2.82E-03	5.54E-03	1.13E-03	4.40E-04	9.52E-03	1.86E-03	1.88E-03	1.34E-02	8.65E-03	2.32E-03	2.05E-04	2.07E-04	5.3650E-02
551471.96	4172967.92	6810.68486	17565.07729	2384.54701	27628.45899	2606.15348	9827.58911	6819.14448	9909.80802	1355.65105	23982.32918	10564.06311	12388.09945	1.72225	1.77178	1.32E-03	5.49E-03	7.45E-04	7.55E-03	3.35E-04	1.26E-03	4.03E-03	3.83E-03	5.23E-04	1.80E-02	5.20E-03	6.10E-03	8.07E-04	8.40E-04	5.6006E-02
551857.22	4172778.98	12921.07496	6591.84677	9823.32121	22338.56261	12017.03879	2716.74339	12525.18207	3850.92631	4963.67452	18233.61062	22115.85676	3705.29793	0.47344	0.47196	2.51E-03	2.06E-03	3.07E-03	6.10E-03	1.54E-03	3.49E-04	7.39E-03	1.49E-03	1.92E-03	1.37E-02	1.09E-02	1.83E-03	2.22E-04	2.24E-04	5.3263E-02
551908.65	4172810.34	20666.45576	9000.35325	7268.62197	17965.34546	6678.93662	4352.79386	20204.34146	5413.19905	4068.77789	16103.20747	13738.96464	6043.0416	0.40086	0.39929	4.01E-03	2.81E-03	2.27E-03	4.91E-03	8.58E-04	5.59E-04	1.19E-02	2.09E-03	1.57E-03	1.21E-02	6.77E-03	2.98E-03	1.88E-04	1.89E-04	5.3200E-02
551700.26	4173190.02	12089.54011	10356.45271	1434.81416	6315.80548	1132.84164	32711.60593	12449.50285	5881.37528	850.26142	6509.14673	2668.99495	37957.5176	3.50942	3.37213	2.35E-03	3.23E-03	4.48E-04	1.73E-03	1.46E-04	4.20E-03	7.35E-03	2.27E-03	3.28E-04	4.88E-03	1.31E-03	1.87E-02	1.64E-03	1.60E-03	5.0186E-02
551468.72	4172958.94	6686.18998	16731.52892	2407.24982	28298.60558	2642.25973	9272.98775	6689.84045	9392.19899	1368.08859	24047.44562	11059.26411	11704.17506	1.71102	1.75946	1.30E-03	5.23E-03	7.52E-04	7.73E-03	3.39E-04	1.19E-03	3.95E-03	3.63E-03	5.28E-04	1.80E-02	5.45E-03	5.77E-03	8.02E-04	8.34E-04	5.5519E-02
551509.39	4173072.46	7121.48889	19130.56567	2003.37588	16805.94655	1965.47213	18167.32457	7187.88773	11506.93539	1144.89221	16704.51695	5976.45743	22062.31044	1.755	1.79435	1.38E-03	5.98E-03	6.26E-04	4.59E-03	2.53E-04	2.33E-03	4.24E-03	4.44E-03	4.42E-04	1.25E-02	2.94E-03	1.09E-02	8.23E-04	8.50E-04	5.2297E-02
551590.14	4172713.71	8772.48294	7004.26204	5612.89165	26437.99422	12181.86169	3846.07296	8660.62657	4146.20686	3002.88287	17494.70084	27444.57043	5156.75791	1.11444	1.14938	1.70E-03	2.19E-03	1.75E-03	7.22E-03	1.56E-03	4.94E-04	5.11E-03	1.60E-03	1.16E-03	1.31E-02	1.35E-02	2.54E-03	5.22E-04	5.45E-04	5.3041E-02
551533.23	4172729.4	6727.83619	7711.55968	3845.59206	34133.98053	6995.48705	4098.53647	6668.17962	4426.77818	2095.51456	19424.81254	27352.66766	5398.02745	1.46132	1.50777	1.31E-03	2.41E-03	1.20E-03	9.33E-03	8.99E-04	5.27E-04	3.94E-03	1.71E-03	8.09E-04	1.46E-02	1.35E-02	2.66E-03	6.85E-04	7.15E-04	5.4217E-02
551555.4	4173142.73	7477.42967	16025.56292	1770.83644	11179.15557	1555.45174	26055.77835	7574.81662	9844.00125	1023.55573	11839.91592	4156.59752	30263.52164	2.442	2.50577	1.45E-03	5.01E-03	5.53E-04	3.05E-03	2.00E-04	3.35E-03	4.47E-03	3.80E-03	3.95E-04	8.88E-03	2.05E-03	1.49E-02	1.14E-03	1.19E-03	5.0442E-02
551465.5	4172949.97	6550.96124	15880.9465	2427.93407	28214.22717	2677.86702	8756.31926	6550.23245	8887.43755	1378.93911	23988.49012	11559.70106	11063.17175	1.69707	1.74603	1.27E-03	4.96E-03	7.58E-04	7.71E-03	3.44E-04	1.12E-03	3.87E-03	3.43E-03	5.32E-04	1.80E-02	5.69E-03	5.45E-03	7.95E-04	8.27E-04	5.4749E-02
551897.91	4172798.03	17964.88285	8286.56305	7792.82773	18623.38255	7590.41629	3802.66888	17488.4533	5017.43121	4302.49715	16488.28297	15324.156	5180.28366	0.4131	0.41161	3.49E-03	2.59E-03	2.43E-03	5.09E-03	9.75E-04	4.89E-04	1.03E-02	1.94E-03	1.66E-03	1.24E-02	7.55E-03	2.55E-03	1.94E-04	1.95E-04	5.1833E-02
551497.82	4173052.15	7004.2312	18874.48905	2043.2726	18387.11572	2065.14556	15751.80734	7059.47315	11554.03524	1165.01877	17895.14273	6587.15531	19377.48175	1.66839	1.7071	1.36E-03	5.90E-03	6.38E-04	5.02E-03	2.65E-04	2.02E-03	4.17E-03	4.46E-03	4.50E-04	1.34E-02	3.24E-03	9.55E-03	7.82E-04	8.09E-04	5.2080E-02
551462.12	4172851.33	5706.71623	10721.39054	2744.05678	35244.71264	3605.54972	5740.25935	5680.53262	5979.0141	1522.91347	22903.70101	20175.10378	7344.0995	2.06352	2.1756	1.11E-03	3.35E-03	8.57E-04	9.63E-03	4.63E-04	7.37E-04	3.35E-03	2.31E-03	5.88E-04	1.72E-02	9.94E-03	3.62E-03	9.67E-04	1.03E-03	5.5119E-02
551832.7	4172759.82	10290.6358	5168.78622	8265.43338	22421.94246	15431.75951	2298.28583	10073.97165	2937.19011	3936.90967	16459.24322	26860.33406	3111.93651	0.51122	0.51009	2.00E-03	1.61E-03	2.58E-03	6.13E-03	1.98E-03	2.95E-04	5.95E-03	1.13E-03	1.52E-03	1.23E-02	1.32E-02	1.53E-03	2.40E-04	2.42E-04	5.0783E-02
551812.51	4172749.53	10182.51194	4527.89582	6741.01526	22263.4848	17245.53918	2191.94765	10022.52659	2547.64151	3171.28973	15080.99288	29938.2473	2964.25383	0.57366	0.57195	1.98E-03	1.41E-03	2.11E-03	6.08E-03	2.22E-03	2.82E-04	5.92E-03	9.83E-04	1.22E-03	1.13E-02	1.47E-02	1.46E-03	2.69E-04	2.71E-04	5.0254E-02
551872.25	4172782.41	13676.1116	6922.14729	9184.14481	20899.81751	10039.68358	2870.38281	13246.38836	4102.23134	4779.74175	17607.99851	19323.076	3918.12872	0.44601	0.4447	2.65E-03	2.16E-03	2.87E-03	5.71E-03	1.29E-03	3.69E-04	7.82E-03	1.58E-03	1.85E-03	1.32E-02	9.52E-03	1.93E-03	2.09E-04	2.11E-04	5.1371E-02
551462.27	4172941.01	6414.3551	15061.26705	2449.56586	28607.69064	2717.02608	8286.15166	6409.64387	8413.92617	1389.65808	23864.8544	12048.99931	10478.43359	1.68501	1.73549	1.24E-03	4.70E-03	7.65E-04	7.82E-03	3.49E-04	1.06E-03	3.78E-03	3.25E-03	5.36E-04	1.79E-02	5.94E-03	5.16E-03	7.90E-04	8.22E-04	5.4113E-02
551546.17	4172723.81	7040.75549	7477.68989	4105.92368	31801.24978	7698.75751	4004.72409	6972.97935	4321.75355	2233.75895	18770.70026	26350.3886	5295.25539	1.29016	1.32704	1.37E-03	2.34E-03	1.28E-03	8.69E-03	9.89E-04	5.14E-04	4.12E-03	1.67E-03	8.62E-04	1.41E-02	1.30E-02	2.61E-03	6.05E-04	6.29E-04	5.2719E-02
551524.15	4172732.07	6422.72576	7688.66028	3589.20698	34027.33834	6365.36963	4090.19883	6369.61741	4397.69358	1957.60957	19160.26155	26590.95709	5373.21725	1.49901	1.54894	1.25E-03	2.40E-03	1.12E-03	9.30E-03	8.18E-04	5.25E-04	3.76E-03	1.70E-03	7.56E-04	1.44E-02	1.31E-02	2.65E-03	7.03E-04	7.34E-04	5.3170E-02
551486.25	4172773.19	5638.48355	8503.67304	2926.00186	36238.04402	4706.06795	4500.54105	5604.47416	4785.26945	1600.81631	20090.79186	25545.0848	5847.34423	2.03386	2.15107	1.09E-03	2.66E-03	9.14E-04	9.90E-03	6.05E-04	5.78E-04	3.31E-03	1.85E-03	6.18E-04	1.51E-02	1.26E-02	2.88E-03	9.53E-04	1.02E-03	5.4021E-02
551573.81	4173165.07	7591.69382	14386.96079	1653.50146	9642.3901	1419.51762	27737.34508	7699.57611	8779.80591	962.44222	10201.65629	3676.98863	32048.36778	2.9232	3.00972	1.47E-03	4.49E-03	5.16E-04	2.63E-03	1.82E-04	3.56E-03	4.55E-03	3.39E-03	3.72E-04	7.65E-03	1.81E-03	1.58E-02	1.37E-03	1.43E-03	4.9213E-02
551846.37	4172766.54	10761.17503	5640.50921	8836.26894	22100.38695	13561.38473	2404.26398	10484.05445	3241.25388	4316.7074	16967.2871	24097.51527	3262.84309	0.48547	0.4845	2.09E-03	1.76E-03	2.76E-03	6.04E-03	1.74E-03	3.09E-04	6.19E-03	1.25E-03	1.67E-03	1.27E-02	1.19E-02	1.61E-03	2.28E-04	2.30E-04	5.0462E-02
551576.1	4172714.44	8067.94768	7076.33159	4994.3991	27555.37751	10298.92326	3857.53701	7973.76972	4157.13938	2687.90668	17668.7533	26080.81547	5149.77757	1.10505	1.13658	1.57E-03	2.21E-03	1.56E-03	7.53E-03	1.32E-03	4.96E-04	4.71E-03	1.60E-03	1.04E-03	1.32E-02	1.28E-02	2.54E-03	5.18E-04	5.39E-04	5.1720E-02
551515.31	4173089.2	7003.80721	17863.8459	1918.93805	15164.20177	1850.70484	19095.359	7075.26159	10751.70029	1098.62542	15230.37965	5463.99636	22941.09779	1.74884	1.78653	1.36E-03	5.58E-03	5.99E-04	4.14E-03	2.38E-04	2.45E-03	4.18E-03	4.15E-03	4.24E-04	1.14E-02	2.69E-03	1.13E-02	8.20E-04	8.47E-04	5.0201E-02
551923.41	4172813.46	20408.85679	8828.12361	6455.11749	16577.14998	5841.8226	4448.75437	20019.52302	5301.98634	3640.05118	14962.26382	12153.5363	6160.67047	0.3796	0.37815	3.96E-03	2.76E-03	2.02E-03	4.53E-03	7.50E-04	5.72E-04	1.18E-02	2.05E-03	1.41E-03	1.12E-02	5.99E-03	3.03E-03	1.78E-04	1.79E-04	5.0451E-02
551590.64	4173180.04	7784.57775	13177.68603	1573.35247	8678.32435	1331.89181	28942.2665	7904.81196	7962.43386	918.75406	9135.29139	3376.48899	33526.78078	3.60714	3.72957	1.51E-03	4.12E-03	4.91E-04	2.37E-03	1.71E-04	3.72E-03	4.67E-03	3.07E-03	3.55E-04	6.85E-03	1.66E-03	1.65E-02	1.69E-03	1.77E-03	4.8959E-02
551555.88	4172718.22	7307.483	7270.14041	4341.08573	29938.4808	8392.77784	3920.81143	7232.13864	4225.02235	2354.10368	18200.61691	25746.98626	5200.54597	1.19076	1.22369	1.42E-03	2.27E-03	1.36E-03	8.18E-03	1.08E-03	5.04E-04	4.27E-03	1.63E-03	9.09E-04	1.36E-02	1.27E-02	2.56E-03	5.58E-04	5.80E-04	5.1644E-02
551459.04	4172932.04	6265.85705	14246.42731	2464.17443	28835.50564	2755.07237	7840.80059	6257.68374	7953.59569	1395.87403	23591.73287	12493.34108	9923.16459	1.66895	1.71979	1.22E-03	4.45E-03	7.70E-04	7.88E-03	3.54E-04	1.01E-03	3.69E-03	3.07E-03	5.39E-04	1.77E-02	6.15E-03	4.89E-03	7.82E-04	8.15E-04	5.3305E-02
551558.49	4173151.31	7360.61299	15122.04275	1710.1155	10541.51972	1495.19175	25441.76975	7457.80455	9284.13026	991.52924	11153.77962	3963.8482	29490.92355	2.45144	2.51496	1.43E-03	4.72E-03	5.34E-04	2.88E-03	1.92E-04	3.27E-03	4.40E-03	3.58E-03	3.83E-04	8.36E-03	1.95E-03	1.45E-02	1.15E-03	1.19E-03	4.8579E-02
551610.65	4173192.13	8101.93163	12047.30929	1508.72107	7886.01997	1260.88601	30416.24798	8240.24551	7242.34871	883.38987	8248.11804	3134.07496	34781.05268	5.11589	5.34833	1.57E-03	3.76E-03	4.71E-04	2.15E-03	1.62E-04	3.91E-03	4.86E-03	2.80E-03	3.41E-04	6.18E-03	1.54E-03	1.71E-02	2.40E-03	2.53E-03	4.9825E-02
551804.98	4173151.99	17154.63132	9269.36688	1231.33209	5221.2193	961.3863	26641.83023	18021.92012	5183.57646	732.72414	5426.18301	2264.76668	31615.23526	0.92159	0.90722	3.33E-03	2.90E-03	3.85E-04	1.43E-03	1.24E-04	3.42E-03	1.06E-02	2.00E-03	2.83E-04	4.07E-03	1.12E-03	1.56E-02	4.32E-04	4.30E-04	4.6123E-02
551692.16	4173195.55	11265.80913	10134.79255	1412.73226	6291.13015	1124.14856	30403.48855	11580.14281	5789.18646	835.95376	6476.48011	2656.80984	35376.12527	4.48839	4.27975	2.19E-03	3.17E-03	4.41E-04	1.72E-03	1.44E-04	3.91E-03	6.84E-03	2.23E-03	3.23E-04	4.86E-03	1.31E-03	1.74E-02	2.10E-03	2.03E-03	4.8678E-02
551792.56	4172739.25	10692.05224	4115.57908	5233.20266	21523.3204	17194.08349	2174.1166	10541.36634	2324.5916	2544.96929	13390.90001	30481.98146	2943.5386	0.64068	0.64034	2.07E-03	1.29E-03	1.63E-03	5.88E-03	2.21E-03	2.79E-04	6.22E-03	8.97E-04	9.82E-04	1.00E-02	1.50E-02	1.45E-03	3.00E-04	3.03E-04	4.8575E-02
551912.73	4172801.2	18416.94916	8358.50694	6876.18014	17240.20221	6599.40069	4054.06794	17997.1388	5027.52565	3821.47427	15289.9661	13489.29889	5614.96142	0.39026	0.3889	3.57E-03	2.61E-03	2.15E-03	4.71E-03	8.48E-04	5.21E-04	1.06E-02	1.94E-03	1.48E-03	1.15E-02	6.64E-03	2.77E-03	1.83E-04	1.84E-04	4.9693E-02
551565.07	4172715.1	7577.0052	7106.32863	4568.11145	28307.48644	9060.61716	3858.72072	7494.52678	4151.14483	2469.13078	17699.5161	25288.73419	5133.07067	1.1149	1.1451	1.47E-03	2.22E-03	1.43E-03	7.73E-03	1.16E-03	4.96E-04	4.42E-03	1.60E-03	9.53E-04	1.33E-02	1.25E-02	2.53E-03	5.23E-04	5.43E-04	5.0811E-02
551887.18	4172785.72	14712.95862	7300.23536	8298.60002	19223.94145	8540.38772	3197.9677	14272.98009	4441.74542	4444.81025	16702.29127	16922.48574	4373.30917	0.42399	0.42271	2.86E-03	2.28E-03	2.59E-03	5.25E-03	1.10E-03	4.11E-04	8.43E-03	1.71E-03	1.72E-03	1.25E-02	8.34E-03	2.15E-03	1.99E-04	2.00E-04	4.9755E-02
551485.26	4173033.92	6760.17257	17998.35767	2039.29815	19359.23131	2115.90902	13389.84248	6803.43161	10925.91722	1161.16768	18421.97201	7081.1605	16318.95181	1.55682	1.59386	1.31E-03	5.62E-03	6.37E-04	5.29E-03	2.72E-04	1.72E-03	4.02E-03	4.22E-03	4.48E-04	1.38E-02	3.49E-03	8.04E-03	7.30E-04	7.55E-04	5.0357E-02
551499.06	4173063.6	6818.07819	17676.71924	1958.83017	16943.30744	1969.03536	15960.35852	6876.48219	10827.34676	1117.60092	16528.54942	6159.54375	19515.01131	1.60184	1.63761	1.32E-03	5.52E-03	6.12E-04	4.63E-03	2.53E-04	2.05E-03	4.06E-03	4.18E-03	4.31E-04	1.24E-02	3.03E-03	9.61E-03	7.51E-04	7.76E-04	4.9625E-02
551631.72	4173199.8	8544.39581	11139.69863	1456.30164	7276.55502	1207.33516	30636.45534	8707.82939	6616.42749	853.96731	7532.47388	2952.44351	35249.72819	9.32537	10.01996	1.66E-03	3.48E-03	4.55E-04	1.99E-03	1.55E-04	3.94E-03	5.14E-03	2.55E-03	3.30E-04	5.65E-03	1.45E-03	1.74E-02	4.37E-03	4.75E-03	5.3281E-02
551482.04	4173024.97	6726.10832	17921.20746	2064.89498	20057.22608	2169.17954	12477.46815	6764.76713	10668.32939	1175.39336	18988.76592	7429.62538	15523.88312	1.54564	1.58254	1.31E-03	5.60E-03	6.45E-04	5.48E-03	2.79E-04	1.60E-03	3.99E-03	4.12E-03	4.54E-04	1.42E-02	3.66E-03	7.65E-03	7.24E-04	7.50E-04	5.0493E-02
551478.81	4173016.01	6690.78845	17774.24414	2072.89323	20803.59856	2219.72098	11833.38932	6724.61084	10512.48887	1178.15767	19175.60155	7782.32674	14764.6959	1.53512	1.57188	1.30E-03	5.55E-03	6.47E-04	5.68E-03	2.85E-04	1.52E-03	3.97E-03	4.06E-03	4.55E-04	1.44E-02	3.83E-03	7.27E-03	7.19E-04	7.45E-04	5.0417E-02
551475.59	4173007.06	6648.10144	17534.11892	2096.45755	21565.06057	2267.17695	11222.17824	6677.00887	10287.09972	1191.51836	19671.93177	8142.72801	14036.10653	1.52674	1.56452	1.29E-03	5.48E-03	6.55E-04	5.89E-03	2.91E-04	1.44E-03	3.94E-03	3.97E-03	4.60E-04	1.47E-02	4.01E-03	6.91E-03	7.16E-04	7.41E-04	5.0550E-02
551455.82	4172923.08	6093.70602	13405.60052	2462.34904	28752.30494	2785.06218	7399.73046	6082.75535	7486.98267	1392.36394	23075.46981	12760.63585	9371.57539	1.64338	1.69319	1.18E-03	4.19E-03	7.69E-04	7.86E-03	3.58E-04	9.51E-04	3.59E-03	2.89E-03	5.37E-04	1.73E-02	6.29E-03	4.62E-03	7.70E-04	8.02E-04	5.2097E-02
551861.46	4172770.03	11312.95407	6010.00684	8695.09598	21039.02248	11494.78198	2516.68857	10984.53584	3498.99926	4373.99513	16756.88867	20848.09825	3424.02987	0.45611	0.45504	2.20E-03	1.88E-03	2.72E-03	5.75E-03	1.48E-03	3.23E-04	6.48E-03	1.35E-03	1.69E-03	1.26E-02	1.03E-02	1.69E-03	2.14E-04	2.16E-04	4.8809E-02
551475.99	4172783.17	5434.21197	8526.21373	2769.12784	34493.58686	4336.96338	4548.53929	5403.46986	4787.74961	1517.84776	19608.32812	23580.4653	5890.88842	1.96946	2.08587	1.05E-03	2.66E-03	8.65E-04	9.42E-03	5.57E-04	5.84E-04	3.19E-03	1.85E-03	5.86E-04	1.47E-02	1.16E-02	2.90E-03	9.23E-04	9.89E-04	5.1903E-02
551472.36	4172998.11	6589.84033	17172.3598	2118.50349	22300.91343	2303.03653	10629.69175	6613.82071	9987.07788	1204.20647	20097.98082	8515.1982	13322.93322	1.52074	1.55854	1.28E-03	5.36E-03	6.62E-04	6.09E-03	2.96E-04	1.37E-03	3.90E-03	3.86E-03	4.65E-04	1.51E-02	4.19E-03	6.56E-03	7.13E-04	7.39E-04	5.0560E-02
551513.61	4172735.63	6056.94349	7590.18787	3287.31892	33021.30692	5661.30864	4054.48302	6011.1917	4326.26057	1794.56536	18552.37476	25036.04848	5311.6238	1.50035	1.5534	1.18E-03	2.37E-03	1.03E-03	9.02E-03	7.27E-04	5.21E-04	3.55E-03	1.67E-03	6.93E-04	1.39E-02	1.23E-02	2.62E-03	7.03E-04	7.36E-04	5.1053E-02
551469.14	4172989.16	6526.92193	16741.49945	2144.10352	23049.37749	2340.75309	10080.92878	6545.91839	9649.43856	1218.87834	20501.46432	8890.24763	12657.7726	1.51611	1.55459	1.27E-03	5.23E-03	6.70E-04	6.30E-03	3.01E-04	1.30E-03	3.86E-03	3.72E-03	4.71E-04	1.54E-02	4.38E-03	6.24E-03	7.11E-04	7.37E-04	5.0551E-02
551521.23	4173105.94	6857.93819	16507.76315	1829.78911	13672.00347	1738.10867	19593.9957	6932.59878	9957.4338	1049.56697	13824.02416	5002.70957	23317.04283	1.74302	1.77957	1.33E-03	5.16E-03	5.72E-04	3.74E-03	2.23E-04	2.52E-03	4.09E-03	3.84E-03	4.05E-04	1.04E-02	2.46E-03	1.15E-02	8.17E-04	8.43E-04	4.7851E-02
551459.2	4172828.05	5403.60327	9545.09021	2643.12431	33645.01127	3723.59083	5156.36013	5377.082	5335.03786	1460.25322	20659.70764	20691.79225	6616.26021	1.96583	2.07126	1.05E-03	2.98E-03	8.26E-04	9.19E-03	4.78E-04	6.62E-04	3.17E-03	2.06E-03	5.64E-04	1.55E-02	1.02E-02	3.26E-03	9.21E-04	9.82E-04	5.1830E-02
551471.04	4172791.83	5386.18704	8685.34978	2722.19744	34215.99754	4186.42088	4645.74309	5356.62403	4869.7331	1494.31373	19707.7022	22957.31266	6004.60714	1.97851	2.09639	1.05E-03	2.71E-03	8.50E-04	9.35E-03	5.38E-04	5.97E-04	3.16E-03	1.88E-03	5.77E-04	1.48E-02	1.13E-02	2.96E-03	9.27E-04	9.94E-04	5.1673E-02
551781.43	4172734.69	11079.47243	3975.12299	4656.69453	20983.01557	16361.1833	2189.86595	10922.03821	2260.92803	2327.48406	12467.92325	29811.7529	2968.4649	0.68643	0.68746	2.15E-03	1.24E-03	1.45E-03	5.73E-03	2.10E-03	2.81E-04	6.45E-03	8.73E-04	8.98E-04	9.35E-03	1.47E-02	1.46E-03	3.22E-04	3.26E-04	4.7324E-02
551465.92	4172980.21	6452.24981	16226.32632	2170.22883	23767.09538	2377.70563	9561.4819	6466.44081	9276.19736	1233.83645	20829.81724	9271.50715	12024.42221	1.51079	1.5503	1.25E-03	5.07E-03	6.78E-04	6.49E-03	3.05E-04	1.23E-03	3.82E-03	3.58E-03	4.76E-04	1.56E-02	4.57E-03	5.92E-03	7.08E-04	7.35E-04	5.0450E-02
551494.19	4173059.01	6693.95562	17237.72754	1940.82133	17027.84381	1970.0111	15048.73174	6748.69299	10543.37953	1106.56577	16473.49997	6246.01185	18457.50757	1.54241	1.57639	1.30E-03	5.38E-03	6.06E-04	4.65E-03	2.53E-04	1.93E-03	3.98E-03	4.07E-03	4.27E-04	1.24E-02	3.08E-03	9.09E-03	7.23E-04	7.47E-04	4.8599E-02
551828.89	4172750.5	9403.39603	4658.49007	7068.76734	21224.88395	15038.31591	2154.99968	9231.64131	2636.18644	3355.35118	15034.43795	26366.0574	2911.43564	0.51615	0.51475	1.82E-03	1.46E-03	2.21E-03	5.80E-03	1.93E-03	2.77E-04	5.45E-03	1.02E-03	1.30E-03	1.13E-02	1.30E-02	1.43E-03	2.42E-04	2.44E-04	4.7438E-02
551466.83	4172800.01	5342.64757	8811.78205	2676.72588	33723.1006	4038.65077	4730.83312	5314.15862	4935.82724	1471.57409	19713.13478	22200.29035	6102.99779	1.95425	2.06815	1.04E-03	2.75E-03	8.36E-04	9.21E-03	5.19E-04	6.08E-04	3.14E-03	1.91E-03	5.68E-04	1.48E-02	1.09E-02	3.01E-03	9.16E-04	9.80E-04	5.1194E-02
551902.04	4172788.94	15969.23785	7669.65386	7290.22821	17764.24662	7408.48419	3530.98977	15548.57479	4635.06681	3994.24373	15566.8263	14875.09268	4800.25427	0.40111	0.39987	3.10E-03	2.40E-03	2.28E-03	4.85E-03	9.52E-04	4.54E-04	9.18E-03	1.79E-03	1.54E-03	1.17E-02	7.33E-03	2.36E-03	1.88E-04	1.90E-04	4.8281E-02
551561.58	4173159.9	7231.11791	14216.67783	1648.93702	9955.82028	1438.51351	24587.71696	7327.75378	8714.74111	956.87622	10491.65393	3786.94151	28470.1412	2.44724	2.51157	1.40E-03	4.44E-03	5.15E-04	2.72E-03	1.85E-04	3.16E-03	4.33E-03	3.36E-03	3.69E-04	7.87E-03	1.87E-03	1.40E-02	1.15E-03	1.19E-03	4.6575E-02
551462.69	4172971.25	6364.23703	15636.53495	2195.80432	24425.78291	2413.40167	9067.34984	6373.76421	8878.48546	1248.24758	21060.35218	9658.87331	11418.94259	1.50443	1.54384	1.24E-03	4.88E-03	6.86E-04	6.67E-03	3.10E-04	1.16E-03	3.76E-03	3.43E-03	4.82E-04	1.58E-02	4.76E-03	5.62E-03	7.05E-04	7.32E-04	5.0234E-02
551503.82	4173080.79	6698.5677	16904.41032	1875.7888	15366.40972	1848.52237	16717.16561	6761.90214	10134.97452	1071.76244	15117.56836	5600.02378	20240.56593	1.58119	1.61387	1.30E-03	5.28E-03	5.86E-04	4.20E-03	2.37E-04	2.15E-03	3.99E-03	3.91E-03	4.14E-04	1.13E-02	2.76E-03	9.97E-03	7.41E-04	7.65E-04	4.7636E-02
551713.92	4173192.61	12249.89884	9505.0987	1366.54315	5910.51968	1081.45472	28071.46691	12640.51226	5370.42431	810.15692	6052.57057	2540.97676	32691.62403	2.71773	2.62719	2.38E-03	2.97E-03	4.27E-04	1.61E-03	1.39E-04	3.61E-03	7.46E-03	2.07E-03	3.13E-04	4.54E-03	1.25E-03	1.61E-02	1.27E-03	1.25E-03	4.5393E-02
551488.95	4172759.84	5533.93124	7950.21809	2864.28748	33409.34871	4664.79854	4248.51557	5499.91159	4490.74737	1565.99224	18716.91837	23758.02612	5528.53593	1.74548	1.83196	1.07E-03	2.48E-03	8.95E-04	9.13E-03	5.99E-04	5.46E-04	3.25E-03	1.73E-03	6.05E-04	1.40E-02	1.17E-02	2.72E-03	8.18E-04	8.68E-04	5.0455E-02
551460.21	4172817.67	5321.91494	9161.33013	2619.86198	33082.15739	3786.76279	4952.76207	5295.12618	5124.88491	1445.00686	19966.90817	20875.2403	6365.66584	1.90348	2.02578	1.03E-03	2.86E-03	8.18E-04	9.04E-03	4.86E-04	6.36E-04	3.13E-03	1.98E-03	5.58E-04	1.50E-02	1.03E-02	3.14E-03	8.92E-04	9.60E-04	5.0777E-02
551452.59	4172914.11	5917.05605	12602.27809	2451.5091	28523.8924	2772.93532	6986.56694	5903.87443	7044.26469	1383.26655	22437.87404	13033.51551	8854.20168	1.61149	1.66319	1.15E-03	3.94E-03	7.66E-04	7.79E-03	3.56E-04	8.98E-04	3.49E-03	2.72E-03	5.34E-04	1.68E-02	6.42E-03	4.36E-03	7.55E-04	7.88E-04	5.0783E-02
551462.63	4172808.18	5303.99703	8928.44074	2632.57998	33153.07047	3893.97305	4815.94201	5276.54768	4998.13029	1449.56161	19685.86853	21386.92287	6200.77002	1.91214	2.0192	1.03E-03	2.79E-03	8.22E-04	9.06E-03	5.00E-04	6.19E-04	3.11E-03	1.93E-03	5.60E-04	1.48E-02	1.05E-02	3.05E-03	8.96E-04	9.57E-04	5.0623E-02
551459.46	4172962.27	6261.75253	14988.05889	2219.31148	24999.35312	2447.32554	8595.88151	6266.85072	8466.9078	1261.24352	21175.21908	10053.78705	10837.82209	1.49506	1.53577	1.22E-03	4.68E-03	6.93E-04	6.83E-03	3.14E-04	1.10E-03	3.70E-03	3.27E-03	4.87E-04	1.59E-02	4.95E-03	5.34E-03	7.01E-04	7.28E-04	4.9889E-02
551524.5	4173115.06	6790.10772	15822.33511	1783.47716	12910.41554	1676.67979	19724.4036	6865.92077	9567.03287	1023.98904	13131.87521	4763.08275	23377.70297	1.7506	1.787	1.32E-03	4.94E-03	5.57E-04	3.53E-03	2.15E-04	2.53E-03	4.05E-03	3.69E-03	3.95E-04	9.84E-03	2.35E-03	1.15E-02	8.20E-04	8.47E-04	4.6610E-02
551500.11	4173075.75	6645.10467	16847.92069	1877.74932	15665.00117	1865.96793	16067.03669	6705.72964	10093.2025	1072.10287	15294.83887	5718.87053	19520.33492	1.547	1.57905	1.29E-03	5.26E-03	5.87E-04	4.28E-03	2.40E-04	2.06E-03	3.96E-03	3.90E-03	4.14E-04	1.15E-02	2.82E-03	9.62E-03	7.25E-04	7.48E-04	4.7364E-02
551927.48	4172804.31	18365.67199	8247.97269	6156.67535	15975.92656	5796.86771	4149.05832	18003.87561	4944.77684	3448.59832	14276.35716	11988.14881	5734.38852	0.37001	0.36874	3.56E-03	2.58E-03	1.92E-03	4.37E-03	7.45E-04	5.33E-04	1.06E-02	1.91E-03	1.33E-03	1.07E-02	5.91E-03	2.82E-03	1.73E-04	1.75E-04	4.7356E-02
551578.62	4173177.16	7388.60465	13064.97425	1564.8227	8891.39764	1342.66202	25735.87603	7495.50847	7933.70758	911.62112	9340.59409	3449.45191	29829.11664	2.93531	3.02322	1.43E-03	4.08E-03	4.89E-04	2.43E-03	1.72E-04	3.31E-03	4.42E-03	3.06E-03	3.52E-04	7.00E-03	1.70E-03	1.47E-02	1.38E-03	1.43E-03	4.5955E-02
551598.32	4172703.94	8618.81065	6355.37216	5382.83242	22111.21491	11561.3289	3569.96096	8507.06212	3780.2601	2870.5301	15248.27045	24039.7029	4795.70234	0.91167	0.93703	1.67E-03	1.99E-03	1.68E-03	6.04E-03	1.49E-03	4.59E-04	5.02E-03	1.46E-03	1.11E-03	1.14E-02	1.18E-02	2.36E-03	4.27E-04	4.44E-04	4.7421E-02
551876.45	4172773.41	11921.2741	6305.13427	8275.44866	19748.63928	9801.44826	2636.77241	11560.9277	3712.28941	4271.50966	16299.24086	18414.33474	3595.79795	0.43011	0.42913	2.31E-03	1.97E-03	2.58E-03	5.40E-03	1.26E-03	3.39E-04	6.82E-03	1.43E-03	1.65E-03	1.22E-02	9.07E-03	1.77E-03	2.02E-04	2.03E-04	4.7235E-02
551608.3	4172701.76	8997.75633	6148.48902	5648.43699	20674.10707	12345.00655	3490.99158	8875.27488	3674.91543	2997.15322	14556.17533	24178.20624	4701.4649	0.88251	0.90811	1.75E-03	1.92E-03	1.76E-03	5.65E-03	1.59E-03	4.48E-04	5.24E-03	1.42E-03	1.16E-03	1.09E-02	1.19E-02	2.32E-03	4.14E-04	4.30E-04	4.6912E-02
551808.86	4172740.22	9467.32044	4111.0358	5550.62148	20674.14223	15741.1979	2075.1207	9332.39106	2312.94172	2649.97427	13479.2799	27933.00885	2802.53059	0.58127	0.58063	1.84E-03	1.28E-03	1.73E-03	5.65E-03	2.02E-03	2.67E-04	5.51E-03	8.93E-04	1.02E-03	1.01E-02	1.38E-02	1.38E-03	2.72E-04	2.75E-04	4.6011E-02
551839.82	4172752.89	9181.91784	4813.61354	7294.9998	20709.89553	13795.59798	2159.77763	8990.72833	2738.10142	3504.3846	15100.21587	24441.35394	2918.95734	0.48951	0.48811	1.78E-03	1.50E-03	2.28E-03	5.66E-03	1.77E-03	2.77E-04	5.31E-03	1.06E-03	1.35E-03	1.13E-02	1.20E-02	1.44E-03	2.29E-04	2.31E-04	4.6249E-02
551542.2	4172716.64	6661.68092	7037.8873	3792.95004	28772.82559	6972.94567	3815.97675	6599.55765	4068.62917	2065.09624	17253.60204	23489.17757	5039.72039	1.1424	1.17207	1.29E-03	2.20E-03	1.18E-03	7.86E-03	8.96E-04	4.90E-04	3.90E-03	1.57E-03	7.97E-04	1.29E-02	1.16E-02	2.48E-03	5.35E-04	5.55E-04	4.8267E-02
551530.53	4172719.95	6358.83376	7131.10748	3549.03748	29827.14654	6355.44008	3851.90462	6303.73457	4100.25507	1935.77128	17449.48147	23603.43379	5070.47659	1.23088	1.26566	1.23E-03	2.23E-03	1.11E-03	8.15E-03	8.16E-04	4.95E-04	3.72E-03	1.58E-03	7.47E-04	1.31E-02	1.16E-02	2.50E-03	5.77E-04	6.00E-04	4.8466E-02
551456.23	4172953.31	6140.31517	14286.06404	2236.8677	24885.84821	2477.22386	8139.3843	6141.43504	8043.52716	1270.46635	21136.82991	10455.09369	10272.22652	1.48255	1.52264	1.19E-03	4.46E-03	6.99E-04	6.80E-03	3.18E-04	1.05E-03	3.63E-03	3.11E-03	4.90E-04	1.58E-02	5.15E-03	5.06E-03	6.95E-04	7.22E-04	4.9210E-02
551619.55	4173200.53	8018.79132	11060.333	1441.6903	7416.34319	1213.78473	27716.88012	8161.36254	6608.34254	843.43928	7647.30003	2999.0757	31890.78505	5.93372	6.24099	1.56E-03	3.45E-03	4.50E-04	2.03E-03	1.56E-04	3.56E-03	4.82E-03	2.55E-03	3.26E-04	5.73E-03	1.48E-03	1.57E-02	2.78E-03	2.96E-03	4.7557E-02
551586.71	4172703.96	8097.20161	6463.1462	4970.38915	23215.34918	10358.06549	3601.12334	7998.51914	3822.11837	2662.78823	15613.57051	23341.94413	4821.32371	0.9205	0.94434	1.57E-03	2.02E-03	1.55E-03	6.34E-03	1.33E-03	4.63E-04	4.72E-03	1.48E-03	1.03E-03	1.17E-02	1.15E-02	2.37E-03	4.31E-04	4.48E-04	4.6962E-02
551850.67	4172757.66	9505.77994	5148.68385	7703.33768	20510.97253	12706.41027	2237.21763	9275.19707	2953.34187	3765.43962	15479.85525	22636.21787	3028.90133	0.4652	0.46445	1.84E-03	1.61E-03	2.41E-03	5.60E-03	1.63E-03	2.87E-04	5.48E-03	1.14E-03	1.45E-03	1.16E-02	1.12E-02	1.49E-03	2.18E-04	2.20E-04	4.6138E-02
551527.59	4173123.64	6731.63667	15208.89401	1741.27205	12227.47296	1619.11231	19754.09953	6808.25387	9221.35737	1000.60305	12520.78741	4545.77482	23342.523	1.76458	1.80159	1.31E-03	4.75E-03	5.44E-04	3.34E-03	2.08E-04	2.54E-03	4.02E-03	3.56E-03	3.86E-04	9.39E-03	2.24E-03	1.15E-02	8.27E-04	8.54E-04	4.5458E-02
551916.84	4172792.1	16391.42887	7751.28749	6485.1355	16527.91099	6486.28482	3782.94046	16009.94033	4675.05734	3580.93414	14505.76215	13193.42039	5141.99739	0.37972	0.37856	3.18E-03	2.42E-03	2.03E-03	4.52E-03	8.33E-04	4.86E-04	9.45E-03	1.80E-03	1.38E-03	1.09E-02	6.50E-03	2.53E-03	1.78E-04	1.79E-04	4.6365E-02
551449.37	4172905.15	5732.97486	11826.37466	2427.25337	28104.86566	2784.32738	6592.90192	5718.12255	6618.06069	1366.36754	21651.0807	13278.60897	8360.85859	1.57306	1.6245	1.11E-03	3.69E-03	7.58E-04	7.68E-03	3.58E-04	8.47E-04	3.38E-03	2.55E-03	5.27E-04	1.62E-02	6.54E-03	4.12E-03	7.37E-04	7.70E-04	4.9305E-02
551597.22	4173191.67	7579.53861	11878.87731	1491.68228	8035.71879	1265.08353	26472.03817	7699.41578	7180.4332	871.23143	8383.77173	3184.98154	30386.66647	3.75766	3.89179	1.47E-03	3.71E-03	4.66E-04	2.20E-03	1.63E-04	3.40E-03	4.55E-03	2.77E-03	3.36E-04	6.29E-03	1.57E-03	1.50E-02	1.76E-03	1.84E-03	4.5488E-02
551453	4172944.34	6018.17457	13604.39509	2255.82578	25201.96453	2510.70421	7722.75999	6015.61147	7643.35115	1279.93958	21050.85993	10839.70397	9754.81219	1.47051	1.51071	1.17E-03	4.25E-03	7.05E-04	6.89E-03	3.23E-04	9.92E-04	3.55E-03	2.95E-03	4.94E-04	1.58E-02	5.34E-03	4.81E-03	6.89E-04	7.16E-04	4.8650E-02
551575.53	4172704.61	7647.46648	6559.81476	4608.22859	24308.48756	9310.44965	3629.84272	7559.80337	3857.59192	2478.6551	15921.85313	22901.31615	4843.56123	0.94192	0.96522	1.48E-03	2.05E-03	1.44E-03	6.64E-03	1.20E-03	4.66E-04	4.46E-03	1.49E-03	9.57E-04	1.19E-02	1.13E-02	2.39E-03	4.41E-04	4.57E-04	4.6688E-02
551891.36	4172776.69	13065.68828	6736.8733	7620.35292	18246.53143	8227.18157	2983.50784	12685.58633	4092.93506	4054.72872	15627.06299	16236.76087	3974.69925	0.41038	0.40947	2.54E-03	2.10E-03	2.38E-03	4.99E-03	1.06E-03	3.83E-04	7.49E-03	1.58E-03	1.57E-03	1.17E-02	8.00E-03	1.96E-03	1.92E-04	1.94E-04	4.6138E-02
551506.02	4173092.49	6532.25351	15819.54962	1803.38563	14250.15895	1764.78967	16752.98183	6597.1199	9480.75402	1031.39543	14053.95607	5257.78067	20158.62699	1.53826	1.56874	1.27E-03	4.94E-03	5.63E-04	3.89E-03	2.27E-04	2.15E-03	3.89E-03	3.66E-03	3.98E-04	1.05E-02	2.59E-03	9.93E-03	7.21E-04	7.43E-04	4.5518E-02
551564.69	4173168.79	7094.96466	13333.97221	1586.40004	9387.73259	1381.62726	23536.42569	7190.93634	8142.81103	921.37507	9854.4232	3612.86027	27292.60258	2.4395	2.50411	1.38E-03	4.16E-03	4.96E-04	2.57E-03	1.77E-04	3.02E-03	4.24E-03	3.14E-03	3.56E-04	7.39E-03	1.78E-03	1.34E-02	1.14E-03	1.19E-03	4.4490E-02
551520.93	4172722.76	6076.17887	7121.70268	3320.31732	29839.36276	5805.08812	3848.98587	6027.15102	4080.01327	1812.95269	17265.9327	23018.32738	5053.45403	1.26852	1.30674	1.18E-03	2.22E-03	1.04E-03	8.15E-03	7.46E-04	4.94E-04	3.56E-03	1.57E-03	7.00E-04	1.29E-02	1.13E-02	2.49E-03	5.95E-04	6.19E-04	4.7653E-02
551705.82	4173198.14	11462.79386	9355.05562	1350.81287	5901.13395	1075.93164	26479.82306	11805.67915	5310.278	799.8016	6038.1506	2533.93784	30928.85805	3.28918	3.16416	2.22E-03	2.92E-03	4.22E-04	1.61E-03	1.38E-04	3.40E-03	6.97E-03	2.05E-03	3.09E-04	4.53E-03	1.25E-03	1.52E-02	1.54E-03	1.50E-03	4.4100E-02
551479.37	4172766.17	5295.66019	7849.39243	2690.17208	31538.27857	4292.04152	4229.53024	5265.21963	4427.06984	1472.51197	18024.99705	21859.95211	5490.20676	1.67446	1.7605	1.03E-03	2.45E-03	8.40E-04	8.62E-03	5.51E-04	5.43E-04	3.11E-03	1.71E-03	5.68E-04	1.35E-02	1.08E-02	2.70E-03	7.85E-04	8.34E-04	4.8023E-02
551449.78	4172935.38	5894.127	12948.41641	2273.39136	25459.96972	2546.88964	7340.3775	5888.24928	7266.07054	1288.10279	20898.57531	11182.84408	9279.01701	1.45823	1.49959	1.14E-03	4.04E-03	7.10E-04	6.96E-03	3.27E-04	9.43E-04	3.48E-03	2.80E-03	4.97E-04	1.57E-02	5.51E-03	4.57E-03	6.83E-04	7.11E-04	4.8045E-02
551584.14	4173185.33	7309.55351	12258.81387	1514.0967	8434.77844	1297.61253	24897.46449	7417.88548	7449.61346	882.35933	8814.62867	3311.52532	28656.51288	3.05742	3.15346	1.42E-03	3.83E-03	4.73E-04	2.30E-03	1.67E-04	3.20E-03	4.38E-03	2.88E-03	3.41E-04	6.61E-03	1.63E-03	1.41E-02	1.43E-03	1.49E-03	4.4269E-02
551530.68	4173132.23	6708.01857	14581.66885	1697.08806	11585.31993	1563.40103	19645.79779	6785.81177	8860.82756	976.06501	11915.61891	4342.82355	23158.04929	1.77558	1.8129	1.30E-03	4.55E-03	5.30E-04	3.17E-03	2.01E-04	2.52E-03	4.01E-03	3.42E-03	3.77E-04	8.93E-03	2.14E-03	1.14E-02	8.32E-04	8.59E-04	4.4251E-02
551564.48	4172705.27	7219.1494	6609.72871	4257.30914	25118.98067	8321.98321	3640.8632	7141.52303	3866.301	2298.9203	16049.12259	22398.39169	4841.83324	0.9627	0.98575	1.40E-03	2.06E-03	1.33E-03	6.86E-03	1.07E-03	4.68E-04	4.22E-03	1.49E-03	8.87E-04	1.20E-02	1.10E-02	2.39E-03	4.51E-04	4.67E-04	4.6160E-02
551554.81	4172708.45	6905.87167	6708.28483	3996.61682	26096.28167	7580.11957	3678.71765	6836.12366	3905.6666	2166.65661	16291.70494	22278.41592	4877.26411	1.00162	1.02552	1.34E-03	2.10E-03	1.25E-03	7.13E-03	9.74E-04	4.73E-04	4.04E-03	1.51E-03	8.36E-04	1.22E-02	1.10E-02	2.40E-03	4.69E-04	4.86E-04	4.6187E-02
551942.19	4172807.36	18015.23634	8062.87239	5525.84549	14812.80942	5130.69542	4224.02587	17709.48499	4832.48879	3114.33138	13319.45425	10722.33163	5821.4132	0.35169	0.35051	3.50E-03	2.52E-03	1.73E-03	4.05E-03	6.59E-04	5.43E-04	1.05E-02	1.87E-03	1.20E-03	9.99E-03	5.28E-03	2.87E-03	1.65E-04	1.66E-04	4.4978E-02
551865.72	4172761.1	9931.60823	5476.21551	7688.05404	19673.12772	10902.0235	2330.04472	9658.38109	3178.38624	3855.27776	15382.78947	19739.08273	3162.13816	0.43889	0.43808	1.93E-03	1.71E-03	2.40E-03	5.38E-03	1.40E-03	2.99E-04	5.70E-03	1.23E-03	1.49E-03	1.15E-02	9.72E-03	1.56E-03	2.06E-04	2.08E-04	4.4758E-02
551906.2	4172779.89	14203.85124	7092.36731	6826.92602	16932.1035	7193.87368	3263.54989	13832.10855	4275.62118	3712.25066	14712.56693	14388.99096	4431.95753	0.38921	0.3882	2.76E-03	2.22E-03	2.13E-03	4.63E-03	9.24E-04	4.19E-04	8.17E-03	1.65E-03	1.43E-03	1.10E-02	7.09E-03	2.18E-03	1.82E-04	1.84E-04	4.4991E-02
551446.14	4172896.18	5545.55049	11094.4449	2391.13578	27523.45113	2791.15208	6222.30967	5529.51653	6214.22182	1342.70458	20755.17623	13499.40986	7897.18507	1.52764	1.57845	1.08E-03	3.47E-03	7.47E-04	7.52E-03	3.59E-04	7.99E-04	3.26E-03	2.40E-03	5.18E-04	1.56E-02	6.65E-03	3.89E-03	7.16E-04	7.48E-04	4.7712E-02
551789.04	4172729.94	9998.78237	3785.81455	4366.88043	19645.35298	14675.11617	2074.15554	9864.26104	2149.78725	2173.08987	11817.60038	26952.37221	2804.73947	0.63823	0.63945	1.94E-03	1.18E-03	1.36E-03	5.37E-03	1.89E-03	2.66E-04	5.82E-03	8.30E-04	8.39E-04	8.86E-03	1.33E-02	1.38E-03	2.99E-04	3.03E-04	4.3618E-02
551476	4173037.26	6290.69977	15784.96449	1894.92147	17570.94366	1993.79769	11853.70974	6331.19835	9585.87258	1078.27489	16503.09804	6692.89516	14689.86809	1.37193	1.40208	1.22E-03	4.93E-03	5.92E-04	4.80E-03	2.56E-04	1.52E-03	3.74E-03	3.70E-03	4.16E-04	1.24E-02	3.30E-03	7.24E-03	6.43E-04	6.64E-04	4.5390E-02
551825.17	4172741.18	8612.60302	4189.42896	5905.8853	19862.12291	14166.21579	2018.80397	8475.43343	2360.10526	2812.00875	13547.2721	25332.67873	2723.33855	0.52637	0.52554	1.67E-03	1.31E-03	1.84E-03	5.43E-03	1.82E-03	2.59E-04	5.00E-03	9.11E-04	1.09E-03	1.02E-02	1.25E-02	1.34E-03	2.47E-04	2.49E-04	4.3803E-02
551931.58	4172795.19	16545.4777	7711.64915	5851.53961	15373.52973	5720.21521	3876.00541	16211.21989	4615.59927	3257.89759	13605.54916	11771.32332	5346.82061	0.36041	0.35932	3.21E-03	2.41E-03	1.83E-03	4.20E-03	7.35E-04	4.98E-04	9.57E-03	1.78E-03	1.26E-03	1.02E-02	5.80E-03	2.63E-03	1.69E-04	1.70E-04	4.4462E-02
551472.77	4173028.3	6260.41537	15730.66516	1899.27818	18144.80618	2038.77874	11277.82741	6296.88748	9369.18953	1079.03695	16630.31607	6994.98073	14022.75577	1.35489	1.3848	1.21E-03	4.91E-03	5.93E-04	4.96E-03	2.62E-04	1.45E-03	3.72E-03	3.62E-03	4.17E-04	1.25E-02	3.45E-03	6.91E-03	6.35E-04	6.56E-04	4.5253E-02
551469.55	4173019.35	6232.26241	15634.86996	1918.29207	18762.24152	2077.82561	10738.49877	6264.47467	9262.11669	1089.76063	17043.13763	7296.02109	13390.26236	1.35004	1.38029	1.21E-03	4.88E-03	5.99E-04	5.13E-03	2.67E-04	1.38E-03	3.70E-03	3.58E-03	4.21E-04	1.28E-02	3.59E-03	6.60E-03	6.33E-04	6.54E-04	4.5414E-02
551446.55	4172926.41	5735.82913	12223.75561	2270.58405	25368.60118	2543.43058	6940.70995	5727.35703	6859.26383	1284.40936	20469.46586	11380.33229	8779.86234	1.43366	1.47437	1.11E-03	3.82E-03	7.09E-04	6.93E-03	3.27E-04	8.92E-04	3.38E-03	2.65E-03	4.96E-04	1.53E-02	5.61E-03	4.32E-03	6.72E-04	6.99E-04	4.6963E-02
551466.32	4173010.4	6196.95977	15461.72395	1938.42712	19388.22243	2111.52477	10220.81511	6224.78584	9096.11215	1101.29424	17445.64295	7600.50252	12775.85222	1.34598	1.37651	1.20E-03	4.83E-03	6.05E-04	5.30E-03	2.71E-04	1.31E-03	3.67E-03	3.51E-03	4.25E-04	1.31E-02	3.74E-03	6.29E-03	6.31E-04	6.52E-04	4.5530E-02
551463.1	4173001.45	6153.31282	15209.50894	1959.8453	20014.17516	2145.02622	9726.80387	6176.63519	8877.29737	1113.68548	17823.50802	7909.18364	12183.70591	1.34196	1.37297	1.19E-03	4.75E-03	6.12E-04	5.47E-03	2.76E-04	1.25E-03	3.65E-03	3.43E-03	4.30E-04	1.34E-02	3.90E-03	6.00E-03	6.29E-04	6.51E-04	4.5593E-02
551606.57	4173200.48	7569.15441	11033.3003	1433.2616	7545.67082	1216.17121	25213.29155	7694.37459	6629.19495	836.66852	7802.52767	3036.20585	29034.09409	4.25094	4.42001	1.47E-03	3.45E-03	4.48E-04	2.06E-03	1.56E-04	3.24E-03	4.54E-03	2.56E-03	3.23E-04	5.85E-03	1.50E-03	1.43E-02	1.99E-03	2.09E-03	4.3979E-02
551459.87	4172992.5	6106.72505	14900.56677	1985.60413	20653.80414	2180.29987	9268.34079	6125.58524	8625.77903	1128.53236	18198.1691	8214.90428	11629.71612	1.34011	1.37188	1.19E-03	4.65E-03	6.20E-04	5.64E-03	2.80E-04	1.19E-03	3.62E-03	3.33E-03	4.36E-04	1.36E-02	4.05E-03	5.73E-03	6.28E-04	6.50E-04	4.5652E-02
551618.37	4172695.61	9058.75706	5691.5286	5557.51478	18043.59579	12020.0516	3293.64914	8932.24921	3415.74609	2933.48949	13029.11028	22435.74455	4444.73399	0.77442	0.79597	1.76E-03	1.78E-03	1.74E-03	4.93E-03	1.54E-03	4.23E-04	5.27E-03	1.32E-03	1.13E-03	9.77E-03	1.11E-02	2.19E-03	3.63E-04	3.77E-04	4.3642E-02
551511.94	4173109.23	6389.47271	14708.29246	1723.54552	12945.42574	1665.23261	17070.93342	6456.85044	8829.93078	987.54533	12844.26581	4841.15555	20369.52461	1.52646	1.5557	1.24E-03	4.59E-03	5.38E-04	3.54E-03	2.14E-04	2.19E-03	3.81E-03	3.41E-03	3.81E-04	9.63E-03	2.38E-03	1.00E-02	7.15E-04	7.37E-04	4.3419E-02
551533.77	4173140.81	6626.57339	13967.52022	1653.0081	10978.72355	1508.95873	19442.368	6704.5375	8504.20401	951.50691	11336.79984	4150.2628	22869.38221	1.78828	1.82626	1.29E-03	4.36E-03	5.16E-04	3.00E-03	1.94E-04	2.50E-03	3.96E-03	3.28E-03	3.67E-04	8.50E-03	2.04E-03	1.13E-02	8.38E-04	8.66E-04	4.2977E-02
551510.39	4172726.32	5739.81104	7029.76198	3051.07644	28974.90711	5186.56649	3815.70004	5697.5349	4014.91592	1667.56714	16738.93152	21705.59974	4995.92984	1.26688	1.3075	1.11E-03	2.20E-03	9.53E-04	7.92E-03	6.66E-04	4.90E-04	3.36E-03	1.55E-03	6.44E-04	1.25E-02	1.07E-02	2.46E-03	5.94E-04	6.20E-04	4.5809E-02
551456.65	4172983.54	6032.2384	14461.5899	2004.15699	21199.84502	2208.99508	8800.95447	6046.809	8310.17283	1139.25382	18421.24194	8537.81698	11061.25513	1.33176	1.36383	1.17E-03	4.52E-03	6.26E-04	5.79E-03	2.84E-04	1.13E-03	3.57E-03	3.21E-03	4.40E-04	1.38E-02	4.21E-03	5.45E-03	6.24E-04	6.46E-04	4.5473E-02
551697.72	4173203.68	10737.73029	9193.43565	1332.89925	5884.27679	1068.76896	25012.83388	11039.69585	5245.97422	788.12695	6018.61822	2523.95575	29279.75516	4.14918	3.96345	2.08E-03	2.87E-03	4.16E-04	1.61E-03	1.37E-04	3.21E-03	6.52E-03	2.03E-03	3.04E-04	4.51E-03	1.24E-03	1.44E-02	1.94E-03	1.88E-03	4.3178E-02
551484.9	4173062.29	6247.10577	15216.01935	1814.81875	15712.10132	1864.83981	13468.62917	6297.61219	9275.73185	1033.96041	14979.47367	5945.08957	16220.16096	1.36763	1.39593	1.21E-03	4.75E-03	5.67E-04	4.29E-03	2.40E-04	1.73E-03	3.72E-03	3.58E-03	3.99E-04	1.12E-02	2.93E-03	7.99E-03	6.41E-04	6.62E-04	4.3944E-02
551468.32	4172777	5094.68497	7857.48589	2543.63704	29999.63387	3954.97588	4271.38682	5067.25233	4422.95416	1394.80247	17554.46512	20200.10523	5526.32441	1.62182	1.7067	9.89E-04	2.45E-03	7.95E-04	8.20E-03	5.08E-04	5.49E-04	2.99E-03	1.71E-03	5.38E-04	1.32E-02	9.95E-03	2.72E-03	7.60E-04	8.09E-04	4.6131E-02
551880.67	4172764.43	10630.38096	5813.541	7459.58627	18595.60176	9335.3453	2467.7033	10322.49341	3413.93986	3833.94613	15116.14761	17458.28381	3357.53119	0.4149	0.41425	2.06E-03	1.82E-03	2.33E-03	5.08E-03	1.20E-03	3.17E-04	6.09E-03	1.32E-03	1.48E-03	1.13E-02	8.60E-03	1.65E-03	1.94E-04	1.96E-04	4.3675E-02
551453.43	4172974.59	5961.18719	14008.13098	2029.43773	21757.57555	2241.84635	8381.59929	5971.50993	7997.32277	1153.54318	18654.0044	8851.35981	10547.71805	1.32755	1.35968	1.16E-03	4.38E-03	6.34E-04	5.94E-03	2.88E-04	1.08E-03	3.53E-03	3.09E-03	4.45E-04	1.40E-02	4.36E-03	5.20E-03	6.22E-04	6.44E-04	4.5341E-02
551461.7	4172788.9	5043.7565	8048.44665	2494.97635	29765.85921	3794.79168	4392.91511	5017.57749	4522.60162	1370.62558	17679.20689	19611.70265	5668.38	1.63625	1.72246	9.79E-04	2.51E-03	7.79E-04	8.13E-03	4.88E-04	5.64E-04	2.96E-03	1.75E-03	5.29E-04	1.33E-02	9.66E-03	2.79E-03	7.67E-04	8.16E-04	4.5984E-02
551487.86	4173070.66	6221.64384	14928.96639	1787.11194	15119.62087	1819.87541	13884.56409	6274.82815	9094.3546	1018.84019	14478.91534	5708.45165	16952.03773	1.36723	1.39473	1.21E-03	4.66E-03	5.58E-04	4.13E-03	2.34E-04	1.78E-03	3.70E-03	3.51E-03	3.93E-04	1.09E-02	2.81E-03	8.35E-03	6.41E-04	6.61E-04	4.3505E-02
551449.38	4172827.76	5055.43101	8770.82781	2416.22981	29056.67502	3372.43962	4858.54367	5032.0837	4918.43079	1336.29653	18331.85288	17629.48692	6222.90575	1.60295	1.67677	9.81E-04	2.74E-03	7.55E-04	7.94E-03	4.33E-04	6.24E-04	2.97E-03	1.90E-03	5.16E-04	1.37E-02	8.68E-03	3.07E-03	7.51E-04	7.95E-04	4.5896E-02
551443.33	4172917.45	5578.138	11541.21237	2262.52751	25201.64848	2559.39299	6572.24105	5567.49348	6478.86164	1277.307	19969.74599	11598.80162	8319.1897	1.4058	1.44766	1.08E-03	3.60E-03	7.07E-04	6.89E-03	3.29E-04	8.44E-04	3.29E-03	2.50E-03	4.93E-04	1.50E-02	5.71E-03	4.10E-03	6.59E-04	6.86E-04	4.5862E-02
551920.98	4172783.03	14600.19351	7179.89815	6114.02684	15827.64703	6342.17672	3470.43672	14254.69149	4330.64045	3371.37341	13785.52458	12854.04557	4702.96703	0.36935	0.36839	2.83E-03	2.24E-03	1.91E-03	4.32E-03	8.15E-04	4.46E-04	8.41E-03	1.67E-03	1.30E-03	1.03E-02	6.33E-03	2.32E-03	1.73E-04	1.75E-04	4.3290E-02
551442.91	4172887.22	5357.95707	10408.22635	2344.55563	26804.20089	2793.00795	5876.88569	5341.15418	5837.70739	1313.41529	19788.19369	13364.12555	7463.23949	1.47439	1.52494	1.04E-03	3.25E-03	7.32E-04	7.32E-03	3.59E-04	7.55E-04	3.15E-03	2.25E-03	5.07E-04	1.48E-02	6.58E-03	3.68E-03	6.91E-04	7.23E-04	4.5883E-02
551515.24	4173118.39	6338.75432	14184.4071	1684.33748	12277.11682	1609.10681	17171.40271	6407.10498	8534.75605	965.94689	12270.10839	4615.46301	20417.77068	1.53431	1.56383	1.23E-03	4.43E-03	5.26E-04	3.35E-03	2.07E-04	2.21E-03	3.78E-03	3.29E-03	3.73E-04	9.20E-03	2.27E-03	1.01E-02	7.19E-04	7.41E-04	4.2394E-02
551457.43	4172797.2	4998.7499	8135.14991	2451.66888	29245.48679	3662.69448	4461.66763	4973.5167	4568.46959	1348.82273	17612.36056	18942.04237	5746.31793	1.61124	1.69423	9.70E-04	2.54E-03	7.66E-04	7.99E-03	4.71E-04	5.73E-04	2.94E-03	1.76E-03	5.21E-04	1.32E-02	9.33E-03	2.83E-03	7.55E-04	8.03E-04	4.5455E-02
551450.19	4172965.61	5868.91649	13473.95008	2049.36074	21794.96677	2270.41131	7965.6111	5875.20019	7653.98318	1164.62328	18752.09102	9173.7354	10035.18898	1.31815	1.35046	1.14E-03	4.21E-03	6.40E-04	5.96E-03	2.92E-04	1.02E-03	3.47E-03	2.95E-03	4.50E-04	1.41E-02	4.52E-03	4.94E-03	6.18E-04	6.40E-04	4.4909E-02
551569.42	4173180.69	6909.6376	12196.44165	1507.98805	8706.79599	1312.5436	22036.18849	7004.54157	7435.22186	876.39283	9077.1375	3404.55744	25517.98841	2.43693	2.50285	1.34E-03	3.81E-03	4.71E-04	2.38E-03	1.69E-04	2.83E-03	4.13E-03	2.87E-03	3.38E-04	6.81E-03	1.68E-03	1.26E-02	1.14E-03	1.19E-03	4.1724E-02
551482.36	4172752.63	5199.65395	7354.25814	2630.83171	29190.47732	4239.07476	3997.45691	5169.24686	4161.38952	1439.44653	16831.49293	20407.61224	5197.62888	1.45896	1.52466	1.01E-03	2.30E-03	8.22E-04	7.98E-03	5.45E-04	5.14E-04	3.05E-03	1.61E-03	5.56E-04	1.26E-02	1.01E-02	2.56E-03	6.84E-04	7.23E-04	4.5014E-02
551596.31	4172694.3	8071.55296	5920.78285	4873.46415	19816.87717	10143.34431	3368.0177	7970.32873	3519.58138	2601.46932	13837.68287	21079.59342	4518.77702	0.78171	0.80038	1.57E-03	1.85E-03	1.52E-03	5.41E-03	1.30E-03	4.33E-04	4.71E-03	1.36E-03	1.00E-03	1.04E-02	1.04E-02	2.23E-03	3.66E-04	3.79E-04	4.2886E-02
551583.34	4173190.78	7082.99793	11598.46002	1468.92782	8163.6528	1266.00781	22854.62015	7186.73458	7034.13931	854.21992	8477.53969	3232.59552	26405.58349	2.87704	2.9677	1.37E-03	3.62E-03	4.59E-04	2.23E-03	1.63E-04	2.94E-03	4.24E-03	2.72E-03	3.30E-04	6.36E-03	1.59E-03	1.30E-02	1.35E-03	1.41E-03	4.1783E-02
551895.55	4172767.68	11614.39717	6208.31896	6993.74259	17341.09525	7888.71236	2776.27739	11285.44293	3767.38969	3699.28053	14620.99069	15534.34851	3686.00574	0.39687	0.39612	2.25E-03	1.94E-03	2.18E-03	4.74E-03	1.01E-03	3.57E-04	6.66E-03	1.45E-03	1.43E-03	1.10E-02	7.65E-03	1.82E-03	1.86E-04	1.88E-04	4.2833E-02
551625.99	4172692.08	9170.78554	5424.1193	5537.53921	16659.95465	11900.27319	3176.45928	9039.8555	3263.3153	2908.78778	12162.71792	21686.50585	4292.69212	0.72359	0.74357	1.78E-03	1.69E-03	1.73E-03	4.55E-03	1.53E-03	4.08E-04	5.34E-03	1.26E-03	1.12E-03	9.12E-03	1.07E-02	2.11E-03	3.39E-04	3.52E-04	4.2019E-02
551777.98	4172725.38	10250.07148	3646.3354	3915.05899	18791.4448	13247.2002	2077.85586	10110.58769	2087.1964	1996.47938	10831.21013	25435.20422	2813.12332	0.68121	0.68486	1.99E-03	1.14E-03	1.22E-03	5.13E-03	1.70E-03	2.67E-04	5.97E-03	8.06E-04	7.71E-04	8.12E-03	1.25E-02	1.39E-03	3.19E-04	3.25E-04	4.1678E-02
551536.86	4173149.4	6528.83221	13308.32212	1604.30304	10419.60875	1457.91186	19057.84414	6606.58694	8107.27347	924.30848	10747.53524	3975.72159	22384.96395	1.78539	1.82341	1.27E-03	4.16E-03	5.01E-04	2.85E-03	1.87E-04	2.45E-03	3.90E-03	3.13E-03	3.57E-04	8.06E-03	1.96E-03	1.10E-02	8.37E-04	8.64E-04	4.1538E-02
551854.99	4172748.79	8471.74276	4717.61725	6741.94384	19031.885	11702.36146	2089.22009	8277.54587	2702.33905	3300.73189	14141.88859	21092.72007	2822.39689	0.44901	0.4481	1.64E-03	1.47E-03	2.11E-03	5.20E-03	1.50E-03	2.68E-04	4.89E-03	1.04E-03	1.27E-03	1.06E-02	1.04E-02	1.39E-03	2.10E-04	2.12E-04	4.2205E-02
551493.78	4173087.4	6155.90547	14520.94419	1729.17047	13974.96064	1728.3478	14576.05314	6213.41609	8669.37137	987.22665	13494.12559	5259.73555	17640.43079	1.3685	1.39441	1.19E-03	4.54E-03	5.40E-04	3.82E-03	2.22E-04	1.87E-03	3.67E-03	3.35E-03	3.81E-04	1.01E-02	2.59E-03	8.69E-03	6.41E-04	6.61E-04	4.2278E-02
551946.28	4172798.24	16378.15269	7566.70562	5288.40514	14308.1702	5082.00807	3952.18182	16089.92741	4528.48023	2963.60132	12748.85286	10570.56929	5438.00636	0.34293	0.34191	3.18E-03	2.36E-03	1.65E-03	3.91E-03	6.53E-04	5.08E-04	9.50E-03	1.75E-03	1.14E-03	9.56E-03	5.21E-03	2.68E-03	1.61E-04	1.62E-04	4.2420E-02
551446.96	4172956.64	5765.48951	12907.88212	2067.17323	22112.0713	2298.00547	7570.00564	5768.10118	7306.05712	1174.09455	18761.62912	9495.938	9545.84757	1.30708	1.3405	1.12E-03	4.03E-03	6.46E-04	6.04E-03	2.95E-04	9.73E-04	3.41E-03	2.82E-03	4.53E-04	1.41E-02	4.68E-03	4.70E-03	6.13E-04	6.35E-04	4.4478E-02
551450.48	4172816.19	4965.91976	8398.3541	2389.83474	28442.89353	3419.86014	4652.07318	4942.34838	4713.25418	1319.35342	17675.09931	17697.31005	5968.79491	1.56176	1.63599	9.64E-04	2.62E-03	7.46E-04	7.77E-03	4.39E-04	5.98E-04	2.92E-03	1.82E-03	5.09E-04	1.33E-02	8.72E-03	2.94E-03	7.32E-04	7.75E-04	4.4805E-02
551526.91	4172710.73	5997.76762	6620.76326	3269.98209	26355.02485	5755.4561	3631.13853	5947.23744	3811.82727	1785.04419	15777.51306	20607.11796	4775.53447	1.06086	1.08821	1.16E-03	2.07E-03	1.02E-03	7.20E-03	7.39E-04	4.66E-04	3.51E-03	1.47E-03	6.89E-04	1.18E-02	1.02E-02	2.35E-03	4.97E-04	5.16E-04	4.3677E-02
551453.16	4172805.5	4946.13902	8185.0271	2401.29153	28492.58361	3517.44419	4518.05658	4921.95956	4595.71434	1323.22455	17437.61442	18115.42466	5807.87554	1.56394	1.64118	9.60E-04	2.56E-03	7.50E-04	7.79E-03	4.52E-04	5.80E-04	2.91E-03	1.77E-03	5.11E-04	1.31E-02	8.92E-03	2.86E-03	7.33E-04	7.78E-04	4.4643E-02
551518.33	4173126.98	6298.93514	13719.17525	1649.25113	11661.21064	1555.95278	17202.56926	6367.98163	8279.89234	946.53671	11767.35055	4408.86552	20401.79005	1.54917	1.57923	1.22E-03	4.29E-03	5.15E-04	3.19E-03	2.00E-04	2.21E-03	3.76E-03	3.20E-03	3.65E-04	8.82E-03	2.17E-03	1.00E-02	7.26E-04	7.48E-04	4.1458E-02
551605.18	4172692.42	8322.45972	5722.79613	5020.48703	18490.23916	10542.14547	3289.39762	8214.29992	3415.75373	2670.4373	13175.7424	20813.06147	4422.84007	0.74355	0.76167	1.62E-03	1.79E-03	1.57E-03	5.05E-03	1.35E-03	4.23E-04	4.85E-03	1.32E-03	1.03E-03	9.88E-03	1.03E-02	2.18E-03	3.48E-04	3.61E-04	4.2017E-02
551586.14	4172694.13	7645.03361	5993.55071	4553.38025	20565.70695	9250.24996	3388.14136	7554.15288	3546.34513	2439.70917	14080.34987	20509.72715	4532.9642	0.78821	0.80588	1.48E-03	1.87E-03	1.42E-03	5.62E-03	1.19E-03	4.35E-04	4.46E-03	1.37E-03	9.42E-04	1.06E-02	1.01E-02	2.23E-03	3.69E-04	3.82E-04	4.2434E-02
551841.47	4172742.15	8023.92612	4283.57432	6083.76474	18958.34493	12546.68449	1982.14148	7874.00209	2425.20952	2927.28961	13437.4322	22759.44091	2673.25569	0.48333	0.48253	1.56E-03	1.34E-03	1.90E-03	5.18E-03	1.61E-03	2.55E-04	4.65E-03	9.36E-04	1.13E-03	1.01E-02	1.12E-02	1.32E-03	2.27E-04	2.29E-04	4.1614E-02
551440.1	4172908.48	5402.96566	10846.85743	2237.16202	24783.77405	2562.60432	6205.22293	5390.76298	6093.92451	1260.2119	19278.90118	11764.79105	7859.92509	1.36853	1.40909	1.05E-03	3.39E-03	6.99E-04	6.77E-03	3.29E-04	7.97E-04	3.18E-03	2.35E-03	4.86E-04	1.45E-02	5.80E-03	3.87E-03	6.41E-04	6.68E-04	4.4484E-02
551719.48	4173200.73	11537.44558	8596.59441	1285.90468	5524.39863	1026.09801	23092.64085	11903.9868	4864.19704	761.54894	5626.67021	2410.57351	27034.40015	2.55487	2.46848	2.24E-03	2.69E-03	4.02E-04	1.51E-03	1.32E-04	2.97E-03	7.03E-03	1.88E-03	2.94E-04	4.22E-03	1.19E-03	1.33E-02	1.20E-03	1.17E-03	4.0223E-02
551443.74	4172947.68	5652.95698	12328.39944	2082.17209	22343.51281	2325.5593	7195.74084	5652.20238	6961.47083	1181.55384	18683.76985	9785.99849	9081.45665	1.29422	1.32797	1.10E-03	3.85E-03	6.50E-04	6.11E-03	2.99E-04	9.24E-04	3.34E-03	2.69E-03	4.56E-04	1.40E-02	4.82E-03	4.47E-03	6.07E-04	6.29E-04	4.3944E-02
551615.92	4173209.29	7544.20726	10231.69395	1373.59005	7064.7792	1165.26859	23675.07265	7674.98891	6112.90517	802.67025	7257.24686	2886.12045	27366.17916	4.92158	5.14147	1.46E-03	3.20E-03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.2498E-02
551439.69	4172878.25	5150.30556	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.34421	1.44435	9.99E-04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

551521.42	4173135.56	6285.50909	13235.35149	1612.15488	11080.03854	1504.58082	17125.58019	6355.66128	8008.89981	925.94087	11260.46447	4216.76281	20266.67528	1.5613	1.59167	1.22E-03	4.13E-03	5.04E-04	3.03E-03	1.93E-04	2.20E-03	3.75E-03	3.09E-03	3.57E-04	8.44E-03	2.08E-03	9.98E-03	7.32E-04	7.54E-04	4.0468E-02
551539.95	4173157.98	6432.04168	12675.52985	1556.65578	9890.41233	1408.00322	18602.79027	6509.45197	7723.56437	897.56671	10194.72266	3808.76187	21826.98364	1.78449	1.82275	1.25E-03	3.96E-03	4.86E-04	2.70E-03	1.81E-04	2.39E-03	3.84E-03	2.98E-03	3.46E-04	7.64E-03	1.88E-03	1.08E-02	8.36E-04	8.64E-04	4.0109E-02
551440.51	4172938.71	5525.09326	11725.6318	2089.48842	22427.46924	2349.94534	6830.60635	5521.38079	6612.57341	1184.27437	18475.36521	9975.19861	8627.11834	1.277	1.31087	1.07E-03	3.66E-03	6.53E-04	6.13E-03	3.02E-04	8.78E-04	3.26E-03	2.55E-03	4.57E-04	1.39E-02	4.91E-03	4.25E-03	5.99E-04	6.21E-04	4.3198E-02
551499.7	4173104.14	6038.53234	13646.44101	1661.81839	12798.02444	1638.97002	14948.83164	6098.78977	8153.75555	950.34975	12460.93139	4862.0977	17943.7938	1.35836	1.3831	1.17E-03	4.26E-03	5.19E-04	3.50E-03	2.11E-04	1.92E-03	3.60E-03	3.15E-03	3.67E-04	9.34E-03	2.40E-03	8.84E-03	6.37E-04	6.55E-04	4.0564E-02
551472.48	4172759.15	4980.86685	7260.74825	2477.50475	27658.95233	3919.87318	3979.17501	4953.62559	4102.98521	1356.89014	16233.25277	18889.59637	5161.35821	1.40479	1.47004	9.67E-04	2.27E-03	7.74E-04	7.56E-03	5.04E-04	5.11E-04	2.92E-03	1.58E-03	5.24E-04	1.22E-02	9.31E-03	2.54E-03	6.58E-04	6.97E-04	4.2985E-02
551821.5	4172731.87	7988.09805	3798.05011	4914.50193	18454.17687	12984.34105	1906.41267	7874.9066	2139.46615	2363.32765	12148.46744	23609.52765	2566.88924	0.53063	0.53056	1.55E-03	1.19E-03	1.54E-03	5.04E-03	1.67E-03	2.45E-04	4.65E-03	8.26E-04	9.12E-04	9.11E-03	1.16E-02	1.26E-03	2.49E-04	2.51E-04	4.0116E-02
551436.87	4172899.52	5230.61657	10206.34694	2204.78431	24286.21373	2565.81007	5867.78228	5217.24763	5737.39314	1239.1172	18535.69824	11725.63993	7438.4548	1.3274	1.36828	1.02E-03	3.19E-03	6.89E-04	6.64E-03	3.30E-04	7.54E-04	3.08E-03	2.21E-03	4.78E-04	1.39E-02	5.78E-03	3.66E-03	6.22E-04	6.48E-04	4.2991E-02
551466.73	4173040.59	5882.68122	14008.33013	1768.30531	16068.33825	1879.28219	10754.35743	5920.61732	8361.41145	997.80203	14908.14832	6310.32921	13321.3687	1.22304	1.24714	1.14E-03	4.38E-03	5.52E-04	4.39E-03	2.41E-04	1.38E-03	3.50E-03	3.23E-03	3.85E-04	1.12E-02	3.11E-03	6.56E-03	5.73E-04	5.91E-04	4.1202E-02
551463.51	4173031.64	5861.32406	13989.98599	1771.12064	16559.29882	1917.3876	10277.43638	5895.70057	8327.61577	1005.80047	15000.24152	6568.03973	12772.18193	1.21105	1.23558	1.14E-03	4.37E-03	5.53E-04	4.52E-03	2.46E-04	1.32E-03	3.48E-03	3.21E-03	3.88E-04	1.12E-02	3.24E-03	6.29E-03	5.68E-04	5.86E-04	4.1161E-02
551884.91	4172755.47	9530.13333	5370.41054	6725.41925	17589.50785	8847.68999	2313.6398	9265.70097	3146.65243	3446.21574	14022.20664	16507.36208	3140.92179	0.40002	0.39964	1.85E-03	1.68E-03	2.10E-03	4.81E-03	1.14E-03	2.97E-04	5.47E-03	1.21E-03	1.33E-03	1.05E-02	8.13E-03	1.55E-03	1.87E-04	1.89E-04	4.0450E-02
551960.95	4172801.24	15998.10519	7384.14283	4785.0156	13312.69937	4536.32122	4007.4093	15752.35937	4416.72488	2695.7939	11932.18852	9524.01437	5498.04021	0.32671	0.32574	3.10E-03	2.31E-03	1.49E-03	3.64E-03	5.83E-04	5.15E-04	9.30E-03	1.70E-03	1.04E-03	8.95E-03	4.69E-03	2.71E-03	1.53E-04	1.54E-04	4.0338E-02
551711.38	4173206.27	10853.64211	8488.52997	1273.35009	5520.82997	1021.93777	22001.58857	11178.43234	4821.01386	753.25886	5619.27346	2405.76833	25835.31522	3.07497	2.95679	2.11E-03	2.65E-03	3.98E-04	1.51E-03	1.31E-04	2.83E-03	6.60E-03	1.86E-03	2.91E-04	4.21E-03	1.19E-03	1.27E-02	1.44E-03	1.40E-03	3.9339E-02
551460.28	4173022.69	5829.37474	13896.08402	1784.15629	17043.13853	1945.61528	9801.47107	5859.96123	8237.53957	1013.18418	15298.11968	6830.57361	12215.71975	1.20356	1.2286	1.13E-03	4.34E-03	5.57E-04	4.66E-03	2.50E-04	1.26E-03	3.46E-03	3.18E-03	3.91E-04	1.15E-02	3.36E-03	6.02E-03	5.64E-04	5.82E-04	4.1223E-02
551457.06	4173013.74	5789.82533	13738.06066	1797.47236	17529.71607	1972.22426	9340.39759	5816.57592	8097.85215	1020.87161	15579.77605	7095.62897	11670.27232	1.19601	1.22177	1.12E-03	4.29E-03	5.61E-04	4.79E-03	2.53E-04	1.20E-03	3.43E-03	3.13E-03	3.94E-04	1.17E-02	3.50E-03	5.75E-03	5.61E-04	5.79E-04	4.1237E-02
551925.14	4172773.98	12815.14417	6635.55063	5834.75203	15143.69547	6174.23374	3159.01309	12502.57351	3993.25444	3190.34323	13172.10633	12485.86396	4286.37975	0.35895	0.35818	2.49E-03	2.07E-03	1.82E-03	4.14E-03	7.93E-04	4.06E-04	7.38E-03	1.54E-03	1.23E-03	9.88E-03	6.15E-03	2.11E-03	1.68E-04	1.70E-04	4.0348E-02
551453.83	4173004.78	5757.56916	13561.55827	1818.14836	18062.17512	2002.7935	8924.04199	5780.24256	7937.52767	1032.91861	15915.38474	7352.13814	11173.32755	1.19403	1.21967	1.12E-03	4.24E-03	5.68E-04	4.94E-03	2.57E-04	1.15E-03	3.41E-03	3.06E-03	3.99E-04	1.19E-02	3.62E-03	5.50E-03	5.60E-04	5.78E-04	4.1330E-02
551437.28	4172929.75	5390.6257	11131.93012	2091.10647	22410.76498	2344.92211	6485.42327	5384.41702	6274.29693	1183.36909	18176.78733	10164.49126	8196.76639	1.25613	1.28956	1.05E-03	3.48E-03	6.53E-04	6.12E-03	3.01E-04	8.33E-04	3.18E-03	2.42E-03	4.57E-04	1.36E-02	5.01E-03	4.04E-03	5.89E-04	6.11E-04	4.2363E-02
551502.88	4173113.14	5979.24961	13189.93137	1625.69049	12207.23014	1590.19313	15044.04964	6040.44248	7890.57961	930.54588	11937.72026	4656.52455	17992.98417	1.35634	1.3806	1.16E-03	4.12E-03	5.08E-04	3.34E-03	2.04E-04	1.93E-03	3.57E-03	3.05E-03	3.59E-04	8.95E-03	2.29E-03	8.86E-03	6.36E-04	6.54E-04	3.9628E-02
551524.51	4173144.15	6208.81439	12715.86598	1571.44614	10537.06403	1455.68374	16922.4555	6279.00785	7708.17078	903.31831	10740.15212	4040.40997	19989.85911	1.56519	1.59576	1.20E-03	3.97E-03	4.91E-04	2.88E-03	1.87E-04	2.17E-03	3.71E-03	2.98E-03	3.49E-04	8.05E-03	1.99E-03	9.85E-03	7.34E-04	7.56E-04	3.9318E-02
551484.22	4172739.84	5084.8246	6889.64383	2559.00749	26787.59244	4138.09616	3783.15185	5054.63164	3910.77231	1400.41769	15660.45603	18841.7108	4923.98008	1.26954	1.3198	9.87E-04	2.15E-03	7.99E-04	7.32E-03	5.32E-04	4.86E-04	2.98E-03	1.51E-03	5.41E-04	1.17E-02	9.28E-03	2.43E-03	5.95E-04	6.25E-04	4.1977E-02
551639.42	4172687.33	9330.02291	4987.68791	5423.92468	14613.4385	11414.42268	2979.31562	9192.65892	3009.60437	2825.62456	10770.15871	20347.01304	4036.07853	0.64579	0.66336	1.81E-03	1.56E-03	1.69E-03	3.99E-03	1.47E-03	3.83E-04	5.43E-03	1.16E-03	1.09E-03	8.07E-03	1.00E-02	1.99E-03	3.03E-04	3.14E-04	3.9286E-02
551450.61	4172995.83	5709.13075	13294.78591	1836.93574	18556.55259	2030.58851	8512.50025	5727.82447	7725.87231	1043.83556	16183.95964	7614.11349	10677.43259	1.18894	1.21537	1.11E-03	4.15E-03	5.74E-04	5.07E-03	2.61E-04	1.09E-03	3.38E-03	2.98E-03	4.03E-04	1.21E-02	3.75E-03	5.26E-03	5.57E-04	5.76E-04	4.1302E-02
551950.41	4172789.14	14819.18487	7103.84203	5048.23611	13809.41225	5015.96378	3703.89036	14545.29114	4247.25295	2814.34105	12192.4312	10396.48666	5087.95864	0.33444	0.33357	2.88E-03	2.22E-03	1.58E-03	3.77E-03	6.44E-04	4.76E-04	8.59E-03	1.64E-03	1.09E-03	9.14E-03	5.12E-03	2.51E-03	1.57E-04	1.58E-04	3.9960E-02
551616.47	4172686.42	8459.10969	5322.62775	5006.30897	16292.62897	10458.66486	3115.34303	8345.40791	3190.86677	2647.88512	11895.21523	19619.2464	4198.083	0.66498	0.68095	1.64E-03	1.66E-03	1.56E-03	4.45E-03	1.34E-03	4.00E-04	4.93E-03	1.23E-03	1.02E-03	8.92E-03	9.66E-03	2.07E-03	3.12E-04	3.23E-04	3.9528E-02
551507.17	4172717.02	5448.8946	6533.30209	2841.64766	25669.1706	4767.72421	3600.10426	5409.72409	3738.51797	1554.74671	15195.01132	19044.48258	4710.63114	1.08924	1.12133	1.06E-03	2.04E-03	8.88E-04	7.01E-03	6.13E-04	4.62E-04	3.19E-03	1.44E-03	6.00E-04	1.14E-02	9.38E-03	2.32E-03	5.11E-04	5.31E-04	4.1447E-02
551475.62	4173065.57	5843.83548	13534.97748	1700.32898	14526.67159	1766.51416	12118.36217	5890.52211	8228.16057	968.03492	13672.18787	5653.64343	14589.17805	1.22225	1.24522	1.13E-03	4.23E-03	5.31E-04	3.97E-03	2.27E-04	1.56E-03	3.48E-03	3.18E-03	3.74E-04	1.03E-02	2.78E-03	7.19E-03	5.73E-04	5.90E-04	4.0058E-02
551447.38	4172986.88	5648.87316	12958.53121	1855.43204	19017.12517	2056.96044	8115.18782	5663.67434	7479.36186	1054.57018	16397.99944	7877.15139	10194.35365	1.18249	1.2095	1.10E-03	4.05E-03	5.80E-04	5.20E-03	2.64E-04	1.04E-03	3.34E-03	2.89E-03	4.07E-04	1.23E-02	3.88E-03	5.02E-03	5.54E-04	5.73E-04	4.1187E-02
551785.55	4172720.64	9372.17226	3502.03898	3720.67751	17798.89623	12244.64722	1982.33885	9250.84428	2000.35423	1887.42276	10414.19234	23468.64481	2677.74639	0.62814	0.63115	1.82E-03	1.09E-03	1.16E-03	4.86E-03	1.57E-03	2.55E-04	5.46E-03	7.72E-04	7.29E-04	7.81E-03	1.16E-02	1.32E-03	2.94E-04	2.99E-04	3.9008E-02
551543.04	4173166.57	6339.59436	12080.71714	1511.32023	9384.79385	1358.57715	18122.99634	6416.73398	7362.35495	872.07427	9683.54887	3646.49169	21241.17396	1.78988	1.82801	1.23E-03	3.77E-03	4.72E-04	2.56E-03	1.75E-04	2.33E-03	3.79E-03	2.84E-03	3.37E-04	7.26E-03	1.80E-03	1.05E-02	8.39E-04	8.66E-04	3.8734E-02
551899.77	4172758.69	10302.22413	5695.04736	6436.20633	16506.06921	7532.35697	2500.84464	10017.68112	3384.22296	3374.73021	13697.68765	14831.22045	3393.13356	0.38136	0.38094	2.00E-03	1.78E-03	2.01E-03	4.51E-03	9.68E-04	3.21E-04	5.91E-03	1.31E-03	1.30E-03	1.03E-02	7.31E-03	1.67E-03	1.79E-04	1.81E-04	3.9716E-02
551602.74	4173209.05	7100.61183	10143.87172	1359.64835	7206.72322	1171.2149	21418.73257	7214.84601	6088.74858	792.72081	7373.3344	2934.85641	24819.13416	3.60857	3.73879	1.38E-03	3.17E-03	4.25E-04	1.97E-03	1.50E-04	2.75E-03	4.26E-03	2.35E-03	3.06E-04	5.53E-03	1.45E-03	1.22E-02	1.69E-03	1.77E-03	3.9420E-02
551436.46	4172869.29	4958.77896	9071.31456	2204.65551	24634.72382	2738.77354	5205.50382	4941.61165	5106.22059	1230.00814	17527.29716	13120.12609	6618.51497	1.31311	1.35863	9.62E-04	2.83E-03	6.89E-04	6.73E-03	3.52E-04	6.69E-04	2.92E-03	1.97E-03	4.75E-04	1.31E-02	6.46E-03	3.26E-03	6.15E-04	6.44E-04	4.1722E-02
551444.16	4172977.93	5584.12638	12584.80588	1876.55493	19116.48964	2084.36159	7744.38432	5595.08883	7219.61555	1066.60137	16586.50123	8137.76481	9740.60048	1.17718	1.20411	1.08E-03	3.93E-03	5.86E-04	5.22E-03	2.68E-04	9.95E-04	3.30E-03	2.79E-03	4.12E-04	1.24E-02	4.01E-03	4.80E-03	5.52E-04	5.71E-04	4.0952E-02
551649.03	4173219.73	8067.37501	9088.51102	1295.24785	6226.84092	1083.6585	22212.73882	8231.1134	5337.76289	760.08482	6335.25118	2623.81246	25923.78586	15.77533	13.10886	1.57E-03	2.84E-03	4.05E-04	1.70E-03	1.39E-04	2.85E-03	4.86E-03	2.06E-03	2.93E-04	4.75E-03	1.29E-03	1.28E-02	7.39E-03	6.21E-03	4.9135E-02
551505.97	4173121.73	5932.51294	12783.38216	1592.56727	11658.61533	1543.27971	15087.27923	5994.37476	7660.8778	912.33111	11470.22483	4464.47302	17992.94716	1.35937	1.38366	1.15E-03	3.99E-03	4.97E-04	3.19E-03	1.98E-04	1.94E-03	3.54E-03	2.96E-03	3.52E-04	8.60E-03	2.20E-03	8.86E-03	6.37E-04	6.56E-04	3.8766E-02
551434.06	4172920.78	5247.77813	10543.87594	2083.92624	22270.20223	2357.07065	6153.82633	5239.50759	5942.84579	1177.13028	17769.04379	10339.98095	7782.74351	1.23131	1.26561	1.02E-03	3.29E-03	6.51E-04	6.09E-03	3.03E-04	7.91E-04	3.09E-03	2.29E-03	4.54E-04	1.33E-02	5.09E-03	3.83E-03	5.77E-04	6.00E-04	4.1408E-02
551481.53	4173082.31	5797.85029	13055.68958	1652.74505	13549.40052	1686.18042	12758.42462	5848.86609	7917.05181	942.17332	12858.79799	5235.22987	15518.57993	1.22476	1.24762	1.13E-03	4.08E-03	5.16E-04	3.70E-03	2.17E-04	1.64E-03	3.45E-03	3.06E-03	3.64E-04	9.64E-03	2.58E-03	7.64E-03	5.74E-04	5.91E-04	3.9179E-02
551460.65	4172770.83	4780.95786	7249.51414	2338.77302	26253.09101	3610.00789	4012.5316	4756.51752	4090.01482	1283.04786	15761.01895	17438.141	5186.75236	1.35874	1.42269	9.28E-04	2.26E-03	7.31E-04	7.17E-03	4.64E-04	5.15E-04	2.81E-03	1.58E-03	4.95E-04	1.18E-02	8.59E-03	2.56E-03	6.37E-04	6.74E-04	4.1229E-02
551574.14	4173194.3	6651.80869	10945.27117	1417.56823	8012.70269	1239.35652	19806.2015	6744.59924	6638.80695	822.74455	8258.27468	3192.67289	23020.12207	2.38002	2.44564	1.29E-03	3.42E-03	4.43E-04	2.19E-03	1.59E-04	2.54E-03	3.98E-03	2.56E-03	3.18E-04	6.19E-03	1.57E-03	1.13E-02	1.12E-03	1.16E-03	3.8285E-02
551433.65	4172890.55	5050.78759	9581.30535	2159.08244	23602.02274	2558.43068	5542.48026	5036.66438	5393.14898	1210.69709	17687.36644	11747.51381	7029.70672	1.27628	1.31746	9.80E-04	2.99E-03	6.74E-04	6.45E-03	3.29E-04	7.12E-04	2.97E-03	2.08E-03	4.67E-04	1.33E-02	5.79E-03	3.46E-03	5.98E-04	6.24E-04	4.1392E-02
551440.92	4172968.94	5510.74462	12170.47834	1898.11186	19490.81297	2111.91955	7391.19632	5517.95567	6946.81096	1078.56157	16722.64861	8398.31911	9306.25716	1.1713	1.19863	1.07E-03	3.80E-03	5.93E-04	5.33E-03	2.71E-04	9.50E-04	3.26E-03	2.68E-03	4.16E-04	1.25E-02	4.14E-03	4.58E-03	5.49E-04	5.68E-04	4.0741E-02
551939.86	4172777.05	13285.17038	6681.9477	5260.87311	14201.26797	5503.1784	3342.3834	12998.15368	4018.62837	2910.31307	12363.12223	11257.35216	4524.13303	0.34176	0.34102	2.58E-03	2.09E-03	1.64E-03	3.88E-03	7.07E-04	4.29E-04	7.67E-03	1.55E-03	1.12E-03	9.27E-03	5.55E-03	2.23E-03	1.60E-04	1.62E-04	3.9037E-02
551703.28	4173211.81	10220.68921	8372.69735	1259.02113	5510.5656	1016.11959	21039.56482	10509.3288	4776.95537	743.87172	5609.77847	2397.75715	24750.72237	3.83807	3.66725	1.98E-03	2.62E-03	3.93E-04	1.51E-03	1.31E-04	2.70E-03	6.20E-03	1.84E-03	2.87E-04	4.21E-03	1.18E-03	1.22E-02	1.80E-03	1.74E-03	3.8782E-02
551524.13	4172701.31	5724.17628	6208.93029	3069.74309	23805.8665	5348.50139	3447.67841	5676.59561	3579.04453	1675.98199	14508.25419	18506.02025	4531.79402	0.94253	0.96533	1.11E-03	1.94E-03	9.59E-04	6.50E-03	6.87E-04	4.43E-04	3.35E-03	1.38E-03	6.47E-04	1.09E-02	9.12E-03	2.23E-03	4.42E-04	4.57E-04	4.0148E-02
551837.73	4172732.83	7357.38619	3869.15206	5159.78944	17765.00316	11808.90258	1861.00303	7237.72817	2183.77539	2485.27277	12170.52417	21666.6557	2504.22637	0.48784	0.48753	1.43E-03	1.21E-03	1.61E-03	4.85E-03	1.52E-03	2.39E-04	4.27E-03	8.43E-04	9.59E-04	9.12E-03	1.07E-02	1.23E-03	2.29E-04	2.31E-04	3.8424E-02
551527.6	4173152.73	6123.07036	12175.76763	1528.20261	10029.96494	1409.06697	16604.3595	6193.03545	7387.48853	879.20695	10220.59244	3877.40564	19590.0377	1.56153	1.59202	1.19E-03	3.80E-03	4.77E-04	2.74E-03	1.81E-04	2.13E-03	3.66E-03	2.85E-03	3.39E-04	7.66E-03	1.91E-03	9.65E-03	7.32E-04	7.54E-04	3.8079E-02
551859.31	4172739.92	7576.33696	4325.29464	5907.16897	17642.29523	10713.69648	1951.25665	7412.20652	2473.23526	2897.82711	12913.58649	19570.4491	2630.88488	0.43493	0.43432	1.47E-03	1.35E-03	1.85E-03	4.82E-03	1.38E-03	2.51E-04	4.38E-03	9.55E-04	1.12E-03	9.68E-03	9.64E-03	1.30E-03	2.04E-04	2.06E-04	3.8590E-02
551659.8	4172686.34	9858.81887	4585.38806	5414.67068	13239.09594	11129.50693	2791.90244	9705.60163	2770.42534	2784.46478	9522.3504	20014.48077	3796.70145	0.61431	0.63168	1.91E-03	1.43E-03	1.69E-03	3.62E-03	1.43E-03	3.59E-04	5.73E-03	1.07E-03	1.07E-03	7.14E-03	9.86E-03	1.87E-03	2.88E-04	2.99E-04	3.7772E-02
551452.33	4172786.01	4704.02056	7410.21562	2274.79879	25729.07967	3416.60825	4130.7924	4681.04027	4174.17607	1250.72264	15745.3106	16668.57961	5321.91351	1.35512	1.41854	9.13E-04	2.31E-03	7.11E-04	7.03E-03	4.39E-04	5.31E-04	2.76E-03	1.61E-03	4.83E-04	1.18E-02	8.21E-03	2.62E-03	6.35E-04	6.72E-04	4.0739E-02
551437.7	4172959.97	5420.53572	11705.47288	1914.76796	19761.49738	2136.56141	7044.19066	5424.38638	6656.51138	1087.50713	16751.11915	8655.52293	8877.61529	1.16158	1.18923	1.05E-03	3.66E-03	5.98E-04	5.40E-03	2.74E-04	9.05E-04	3.20E-03	2.57E-03	4.20E-04	1.26E-02	4.26E-03	4.37E-03	5.44E-04	5.64E-04	4.0380E-02
551914.57	4172761.85	10854.57147	5904.58505	5989.58919	15491.8632	6702.40052	2721.26439	10567.3198	3583.88485	3202.19767	13140.92971	13374.264	3609.32915	0.36503	0.36436	2.11E-03	1.84E-03	1.87E-03	4.23E-03	8.61E-04	3.50E-04	6.24E-03	1.38E-03	1.24E-03	9.85E-03	6.59E-03	1.78E-03	1.71E-04	1.73E-04	3.8685E-02
551509.06	4173130.31	5892.57774	12395.41068	1560.57983	11117.65672	1495.94402	15080.69694	5954.93701	7446.75512	894.6708	11029.10322	4276.73253	17943.57648	1.3672	1.39158	1.14E-03	3.87E-03	4.87E-04	3.04E-03	1.92E-04	1.94E-03	3.52E-03	2.87E-03	3.45E-04	8.27E-03	2.11E-03	8.84E-03	6.41E-04	6.60E-04	3.7920E-02
551474.81	4172746.05	4872.61996	6810.29515	2409.0887	25574.6721	3832.17068	3765.40428	4845.74348	3860.1497	1319.34485	15152.44082	17594.41698	4890.67159	1.23563	1.28681	9.46E-04	2.13E-03	7.52E-04	6.99E-03	4.92E-04	4.84E-04	2.86E-03	1.49E-03	5.09E-04	1.14E-02	8.67E-03	2.41E-03	5.79E-04	6.10E-04	4.0274E-02
551557.67	4172685.77	6456.89322	5834.8207	3639.13081	20885.97176	6869.35915	3284.51864	6390.68051	3411.49103	1964.62577	13621.37991	18207.82815	4358.8326	0.77628	0.79195	1.25E-03	1.82E-03	1.14E-03	5.71E-03	8.82E-04	4.22E-04	3.77E-03	1.32E-03	7.58E-04	1.02E-02	8.97E-03	2.15E-03	3.64E-04	3.75E-04	3.9139E-02
551636.31	4173221.58	7676.61709	9108.6633	1289.24916	6336.66208	1087.90305	21372.97101	7824.20274	5382.95046	755.122	6454.91898	2654.94846	24900.0491	8.22792	8.7747	1.49E-03	2.85E-03	4.03E-04	1.73E-03	1.40E-04	2.75E-03	4.62E-03	2.08E-03	2.91E-04	4.84E-03	1.31E-03	1.23E-02	3.86E-03	4.16E-03	4.2770E-02
551965.07	4172792.14	14688.10729	6958.24932	4594.33961	12889.20112	4490.45286	3761.73371	14457.39087	4157.34525	2575.62348	11454.79909	9393.8148	5154.0709	0.31884	0.318	2.85E-03	2.17E-03	1.44E-03	3.52E-03	5.77E-04	4.83E-04	8.53E-03	1.60E-03	9.94E-04	8.59E-03	4.63E-03	2.54E-03	1.49E-04	1.51E-04	3.8228E-02
551448	4172794.42	4662.00629	7470.96927	2236.67003	25267.82086	3302.75794	4187.91263	4639.83663	4206.91778	1231.51389	15654.41959	16128.90884	5385.54569	1.33529	1.39636	9.05E-04	2.33E-03	6.99E-04	6.90E-03	4.24E-04	5.38E-04	2.74E-03	1.62E-03	4.75E-04	1.17E-02	7.95E-03	2.65E-03	6.26E-04	6.62E-04	4.0263E-02
551434.47	4172951.01	5323.80597	11229.06908	1930.10105	19978.39256	2161.82814	6717.29458	5324.50329	6368.53896	1095.30601	16718.30962	8867.37965	8472.54072	1.1507	1.17837	1.03E-03	3.51E-03	6.03E-04	5.46E-03	2.78E-04	8.63E-04	3.14E-03	2.46E-03	4.23E-04	1.25E-02	4.37E-03	4.17E-03	5.39E-04	5.58E-04	3.9940E-02
551434.05	4172860.37	4811.5971	8592.21703	2153.48234	23915.8029	2735.30213	4954.46572	4794.21609	4839.40205	1199.34285	16688.65221	13106.15088	6305.39812	1.26307	1.30747	9.34E-04	2.68E-03	6.73E-04	6.53E-03	3.51E-04	6.36E-04	2.83E-03	1.87E-03	4.63E-04	1.25E-02	6.46E-03	3.11E-03	5.92E-04	6.20E-04	4.0259E-02
551874.27	4172743.26	7862.5137	4598.13073	6043.16055	17136.34208	9638.15029	2022.94242	7667.86448	2656.62573	3022.94486	12991.67271	17701.22432	2732.96997	0.40533	0.40484	1.53E-03	1.44E-03	1.89E-03	4.68E-03	1.24E-03	2.60E-04	4.53E-03	1.03E-03	1.17E-03	9.74E-03	8.72E-03	1.35E-03	1.90E-04	1.92E-04	3.7937E-02
551583.21	4173202.84	6673.31363	10368.80769	1371.88091	7599.13176	1200.42065	19487.27935	6770.26809	6262.92332	797.33401	7771.3106	3063.77236	22663.33343	2.5869	2.66575	1.30E-03	3.24E-03	4.29E-04	2.08E-03	1.54E-04	2.50E-03	4.00E-03	2.42E-03	3.08E-04	5.83E-03	1.51E-03	1.12E-02	1.21E-03	1.26E-03	3.7394E-02
551487.45	4173099.05	5710.32791	12411.04873	1597.61117	12537.60171	1606.10277	13167.67322	5764.30927	7521.80107	912.06632	12003.18805	4856.30612	15891.56289	1.21919	1.24044	1.11E-03	3.88E-03	4.99E-04	3.43E-03	2.06E-04	1.69E-03	3.40E-03	2.90E-03	3.52E-04	9.00E-03	2.39E-03	7.83E-03	5.71E-04	5.88E-04	3.7844E-02
551430.83	4172911.82	5083.40625	9931.05914	2058.52312	21870.79472	2354.38404	5816.28414	5073.66345	5598.8002	1160.41385	17169.46123	10461.24805	7361.62973	1.1954	1.22904	9.86E-04	3.10E-03	6.43E-04	5.98E-03	3.02E-04	7.47E-04	3.00E-03	2.16E-03	4.48E-04	1.29E-02	5.15E-03	3.63E-03	5.60E-04	5.82E-04	4.0156E-02
551546.45	4173176.22	6222.65924	11396.98894	1457.19014	8859.8113	1306.1526	17429.87915	6299.2234	6939.33739	841.75842	9120.81537	3479.08419	20422.37041	1.78124	1.8191	1.21E-03	3.56E-03	4.55E-04	2.42E-03	1.68E-04	2.24E-03	3.72E-03	2.68E-03	3.25E-04	6.84E-03	1.71E-03	1.01E-02	8.35E-04	8.62E-04	3.7081E-02
551974.56	4172799.99	15058.22563	7053.09209	4356.12058	12415.15547	4143.48368	3938.48001	14845.68691	4214.34322	2458.18549	11135.31742	8748.55701	5387.03703	0.31165	0.31077	2.92E-03	2.20E-03	1.36E-03	3.39E-03	5.32E-04	5.06E-04	8.76E-03	1.63E-03	9.49E-04	8.35E-03	4.31E-03	2.65E-03	1.46E-04	1.47E-04	3.7861E-02
551514.49	4172704.15	5452.88763	6154.69006	2859.34221	23445.91664	4855.81663	3427.22755	5410.98638	3537.61248	1564.05624	14209.90618	17729.36816	4493.23954	0.9474	0.97154	1.06E-03	1.92E-03	8.93E-04	6.41E-03	6.24E-04	4.40E-04	3.19E-03	1.37E-03	6.04E-04	1.07E-02	8.73E-03	2.21E-03	4.44E-04	4.60E-04	3.9012E-02
551626.93	4172681.43	8533.30395	4959.39648	4916.21508	14489.27582	10124.5336	2952.29594	8415.93528	2982.3455	2585.50145	10754.90493	18424.39583	3985.71486	0.59773	0.61183	1.66E-03	1.55E-03	1.54E-03	3.96E-03	1.30E-03	3.79E-04	4.97E-03	1.15E-03	9.98E-04	8.06E-03	9.08E-03	1.96E-03	2.80E-04	2.90E-04	3.7169E-02
551512.15	4173138.9	5891.55635	12017.65421	1529.07257	10592.70323	1448.57581	15021.66047	5954.87758	7240.00825	877.20316	10604.88813	4095.01195	17840.10444	1.3784	1.40318	1.14E-03	3.75E-03	4.78E-04	2.89E-03	1.86E-04	1.93E-03	3.52E-03	2.79E-03	3.39E-04	7.95E-03	2.02E-03	8.79E-03	6.46E-04	6.65E-04	3.7100E-02
551530.69	4173161.32	6034.55929	11640.36551	1484.52335	9549.38052	1363.65206	16210.54672	6104.15223	7065.69681	854.7798	9720.41214	3722.52787	19111.02818	1.55586	1.58624	1.17E-03	3.64E-03	4.64E-04	2.61E-03	1.75E-04	2.08E-03	3.60E-03	2.73E-03	3.30E-04	7.29E-03	1.83E-03	9.41E-03	7.29E-04	7.52E-04	3.6815E-02
551443.68	4172802.82	4613.97047	7499.77737	2192.57114	24640.15604	3178.80325	4233.83566	4592.68427	4223.46977	1209.10946	15480.79655	15478.3999	5434.53484	1.30097	1.35831	8.95E-04	2.34E-03	6.85E-04	6.73E-03	4.08E-04	5.44E-04	2.71E-03	1.63E-03	4.67E-04	1.16E-02	7.62E-03	2.68E-03	6.10E-04	6.44E-04	3.9577E-02
551431.24	4172942.04	5218.77508	10744.0576	1941.70175	20118.86464	2186.66122	6405.60464	5216.6416	6082.88973	1100.60884	16608.32884	9050.99485	8085.25558	1.13789	1.16636	1.01E-03	3.36E-03	6.06E-04	5.50E-03	2.81E-04	8.23E-04	3.08E-03	2.35E-03	4.25E-04	1.25E-02	4.46E-03	3.98E-03	5.33E-04	5.53E-04	3.9407E-02
551929.32	4172764.95	11402.93759	6140.62757	5516.85548	14471.30403	5982.04882	2896.18805	11123.1115	3683.84102	2994.05174	12522.27737	12081.25356	3934.1035	0.34832	0.34775	2.21E-03	1.92E-03	1.72E-03	3.95E-03	7.69E-04	3.72E-04	6.57E-03	1.42E-03	1.16E-03	9.39E-03	5.95E-03	1.94E-03	1.63E-04	1.65E-04	3.7698E-02
551954.55	4172780.08	13325.51094	6638.95263	4807.05191	13318.98528	4935.02868	3450.26205	13065.14636	3982.66206	2671.03589	11649.28904	10205.9592	4667.86309	0.32615	0.32542	2.59E-03	2.07E-03	1.50E-03	3.64E-03	6.34E-04	4.43E-04	7.71E-03	1.54E-03	1.03E-03	8.73E-03	5.03E-03	2.30E-03	1.53E-04	1.54E-04	3.7526E-02
551889.16	4172746.53	8544.11023	4954.02212	6059.37486	16539.68293	8378.67209	2164.06499	8316.8196	2895.79224	3097.5772	12997.96394	15580.23814	2931.61426	0.38523	0.38501	1.66E-03	1.55E-03	1.89E-03	4.52E-03	1.08E-03	2.78E-04	4.91E-03	1.12E-03	1.20E-03	9.74E-03	7.67E-03	1.44E-03	1.81E-04	1.82E-04	3.7421E-02
551430.42	4172881.59	4862.11395	8961.16446	2098.2357	22697.16516	2532.94926	5221.13426	4847.6295	5052.34954	1174.14413	16728.09677	11650.60027	6625.8158	1.2068	1.24639	9.44E-04	2.80E-03	6.55E-04	6.20E-03	3.25E-04	6.71E-04	2.86E-03	1.95E-03	4.53E-04	1.25E-02	5.74E-03	3.26E-03	5.66E-04	5.91E-04	3.9561E-02
551490.41	4173107.42	5661.14777	12074.86425	1568.66716	12048.41321	1565.74358	13284.5445	5716.1166	7318.65939	896.24557	11579.95409	4676.51082	15977.31717	1.21608	1.23692	1.10E-03	3.77E-03	4.90E-04	3.29E-03	2.01E-04	1.71E-03	3.37E-03	2.83E-03	3.46E-04	8.68E-03	2.30E-03	7.87E-03	5.70E-04	5.86E-04	3.7117E-02
551647.27	4172681.96	9184.29162	4639.00086	5122.42841	13143.78466	10470.84805	2811.49848	9048.83161	2800.24604	2659.38537	9725.66052	18637.95448	3812.33851	0.57763	0.59274	1.78E-03	1.45E-03	1.60E-03	3.59E-03	1.35E-03	3.61E-04	5.34E-03	1.08E-03	1.03E-03	7.29E-03	9.18E-03	1.88E-03	2.71E-04	2.81E-04	3.6480E-02
551725.04	4173208.86	10838.62271	7801.07971	1211.09144	5173.86818	974.45051	19306.86458	11179.75969	4420.99179	716.47567	5240.94745	2289.31084	22721.92659	2.4036	2.32247	2.10E-03	2.44E-03	3.78E-04	1.41E-03	1.25E-04	2.48E-03	6.60E-03	1.71E-03	2.77E-04	3.93E-03	1.13E-03	1.12E-02	1.13E-03	1.10E-03	3.5997E-02
551673.01	4172684.76	10017.53384	4295.99072	5185.77167	12514.26611	10355.57099	2646.63149	9859.06441	2591.73226	2650.24232	8721.32588	19179.81968	3604.96662	0.59215	0.60901	1.94E-03	1.34E-03	1.62E-03	3.42E-03	1.33E-03	3.40E-04	5.82E-03	1.00E-03	1.02E-03	6.54E-03	9.45E-03	1.78E-03	2.78E-04	2.89E-04	3.6167E-02
551817.89	4172722.56	7463.33608	3461.83923	4096.00944	17015.59658	11602.85311	1807.0699	7367.40222	1954.35737	1998.149	10847.06976	21544.57063	2429.25155	0.52932	0.53029	1.45E-03	1.08E-03	1.28E-03	4.65E-03	1.49E-03	2.32E-04	4.35E-03	7.54E-04	7.71E-04	8.13E-03	1.06E-02	1.20E-03	2.48E-04	2.51E-04	3.6497E-02
551451.02	4173026.03	5468.10641	12445.67401	1665.03838	15558.48063	1826.76376	8983.76181	5497.15332	7379.43876	945.2185	13826.94172	6395.27336	11191.96539	1.0815	1.10261	1.06E-03	3.89E-03	5.20E-04	4.25E-03	2.35E-04	1.15E-03	3.25E-03	2.85E-03	3.65E-04	1.04E-02	3.15E-03	5.51E-03	5.07E-04	5.23E-04	3.7626E-02
551427.61	4172902.85	4934.87256	9395.15517	2035.27029	21530.50199	2361.98498	5523.48718	4923.86603	5298.92482	1144.75398	16610.24392	10421.62217	6995.47343	1.16314	1.19683	9.58E-04	2.93E-03	6.36E-04	5.88E-03	3.03E-04	7.10E-04	2.91E-03	2.05E-03	4.42E-04	1.25E-02	5.13E-03	3.45E-03	5.45E-04	5.67E-04	3.8963E-02
551457.46	4173043.93	5501.30445	12478.68617	1637.93494	14706.69569	1772.87726	9772.26	5536.89586	7443.94155	929.86059	13272.81242	5955.58385	12100.93267	1.09102	1.11156	1.07E-03	3.90E-03	5.12E-04	4.02E-03	2.28E-04	1.26E-03	3.27E-03	2.87E-03	3.59E-04	9.95E-03	2.93E-03	5.96E-03	5.11E-04	5.27E-04	3.7363E-02
551454.24	4173034.98	5481.37212	12467.09742	1648.98123	15112.48317	1799.16104	9363.92674	5513.83379	7421.51107	935.98418	13525.73483	6178.78046	11632.7601	1.08408	1.1053	1.06E-03	3.89E-03	5.15E-04	4.13E-03	2.31E-04	1.20E-03	3.25E-03	2.86E-03	3.61E-04	1.01E-02	3.04E-03	5.73E-03	5.08E-04	5.24E-04	3.7464E-02
551465.4	4172752.27	4684.40326	6724.21852	2281.87632	24359.1625	3576.1706	3746.51343	4660.10955	3806.91027	1250.67511	14649.64205	16424.56408	4855.85284	1.19338	1.2439	9.09E-04	2.10E-03	7.13E-04	6.66E-03	4.59E-04	4.81E-04	2.75E-03	1.47E-03	4.83E-04	1.10E-02	8.09E-03	2.39E-03	5.59E-04	5.90E-04	3.8636E-02
551447.79	4173017.07	5437.48043	12335.89941	1677.95808	15974.57811	1851.01787	8592.08891	5463.05311	7278.48613	952.73247	14074.51876	6618.2809	10730.73235	1.07586	1.09735	1.06E-03	3.85E-03	5.24E-04	4.36E-03	2.38E-04	1.10E-03	3.22E-03	2.81E-03	3.68E-04	1.06E-02	3.26E-03	5.29E-03	5.04E-04	5.20E-04	3.7663E-02
551515.24	4173147.48	5827.88176	11606.04334	1494.20782	10100.67666	1403.56233	14861.80225	5891.26293	7006.40684	857.83181	10162.24093	3928.71649	17622.46967	1.38285	1.40787	1.13E-03	3.63E-03	4.67E-04	2.76E-03	1.80E-04	1.91E-03	3.48E-03	2.70E-03	3.31E-04	7.62E-03	1.94E-03	8.68E-03	6.48E-04	6.67E-04	3.6136E-02
551592.28	4173211.39	6609.16468	9780.39093	1325.24723	7186.67101	1159.49642	18963.36863	6709.61772	5882.43173	771.15983	7303.27959	2933.94071	22075.65297	2.85578	2.94866	1.28E-03	3.05E-03	4.14E-04	1.96E-03	1.49E-04	2.44E-03	3.96E-03	2.27E-03	2.98E-04	5.48E-03	1.45E-03	1.09E-02	1.34E-03	1.40E-03	3.6360E-02
551444.57	4173008.12	5400.69419	12172.92069	1692.20448	16386.80291	1874.94846	8215.34306	5422.66789	7140.2785	961.12716	14310.71652	6840.27213	10282.29606	1.07028	1.09241	1.05E-03	3.80E-03	5.29E-04	4.48E-03	2.41E-04	1.06E-03	3.20E-03	2.76E-03	3.71E-04	1.07E-02	3.37E-03	5.07E-03	5.02E-04	5.18E-04	3.7664E-02
551428.02	4172933.08	5088.35809	10209.97097	1938.8612	20042.95457	2176.81137	6082.87515	5083.95375	5776.26508	1097.50253	16319.55442	9178.57221	7683.16759	1.1156	1.1442	9.87E-04	3.19E-03	6.06E-04	5.48E-03	2.80E-04	7.81E-04	3.00E-03	2.23E-03	4.24E-04	1.22E-02	4.52E-03	3.78E-03	5.23E-04	5.42E-04	3.8580E-02
551493.61	4173116.48	5604.21866	11902.33235	1536.25832	11532.0362	1522.00968	13338.95981	5659.89374	7098.07598	878.50054	11125.43589	4489.34012	15991.09476	1.21253	1.23298	1.09E-03	3.72E-03	4.80E-04	3.15E-03	1.96E-04	1.71E-03	3.34E-03	2.74E-03	3.39E-04	8.34E-03	2.21E-03	7.88E-03	5.68E-04	5.84E-04	3.6348E-02
551772.98	4172714.29	9484.54022	3337.87004	3320.62417	16404.56866	10133.74152	1970.04483	9360.12721	1924.39274	1721.68479	9198.75858	21024.48152	2665.38571	0.65343	0.66091	1.84E-03	1.04E-03	1.04E-03	4.48E-03	1.30E-03	2.53E-04	5.53E-03	7.43E-04	6.65E-04	6.90E-03	1.04E-02	1.31E-03	3.06E-04	3.13E-04	3.6076E-02
551903.99	4172749.72	9128.98632	5215.50625	5872.4114	15680.0155	7316.12988	2297.87141	8883.55237	3080.17135	3060.28971	12762.88613	14129.40517	3115.85976	0.36726	0.36699	1.77E-03	1.63E-03	1.83E-03	4.28E-03	9.40E-04	2.95E-04	5.24E-03	1.19E-03	1.18E-03	9.57E-03	6.96E-03	1.53E-03	1.72E-04	1.74E-04	3.6778E-02
551944.03	4172768.01	12009.64058	6231.89346	5005.11107	13619.21744	5356.34422	3095.78995	11748.14795	3744.40252	2752.23212	11805.5698	10934.94347	4188.62743	0.33221	0.33162	2.33E-03	1.95E-03	1.56E-03	3.72E-03	6.88E-04	3.98E-04	6.94E-03	1.45E-03	1.06E-03	8.85E-03	5.39E-03	2.06E-03	1.56E-04	1.57E-04	3.6704E-02
551589.63	4172675.63	7158.25251	5298.05965	4102.90523	16993.47757	8139.47632	3065.01743	7073.94828	3141.36161	2194.79345	11970.22513	17238.67214	4100.55833	0.63513	0.64721	1.39E-03	1.65E-03	1.28E-03	4.64E-03	1.05E-03	3.94E-04	4.18E-03	1.21E-03	8.47E-04	8.97E-03	8.49E-03	2.02E-03	2.98E-04	3.07E-04	3.6734E-02
551441.34	4172999.17	5355.99817	11953.61987	1707.61603	16785.36005	1898.2653	7852.57935	5374.36875	6967.64286	970.17057	14524.06423	7060.80159	9845.82364	1.06462	1.08702	1.04E-03	3.73E-03	5.33E-04	4.59E-03	2.44E-04	1.01E-03	3.17E-03	2.69E-03	3.75E-04	1.09E-02	3.48E-03	4.85E-03	4.99E-04	5.15E-04	3.7613E-02
551430.64	4172839.5	4590.67254	7861.84823	2093.49106	23178.72118	2805.75272	4550.44524	4572.45705	4432.31974	1161.62015	15489.4611	13445.16998	5802.46046	1.21342	1.25848	8.91E-04	2.46E-03	6.54E-04	6.33E-03	3.60E-04	5.85E-04	2.70E-03	1.71E-03	4.48E-04	1.16E-02	6.62E-03	2.86E-03	5.69E-04	5.96E-04	3.8396E-02
551973.66	4172788.19	13847.06048	6663.31357	4316.05893	12295.35101	4264.59649	3650.12945	13635.63882	3978.09937	2418.33968	10901.31917	8940.24999	4991.46	0.3084	0.30766	2.69E-03	2.08E-03	1.35E-03	3.36E-03	5.48E-04	4.69E-04	8.05E-03	1.54E-03	9.34E-04	8.17E-03	4.40E-03	2.46E-03	1.45E-04	1.46E-04	3.6337E-02
551503.95	4172707.71	5177.94055	6085.77599	2651.07971	22897.71317	4392.71091	3402.13167	5141.58197	3488.49209	1451.86462	13847.22483	16841.54081	4448.72469	0.94833	0.9742	1.00E-03	1.90E-03	8.28E-04	6.26E-03	5.64E-04	4.37E-04	3.04E-03	1.35E-03	5.60E-04	1.04E-02	8.30E-03	2.19E-03	4.44E-04	4.62E-04	3.7709E-02
551533.78	4173169.91	5946.61761	11122.2535	1441.60943	9092.04869	1319.16014	15772.84752	6015.84671	6752.1875	830.67439	9247.76377	3573.87032	18586.24037	1.55122	1.5816	1.15E-03	3.47E-03	4.50E-04	2.48E-03	1.69E-04	2.03E-03	3.55E-03	2.61E-03	3.21E-04	6.93E-03	1.76E-03	9.16E-03	7.27E-04	7.50E-04	3.5563E-02
551477.82	4172732.5	4790.86519	6406.47824	2360.95101	23738.99196	3767.84456	3572.52432	4763.83037	3642.50931	1293.19303	14210.60433	16478.70736	4645.51148	1.09492	1.1352	9.30E-04	2.00E-03	7.37E-04	6.49E-03	4.84E-04	4.59E-04	2.81E-03	1.41E-03	4.99E-04	1.07E-02	8.12E-03	2.29E-03	5.13E-04	5.38E-04	3.7926E-02
551466.33	4173068.85	5467.3237	12083.01531	1593.97774	13426.73819	1675.21369	10740.71511	5510.58558	7224.08076	906.88709	12498.32026	5378.84001	13159.03805	1.0973	1.1178	1.06E-03	3.77E-03	4.98E-04	3.67E-03	2.15E-04	1.38E-03	3.25E-03	2.79E-03	3.50E-04	9.37E-03	2.65E-03	6.48E-03	5.14E-04	5.30E-04	3.6534E-02
551657.13	4172680.91	9349.68824	4425.13116	5043.8685	12416.18384	10134.35994	2708.63684	9208.95413	2671.93565	2604.83158	9089.27598	18169.28735	3678.89248	0.5571	0.572	1.81E-03	1.38E-03	1.58E-03	3.39E-03	1.30E-03	3.48E-04	5.44E-03	1.03E-03	1.01E-03	6.81E-03	8.95E-03	1.81E-03	2.61E-04	2.71E-04	3.5397E-02
551579.41	4172674.79	6817.17829	5355.01649	3869.88068	17608.59263	7542.13202	3079.93584	6740.52651	3161.78836	2076.09834	12169.95021	16931.00474	4110.07352	0.64896	0.66096	1.32E-03	1.67E-03	1.21E-03	4.81E-03	9.69E-04	3.96E-04	3.98E-03	1.22E-03	8.01E-04	9.12E-03	8.34E-03	2.02E-03	3.04E-04	3.13E-04	3.6487E-02
551438.12	4172990.22	5299.85581	11673.35521	1722.49617	16857.29682	1920.1087	7499.81456	5314.72835	6762.88207	978.84063	14691.40623	7282.33391	9417.44317	1.05772	1.08034	1.03E-03	3.65E-03	5.38E-04	4.61E-03	2.47E-04	9.63E-04	3.14E-03	2.61E-03	3.78E-04	1.10E-02	3.59E-03	4.64E-03	4.96E-04	5.12E-04	3.7403E-02
551469.29	4173077.22	5449.14551	11898.33958	1574.13726	13011.86212	1640.16844	11215.49903	5494.4257	7214.39647	896.10523	12164.03199	5189.88996	13457.57868	1.09744	1.11634	1.06E-03	3.72E-03	4.92E-04	3.56E-03	2.11E-04	1.44E-03	3.24E-03	2.78E-03	3.46E-04	9.12E-03	2.56E-03	6.63E-03	5.14E-04	5.29E-04	3.6195E-02
551496.7	4173125.06	5572.30589	11592.07917	1508.72636	11060.21576	1479.10548	13378.74221	5628.54388	6924.78754	863.39908	10742.68301	4309.34112	15999.06741	1.21718	1.2376	1.08E-03	3.62E-03	4.71E-04	3.02E-03	1.90E-04	1.72E-03	3.32E-03	2.67E-03	3.33E-04	8.05E-03	2.12E-03	7.88E-03	5.70E-04	5.87E-04	3.5648E-02
551568.15	4172675.45	6499.1789	5440.9176	3649.68792	18417.85653	6971.26328	3109.42413	6429.70106	3197.81976	1963.53401	12442.69525	16799.0257	4137.6244	0.67484	0.68731	1.26E-03	1.70E-03	1.14E-03	5.03E-03	8.96E-04	3.99E-04	3.80E-03	1.23E-03	7.58E-04	9.33E-03	8.28E-03	2.04E-03	3.16E-04	3.26E-04	3.6500E-02
551551.03	4173187.73	6098.0157	10646.58362	1395.22599	8279.94275	1246.80631	16638.75162	6174.35339	6472.97467	807.54452	8501.01827	3291.44995	19490.63067	1.78233	1.82066	1.18E-03	3.33E-03	4.36E-04	2.26E-03	1.60E-04	2.14E-03	3.64E-03	2.50E-03	3.12E-04	6.37E-03	1.62E-03	9.60E-03	8.35E-04	8.63E-04	3.5254E-02
551636.74	4172677.85	8621.62114	4669.33202	4829.42016	13194.06526	9793.0372	2818.27727	8500.45591	2813.27362	2526.26555	9867.32886	17547.35727	3811.31496	0.55183	0.56488	1.67E-03	1.46E-03	1.51E-03	3.61E-03	1.26E-03	3.62E-04	5.02E-03	1.09E-03	9.75E-04	7.40E-03	8.64E-03	1.88E-03	2.59E-04	2.68E-04	3.5390E-02
551716.94	4173214.4	10245.89272	7722.89255	1201.03982	5175.85832	971.67862	18528.0333	10550.9328	4388.95358	709.82977	5237.73352	2287.04003	21878.10189	2.874	2.76125	1.99E-03	2.41E-03	3.75E-04	1.41E-03	1.25E-04	2.38E-03	6.23E-03	1.69E-03	2.74E-04	3.93E-03	1.13E-03	1.08E-02	1.35E-03	1.31E-03	3.5378E-02
551427.2	4172872.62	4696.29779	8426.30094	2042.04701	21917.08372	2515.79432	4941.31998	4681.52344	4756.37253	1140.45723	15860.32438	11582.20137	6274.87142	1.14952	1.18666	9.11E-04	2.63E-03	6.38E-04	5.99E-03	3.23E-04	6.35E-04	2.76E-03	1.84E-03	4.40E-04	1.19E-02	5.71E-03	3.09E-03	5.39E-04	5.62E-04	3.7956E-02
551521.35	4172691.88	5467.19365	5834.56832	2885.21757	21611.09176	4978.74544	3278.00116	5422.3706	3366.93372	1575.21393	13384.09931	16711.71929	4306.51879	0.84404	0.86332	1.06E-03	1.82E-03	9.01E-04	5.90E-03	6.40E-04	4.21E-04	3.20E-03	1.30E-03	6.08E-04	1.00E-02	8.23E-03	2.12E-03	3.96E-04	4.09E-04	3.7051E-02
551434.89	4172981.27	5240.66069	11362.27841	1740.19402	17180.07368	1943.05556	7170.03117	5252.09433	6545.4699	988.9902	14845.01376	7499.13716	9014.57601	1.05197	1.07478	1.02E-03	3.55E-03	5.44E-04	4.69E-03	2.50E-04	9.21E-04	3.10E-03	2.53E-03	3.82E-04	1.11E-02	3.69E-03	4.44E-03	4.93E-04	5.09E-04	3.7250E-02
551424.79	4172924.11	4956.30786	9694.49001	1931.45315	19907.12514	2185.19745	5780.61542	4949.95533	5482.93991	1091.4267	15972.01162	9313.58693	7306.16642	1.09303	1.12151	9.62E-04	3.03E-03	6.03E-04	5.44E-03	2.81E-04	7.43E-04	2.92E-03	2.12E-03	4.21E-04	1.20E-02	4.59E-03	3.60E-03	5.12E-04	5.32E-04	3.7721E-02
551918.78	4172752.86	9680.41473	5434.14095	5575.20846	14818.54965	6423.8933	2449.00466	9427.8351	3238.17777	2956.59285	12391.15841	12822.0323	3320.61239	0.35122	0.35101	1.88E-03	1.70E-03	1.74E-03	4.05E-03	8.25E-04	3.15E-04	5.57E-03	1.25E-03	1.14E-03	9.29E-03	6.32E-03	1.64E-03	1.65E-04	1.66E-04	3.6035E-02
551557.34	4172675.93	6209.69049	5497.3166	3443.58783	19074.04001	6443.34211	3127.41171	6146.50259	3217.19972	1857.61926	12614.28756	16650.35802	4149.83454	0.7008	0.71398	1.21E-03	1.72E-03	1.08E-03	5.21E-03	8.28E-04	4.02E-04	3.63E-03	1.24E-03	7.17E-04	9.46E-03	8.20E-03	2.04E-03	3.28E-04	3.38E-04	3.6396E-02
551431.66	4172972.27	5181.87629	11037.45155	1762.12808	17523.14579	1968.86322	6866.94956	5189.80327	6326.62283	1001.19038	14996.8596	7710.39706	8642.70887	1.0477	1.07084	1.01E-03	3.45E-03	5.50E-04	4.79E-03	2.53E-04	8.82E-04	3.06E-03	2.44E-03	3.86E-04	1.12E-02	3.80E-03	4.26E-03	4.91E-04	5.07E-04	3.7116E-02
551495.46	4172711.26	5002.70044	6072.30703	2523.39535	22681.90199	4122.62913	3400.04504	4969.8239	3473.08559	1382.36131	13689.99814	16378.99775	4438.04476	0.96332	0.99154	9.71E-04	1.90E-03	7.88E-04	6.20E-03	5.30E-04	4.37E-04	2.93E-03	1.34E-03	5.34E-04	1.03E-02	8.07E-03	2.19E-03	4.51E-04	4.70E-04	3.7067E-02
551962.65	4172775.55	12581.41759	6356.77227	4510.68727	12701.35803	4680.65288	3343.47516	12343.36837	3808.8656	2505.3093	11081.7547	9700.91185	4518.47613	0.31526	0.31463	2.44E-03	1.99E-03	1.41E-03	3.47E-03	6.01E-04	4.30E-04	7.29E-03	1.47E-03	9.67E-04	8.31E-03	4.78E-03	2.23E-03	1.48E-04	1.49E-04	3.5671E-02
551518.33	4173156.07	5748.21688	11146.43861	1454.40741	9644.67885	1361.4988	14573.36562	5811.3238	6734.69087	835.71769	9694.03579	3779.03002	17264.38226	1.37537	1.40014	1.12E-03	3.48E-03	4.54E-04	2.64E-03	1.75E-04	1.87E-03	3.43E-03	2.60E-03	3.23E-04	7.27E-03	1.86E-03	8.50E-03	6.45E-04	6.64E-04	3.5029E-02
551834.05	4172723.51	6801.86376	3503.65161	4336.60986	16501.06934	10841.29338	1752.54116	6704.60509	1976.5709	2102.55019	10947.90221	20180.93154	2353.52979	0.48903	0.48952	1.32E-03	1.09E-03	1.35E-03	4.51E-03	1.39E-03	2.25E-04	3.96E-03	7.63E-04	8.12E-04	8.21E-03	9.94E-03	1.16E-03	2.29E-04	2.32E-04	3.5197E-02
551475.21	4173093.96	5410.08448	11503.13058	1533.29842	12218.65572	1567.31735	11673.21676	5458.49289	6947.55655	873.98899	11507.46923	4821.03944	14157.97738	1.10334	1.12181	1.05E-03	3.59E-03	4.79E-04	3.34E-03	2.01E-04	1.50E-03	3.22E-03	2.68E-03	3.37E-04	8.63E-03	2.37E-03	6.97E-03	5.17E-04	5.32E-04	3.5428E-02
551863.63	4172731.06	6769.80853	3961.57367	5164.22253	16316.22095	9746.43758	1818.66706	6631.37484	2257.78176	2538.57472	11760.18209	18209.07847	2448.57852	0.4228	0.42261	1.31E-03	1.24E-03	1.61E-03	4.46E-03	1.25E-03	2.34E-04	3.91E-03	8.72E-04	9.80E-04	8.82E-03	8.97E-03	1.21E-03	1.98E-04	2.00E-04	3.5265E-02
551424.38	4172893.89	4757.75161	8811.56158	1987.29718	20831.1488	2342.28996	5210.76381	4746.08431	4976.21292	1115.45505	15829.77137	10365.86619	6602.76629	1.11133	1.14475	9.23E-04	2.75E-03	6.21E-04	5.69E-03	3.01E-04	6.69E-04	2.80E-03	1.92E-03	4.31E-04	1.19E-02	5.11E-03	3.25E-03	5.21E-04	5.43E-04	3.7401E-02
551499.79	4173133.65	5534.61766	11269.73316	1479.99874	10581.73384	1436.55755	13354.43286	5591.22391	6746.71192	847.5788	10358.44343	4137.55024	15937.27701	1.22157	1.24199	1.07E-03	3.52E-03	4.62E-04	2.89E-03	1.85E-04	1.72E-03	3.30E-03	2.60E-03	3.27E-04	7.77E-03	2.04E-03	7.85E-03	5.73E-04	5.89E-04	3.4896E-02
551428.43	4172963.31	5101.77742	10649.36037	1777.07037	17747.36665	1990.39691	6559.48015	5106.63616	6081.19222	1009.24853	15030.69282	7899.93049	8263.38441	1.03852	1.06209	9.90E-04	3.33E-03	5.55E-04	4.85E-03	2.56E-04	8.43E-04	3.01E-03	2.35E-03	3.90E-04	1.13E-02	3.89E-03	4.07E-03	4.87E-04	5.03E-04	3.6791E-02
551452.97	4172764.65	4491.2152	6699.17062	2152.88551	23103.4301	3298.23432	3771.9156	4469.46512	3786.76244	1181.69109	14191.35118	15163.73854	4872.16457	1.1541	1.20346	8.72E-04	2.09E-03	6.72E-04	6.31E-03	4.24E-04	4.85E-04	2.64E-03	1.46E-03	4.56E-04	1.06E-02	7.47E-03	2.40E-03	5.41E-04	5.70E-04	3.7034E-02
551545.57	4172676.99	5890.5603	5517.28279	3208.81491	19488.56755	5846.8332	3131.62543	5834.19699	3215.06536	1736.86853	12639.01185	16291.35184	4142.20801	0.72195	0.73583	1.14E-03	1.72E-03	1.00E-03	5.32E-03	7.51E-04	4.02E-04	3.44E-03	1.24E-03	6.70E-04	9.48E-03	8.03E-03	2.04E-03	3.38E-04	3.49E-04	3.5931E-02
551429.66	4172828.01	4461.3216	7464.63486	2045.30832	22364.02465	2802.18461	4330.69988	4443.08479	4211.80586	1133.20628	14743.96046	13292.35129	5528.93924	1.16254	1.2065	8.66E-04	2.33E-03	6.39E-04	6.11E-03	3.60E-04	5.56E-04	2.62E-03	1.63E-03	4.37E-04	1.11E-02	6.55E-03	2.72E-03	5.45E-04	5.72E-04	3.6991E-02
551878.56	4172734.36	7098.27749	4244.29396	5386.3548	15994.90891	8928.71031	1899.02959	6931.18912	2448.34366	2695.14031	11971.04265	16566.59866	2560.61949	0.3907	0.39038	1.38E-03	1.33E-03	1.68E-03	4.37E-03	1.15E-03	2.44E-04	4.09E-03	9.45E-04	1.04E-03	8.97E-03	8.16E-03	1.26E-03	1.83E-04	1.85E-04	3.4989E-02
551622.14	4173227.33	6915.77288	8716.65113	1245.82166	6309.61703	1073.36334	18621.57799	7037.05798	5179.27891	727.70647	6377.17848	2649.27818	21736.18695	4.84135	5.06075	1.34E-03	2.72E-03	3.89E-04	1.72E-03	1.38E-04	2.39E-03	4.15E-03	2.00E-03	2.81E-04	4.78E-03	1.31E-03	1.07E-02	2.27E-03	2.40E-03	3.6603E-02
551933.52	4172755.95	10128.05736	5590.18663	5188.97856	13949.87201	5774.15258	2654.96009	9878.34415	3390.6498	2795.67553	11868.71436	11661.02566	3515.72965	0.33718	0.33669	1.97E-03	1.75E-03	1.62E-03	3.81E-03	7.42E-04	3.41E-04	5.83E-03	1.31E-03	1.08E-03	8.90E-03	5.74E-03	1.73E-03	1.58E-04	1.60E-04	3.5138E-02
551446.9	4172775.46	4433.63857	6783.70339	2109.90781	22747.63259	3177.07724	3840.77651	4412.81581	3831.38558	1159.68792	14145.79717	14692.43396	4949.4112	1.15174	1.20095	8.60E-04	2.12E-03	6.59E-04	6.22E-03	4.08E-04	4.93E-04	2.60E-03	1.48E-03	4.48E-04	1.06E-02	7.24E-03	2.44E-03	5.40E-04	5.69E-04	3.6677E-02
551537.33	4173179.94	5849.30969	10557.96601	1394.56794	8579.81558	1267.33498	15264.32149	5918.24848	6411.23991	804.1748	8742.41263	3403.94415	17973.20261	1.55344	1.58396	1.14E-03	3.30E-03	4.36E-04	2.34E-03	1.63E-04	1.96E-03	3.49E-03	2.47E-03	3.10E-04	6.55E-03	1.68E-03	8.85E-03	7.28E-04	7.51E-04	3.4179E-02
551468.16	4172738.88	4594.39284	6331.18009	2226.78208	22703.45291	3502.34033	3554.74035	4570.32938	3594.99083	1220.45987	13759.31273	15437.8918	4613.26535	1.06619	1.107	8.92E-04	1.98E-03	6.96E-04	6.20E-03	4.50E-04	4.57E-04	2.70E-03	1.39E-03	4.71E-04	1.03E-02	7.60E-03	2.27E-03	5.00E-04	5.25E-04	3.6448E-02
551782.09	4172711.34	8684.98841	3210.99339	3157.3612	15802.02183	9789.6449	1875.69267	8577.65461	1844.13948	1628.42283	9020.8852	19981.14643	2531.25638	0.60982	0.61619	1.69E-03	1.00E-03	9.86E-04	4.32E-03	1.26E-03	2.41E-04	5.06E-03	7.12E-04	6.29E-04	6.76E-03	9.84E-03	1.25E-03	2.86E-04	2.92E-04	3.4325E-02
551708.84	4173219.94	9681.00693	7632.47019	1188.9772	5173.96699	967.77495	17808.95379	9953.82575	4352.86406	701.94523	5230.23234	2283.15653	21081.44089	3.56256	3.40112	1.88E-03	2.38E-03	3.71E-04	1.41E-03	1.24E-04	2.29E-03	5.88E-03	1.68E-03	2.71E-04	3.92E-03	1.12E-03	1.04E-02	1.67E-03	1.61E-03	3.4999E-02
551425.2	4172954.34	5012.74194	10240.31965	1789.65755	17912.3072	2011.41794	6264.40422	5014.71798	5831.32166	1015.64634	15000.72376	8050.0463	7898.09796	1.02766	1.05136	9.73E-04	3.20E-03	5.59E-04	4.89E-03	2.58E-04	8.05E-04	2.96E-03	2.25E-03	3.92E-04	1.12E-02	3.97E-03	3.89E-03	4.82E-04	4.98E-04	3.6373E-02
551421.57	4172915.15	4806.08817	9160.41576	1908.83022	19567.44367	2181.57952	5475.13312	4798.32174	5180.23272	1076.63104	15471.77536	9409.21808	6925.75983	1.06127	1.0893	9.33E-04	2.86E-03	5.96E-04	5.35E-03	2.80E-04	7.03E-04	2.83E-03	2.00E-03	4.16E-04	1.16E-02	4.64E-03	3.41E-03	4.97E-04	5.16E-04	3.6628E-02
551951.63	4172762.91	11335.31514	5965.43623	4681.41911	12981.59099	5072.91723	3002.13435	11095.99284	3580.66021	2573.97841	11211.52059	10380.76646	4056.42602	0.32092	0.32042	2.20E-03	1.86E-03	1.46E-03	3.55E-03	6.52E-04	3.86E-04	6.55E-03	1.38E-03	9.94E-04	8.41E-03	5.11E-03	2.00E-03	1.50E-04	1.52E-04	3.4855E-02
551424.71	4172863.54	4556.19918	7987.43781	1994.66528	21284.01488	2509.45998	4705.25507	4541.1346	4510.59251	1112.07905	15123.59101	11554.41895	5980.85441	1.10751	1.14267	8.84E-04	2.49E-03	6.23E-04	5.82E-03	3.22E-04	6.04E-04	2.68E-03	1.74E-03	4.29E-04	1.13E-02	5.69E-03	2.95E-03	5.19E-04	5.42E-04	3.6632E-02
551988.57	4172791.46	13493.64447	6500.57642	3941.48732	11489.07899	3840.69712	3690.65799	13311.61051	3877.99715	2218.71993	10245.6316	8119.73165	5032.40648	0.29469	0.29397	2.62E-03	2.03E-03	1.23E-03	3.14E-03	4.93E-04	4.74E-04	7.86E-03	1.50E-03	8.56E-04	7.68E-03	4.00E-03	2.48E-03	1.38E-04	1.39E-04	3.4636E-02
551512.63	4172694.38	5217.549	5759.79167	2693.6306	21119.04432	4535.05026	3248.99397	5177.85706	3316.26467	1473.84123	13044.22126	15904.36104	4258.21996	0.83664	0.85643	1.01E-03	1.80E-03	8.41E-04	5.77E-03	5.83E-04	4.17E-04	3.06E-03	1.28E-03	5.69E-04	9.78E-03	7.83E-03	2.10E-03	3.92E-04	4.06E-04	3.5839E-02
551442.66	4172783.7	4399.22249	6845.39363	2081.63538	22471.74398	3090.19941	3894.37167	4379.00281	3864.73412	1145.51126	14106.4556	14344.72707	5009.64365	1.14623	1.19469	8.54E-04	2.14E-03	6.50E-04	6.14E-03	3.97E-04	5.00E-04	2.58E-03	1.49E-03	4.42E-04	1.06E-02	7.07E-03	2.47E-03	5.37E-04	5.66E-04	3.6412E-02
551578.97	4173211.03	6234.49847	9564.00965	1304.01042	7259.47076	1156.18395	17008.93152	6323.19527	5766.67151	757.16154	7349.68909	2961.25853	19885.41025	2.25759	2.31873	1.21E-03	2.99E-03	4.07E-04	1.98E-03	1.49E-04	2.19E-03	3.73E-03	2.23E-03	2.92E-04	5.51E-03	1.46E-03	9.80E-03	1.06E-03	1.10E-03	3.4094E-02
551850.22	4172724.47	6488.85934	3631.06208	4615.46497	16079.99581	10053.87554	1742.93904	6379.38691	2055.67722	2246.97827	11100.3998	18793.53642	2341.35345	0.44751	0.44766	1.26E-03	1.13E-03	1.44E-03	4.39E-03	1.29E-03	2.24E-04	3.77E-03	7.94E-04	8.67E-04	8.32E-03	9.26E-03	1.15E-03	2.10E-04	2.12E-04	3.4326E-02
551893.42	4172737.59	7600.448	4539.16145	5439.53644	15525.97568	7935.34792	2007.67883	7406.65769	2645.51156	2773.77008	12010.47563	14820.18705	2713.8486	0.37031	0.37031	1.47E-03	1.42E-03	1.70E-03	4.24E-03	1.02E-03	2.58E-04	4.37E-03	1.02E-03	1.07E-03	9.00E-03	7.30E-03	1.34E-03	1.74E-04	1.75E-04	3.4566E-02
551521.42	4173164.65	5670.11356	10702.05316	1415.358	9207.70178	1319.95036	14246.1952	5732.89769	6470.93795	813.91082	9250.78477	3634.38909	16867.27632	1.36932	1.39393	1.10E-03	3.34E-03	4.42E-04	2.52E-03	1.70E-04	1.83E-03	3.38E-03	2.50E-03	3.14E-04	6.94E-03	1.79E-03	8.31E-03	6.42E-04	6.61E-04	3.3934E-02
551502.88	4173142.23	5486.94255	10929.87609	1449.37007	10122.8733	1395.136	13258.55506	5543.67996	6556.53794	830.66109	9966.04946	3976.62649	15797.05636	1.22331	1.24381	1.06E-03	3.41E-03	4.53E-04	2.77E-03	1.79E-04	1.70E-03	3.27E-03	2.53E-03	3.21E-04	7.47E-03	1.96E-03	7.78E-03	5.73E-04	5.89E-04	3.4079E-02
551977.6	4172778.88	12640.91257	6285.71217	4141.87036	11909.52654	4212.67043	3430.53146	12434.11757	3750.08887	2310.49536	10469.74037	8810.19364	4685.14834	0.30117	0.30056	2.45E-03	1.96E-03	1.29E-03	3.25E-03	5.41E-04	4.41E-04	7.34E-03	1.45E-03	8.92E-04	7.85E-03	4.34E-03	2.31E-03	1.41E-04	1.42E-04	3.4406E-02
551554.98	4173196.77	5987.10321	10035.93846	1345.27818	7872.72383	1205.19488	15852.50789	6063.00175	6086.07461	778.17431	8019.83941	3163.06009	18598.50378	1.76968	1.80853	1.16E-03	3.13E-03	4.20E-04	2.15E-03	1.55E-04	2.04E-03	3.58E-03	2.35E-03	3.00E-04	6.01E-03	1.56E-03	9.16E-03	8.29E-04	8.57E-04	3.3707E-02
551481.13	4173110.7	5320.61598	10942.17637	1482.9251	11349.79567	1495.79331	11886.46041	5370.91983	6609.31785	846.49941	10780.28366	4492.45565	14322.59579	1.09655	1.11431	1.03E-03	3.42E-03	4.63E-04	3.10E-03	1.92E-04	1.53E-03	3.17E-03	2.55E-03	3.27E-04	8.08E-03	2.21E-03	7.06E-03	5.14E-04	5.28E-04	3.4175E-02
551643.28	4172673.99	8566.51657	4432.86005	4664.04764	12231.84984	9285.52435	2703.82864	8445.41655	2672.18945	2432.81469	9177.22156	16583.38364	3659.68194	0.51309	0.52504	1.66E-03	1.38E-03	1.46E-03	3.34E-03	1.19E-03	3.47E-04	4.99E-03	1.03E-03	9.39E-04	6.88E-03	8.17E-03	1.80E-03	2.40E-04	2.49E-04	3.3684E-02
551529.47	4172679.86	5497.21546	5530.00804	2917.65398	19851.02293	5125.29398	3135.26703	5449.2636	3204.73486	1587.3268	12588.00464	15772.02697	4129.01891	0.75267	0.76814	1.07E-03	1.73E-03	9.11E-04	5.42E-03	6.58E-04	4.03E-04	3.22E-03	1.24E-03	6.13E-04	9.44E-03	7.77E-03	2.03E-03	3.53E-04	3.64E-04	3.5215E-02
551438.43	4172791.94	4364.38273	6890.93096	2051.32	22120.77348	2998.81366	3943.1282	4344.79552	3890.01185	1130.31761	14027.10096	13947.77918	5063.42143	1.13348	1.18047	8.47E-04	2.15E-03	6.41E-04	6.04E-03	3.85E-04	5.07E-04	2.56E-03	1.50E-03	4.36E-04	1.05E-02	6.87E-03	2.49E-03	5.31E-04	5.59E-04	3.6051E-02
551421.98	4172945.38	4914.85553	9818.02267	1798.27084	18005.0413	2011.88804	5980.80812	4914.23327	5580.15981	1019.48025	14899.27813	8193.31287	7545.99616	1.01453	1.03858	9.54E-04	3.07E-03	5.62E-04	4.92E-03	2.58E-04	7.68E-04	2.90E-03	2.15E-03	3.94E-04	1.12E-02	4.04E-03	3.72E-03	4.75E-04	4.92E-04	3.5868E-02
551584.57	4172666.68	6730.60923	5056.10033	3770.05404	16022.75492	7315.38245	2942.63439	6654.14671	2992.41504	2019.81213	11281.26403	15786.08965	3930.26558	0.58755	0.59777	1.31E-03	1.58E-03	1.18E-03	4.38E-03	9.40E-04	3.78E-04	3.93E-03	1.16E-03	7.80E-04	8.46E-03	7.78E-03	1.94E-03	2.75E-04	2.83E-04	3.4350E-02
551421.15	4172884.92	4599.43922	8298.04389	1941.75584	20210.22353	2329.34479	4935.0393	4587.1942	4691.57016	1087.61928	15104.79902	10339.28887	6256.85443	1.06011	1.09226	8.93E-04	2.59E-03	6.07E-04	5.52E-03	2.99E-04	6.34E-04	2.71E-03	1.81E-03	4.20E-04	1.13E-02	5.09E-03	3.08E-03	4.97E-04	5.18E-04	3.5999E-02
551669.75	4172677.94	9351.87832	4101.02445	4744.59275	11423.6395	9195.63538	2544.41094	9209.80755	2472.97877	2439.23081	8195.33143	16898.77301	3460.76999	0.52134	0.53546	1.81E-03	1.28E-03	1.48E-03	3.12E-03	1.18E-03	3.27E-04	5.44E-03	9.55E-04	9.42E-04	6.14E-03	8.32E-03	1.70E-03	2.44E-04	2.54E-04	3.3212E-02
551463.9	4173082.37	5218.66755	11036.87416	1504.30118	12272.52322	1571.26344	10557.17275	5262.17211	6673.81429	856.16004	11402.86221	4954.23487	12665.67213	1.02582	1.04277	1.01E-03	3.45E-03	4.70E-04	3.35E-03	2.02E-04	1.36E-03	3.11E-03	2.58E-03	3.31E-04	8.55E-03	2.44E-03	6.24E-03	4.81E-04	4.94E-04	3.4058E-02
551908.23	4172740.76	8106.22748	4781.60682	5336.2094	14917.5691	7071.19922	2119.69162	7894.53308	2810.71875	2768.38061	11865.91395	13424.27869	2871.42655	0.35343	0.35337	1.57E-03	1.49E-03	1.67E-03	4.08E-03	9.08E-04	2.72E-04	4.66E-03	1.09E-03	1.07E-03	8.90E-03	6.61E-03	1.41E-03	1.66E-04	1.67E-04	3.4060E-02
551484.35	4173119.81	5274.11607	10814.28808	1455.07738	10905.96871	1456.02191	11927.16507	5325.01359	6432.81357	831.28467	10398.04468	4318.98745	14330.76448	1.09437	1.11181	1.02E-03	3.38E-03	4.54E-04	2.98E-03	1.87E-04	1.53E-03	3.14E-03	2.48E-03	3.21E-04	7.80E-03	2.13E-03	7.06E-03	5.13E-04	5.27E-04	3.3525E-02
551441.75	4173029.36	5126.11113	11172.96255	1552.43773	14221.80898	1714.96235	8236.23305	5153.71306	6627.69734	880.99937	12505.51908	5998.81554	10257.81178	0.97399	0.99188	9.95E-04	3.49E-03	4.85E-04	3.89E-03	2.20E-04	1.06E-03	3.04E-03	2.56E-03	3.40E-04	9.38E-03	2.96E-03	5.05E-03	4.56E-04	4.70E-04	3.4385E-02
551444.97	4173038.32	5141.01592	11193.2583	1540.26471	13857.91213	1691.88185	8570.43468	5171.66694	6661.10354	873.92927	12274.16002	5810.62649	10643.81843	0.97776	0.99556	9.98E-04	3.50E-03	4.81E-04	3.79E-03	2.17E-04	1.10E-03	3.05E-03	2.57E-03	3.37E-04	9.20E-03	2.86E-03	5.24E-03	4.58E-04	4.72E-04	3.4279E-02
551438.53	4173020.41	5103.68503	11102.03886	1564.95862	14578.6028	1737.09474	7904.98552	5128.21534	6557.41482	888.33745	12725.33755	6186.50079	9869.74876	0.96941	0.9881	9.90E-04	3.47E-03	4.89E-04	3.98E-03	2.23E-04	1.02E-03	3.03E-03	2.53E-03	3.43E-04	9.54E-03	3.05E-03	4.86E-03	4.54E-04	4.68E-04	3.4443E-02
551448.2	4173047.27	5149.75546	11169.67917	1528.49938	13494.18953	1668.21987	8904.11441	5183.24835	6660.27125	867.23823	12037.92309	5623.25479	11023.1874	0.98163	0.99949	9.99E-04	3.49E-03	4.77E-04	3.69E-03	2.14E-04	1.14E-03	3.06E-03	2.57E-03	3.35E-04	9.02E-03	2.77E-03	5.43E-03	4.60E-04	4.74E-04	3.4135E-02
551966.63	4172766.3	11473.28667	5961.16343	4305.63642	12232.44244	4577.40995	3112.88265	11252.85219	3571.61743	2386.56265	10622.96431	9466.85169	4203.65517	0.30692	0.30643	2.23E-03	1.86E-03	1.34E-03	3.34E-03	5.88E-04	4.00E-04	6.64E-03	1.38E-03	9.21E-04	7.96E-03	4.66E-03	2.07E-03	1.44E-04	1.45E-04	3.3694E-02
551418.75	4172936.41	4807.8803	9386.01437	1801.38405	18015.49342	2024.79433	5706.14539	4805.02117	5328.32906	1019.90574	14718.7098	8327.08463	7204.21559	0.99803	1.02221	9.33E-04	2.93E-03	5.63E-04	4.92E-03	2.60E-04	7.33E-04	2.84E-03	2.06E-03	3.94E-04	1.10E-02	4.10E-03	3.55E-03	4.68E-04	4.84E-04	3.5268E-02
551505.97	4173150.82	5426.82478	10567.65207	1416.16497	9687.14813	1355.19319	13083.27701	5483.49692	6348.97606	812.25316	9561.75198	3826.86122	15570.04768	1.22053	1.24096	1.05E-03	3.30E-03	4.42E-04	2.65E-03	1.74E-04	1.68E-03	3.24E-03	2.45E-03	3.14E-04	7.17E-03	1.89E-03	7.67E-03	5.72E-04	5.88E-04	3.3183E-02
551435.3	4173011.46	5074.32218	10981.45803	1578.42822	14927.36054	1758.51688	7581.27428	5095.58539	6452.75389	896.28372	12933.40629	6372.58018	9485.5164	0.96503	0.98372	9.85E-04	3.43E-03	4.93E-04	4.08E-03	2.26E-04	9.74E-04	3.01E-03	2.49E-03	3.46E-04	9.70E-03	3.14E-03	4.67E-03	4.52E-04	4.66E-04	3.4458E-02
551610.42	4173228.47	6541.58927	8618.95568	1231.15416	6386.18513	1074.02206	17317.47766	6649.76308	5140.70576	717.81963	6433.2915	2675.67296	20240.0582	3.60649	3.74061	1.27E-03	2.69E-03	3.85E-04	1.74E-03	1.38E-04	2.22E-03	3.93E-03	1.98E-03	2.77E-04	4.82E-03	1.32E-03	9.97E-03	1.69E-03	1.77E-03	3.4215E-02
551500.73	4172698.4	4950.03556	5713.14541	2496.35339	20764.11187	4100.16043	3232.64024	4915.7979	3279.12271	1368.03027	12770.26626	15185.51106	4224.99694	0.84586	0.86763	9.61E-04	1.78E-03	7.80E-04	5.67E-03	5.27E-04	4.15E-04	2.90E-03	1.27E-03	5.28E-04	9.57E-03	7.48E-03	2.08E-03	3.96E-04	4.11E-04	3.4779E-02
551595.84	4172664.39	6964.71385	4871.59172	3891.6297	14857.73017	7611.11793	2866.90081	6882.33889	2896.10819	2077.9472	10703.74281	15489.43711	3838.19044	0.55045	0.55998	1.35E-03	1.52E-03	1.22E-03	4.06E-03	9.78E-04	3.68E-04	4.06E-03	1.12E-03	8.02E-04	8.02E-03	7.63E-03	1.89E-03	2.58E-04	2.65E-04	3.3546E-02
551458.5	4172745.26	4425.03953	6259.19987	2116.55067	21734.09069	3287.56787	3539.66138	4403.21161	3549.92395	1160.80607	13341.60842	14513.13445	4584.40931	1.0358	1.07631	8.59E-04	1.96E-03	6.61E-04	5.94E-03	4.22E-04	4.55E-04	2.60E-03	1.37E-03	4.48E-04	1.00E-02	7.15E-03	2.26E-03	4.85E-04	5.10E-04	3.5114E-02
551588.33	4173219.84	6218.88424	9044.85995	1260.87795	6867.08051	1116.78933	16591.50775	6311.38712	5432.86476	732.97159	6917.50535	2835.27444	19411.18128	2.47957	2.55482	1.21E-03	2.83E-03	3.94E-04	1.88E-03	1.43E-04	2.13E-03	3.73E-03	2.10E-03	2.83E-04	5.19E-03	1.40E-03	9.56E-03	1.16E-03	1.21E-03	3.3201E-02
551814.31	4172713.25	7005.51462	3168.56196	3430.82838	15566.97602	10118.48237	1716.45626	6922.4717	1794.94488	1701.58163	9638.11583	19367.5393	2304.43644	0.52212	0.52474	1.36E-03	9.90E-04	1.07E-03	4.25E-03	1.30E-03	2.21E-04	4.09E-03	6.93E-04	6.57E-04	7.23E-03	9.54E-03	1.14E-03	2.45E-04	2.49E-04	3.3026E-02
551418.34	4172906.18	4641.3355	8616.45921	1871.53638	19029.62356	2164.66847	5171.72919	4632.59487	4875.86714	1053.60054	14844.8354	9246.03451	6545.68404	1.01919	1.0473	9.01E-04	2.69E-03	5.85E-04	5.20E-03	2.78E-04	6.64E-04	2.73E-03	1.88E-03	4.07E-04	1.11E-02	4.55E-03	3.22E-03	4.78E-04	4.96E-04	3.5225E-02
551432.08	4173002.51	5041.40988	10822.97669	1594.56568	15050.46968	1780.38667	7273.42971	5059.36843	6323.40354	905.75888	13140.68247	6556.07039	9116.38274	0.96142	0.98022	9.78E-04	3.38E-03	4.98E-04	4.11E-03	2.29E-04	9.34E-04	2.99E-03	2.44E-03	3.50E-04	9.85E-03	3.23E-03	4.49E-03	4.51E-04	4.65E-04	3.4397E-02
551524.51	4173173.24	5594.73743	10275.77781	1377.51723	8787.15272	1278.67112	13899.55751	5657.20865	6217.18066	792.7213	8834.00681	3493.45301	16450.1693	1.36604	1.39061	1.09E-03	3.21E-03	4.30E-04	2.40E-03	1.64E-04	1.79E-03	3.34E-03	2.40E-03	3.06E-04	6.62E-03	1.72E-03	8.10E-03	6.40E-04	6.59E-04	3.2868E-02
551923	4172743.88	8650.68205	5003.71061	5139.76543	14130.53679	6232.38611	2257.43073	8429.0382	2967.07539	2710.56014	11612.64049	12262.79618	3058.85865	0.33853	0.33847	1.68E-03	1.56E-03	1.61E-03	3.86E-03	8.01E-04	2.90E-04	4.98E-03	1.15E-03	1.05E-03	8.71E-03	6.04E-03	1.51E-03	1.59E-04	1.60E-04	3.3539E-02
551573.25	4172665.28	6337.52082	5061.26688	3498.02952	16336.92382	6633.06272	2934.90302	6269.5028	2983.06541	1879.9594	11307.43396	15211.9695	3909.06236	0.59075	0.60063	1.23E-03	1.58E-03	1.09E-03	4.46E-03	8.52E-04	3.77E-04	3.70E-03	1.15E-03	7.26E-04	8.48E-03	7.49E-03	1.93E-03	2.77E-04	2.85E-04	3.3632E-02

551457.05	4173072.14	5130.19947	10867.44134	1497.70542	12449.66562	1589.45136	9740.60157	5170.38624	6486.28144	846.06379	11315.2576	5111.93713	11935.99003	0.99058	1.00833	9.96E-04	3.39E-03	4.68E-04	3.40E-03	2.04E-04	1.25E-03	3.05E-03	2.50E-03	3.27E-04	8.48E-03	2.52E-03	5.88E-03	4.64E-04	4.78E-04	3.3421E-02
551421.34	4172842.87	4348.86067	7332.00229	1940.31539	20625.89265	2564.42532	4334.7794	4332.88705	4144.67352	1077.98066	14087.87147	11814.15665	5519.2747	1.06041	1.09652	8.44E-04	2.29E-03	6.06E-04	5.64E-03	3.29E-04	5.57E-04	2.56E-03	1.60E-03	4.16E-04	1.06E-02	5.82E-03	2.72E-03	4.97E-04	5.20E-04	3.4953E-02
551541.83	4173191.25	5736.4338	9917.06305	1339.09007	8058.13983	1214.15247	14604.03601	5804.96299	6014.93307	772.89506	8182.58607	3232.9741	17200.17893	1.54747	1.57811	1.11E-03	3.10E-03	4.18E-04	2.20E-03	1.56E-04	1.88E-03	3.43E-03	2.32E-03	2.98E-04	6.13E-03	1.59E-03	8.47E-03	7.25E-04	7.48E-04	3.2583E-02
551428.85	4172993.56	4988.52114	10585.03829	1606.39171	15300.707	1798.40034	6957.45182	5003.33557	6150.77294	912.66017	13269.96176	6742.90484	8733.43013	0.95412	0.97329	9.68E-04	3.31E-03	5.02E-04	4.18E-03	2.31E-04	8.94E-04	2.95E-03	2.37E-03	3.52E-04	9.95E-03	3.32E-03	4.30E-03	4.47E-04	4.61E-04	3.4242E-02
551487.44	4173128.4	5242.74561	10552.81116	1430.32389	10487.68843	1417.61376	11942.99632	5294.04881	6286.57173	817.7689	10064.59577	4155.63941	14317.99032	1.09666	1.11399	1.02E-03	3.30E-03	4.47E-04	2.87E-03	1.82E-04	1.53E-03	3.13E-03	2.43E-03	3.16E-04	7.55E-03	2.05E-03	7.05E-03	5.14E-04	5.28E-04	3.2898E-02
551471.35	4172725.21	4530.59899	5985.57604	2191.15088	21290.43148	3455.78267	3384.72789	4506.2253	3408.07889	1201.15093	12997.95976	14614.28753	4397.58005	0.96186	0.99512	8.79E-04	1.87E-03	6.84E-04	5.82E-03	4.44E-04	4.35E-04	2.66E-03	1.32E-03	4.64E-04	9.74E-03	7.20E-03	2.17E-03	4.51E-04	4.72E-04	3.4601E-02
551459.14	4173077.88	5121.25966	10770.51396	1486.67947	12212.42723	1568.69948	9912.54617	5162.71572	6426.67968	845.59409	11288.0121	4997.6241	12116.1204	0.99425	1.0095	9.94E-04	3.36E-03	4.64E-04	3.34E-03	2.02E-04	1.27E-03	3.05E-03	2.48E-03	3.26E-04	8.46E-03	2.46E-03	5.97E-03	4.66E-04	4.78E-04	3.3326E-02
551940.61	4172750.27	9534.95296	5341.55342	4841.91367	13279.75728	5457.77343	2566.69918	9306.18857	3237.73251	2609.22785	11257.90203	11052.31997	3394.09294	0.32548	0.3251	1.85E-03	1.67E-03	1.51E-03	3.63E-03	7.01E-04	3.30E-04	5.49E-03	1.25E-03	1.01E-03	8.44E-03	5.44E-03	1.67E-03	1.53E-04	1.54E-04	3.3304E-02
551562.13	4172665.95	6042.47987	5117.61132	3296.81864	16913.56069	6129.46719	2953.59049	5980.84015	3003.98104	1776.3834	11476.15714	15009.87056	3923.15804	0.61035	0.62061	1.17E-03	1.60E-03	1.03E-03	4.62E-03	7.87E-04	3.79E-04	3.53E-03	1.16E-03	6.86E-04	8.60E-03	7.39E-03	1.93E-03	2.86E-04	2.94E-04	3.3475E-02
551992.5	4172782.15	12507.79856	6151.96172	3798.82464	11151.64904	3798.88472	3473.67467	12334.70231	3666.75902	2129.47858	9869.12996	8007.75795	4732.10218	0.28769	0.28708	2.43E-03	1.92E-03	1.19E-03	3.05E-03	4.88E-04	4.46E-04	7.28E-03	1.42E-03	8.22E-04	7.40E-03	3.94E-03	2.33E-03	1.35E-04	1.36E-04	3.2981E-02
551517.79	4172682.65	5182.60775	5461.34677	2680.00947	19490.14209	4561.63604	3107.8034	5141.1866	3154.5294	1463.59488	12267.1473	14936.89166	4079.72014	0.75169	0.76781	1.01E-03	1.71E-03	8.37E-04	5.33E-03	5.86E-04	3.99E-04	3.03E-03	1.22E-03	5.65E-04	9.20E-03	7.36E-03	2.01E-03	3.52E-04	3.64E-04	3.3958E-02
551425.63	4172984.6	4937.53813	10332.71823	1622.71314	15575.96712	1818.79349	6667.57019	4949.23312	5972.36615	922.03577	13410.48767	6921.01832	8380.1879	0.9487	0.96834	9.58E-04	3.23E-03	5.07E-04	4.26E-03	2.34E-04	8.57E-04	2.92E-03	2.31E-03	3.56E-04	1.01E-02	3.41E-03	4.13E-03	4.45E-04	4.59E-04	3.4116E-02
551462.96	4173088.88	5108.09556	10589.82573	1465.22042	11782.49838	1525.8046	10368.17254	5151.50178	6391.86732	834.06768	10941.06303	4771.84342	12424.43039	0.99639	1.01309	9.91E-04	3.31E-03	4.58E-04	3.22E-03	1.96E-04	1.33E-03	3.04E-03	2.47E-03	3.22E-04	8.20E-03	2.35E-03	6.12E-03	4.67E-04	4.80E-04	3.2955E-02
551415.53	4172927.45	4687.44122	8937.70545	1794.6956	17897.00565	2031.18677	5432.97331	4682.75825	5070.77341	1014.49055	14429.00507	8436.28526	6863.85871	0.97747	1.00157	9.10E-04	2.79E-03	5.61E-04	4.89E-03	2.61E-04	6.98E-04	2.76E-03	1.96E-03	3.92E-04	1.08E-02	4.16E-03	3.38E-03	4.58E-04	4.75E-04	3.4511E-02
551491.86	4172702.15	4771.90973	5687.29614	2368.19041	20485.86393	3830.12313	3225.4212	4741.22313	3257.5618	1298.46126	12585.46201	14688.63348	4207.74085	0.85363	0.87706	9.26E-04	1.78E-03	7.40E-04	5.60E-03	4.92E-04	4.14E-04	2.80E-03	1.26E-03	5.01E-04	9.44E-03	7.24E-03	2.07E-03	4.00E-04	4.16E-04	3.4063E-02
551417.93	4172875.96	4442.58582	7811.2428	1888.63776	19505.54948	2307.13936	4672.69251	4430.01562	4419.43418	1055.87743	14338.67291	10245.05913	5929.01767	1.01113	1.04014	8.62E-04	2.44E-03	5.90E-04	5.33E-03	2.96E-04	6.00E-04	2.62E-03	1.71E-03	4.08E-04	1.07E-02	5.05E-03	2.92E-03	4.74E-04	4.93E-04	3.4531E-02
551509.06	4173159.4	5365.62003	10207.26312	1382.61079	9269.35381	1315.8853	12863.11632	5422.1269	6140.86679	793.59368	9168.2071	3683.38956	15296.1963	1.21739	1.23767	1.04E-03	3.19E-03	4.32E-04	2.53E-03	1.69E-04	1.65E-03	3.20E-03	2.37E-03	3.06E-04	6.87E-03	1.81E-03	7.53E-03	5.71E-04	5.87E-04	3.2273E-02
551688.86	4172679.19	9618.77682	3809.80395	4464.23239	11128.66244	8322.73766	2389.4922	9470.06371	2289.26149	2281.76421	7500.46714	16326.40824	3255.40514	0.52814	0.54305	1.87E-03	1.19E-03	1.39E-03	3.04E-03	1.07E-03	3.07E-04	5.59E-03	8.84E-04	8.81E-04	5.62E-03	8.04E-03	1.60E-03	2.48E-04	2.57E-04	3.1997E-02
551422.39	4172975.61	4876.5538	10039.68296	1638.21611	15814.22943	1838.55747	6385.32375	4885.09925	5776.2239	930.71187	13504.32204	7082.89303	8034.2205	0.94194	0.96175	9.46E-04	3.14E-03	5.12E-04	4.32E-03	2.36E-04	8.20E-04	2.88E-03	2.23E-03	3.59E-04	1.01E-02	3.49E-03	3.96E-03	4.41E-04	4.56E-04	3.3912E-02
551607.18	4172661.39	7163.94565	4649.26364	3962.5935	13626.46173	7761.80193	2771.54967	7076.09255	2775.28315	2106.50924	10021.60258	15049.00221	3718.5571	0.51171	0.52059	1.39E-03	1.45E-03	1.24E-03	3.72E-03	9.97E-04	3.56E-04	4.18E-03	1.07E-03	8.13E-04	7.51E-03	7.41E-03	1.83E-03	2.40E-04	2.47E-04	3.2463E-02
551490.53	4173136.98	5214.01701	10296.5766	1405.81414	10062.91577	1378.80734	11923.04538	5265.60839	6146.83856	804.29361	9742.10321	3996.09489	14267.93967	1.10094	1.11827	1.01E-03	3.22E-03	4.39E-04	2.75E-03	1.77E-04	1.53E-03	3.11E-03	2.37E-03	3.10E-04	7.30E-03	1.97E-03	7.03E-03	5.16E-04	5.30E-04	3.2264E-02
551955.66	4172753.71	10060.48135	5547.21391	4472.36424	12452.51453	4925.43173	2752.40995	9840.53828	3323.49449	2442.52532	10732.04643	10073.53827	3723.85468	0.31184	0.31151	1.95E-03	1.73E-03	1.40E-03	3.40E-03	6.33E-04	3.54E-04	5.81E-03	1.28E-03	9.43E-04	8.05E-03	4.96E-03	1.83E-03	1.46E-04	1.48E-04	3.2642E-02
551981.57	4172769.62	11494.91846	5912.8545	3963.09751	11520.3863	4145.624	3201.91739	11295.40837	3533.79653	2208.34676	10046.37372	8657.00016	4320.75231	0.29395	0.29344	2.23E-03	1.85E-03	1.24E-03	3.15E-03	5.33E-04	4.11E-04	6.67E-03	1.36E-03	8.52E-04	7.53E-03	4.26E-03	2.13E-03	1.38E-04	1.39E-04	3.2493E-02
551830.42	4172714.2	6356.74058	3193.36704	3649.50872	15237.56704	9744.46998	1659.27974	6275.37198	1803.88152	1788.36558	9816.25749	18515.0446	2224.72303	0.48433	0.48612	1.23E-03	9.97E-04	1.14E-03	4.16E-03	1.25E-03	2.13E-04	3.70E-03	6.96E-04	6.90E-04	7.36E-03	9.12E-03	1.10E-03	2.27E-04	2.30E-04	3.2124E-02
551654.45	4172671.43	8600.61685	4141.48606	4478.01432	11136.46916	8672.17539	2561.22416	8477.45259	2497.25996	2325.71525	8329.84306	15546.83742	3472.76141	0.47467	0.48594	1.67E-03	1.29E-03	1.40E-03	3.04E-03	1.11E-03	3.29E-04	5.00E-03	9.64E-04	8.98E-04	6.24E-03	7.66E-03	1.71E-03	2.22E-04	2.30E-04	3.1780E-02
551419.16	4172966.64	4808.20232	9721.42216	1652.99958	16017.90264	1858.23627	6115.77832	4813.89262	5571.87346	938.74088	13554.82259	7220.67182	7702.25749	0.93416	0.95429	9.33E-04	3.04E-03	5.16E-04	4.38E-03	2.39E-04	7.86E-04	2.84E-03	2.15E-03	3.62E-04	1.02E-02	3.56E-03	3.79E-03	4.38E-04	4.52E-04	3.3645E-02
551882.85	4172725.46	6421.10133	3918.76554	4802.49993	14917.00804	8241.55241	1782.02737	6277.34303	2255.97629	2404.39517	11024.33731	15471.29796	2398.70867	0.37754	0.3775	1.25E-03	1.22E-03	1.50E-03	4.08E-03	1.06E-03	2.29E-04	3.71E-03	8.71E-04	9.28E-04	8.26E-03	7.62E-03	1.18E-03	1.77E-04	1.79E-04	3.2262E-02
551415.11	4172897.22	4489.52995	8125.77669	1834.51448	18519.54845	2151.75602	4899.73185	4479.97903	4602.25573	1030.61295	14243.32363	9222.63881	6204.6216	0.9771	1.00445	8.71E-04	2.54E-03	5.73E-04	5.06E-03	2.76E-04	6.29E-04	2.64E-03	1.78E-03	3.98E-04	1.07E-02	4.54E-03	3.06E-03	4.58E-04	4.76E-04	3.3979E-02
551722.5	4173222.53	9640.50476	7041.15619	1133.29247	4863.34771	925.13015	15740.62937	9924.53817	4003.35811	669.13568	4887.42311	2177.98241	18702.04524	2.69307	2.58722	1.87E-03	2.20E-03	3.54E-04	1.33E-03	1.19E-04	2.02E-03	5.86E-03	1.55E-03	2.58E-04	3.66E-03	1.07E-03	9.21E-03	1.26E-03	1.23E-03	3.1994E-02
551468.88	4173105.62	5045.22225	10176.33414	1424.84496	11053.75151	1461.78595	10627.81272	5090.73984	6131.61482	812.13007	10347.72087	4461.0837	12863.7987	0.99528	1.01073	9.79E-04	3.18E-03	4.45E-04	3.02E-03	1.88E-04	1.37E-03	3.01E-03	2.37E-03	3.14E-04	7.76E-03	2.20E-03	6.34E-03	4.66E-04	4.79E-04	3.2099E-02
551528.21	4173183.65	5505.24231	9780.19937	1333.22986	8299.81783	1229.19991	13464.11822	5567.45774	5920.89117	767.80308	8361.32514	3328.13872	15926.65072	1.36505	1.38982	1.07E-03	3.05E-03	4.16E-04	2.27E-03	1.58E-04	1.73E-03	3.29E-03	2.29E-03	2.96E-04	6.27E-03	1.64E-03	7.85E-03	6.40E-04	6.59E-04	3.1616E-02
551897.69	4172728.67	6789.9915	4164.23279	4881.65856	14545.41663	7535.14398	1866.13611	6624.24893	2420.48881	2484.69566	11091.47584	14158.20945	2517.23056	0.35505	0.3552	1.32E-03	1.30E-03	1.52E-03	3.97E-03	9.68E-04	2.40E-04	3.91E-03	9.34E-04	9.59E-04	8.32E-03	6.97E-03	1.24E-03	1.66E-04	1.68E-04	3.1994E-02
551508.05	4172685.53	4944.99583	5404.14724	2503.25502	19130.14131	4159.88686	3086.02968	4908.4394	3113.32692	1370.50747	11994.16401	14269.27892	4041.1237	0.75066	0.76763	9.60E-04	1.69E-03	7.82E-04	5.23E-03	5.34E-04	3.96E-04	2.90E-03	1.20E-03	5.29E-04	8.99E-03	7.03E-03	1.99E-03	3.52E-04	3.64E-04	3.2943E-02
551415.94	4172957.68	4726.98141	9370.9347	1663.53582	16146.32171	1860.26865	5850.18218	4730.02833	5355.62682	944.10529	13530.00492	7343.59271	7373.86062	0.9236	0.94381	9.17E-04	2.93E-03	5.20E-04	4.41E-03	2.39E-04	7.52E-04	2.79E-03	2.07E-03	3.64E-04	1.01E-02	3.62E-03	3.63E-03	4.33E-04	4.47E-04	3.3264E-02
551445.3	4172758.48	4222.50933	6200.51874	1984.86041	20429.75739	3015.70925	3549.26612	4203.18576	3511.7242	1090.16247	12817.03118	13280.27597	4581.13466	0.99153	1.03032	8.19E-04	1.94E-03	6.20E-04	5.58E-03	3.87E-04	4.56E-04	2.48E-03	1.36E-03	4.21E-04	9.61E-03	6.54E-03	2.26E-03	4.65E-04	4.88E-04	3.3420E-02
551681.47	4172676.26	9278.81355	3820.04627	4403.46936	10698.77195	8200.7765	2396.67064	9138.3029	2298.35063	2259.26498	7475.57667	15633.29712	3262.61047	0.49579	0.50947	1.80E-03	1.19E-03	1.38E-03	2.92E-03	1.05E-03	3.08E-04	5.39E-03	8.87E-04	8.72E-04	5.60E-03	7.70E-03	1.61E-03	2.32E-04	2.41E-04	3.1194E-02
552052.84	4172923.97	15178.39659	7013.29662	2099.07079	7543.4505	1635.76878	5865.38607	15253.9674	4124.56298	1242.63018	7300.00916	3827.8542	7744.178	0.27197	0.27047	2.95E-03	2.19E-03	6.56E-04	2.06E-03	2.10E-04	7.54E-04	9.00E-03	1.59E-03	4.80E-04	5.47E-03	1.89E-03	3.81E-03	1.27E-04	1.28E-04	3.1322E-02
551461.47	4172731.74	4347.53053	5913.15778	2069.82848	20388.0242	3222.0682	3366.56712	4325.85721	3362.84204	1135.25259	12590.85959	13726.63952	4365.74616	0.93667	0.97018	8.44E-04	1.85E-03	6.47E-04	5.57E-03	4.14E-04	4.32E-04	2.55E-03	1.30E-03	4.38E-04	9.44E-03	6.76E-03	2.15E-03	4.39E-04	4.60E-04	3.3295E-02
551412.3	4172918.48	4545.56248	8459.53431	1772.11573	17573.27849	2024.03517	5150.36276	4539.54601	4797.59952	1000.02163	13985.23528	8382.07662	6512.35825	0.94761	0.97157	8.82E-04	2.64E-03	5.54E-04	4.80E-03	2.60E-04	6.62E-04	2.68E-03	1.85E-03	3.86E-04	1.05E-02	4.13E-03	3.21E-03	4.44E-04	4.60E-04	3.3445E-02
551772.5	4172704.09	8619.12961	3072.12705	2891.42501	14377.72385	8015.89943	1851.98043	8511.93601	1777.17721	1511.42219	8006.91066	17580.64697	2502.12506	0.60006	0.60895	1.67E-03	9.60E-04	9.03E-04	3.93E-03	1.03E-03	2.38E-04	5.02E-03	6.86E-04	5.83E-04	6.00E-03	8.66E-03	1.23E-03	2.81E-04	2.89E-04	3.1491E-02
551512.15	4173167.99	5330.88264	9840.29904	1347.9641	8870.46152	1277.55483	12591.9041	5387.60321	5925.97876	774.30421	8779.36661	3547.20552	14967.93436	1.21197	1.23208	1.03E-03	3.07E-03	4.21E-04	2.42E-03	1.64E-04	1.62E-03	3.18E-03	2.29E-03	2.99E-04	6.58E-03	1.75E-03	7.37E-03	5.68E-04	5.84E-04	3.1356E-02
551493.62	4173145.57	5158.62647	9989.29269	1376.24946	9660.64074	1342.51078	11803.64257	5210.18517	5971.53533	787.98567	9377.78219	3853.90346	14105.26893	1.09685	1.11398	1.00E-03	3.12E-03	4.30E-04	2.64E-03	1.72E-04	1.52E-03	3.08E-03	2.31E-03	3.04E-04	7.03E-03	1.90E-03	6.95E-03	5.14E-04	5.28E-04	3.1484E-02
551846.54	4172715.16	5985.57716	3292.4123	3928.64855	14969.12729	9277.54528	1639.70077	5897.01681	1861.73409	1919.71077	10035.35015	17579.24476	2198.06944	0.44687	0.44774	1.16E-03	1.03E-03	1.23E-03	4.09E-03	1.19E-03	2.11E-04	3.48E-03	7.19E-04	7.41E-04	7.52E-03	8.66E-03	1.08E-03	2.09E-04	2.12E-04	3.1538E-02
551415.38	4172866.69	4315.87456	7425.11985	1849.5721	19015.62433	2305.77386	4460.35346	4302.89865	4203.16571	1032.28559	13734.43895	10244.42093	5663.90861	0.97843	1.00729	8.38E-04	2.32E-03	5.78E-04	5.20E-03	2.96E-04	5.73E-04	2.54E-03	1.62E-03	3.98E-04	1.03E-02	5.05E-03	2.79E-03	4.59E-04	4.77E-04	3.3430E-02
551970.65	4172757.08	10508.594	5599.24864	4092.00936	11765.50162	4458.07638	2919.28991	10305.73695	3353.15189	2258.61132	10146.37904	9204.89579	3936.58052	0.29845	0.29809	2.04E-03	1.75E-03	1.28E-03	3.21E-03	5.73E-04	3.75E-04	6.08E-03	1.29E-03	8.72E-04	7.61E-03	4.53E-03	1.94E-03	1.40E-04	1.41E-04	3.1840E-02
551546.06	4173200.95	5633.1821	9361.73149	1289.23327	7651.09954	1172.47244	13952.21177	5701.50678	5666.13294	744.69093	7711.8758	3101.90539	16454.34522	1.53419	1.56447	1.09E-03	2.92E-03	4.03E-04	2.09E-03	1.51E-04	1.79E-03	3.37E-03	2.19E-03	2.87E-04	5.78E-03	1.53E-03	8.11E-03	7.19E-04	7.41E-04	3.1170E-02
551419.83	4172827.8	4182.24362	6851.72322	1878.67129	19640.38441	2547.93124	4064.38272	4166.2246	3877.53189	1041.79493	13199.91376	11588.53275	5182.35041	0.99985	1.03436	8.12E-04	2.14E-03	5.87E-04	5.37E-03	3.27E-04	5.22E-04	2.46E-03	1.50E-03	4.02E-04	9.90E-03	5.71E-03	2.55E-03	4.69E-04	4.90E-04	3.3229E-02
552007.35	4172785.37	12163.31998	6000.88561	3495.27995	10470.04722	3454.4537	3503.93373	12013.51592	3574.73147	1967.16997	9311.38474	7341.51619	4759.47261	0.27602	0.27542	2.36E-03	1.87E-03	1.09E-03	2.86E-03	4.44E-04	4.50E-04	7.09E-03	1.38E-03	7.59E-04	6.98E-03	3.62E-03	2.34E-03	1.29E-04	1.31E-04	3.1514E-02
551437.56	4172772.52	4158.54823	6290.93184	1938.7494	20062.63509	2888.58949	3627.76809	4140.15545	3559.2966	1066.52611	12756.45246	12801.67027	4669.08911	0.99055	1.02927	8.07E-04	1.96E-03	6.06E-04	5.48E-03	3.71E-04	4.66E-04	2.44E-03	1.37E-03	4.12E-04	9.56E-03	6.31E-03	2.30E-03	4.64E-04	4.88E-04	3.3048E-02
551912.48	4172731.82	7253.81871	4400.67744	4846.59716	14073.40353	6739.60912	1969.21604	7070.43604	2579.44696	2506.98977	11031.77527	12779.06218	2662.28196	0.34023	0.34027	1.41E-03	1.37E-03	1.51E-03	3.85E-03	8.66E-04	2.53E-04	4.17E-03	9.96E-04	9.68E-04	8.27E-03	6.29E-03	1.31E-03	1.59E-04	1.61E-04	3.1595E-02
551582.18	4172657.13	6337.06514	4749.89388	3456.1973	14636.24791	6547.48133	2793.39201	6267.54554	2810.08643	1854.02333	10390.17931	14164.36641	3726.78672	0.52693	0.53512	1.23E-03	1.48E-03	1.08E-03	4.00E-03	8.41E-04	3.59E-04	3.70E-03	1.08E-03	7.16E-04	7.79E-03	6.98E-03	1.84E-03	2.47E-04	2.54E-04	3.1596E-02
551412.71	4172948.71	4639.42526	9010.19669	1671.6409	16228.62538	1873.56675	5596.28468	4640.05654	5138.63222	947.78957	13454.33774	7465.50615	7058.98216	0.9109	0.93119	9.00E-04	2.81E-03	5.22E-04	4.43E-03	2.41E-04	7.19E-04	2.74E-03	1.98E-03	3.66E-04	1.01E-02	3.68E-03	3.48E-03	4.27E-04	4.41E-04	3.2829E-02
551929.59	4172737.63	8034.91564	4735.88274	4771.28204	13445.93617	5940.39769	2149.23738	7833.45987	2802.12183	2514.99088	10969.63428	11603.99617	2911.83513	0.32577	0.32575	1.56E-03	1.48E-03	1.49E-03	3.67E-03	7.63E-04	2.76E-04	4.62E-03	1.08E-03	9.71E-04	8.22E-03	5.72E-03	1.43E-03	1.53E-04	1.54E-04	3.1600E-02
551996.47	4172772.88	11507.93716	5826.37907	3658.80352	10831.70125	3757.65248	3276.03341	11336.31652	3471.51627	2042.95192	9507.57796	7909.60944	4457.779	0.28141	0.28092	2.23E-03	1.82E-03	1.14E-03	2.96E-03	4.83E-04	4.21E-04	6.69E-03	1.34E-03	7.89E-04	7.13E-03	3.90E-03	2.20E-03	1.32E-04	1.33E-04	3.1365E-02
551433.28	4172780.85	4129.58045	6340.20392	1915.75386	19847.14167	2817.27691	3675.12523	4111.65806	3586.54161	1055.0081	12719.69514	12530.35102	4721.78309	0.98762	1.02588	8.01E-04	1.98E-03	5.98E-04	5.42E-03	3.62E-04	4.72E-04	2.43E-03	1.38E-03	4.07E-04	9.54E-03	6.17E-03	2.33E-03	4.63E-04	4.86E-04	3.2840E-02
551527.47	4172670.25	5203.30756	5149.97806	2698.94894	17730.48166	4668.50987	2960.80029	5159.10876	2988.30185	1468.3188	11450.89498	13977.42474	3897.28374	0.66142	0.67379	1.01E-03	1.61E-03	8.43E-04	4.84E-03	6.00E-04	3.80E-04	3.05E-03	1.15E-03	5.67E-04	8.58E-03	6.89E-03	1.92E-03	3.10E-04	3.19E-04	3.2071E-02
551714.4	4173228.07	9166.2884	6961.78	1122.53896	4870.37304	923.62795	15141.97568	9416.36352	3968.7442	662.13079	4877.37773	2180.36077	18051.50952	3.32442	3.17269	1.78E-03	2.17E-03	3.51E-04	1.33E-03	1.19E-04	1.95E-03	5.56E-03	1.53E-03	2.56E-04	3.66E-03	1.07E-03	8.89E-03	1.56E-03	1.50E-03	3.1729E-02
551411.89	4172888.25	4352.98624	7689.51215	1798.77834	18068.0006	2144.86336	4658.13633	4342.74937	4358.31954	1008.4355	13673.47607	9222.87162	5901.98369	0.9397	0.96552	8.45E-04	2.40E-03	5.62E-04	4.94E-03	2.76E-04	5.98E-04	2.56E-03	1.68E-03	3.89E-04	1.03E-02	4.54E-03	2.91E-03	4.40E-04	4.58E-04	3.2854E-02
552055.99	4172932.77	14859.19377	6912.1911	1988.17177	7258.83718	1540.30498	5922.22519	14951.41033	4059.02191	1178.75199	7047.42362	3624.43138	7798.41089	0.27067	0.26913	2.88E-03	2.16E-03	6.21E-04	1.98E-03	1.98E-04	7.61E-04	8.83E-03	1.57E-03	4.55E-04	5.28E-03	1.79E-03	3.84E-03	1.27E-04	1.28E-04	3.0618E-02
551473.08	4172712.51	4429.4629	5633.02616	2130.13808	19674.12352	3354.98909	3215.34496	4405.17814	3215.37428	1168.38755	12152.86755	13575.07887	4180.1381	0.85883	0.88563	8.60E-04	1.76E-03	6.65E-04	5.38E-03	4.31E-04	4.13E-04	2.60E-03	1.24E-03	4.51E-04	9.11E-03	6.69E-03	2.06E-03	4.03E-04	4.20E-04	3.2476E-02
551497.51	4172689.09	4735.57885	5374.23554	2353.18678	18909.62986	3832.75239	3075.89273	4703.29879	3087.89038	1290.33207	11809.19819	13762.87022	4018.37302	0.75981	0.77833	9.19E-04	1.68E-03	7.35E-04	5.17E-03	4.92E-04	3.95E-04	2.78E-03	1.19E-03	4.98E-04	8.85E-03	6.78E-03	1.98E-03	3.56E-04	3.69E-04	3.2191E-02
551474.8	4173122.36	4963.02814	9712.95978	1379.68505	10318.39885	1397.08405	10704.63396	5009.60826	5853.20438	787.50646	9734.92967	4170.76105	12890.13749	0.99003	1.00498	9.63E-04	3.03E-03	4.31E-04	2.82E-03	1.79E-04	1.38E-03	2.96E-03	2.26E-03	3.04E-04	7.30E-03	2.05E-03	6.35E-03	4.64E-04	4.76E-04	3.0966E-02
551496.71	4173154.15	5105.56025	9689.01914	1346.7474	9270.31329	1306.23773	11650.33915	5157.01986	5800.64717	771.66769	9025.72234	3715.45532	13908.53484	1.09359	1.11059	9.91E-04	3.03E-03	4.21E-04	2.53E-03	1.68E-04	1.50E-03	3.04E-03	2.24E-03	2.98E-04	6.77E-03	1.83E-03	6.85E-03	5.13E-04	5.26E-04	3.0704E-02
551592.73	4172655.05	6547.08178	4602.89495	3564.39095	13734.8785	6802.75251	2732.46672	6472.44648	2733.76979	1906.32501	9943.19745	13974.29754	3653.23618	0.49846	0.50615	1.27E-03	1.44E-03	1.11E-03	3.75E-03	8.74E-04	3.51E-04	3.82E-03	1.06E-03	7.36E-04	7.45E-03	6.88E-03	1.80E-03	2.34E-04	2.40E-04	3.1023E-02
551572.67	4172655.45	6059.17928	4769.06914	3276.84057	14976.43229	6121.97047	2793.46798	5995.36705	2811.74339	1761.65383	10471.14057	13888.48007	3718.84905	0.53601	0.54429	1.18E-03	1.49E-03	1.02E-03	4.09E-03	7.86E-04	3.59E-04	3.54E-03	1.09E-03	6.80E-04	7.85E-03	6.84E-03	1.83E-03	2.51E-04	2.58E-04	3.1264E-02
551515.24	4173176.58	5276.00975	9517.60039	1317.58316	8476.23717	1237.87597	12364.59883	5332.6697	5740.85292	757.28761	8436.59028	3407.69316	14687.91548	1.21659	1.23691	1.02E-03	2.97E-03	4.12E-04	2.32E-03	1.59E-04	1.59E-03	3.15E-03	2.22E-03	2.92E-04	6.32E-03	1.68E-03	7.24E-03	5.70E-04	5.86E-04	3.0523E-02
551620.52	4172656.72	7294.98261	4330.16092	3931.91692	12078.46258	7620.26341	2627.12845	7202.57316	2594.99741	2078.12662	9068.79192	14182.67304	3532.7374	0.46014	0.46808	1.42E-03	1.35E-03	1.23E-03	3.30E-03	9.79E-04	3.38E-04	4.25E-03	1.00E-03	8.02E-04	6.80E-03	6.99E-03	1.74E-03	2.16E-04	2.22E-04	3.0632E-02
551944.69	4172741.13	8549.85391	4929.00963	4552.05358	12762.78396	5246.60655	2302.13181	8345.52761	2937.88703	2434.59878	10677.46619	10636.66882	3116.34619	0.3132	0.31308	1.66E-03	1.54E-03	1.42E-03	3.49E-03	6.74E-04	2.96E-04	4.93E-03	1.13E-03	9.40E-04	8.00E-03	5.24E-03	1.54E-03	1.47E-04	1.48E-04	3.1153E-02
551409.48	4172939.75	4547.77624	8649.57068	1677.06282	16269.33864	1887.16108	5356.01393	4546.26469	4925.65726	949.70093	13331.9851	7587.70887	6760.30044	0.89834	0.91865	8.83E-04	2.70E-03	5.24E-04	4.45E-03	2.42E-04	6.88E-04	2.68E-03	1.90E-03	3.67E-04	9.99E-03	3.74E-03	3.33E-03	4.21E-04	4.35E-04	3.2355E-02
551409.07	4172909.52	4405.5282	8006.63139	1745.25627	17200.99832	2015.79183	4888.86067	4398.44469	4542.35657	983.01809	13513.8781	8382.19271	6184.74395	0.91594	0.93948	8.55E-04	2.50E-03	5.45E-04	4.70E-03	2.59E-04	6.28E-04	2.60E-03	1.75E-03	3.79E-04	1.01E-02	4.13E-03	3.05E-03	4.29E-04	4.45E-04	3.2399E-02
551778.65	4172702.03	8131.40982	2987.19588	2775.88894	14049.65371	7870.72558	1790.48432	8034.36863	1723.58318	1448.03073	7901.11986	17049.74679	2415.04666	0.57506	0.58313	1.58E-03	9.33E-04	8.67E-04	3.84E-03	1.01E-03	2.30E-04	4.74E-03	6.65E-04	5.59E-04	5.92E-03	8.40E-03	1.19E-03	2.70E-04	2.76E-04	3.0483E-02
551985.58	4172760.39	10570.44768	5570.2165	3789.04336	11115.53346	4054.21804	3003.09132	10384.59106	3328.92249	2105.05082	9640.0368	8451.09198	4047.82199	0.28622	0.28584	2.05E-03	1.74E-03	1.18E-03	3.04E-03	5.21E-04	3.86E-04	6.13E-03	1.29E-03	8.13E-04	7.23E-03	4.16E-03	1.99E-03	1.34E-04	1.35E-04	3.0800E-02
551532.63	4173194.77	5405.97698	9241.53546	1283.50211	7828.05928	1181.06351	12930.47717	5467.85815	5590.69955	739.8149	7861.04993	3170.62318	15301.87405	1.35705	1.3816	1.05E-03	2.89E-03	4.01E-04	2.14E-03	1.52E-04	1.66E-03	3.23E-03	2.16E-03	2.86E-04	5.89E-03	1.56E-03	7.54E-03	6.36E-04	6.55E-04	3.0244E-02
551421.27	4172811.76	4082.27888	6527.90965	1849.95215	19116.39216	2575.9413	3863.26302	4065.99431	3695.9331	1023.63695	12655.47693	11566.26712	4935.60998	0.96527	0.99972	7.92E-04	2.04E-03	5.78E-04	5.22E-03	3.31E-04	4.96E-04	2.40E-03	1.43E-03	3.95E-04	9.49E-03	5.70E-03	2.43E-03	4.52E-04	4.74E-04	3.2225E-02
551478.17	4173131.73	4932.97989	9627.75557	1355.94296	9942.50395	1359.44685	10710.21971	4979.87806	5720.9708	774.56159	9422.47385	4007.97475	12869.86862	0.99138	1.0061	9.57E-04	3.01E-03	4.24E-04	2.72E-03	1.75E-04	1.38E-03	2.94E-03	2.21E-03	2.99E-04	7.06E-03	1.97E-03	6.34E-03	4.65E-04	4.77E-04	3.0422E-02
551451.59	4172738.26	4179.61096	5827.71539	1963.10671	19438.64424	3019.33849	3343.97399	4160.06184	3311.02372	1077.38013	12162.88351	12861.11602	4327.9688	0.90472	0.93753	8.11E-04	1.82E-03	6.13E-04	5.31E-03	3.88E-04	4.30E-04	2.46E-03	1.28E-03	4.16E-04	9.12E-03	6.34E-03	2.13E-03	4.24E-04	4.44E-04	3.1977E-02
551447.76	4173075.42	4823.16703	9827.31947	1401.12602	11568.20952	1508.44802	8869.58263	4860.57138	5856.95877	795.19618	10413.13163	4856.84454	10871.48506	0.89906	0.91308	9.36E-04	3.07E-03	4.38E-04	3.16E-03	1.94E-04	1.14E-03	2.87E-03	2.26E-03	3.07E-04	7.81E-03	2.39E-03	5.36E-03	4.21E-04	4.33E-04	3.0783E-02
551561.54	4172656.12	5766.41468	4805.71099	3080.81623	15384.58272	5645.1892	2804.59464	5708.79087	2822.71479	1660.51859	10572.4739	13600.86736	3723.87667	0.54889	0.55734	1.12E-03	1.50E-03	9.62E-04	4.20E-03	7.25E-04	3.60E-04	3.37E-03	1.09E-03	6.41E-04	7.93E-03	6.70E-03	1.83E-03	2.57E-04	2.64E-04	3.0954E-02
551412.04	4172846.2	4133.33033	6862.14581	1807.72904	18554.15796	2361.51128	4134.86233	4119.29115	3888.04547	1005.37095	12906.33262	10516.19899	5258.13567	0.94183	0.97151	8.02E-04	2.14E-03	5.65E-04	5.07E-03	3.03E-04	5.31E-04	2.43E-03	1.50E-03	3.88E-04	9.68E-03	5.18E-03	2.59E-03	4.41E-04	4.60E-04	3.2083E-02
551666.48	4172668.65	8573.83237	3845.92397	4216.75562	10189.94629	7887.46409	2409.87495	8450.24556	2316.49542	2182.55575	7525.36315	14402.57638	3272.41653	0.4429	0.45377	1.66E-03	1.20E-03	1.32E-03	2.78E-03	1.01E-03	3.10E-04	4.99E-03	8.94E-04	8.43E-04	5.64E-03	7.09E-03	1.61E-03	2.08E-04	2.15E-04	2.9786E-02
552062.11	4172920.65	14307.84459	6701.82069	2031.50837	7303.16064	1603.7687	5605.26287	14377.39568	3941.61341	1200.0616	7042.65933	3746.50223	7393.71561	0.2643	0.26287	2.78E-03	2.09E-03	6.35E-04	2.00E-03	2.06E-04	7.20E-04	8.49E-03	1.52E-03	4.63E-04	5.28E-03	1.85E-03	3.64E-03	1.24E-04	1.25E-04	2.9914E-02
551959.72	4172744.55	8999.96949	5083.02681	4249.2011	12013.26575	4766.65437	2521.59333	8800.04552	3075.06904	2304.94508	10237.23769	9753.95156	3333.20404	0.30234	0.30215	1.75E-03	1.59E-03	1.33E-03	3.28E-03	6.12E-04	3.24E-04	5.19E-03	1.19E-03	8.90E-04	7.67E-03	4.80E-03	1.64E-03	1.42E-04	1.43E-04	3.0558E-02
551514.96	4172673.24	4926.83371	5117.67805	2499.15227	17616.46974	4203.0288	2948.76513	4888.31118	2958.92298	1365.01506	11264.34432	13413.41709	3868.78487	0.67124	0.68473	9.56E-04	1.60E-03	7.81E-04	4.81E-03	5.40E-04	3.79E-04	2.89E-03	1.14E-03	5.27E-04	8.44E-03	6.61E-03	1.91E-03	3.15E-04	3.25E-04	3.1220E-02
551603.79	4172652.14	6739.60025	4417.38023	3638.89014	12732.73426	6965.5015	2652.20687	6659.85628	2633.512	1938.12768	9390.5375	13667.05988	3553.16422	0.46763	0.47487	1.31E-03	1.38E-03	1.14E-03	3.48E-03	8.95E-04	3.41E-04	3.93E-03	1.02E-03	7.48E-04	7.04E-03	6.73E-03	1.75E-03	2.19E-04	2.25E-04	3.0202E-02
551555.69	4173213.47	5527.81994	8764.1847	1232.99818	7174.37455	1126.5412	13479.28949	5598.07186	5285.56371	713.26284	7152.56845	2949.42544	15915.5942	1.58464	1.61714	1.07E-03	2.74E-03	3.85E-04	1.96E-03	1.45E-04	1.73E-03	3.30E-03	2.04E-03	2.75E-04	5.36E-03	1.45E-03	7.84E-03	7.43E-04	7.66E-04	2.9817E-02
551453.68	4173092.16	4797.01998	9577.95416	1380.91407	10982.52317	1453.49522	9396.7551	4837.2076	5777.68389	785.53332	10110.29827	4558.42463	11261.30821	0.90421	0.91734	9.31E-04	2.99E-03	4.31E-04	3.00E-03	1.87E-04	1.21E-03	2.86E-03	2.23E-03	3.03E-04	7.58E-03	2.25E-03	5.55E-03	4.24E-04	4.35E-04	3.0369E-02
551463.57	4172718.79	4268.70052	5595.03438	2023.50605	19103.10141	3151.35457	3208.67068	4247.04126	3189.45583	1110.18892	11884.05139	12947.65177	4164.61375	0.85023	0.8781	8.28E-04	1.75E-03	6.32E-04	5.22E-03	4.05E-04	4.12E-04	2.51E-03	1.23E-03	4.29E-04	8.91E-03	6.38E-03	2.05E-03	3.98E-04	4.16E-04	3.1565E-02
551499.8	4173162.74	5054.04844	9392.81683	1317.21267	8891.5213	1270.061	11468.07598	5105.33938	5631.70632	755.29398	8684.27537	3580.80906	13682.06513	1.09092	1.10788	9.81E-04	2.93E-03	4.11E-04	2.43E-03	1.63E-04	1.47E-03	3.01E-03	2.17E-03	2.92E-04	6.51E-03	1.76E-03	6.74E-03	5.11E-04	5.25E-04	2.9922E-02
551406.26	4172930.78	4433.41983	8247.89386	1668.80833	16137.11917	1889.3894	5102.66549	4430.21984	4692.92659	943.62575	13067.64948	7669.4555	6445.06172	0.87827	0.8987	8.60E-04	2.58E-03	5.21E-04	4.41E-03	2.43E-04	6.56E-04	2.62E-03	1.81E-03	3.64E-04	9.80E-03	3.78E-03	3.17E-03	4.12E-04	4.26E-04	3.1644E-02
551855.07	4173168.6	10517.50119	6397.41406	926.75561	4009.42103	754.18258	14123.18734	10939.15602	3579.78355	547.56256	4096.27573	1792.08661	16938.9123	0.68066	0.67013	2.04E-03	2.00E-03	2.89E-04	1.10E-03	9.69E-05	1.81E-03	6.46E-03	1.38E-03	2.11E-04	3.07E-03	8.83E-04	8.34E-03	3.19E-04	3.18E-04	2.8321E-02
551810.77	4172703.94	6616.926	2922.92646	2916.65623	14179.73972	8670.14548	1637.28199	6543.34947	1662.06735	1470.51963	8559.12753	17218.54442	2196.35141	0.50599	0.51007	1.28E-03	9.13E-04	9.11E-04	3.87E-03	1.11E-03	2.10E-04	3.86E-03	6.42E-04	5.68E-04	6.42E-03	8.48E-03	1.08E-03	2.37E-04	2.42E-04	2.9838E-02
551702.91	4173235.84	8499.33987	6857.88914	1106.52967	4868.27319	918.15752	14570.39136	8714.74838	3930.87236	651.68234	4871.66812	2175.31074	17378.54858	4.79692	4.51996	1.65E-03	2.14E-03	3.46E-04	1.33E-03	1.18E-04	1.87E-03	5.14E-03	1.52E-03	2.52E-04	3.65E-03	1.07E-03	8.56E-03	2.25E-03	2.14E-03	3.2045E-02
552011.31	4172776.09	11333.21727	5696.55077	3374.9605	10175.3296	3413.426	3306.88588	11189.75893	3390.92622	1892.48025	8986.12361	7236.81276	4488.5299	0.26952	0.26902	2.20E-03	1.78E-03	1.05E-03	2.78E-03	4.39E-04	4.25E-04	6.61E-03	1.31E-03	7.31E-04	6.74E-03	3.56E-03	2.21E-03	1.26E-04	1.27E-04	3.0088E-02
551481.26	4173140.32	4907.51273	9415.32972	1334.07604	9571.49216	1324.45187	10683.42317	4954.59309	5604.46741	762.59937	9143.04097	3861.75557	12816.85639	0.99381	1.00862	9.52E-04	2.94E-03	4.17E-04	2.62E-03	1.70E-04	1.37E-03	2.92E-03	2.16E-03	2.94E-04	6.85E-03	1.90E-03	6.31E-03	4.66E-04	4.78E-04	2.9865E-02
551408.66	4172879.29	4207.81624	7255.20345	1750.96458	17462.43537	2122.76717	4417.91693	4197.20651	4113.44965	979.91443	13015.20156	9127.74571	5602.54737	0.89934	0.92365	8.17E-04	2.27E-03	5.47E-04	4.77E-03	2.73E-04	5.68E-04	2.48E-03	1.59E-03	3.78E-04	9.76E-03	4.50E-03	2.76E-03	4.22E-04	4.38E-04	3.1558E-02
551974.69	4172747.9	9594.82357	5248.60295	3906.5491	11310.55423	4331.43682	2714.92645	9407.67168	3141.09932	2145.71563	9718.40896	8937.58015	3660.45417	0.29018	0.28994	1.86E-03	1.64E-03	1.22E-03	3.09E-03	5.56E-04	3.49E-04	5.55E-03	1.21E-03	8.28E-04	7.29E-03	4.40E-03	1.80E-03	1.36E-04	1.37E-04	3.0077E-02
551444.24	4172744.93	4073.86139	5793.47324	1896.91968	18836.92082	2889.62125	3344.47558	4055.57568	3288.96618	1041.64989	11907.42151	12301.99797	4321.25152	0.88625	0.91854	7.91E-04	1.81E-03	5.93E-04	5.15E-03	3.71E-04	4.30E-04	2.39E-03	1.27E-03	4.02E-04	8.93E-03	6.06E-03	2.13E-03	4.15E-04	4.35E-04	3.1173E-02
552065.26	4172929.45	14019.64148	6608.5717	1927.83076	7035.4693	1512.41377	5656.74905	14104.21154	3881.26717	1140.55156	6806.84278	3552.07992	7442.84203	0.26302	0.26154	2.72E-03	2.06E-03	6.02E-04	1.92E-03	1.94E-04	7.27E-04	8.33E-03	1.50E-03	4.40E-04	5.10E-03	1.75E-03	3.67E-03	1.23E-04	1.24E-04	2.9261E-02
551519.09	4173187.37	5191.20309	9074.02499	1275.13169	8016.58035	1191.14094	11975.69925	5247.5273	5477.20749	733.47534	7990.09986	3249.07031	14223.10361	1.21157	1.2318	1.01E-03	2.83E-03	3.98E-04	2.19E-03	1.53E-04	1.54E-03	3.10E-03	2.11E-03	2.83E-04	5.99E-03	1.60E-03	7.01E-03	5.68E-04	5.84E-04	2.9366E-02
552000.46	4172763.65	10573.30693	5511.81526	3511.19448	10493.22186	3695.3573	3089.7773	10406.82558	3283.92153	1953.37339	9140.53418	7768.50212	4159.50323	0.27462	0.27423	2.05E-03	1.72E-03	1.10E-03	2.87E-03	4.75E-04	3.97E-04	6.14E-03	1.27E-03	7.54E-04	6.85E-03	3.83E-03	2.05E-03	1.29E-04	1.30E-04	2.9761E-02
551405.85	4172900.55	4261.02308	7557.93725	1709.13284	16723.03728	1998.78646	4633.3406	4253.17352	4290.77893	960.80364	12974.70436	8336.10494	5864.53783	0.87669	0.8996	8.27E-04	2.36E-03	5.34E-04	4.57E-03	2.57E-04	5.95E-04	2.51E-03	1.66E-03	3.71E-04	9.73E-03	4.11E-03	2.89E-03	4.11E-04	4.26E-04	3.1240E-02
551459.6	4173108.9	4753.63151	9273.12337	1347.89432	10385.14994	1395.55433	9619.28995	4795.60481	5575.6526	767.70574	9630.65809	4272.67164	11659.08023	0.9049	0.9188	9.22E-04	2.90E-03	4.21E-04	2.84E-03	1.79E-04	1.24E-03	2.83E-03	2.15E-03	2.96E-04	7.22E-03	2.10E-03	5.74E-03	4.24E-04	4.35E-04	2.9700E-02
551564.84	4173222.09	5539.56515	8428.01253	1202.04037	6842.97647	1094.91748	13426.29301	5613.04812	5071.94671	696.2136	6807.9215	2839.5454	15845.887	1.69364	1.73062	1.08E-03	2.63E-03	3.75E-04	1.87E-03	1.41E-04	1.72E-03	3.31E-03	1.96E-03	2.69E-04	5.10E-03	1.40E-03	7.81E-03	7.94E-04	8.20E-04	2.9281E-02
551887.15	4172716.57	5767.63376	3598.6903	4255.23074	13860.50424	7568.91668	1661.45822	5645.19384	2064.28523	2130.91479	10099.15674	14525.6458	2233.35404	0.36718	0.3674	1.12E-03	1.12E-03	1.33E-03	3.79E-03	9.72E-04	2.13E-04	3.33E-03	7.97E-04	8.23E-04	7.57E-03	7.16E-03	1.10E-03	1.72E-04	1.74E-04	2.9670E-02
551826.83	4172704.89	6015.16434	2943.02419	3111.56159	14051.29156	8639.64276	1583.94991	5944.70279	1666.64047	1544.40398	8818.79129	16829.10446	2121.2699	0.47233	0.47523	1.17E-03	9.19E-04	9.72E-04	3.84E-03	1.11E-03	2.03E-04	3.51E-03	6.43E-04	5.96E-04	6.61E-03	8.29E-03	1.04E-03	2.21E-04	2.25E-04	2.9353E-02
551918.58	4172724.99	6697.44615	4143.45601	4462.14188	13313.11225	6410.13223	1869.90123	6532.25531	2426.31238	2309.14158	10363.09144	12188.80053	2524.80644	0.32694	0.32717	1.30E-03	1.29E-03	1.39E-03	3.64E-03	8.23E-04	2.40E-04	3.86E-03	9.37E-04	8.91E-04	7.77E-03	6.00E-03	1.24E-03	1.53E-04	1.55E-04	2.9699E-02
551652.86	4173246.06	6801.57218	7147.01915	1119.20655	5326.08036	963.8603	14937.43879	6935.34664	4235.58615	655.27125	5330.26856	2339.42545	17323.80806	11.72829	12.86	1.32E-03	2.23E-03	3.50E-04	1.46E-03	1.24E-04	1.92E-03	4.09E-03	1.64E-03	2.53E-04	4.00E-03	1.15E-03	8.53E-03	5.50E-03	6.09E-03	3.8656E-02
551542.34	4172657.54	5290.49595	4814.08149	2752.29803	15767.16226	4857.01881	2803.39982	5242.49629	2810.49515	1490.21784	10551.8573	12994.97367	3704.40657	0.56783	0.57685	1.03E-03	1.50E-03	8.60E-04	4.31E-03	6.24E-04	3.60E-04	3.09E-03	1.08E-03	5.75E-04	7.91E-03	6.40E-03	1.82E-03	2.66E-04	2.73E-04	3.0114E-02
551901.96	4172719.75	6084.81876	3820.00579	4374.07274	13600.06068	7035.87057	1734.34525	5942.85541	2213.25809	2223.0536	10225.91908	13414.50398	2335.23412	0.34488	0.34493	1.18E-03	1.19E-03	1.37E-03	3.72E-03	9.04E-04	2.23E-04	3.51E-03	8.54E-04	8.58E-04	7.67E-03	6.61E-03	1.15E-03	1.62E-04	1.63E-04	2.9554E-02
551502.89	4173171.33	5033.20465	9104.09938	1288.21731	8524.23686	1233.94045	11269.93974	5084.8593	5466.69688	739.13859	8357.16558	3449.43962	13439.33687	1.08968	1.1066	9.77E-04	2.84E-03	4.02E-04	2.33E-03	1.59E-04	1.45E-03	3.00E-03	2.11E-03	2.85E-04	6.27E-03	1.70E-03	6.62E-03	5.11E-04	5.24E-04	2.9176E-02
551594.12	4173237.48	5818.43748	7920.64565	1159.01492	6179.93745	1036.73209	14141.01303	5907.17055	4727.37868	673.79558	6166.62096	2618.55443	16635.10318	2.40828	2.48283	1.13E-03	2.47E-03	3.62E-04	1.69E-03	1.33E-04	1.82E-03	3.49E-03	1.82E-03	2.60E-04	4.62E-03	1.29E-03	8.19E-03	1.13E-03	1.18E-03	2.9589E-02
551504.84	4172676.23	4712.45106	5076.6511	2345.41288	17376.22736	3856.77054	2933.75041	4678.30341	2927.69274	1284.53348	11060.63719	12889.13288	3839.35763	0.67433	0.68877	9.14E-04	1.59E-03	7.33E-04	4.75E-03	4.95E-04	3.77E-04	2.76E-03	1.13E-03	4.96E-04	8.29E-03	6.35E-03	1.89E-03	3.16E-04	3.26E-04	3.0416E-02
551484.35	4173148.9	4861.18426	9164.99336	1308.41127	9212.00799	1291.31455	10582.07323	4908.2197	5462.9158	748.4677	8832.18451	3729.72487	12679.89801	0.99063	1.00524	9.43E-04	2.86E-03	4.09E-04	2.52E-03	1.66E-04	1.36E-03	2.90E-03	2.11E-03	2.89E-04	6.62E-03	1.84E-03	6.25E-03	4.64E-04	4.76E-04	2.9198E-02
551537.15	4173205.13	5269.83943	8720.74759	1233.67082	7429.4021	1140.52537	12343.10756	5331.24785	5264.94603	711.7216	7394.65062	3041.60179	14629.12514	1.33956	1.36368	1.02E-03	2.72E-03	3.85E-04	2.03E-03	1.47E-04	1.59E-03	3.15E-03	2.03E-03	2.75E-04	5.54E-03	1.50E-03	7.21E-03	6.28E-04	6.46E-04	2.8871E-02
551933.72	4172728.54	7225.02772	4376.02571	4385.24504	12841.9997	5719.40503	1996.59866	7047.71215	2581.40211	2303.16109	10264.88532	11070.01592	2700.97959	0.31411	0.31424	1.40E-03	1.37E-03	1.37E-03	3.51E-03	7.35E-04	2.56E-04	4.16E-03	9.96E-04	8.89E-04	7.70E-03	5.45E-03	1.33E-03	1.47E-04	1.49E-04	2.9460E-02
551685.6	4172669.9	8811.47403	3575.67429	3992.55969	9807.97758	7183.38555	2264.50335	8681.93674	2147.59694	2054.96397	6878.03987	13883.58309	3080.32569	0.44936	0.46146	1.71E-03	1.12E-03	1.25E-03	2.68E-03	9.23E-04	2.91E-04	5.13E-03	8.29E-04	7.93E-04	5.16E-03	6.84E-03	1.52E-03	2.11E-04	2.19E-04	2.8657E-02
551454.05	4172725.07	4108.58808	5528.17537	1920.97448	18351.06488	2958.94757	3190.74355	4089.19566	3148.19588	1054.40292	11534.28085	12228.88072	4134.32659	0.82867	0.85656	7.97E-04	1.73E-03	6.00E-04	5.01E-03	3.80E-04	4.10E-04	2.41E-03	1.22E-03	4.07E-04	8.65E-03	6.02E-03	2.04E-03	3.88E-04	4.06E-04	3.0467E-02
551403.03	4172921.82	4292.54548	7803.29816	1642.36559	15776.29513	1874.21111	4833.2001	4288.15761	4438.20455	927.31529	12637.12127	7572.37075	6109.6832	0.84762	0.86783	8.33E-04	2.44E-03	5.13E-04	4.31E-03	2.41E-04	6.21E-04	2.53E-03	1.71E-03	3.58E-04	9.47E-03	3.73E-03	3.01E-03	3.97E-04	4.11E-04	3.0581E-02
551989.61	4172751.2	9740.65583	5251.12877	3615.24087	10714.62363	3952.35742	2823.95579	9568.07618	3137.47848	2000.93903	9234.5921	8228.33372	3801.54549	0.2785	0.27823	1.89E-03	1.64E-03	1.13E-03	2.93E-03	5.08E-04	3.63E-04	5.65E-03	1.21E-03	7.72E-04	6.92E-03	4.05E-03	1.87E-03	1.31E-04	1.32E-04	2.9201E-02
551579.79	4172647.57	5987.96452	4478.31803	3186.87164	13467.20147	5912.82414	2658.87933	5924.41746	2648.18879	1711.6015	9625.15502	12821.98468	3543.65679	0.47836	0.48511	1.16E-03	1.40E-03	9.95E-04	3.68E-03	7.60E-04	3.42E-04	3.50E-03	1.02E-03	6.61E-04	7.22E-03	6.32E-03	1.75E-03	2.24E-04	2.30E-04	2.9249E-02
551842.9	4172705.84	5585.98332	3003.37983	3342.13641	13864.90508	8404.66511	1551.28103	5512.55972	1699.01193	1645.37453	9043.66764	16223.67916	2076.05878	0.44058	0.4425	1.08E-03	9.38E-04	1.04E-03	3.79E-03	1.08E-03	1.99E-04	3.25E-03	6.56E-04	6.35E-04	6.78E-03	7.99E-03	1.02E-03	2.06E-04	2.10E-04	2.8889E-02
551437.62	4172752.32	3982.1872	5763.29511	1839.1111	18248.05824	2771.43743	3349.5149	3964.94175	3270.09341	1010.66997	11660.85834	11770.52547	4320.0578	0.86622	0.8976	7.73E-04	1.80E-03	5.74E-04	4.99E-03	3.56E-04	4.30E-04	2.34E-03	1.26E-03	3.90E-04	8.74E-03	5.80E-03	2.13E-03	4.06E-04	4.25E-04	3.0413E-02
551406.05	4172869.85	4086.10937	6896.60929	1714.67678	17013.79568	2117.41689	4217.7587	4075.05481	3912.84167	957.99616	12479.64509	9105.48929	5351.81845	0.86783	0.89227	7.93E-04	2.15E-03	5.36E-04	4.65E-03	2.72E-04	5.42E-04	2.41E-03	1.51E-03	3.70E-04	9.36E-03	4.49E-03	2.64E-03	4.07E-04	4.23E-04	3.0538E-02
552071.38	4172917.34	13507.77083	6409.69079	1965.54877	7070.81948	1570.90694	5361.16528	13571.9169	3769.77059	1158.74496	6796.07998	3663.59612	7065.59136	0.25687	0.25551	2.62E-03	2.00E-03	6.14E-04	1.93E-03	2.02E-04	6.89E-04	8.01E-03	1.46E-03	4.47E-04	5.10E-03	1.80E-03	3.48E-03	1.20E-04	1.21E-04	2.8596E-02
551678.21	4172666.97	8572.13447	3614.7034	3982.04558	9638.3302	7217.72196	2286.28454	8448.08114	2173.01026	2055.51936	6950.20475	13587.85525	3107.63803	0.42984	0.44089	1.66E-03	1.13E-03	1.24E-03	2.63E-03	9.27E-04	2.94E-04	4.99E-03	8.39E-04	7.93E-04	5.21E-03	6.69E-03	1.53E-03	2.01E-04	2.09E-04	2.8355E-02
551589.61	4172645.7	6192.82598	4374.66598	3298.01798	12840.76657	6172.32979	2615.82507	6124.43747	2595.57601	1766.16749	9322.54584	12793.37819	3492.99418	0.45965	0.46615	1.20E-03	1.37E-03	1.03E-03	3.51E-03	7.93E-04	3.36E-04	3.62E-03	1.00E-03	6.82E-04	6.99E-03	6.30E-03	1.72E-03	2.15E-04	2.21E-04	2.8983E-02
551948.79	4172732.01	7694.31337	4559.56195	4232.17201	12206.6836	5129.85655	2125.65149	7512.20333	2706.29594	2252.39849	10054.98872	10209.67289	2876.58416	0.30212	0.30224	1.49E-03	1.42E-03	1.32E-03	3.34E-03	6.59E-04	2.73E-04	4.43E-03	1.04E-03	8.69E-04	7.54E-03	5.03E-03	1.42E-03	1.42E-04	1.43E-04	2.9125E-02
551728.06	4173230.66	9035.71393	6414.65505	1068.49796	4583.59504	883.40264	13344.84929	9291.15062	3646.69646	630.24272	4556.11837	2082.84605	15988.43958	2.55309	2.45287	1.75E-03	2.00E-03	3.34E-04	1.25E-03	1.13E-04	1.71E-03	5.48E-03	1.41E-03	2.43E-04	3.42E-03	1.03E-03	7.88E-03	1.20E-03	1.16E-03	2.8984E-02
551432.52	4172761.22	3942.98097	5812.08883	1812.85889	18056.42208	2703.86674	3393.45112	3926.25248	3295.52014	997.09355	11622.96112	11525.25339	4369.05371	0.86716	0.89864	7.65E-04	1.82E-03	5.66E-04	4.93E-03	3.47E-04	4.36E-04	2.32E-03	1.27E-03	3.85E-04	8.71E-03	5.68E-03	2.15E-03	4.06E-04	4.26E-04	3.0214E-02
551529.92	4172659.57	5014.15419	4803.76314	2559.71125	15859.09778	4400.80259	2799.16801	4971.67873	2794.39833	1390.84132	10466.44219	12575.72623	3686.63844	0.57969	0.58936	9.73E-04	1.50E-03	8.00E-04	4.33E-03	5.65E-04	3.60E-04	2.93E-03	1.08E-03	5.37E-04	7.85E-03	6.19E-03	1.82E-03	2.72E-04	2.79E-04	2.9490E-02
551465.51	4173125.64	4686.79302	8905.71145	1309.24799	9759.00401	1336.99004	9678.41019	4729.60451	5350.20552	746.69598	9116.96486	4006.39053	11677.17891	0.90264	0.91562	9.10E-04	2.78E-03	4.09E-04	2.67E-03	1.72E-04	1.24E-03	2.79E-03	2.07E-03	2.88E-04	6.83E-03	1.97E-03	5.75E-03	4.23E-04	4.34E-04	2.8745E-02
551494.3	4172679.79	4523.16651	5051.92039	2213.1636	17203.88406	3570.5252	2925.56709	4492.8835	2906.09516	1214.2755	10908.36005	12461.97111	3819.89835	0.68266	0.69838	8.78E-04	1.58E-03	6.91E-04	4.70E-03	4.59E-04	3.76E-04	2.65E-03	1.12E-03	4.69E-04	8.18E-03	6.14E-03	1.88E-03	3.20E-04	3.31E-04	2.9775E-02
551466.74	4172705.13	4204.9929	5292.49291	1987.39382	17868.13213	3096.52671	3057.98434	4182.92874	3023.90446	1090.95914	11209.93385	12211.61636	3972.55396	0.77053	0.79346	8.16E-04	1.65E-03	6.21E-04	4.88E-03	3.98E-04	3.93E-04	2.47E-03	1.17E-03	4.21E-04	8.40E-03	6.02E-03	1.96E-03	3.61E-04	3.76E-04	2.9934E-02
551487.44	4173157.49	4818.55909	8921.32379	1282.89339	8859.54247	1257.8492	10457.88857	4865.4961	5326.04505	734.38398	8531.75604	3599.67265	12520.18699	0.9886	1.00307	9.35E-04	2.79E-03	4.01E-04	2.42E-03	1.62E-04	1.34E-03	2.87E-03	2.06E-03	2.83E-04	6.40E-03	1.77E-03	6.17E-03	4.63E-04	4.75E-04	2.8536E-02
551505.98	4173179.91	4981.81535	8823.89747	1259.9705	8168.64894	1198.02659	11065.60705	5033.32241	5306.25122	723.38254	8045.46157	3321.44241	13189.91117	1.09021	1.10718	9.67E-04	2.76E-03	3.94E-04	2.23E-03	1.54E-04	1.42E-03	2.97E-03	2.05E-03	2.79E-04	6.03E-03	1.64E-03	6.50E-03	5.11E-04	5.25E-04	2.8424E-02
552015.3	4172766.85	10541.34491	5410.80619	3255.14673	9887.99686	3368.78761	3125.67781	10401.7563	3219.05771	1819.09432	8669.65976	7131.70067	4238.89927	0.2634	0.263	2.05E-03	1.69E-03	1.02E-03	2.70E-03	4.33E-04	4.02E-04	6.14E-03	1.24E-03	7.02E-04	6.50E-03	3.51E-03	2.09E-03	1.23E-04	1.25E-04	2.8723E-02
551428.2	4172769.62	3914.56247	5856.72081	1792.15576	17886.42896	2644.2017	3435.97127	3898.20722	3319.59622	986.63993	11589.92595	11308.64804	4416.55668	0.86691	0.89827	7.60E-04	1.83E-03	5.60E-04	4.89E-03	3.40E-04	4.41E-04	2.30E-03	1.28E-03	3.81E-04	8.69E-03	5.57E-03	2.18E-03	4.06E-04	4.26E-04	3.0048E-02
551402.62	4172891.59	4127.52261	7148.59253	1671.93268	16265.27338	1983.37599	4401.0531	4119.04036	4060.18677	938.09759	12442.06107	8291.31066	5574.01284	0.84116	0.86321	8.01E-04	2.23E-03	5.22E-04	4.44E-03	2.55E-04	5.65E-04	2.43E-03	1.57E-03	3.62E-04	9.33E-03	4.08E-03	2.75E-03	3.94E-04	4.09E-04	3.0143E-02
551409.97	4172827.9	3933.08271	6314.02909	1733.13451	17427.64394	2328.67009	3823.18943	3918.99014	3582.76202	961.86487	11903.57855	10209.95251	4869.31253	0.87304	0.90088	7.63E-04	1.97E-03	5.41E-04	4.76E-03	2.99E-04	4.91E-04	2.31E-03	1.38E-03	3.71E-04	8.92E-03	5.03E-03	2.40E-03	4.09E-04	4.27E-04	3.0085E-02
551617.49	4172647.36	6848.4123	4109.84735	3600.68424	11264.36356	6815.93343	2511.9219	6764.83902	2460.10932	1907.54095	8490.45074	12820.11096	3372.59348	0.41843	0.42478	1.33E-03	1.28E-03	1.12E-03	3.08E-03	8.76E-04	3.23E-04	3.99E-03	9.50E-04	7.36E-04	6.37E-03	6.32E-03	1.66E-03	1.96E-04	2.01E-04	2.8432E-02
551704.71	4172673.61	9030.26629	3378.17692	3729.19757	10078.12275	6526.08335	2149.87116	8897.06497	2019.57964	1917.47332	6549.27416	13744.37006	2925.47768	0.48011	0.49352	1.75E-03	1.06E-03	1.16E-03	2.75E-03	8.38E-04	2.76E-04	5.25E-03	7.80E-04	7.40E-04	4.91E-03	6.77E-03	1.44E-03	2.25E-04	2.34E-04	2.8193E-02
551545.36	4172652.37	5239.09899	4660.77272	2709.9534	14949.49879	4780.40918	2730.96262	5191.33041	2725.14829	1466.30686	10123.27946	12435.90109	3611.21118	0.53362	0.54164	1.02E-03	1.46E-03	8.46E-04	4.08E-03	6.14E-04	3.51E-04	3.06E-03	1.05E-03	5.66E-04	7.59E-03	6.13E-03	1.78E-03	2.50E-04	2.57E-04	2.9052E-02
551523.44	4173198.3	5095.21051	8596.59308	1227.85581	7598.29248	1148.87843	11490.76276	5151.12271	5184.25198	706.93617	7525.9767	3109.58513	13661.2079	1.19579	1.21556	9.89E-04	2.69E-03	3.84E-04	2.08E-03	1.48E-04	1.48E-03	3.04E-03	2.00E-03	2.73E-04	5.64E-03	1.53E-03	6.73E-03	5.60E-04	5.76E-04	2.8112E-02
552074.53	4172926.14	13250.37629	6325.04798	1869.35063	6821.66489	1484.42569	5409.50718	13328.15549	3715.21443	1103.74218	6577.67589	3480.40156	7112.05311	0.2557	0.25429	2.57E-03	1.98E-03	5.84E-04	1.86E-03	1.91E-04	6.95E-04	7.87E-03	1.43E-03	4.26E-04	4.93E-03	1.71E-03	3.50E-03	1.20E-04	1.21E-04	2.7998E-02
551963.8	4172735.41	8106.75581	4705.74964	4028.3023	11597.51745	4595.30607	2263.36645	7925.83483	2807.36975	2169.88443	9762.62932	9414.82084	3060.20403	0.29118	0.29121	1.57E-03	1.47E-03	1.26E-03	3.17E-03	5.90E-04	2.91E-04	4.68E-03	1.08E-03	8.38E-04	7.32E-03	4.64E-03	1.51E-03	1.36E-04	1.38E-04	2.8690E-02
551566.39	4172645.96	5625.85703	4497.25457	2957.25872	13829.82862	5381.63764	2657.95506	5569.5972	2647.38352	1593.1198	9696.7818	12437.71672	3532.23554	0.48844	0.49529	1.09E-03	1.40E-03	9.24E-04	3.78E-03	6.91E-04	3.41E-04	3.29E-03	1.02E-03	6.15E-04	7.27E-03	6.13E-03	1.74E-03	2.29E-04	2.35E-04	2.8757E-02
551694.62	4172670.33	8821.23308	3439.93509	3810.17142	9688.00901	6708.40249	2188.40126	8691.97682	2061.63292	1960.43898	6594.34312	13466.296	2977.39278	0.45201	0.46445	1.71E-03	1.07E-03	1.19E-03	2.65E-03	8.62E-04	2.81E-04	5.13E-03	7.96E-04	7.57E-04	4.94E-03	6.63E-03	1.47E-03	2.12E-04	2.20E-04	2.7926E-02
551521.02	4172661.7	4841.75841	4804.01654	2440.33026	15932.7639	4121.48282	2800.56662	4802.78906	2787.42539	1329.56983	10420.46453	12327.54663	3679.94162	0.591	0.60144	9.40E-04	1.50E-03	7.62E-04	4.35E-03	5.29E-04	3.60E-04	2.84E-03	1.08E-03	5.13E-04	7.81E-03	6.07E-03	1.81E-03	2.77E-04	2.85E-04	2.9129E-02
551468.9	4173135.07	4654.03269	8824.01985	1287.35903	9424.71353	1303.32129	9665.65538	4697.0696	5232.63184	734.78124	8837.21081	3859.99278	11639.58932	0.90191	0.91469	9.03E-04	2.76E-03	4.02E-04	2.58E-03	1.67E-04	1.24E-03	2.77E-03	2.02E-03	2.84E-04	6.63E-03	1.90E-03	5.73E-03	4.23E-04	4.33E-04	2.8239E-02
551769.11	4172694.79	8088.02253	2885.62654	2619.7452	12737.61455	6494.84925	1775.6588	7990.34158	1676.79348	1378.01493	7079.16705	15009.32584	2397.38579	0.5552	0.56525	1.57E-03	9.01E-04	8.18E-04	3.48E-03	8.34E-04	2.28E-04	4.72E-03	6.47E-04	5.32E-04	5.31E-03	7.39E-03	1.18E-03	2.60E-04	2.68E-04	2.8138E-02
551399.81	4172912.85	4168.53632	7412.83349	1620.75096	15483.90976	1867.97739	4600.2918	4163.07107	4216.53585	913.44801	12259.46046	7575.18458	5818.10774	0.82113	0.8413	8.09E-04	2.32E-03	5.06E-04	4.23E-03	2.40E-04	5.91E-04	2.46E-03	1.63E-03	3.53E-04	9.19E-03	3.73E-03	2.87E-03	3.85E-04	3.99E-04	2.9702E-02
552004.49	4172754.44	9762.68015	5209.1244	3360.35333	10145.38923	3617.18498	2895.30486	9605.64122	3105.45171	1869.03735	8781.05935	7594.76563	3894.647	0.26766	0.26736	1.89E-03	1.63E-03	1.05E-03	2.77E-03	4.65E-04	3.72E-04	5.67E-03	1.20E-03	7.21E-04	6.58E-03	3.74E-03	1.92E-03	1.25E-04	1.27E-04	2.8266E-02
551600.39	4172642.9	6344.40447	4197.26154	3346.0498	11899.96144	6265.88194	2538.25116	6272.02438	2499.39539	1785.5465	8800.67942	12434.13215	3395.65461	0.42911	0.43507	1.23E-03	1.31E-03	1.05E-03	3.25E-03	8.05E-04	3.26E-04	3.70E-03	9.65E-04	6.89E-04	6.60E-03	6.13E-03	1.67E-03	2.01E-04	2.06E-04	2.8129E-02

552019.32	4172757.64	9751.64513	5139.71466	3132.45998	9596.69164	3314.55638	2956.2389	9613.26458	3055.67715	1744.94239	8354.66456	7010.90958	4004.07486	0.25729	0.25698	1.89E-03	1.61E-03	9.78E-04	2.62E-03	4.26E-04	3.80E-04	5.67E-03	1.18E-03	6.74E-04	6.26E-03	3.45E-03	1.97E-03	1.21E-04	1.22E-04	2.7364E-02
551475.08	4173152.24	4593.01034	8441.61313	1245.6415	8777.41697	1241.47017	9550.43766	4636.09312	5020.00392	711.94267	8329.39935	3603.90801	11472.0612	0.90084	0.91344	8.91E-04	2.64E-03	3.89E-04	2.40E-03	1.59E-04	1.23E-03	2.74E-03	1.94E-03	2.75E-04	6.24E-03	1.78E-03	5.65E-03	4.22E-04	4.33E-04	2.7177E-02
551937.87	4172719.48	6452.32314	4021.53515	4014.74131	12158.57428	5548.70836	1842.74569	6297.25017	2365.1592	2101.22347	9575.23274	10695.31951	2488.44876	0.30234	0.30255	1.25E-03	1.26E-03	1.25E-03	3.32E-03	7.13E-04	2.37E-04	3.72E-03	9.13E-04	8.11E-04	7.18E-03	5.27E-03	1.23E-03	1.42E-04	1.43E-04	2.7434E-02
551541.12	4172647.77	5033.58637	4515.68212	2565.45609	14305.85207	4464.42895	2660.68622	4989.06319	2638.66453	1389.48339	9707.76327	11735.89795	3514.27653	0.51005	0.5175	9.77E-04	1.41E-03	8.01E-04	3.91E-03	5.74E-04	3.42E-04	2.95E-03	1.02E-03	5.36E-04	7.28E-03	5.78E-03	1.73E-03	2.39E-04	2.45E-04	2.7787E-02
552083.8	4172922.82	12542.26191	6059.2122	1812.5858	6616.06787	1456.20581	5177.89635	12613.90227	3559.3992	1068.1868	6358.71824	3408.78395	6802.64628	0.24866	0.24732	2.43E-03	1.89E-03	5.66E-04	1.81E-03	1.87E-04	6.65E-04	7.45E-03	1.37E-03	4.12E-04	4.77E-03	1.68E-03	3.35E-03	1.17E-04	1.17E-04	2.6816E-02
552080.83	4172943.74	12620.30368	6115.24826	1683.75218	6322.28991	1323.68805	5463.30163	12722.36834	3582.78933	996.74378	6131.75299	3134.87226	7147.77584	0.25309	0.25158	2.45E-03	1.91E-03	5.26E-04	1.73E-03	1.70E-04	7.02E-04	7.51E-03	1.38E-03	3.85E-04	4.60E-03	1.54E-03	3.52E-03	1.19E-04	1.19E-04	2.6663E-02
551577.41	4172638.02	5688.3364	4245.99878	2964.29015	12520.41834	5406.28919	2541.31918	5629.66876	2509.22068	1593.6273	8993.10274	11757.45491	3383.91888	0.44085	0.44662	1.10E-03	1.33E-03	9.26E-04	3.42E-03	6.95E-04	3.26E-04	3.32E-03	9.69E-04	6.15E-04	6.74E-03	5.79E-03	1.67E-03	2.07E-04	2.12E-04	2.7324E-02
551435.94	4172739.46	3829.22129	5382.76489	1748.71853	16776.35209	2634.42981	3156.56482	3813.14084	3061.0353	960.99142	10810.65731	10843.50477	4074.625	0.7746	0.80077	7.43E-04	1.68E-03	5.46E-04	4.58E-03	3.38E-04	4.06E-04	2.25E-03	1.18E-03	3.71E-04	8.10E-03	5.34E-03	2.01E-03	3.63E-04	3.80E-04	2.8298E-02
551952.92	4172722.92	6941.93216	4223.70761	3921.6718	11714.55519	4970.42121	1971.67626	6779.7073	2499.0061	2079.06842	9451.98477	9777.87803	2666.02277	0.29143	0.29162	1.35E-03	1.32E-03	1.22E-03	3.20E-03	6.39E-04	2.53E-04	4.00E-03	9.65E-04	8.03E-04	7.09E-03	4.82E-03	1.31E-03	1.37E-04	1.38E-04	2.7244E-02
552086.78	4172901.9	12269.85401	5938.92314	1925.28642	6852.21445	1586.76296	4865.55847	12312.88419	3496.70007	1128.83111	6522.69991	3670.84715	6416.04736	0.24386	0.24267	2.38E-03	1.86E-03	6.01E-04	1.87E-03	2.04E-04	6.25E-04	7.27E-03	1.35E-03	4.36E-04	4.89E-03	1.81E-03	3.16E-03	1.14E-04	1.15E-04	2.6681E-02
551586.5	4172636.36	5865.14902	4161.3349	3057.97767	12021.00468	5618.57795	2505.95783	5802.39677	2466.65343	1639.7721	8752.22489	11742.81089	3342.32722	0.42558	0.43114	1.14E-03	1.30E-03	9.55E-04	3.28E-03	7.22E-04	3.22E-04	3.43E-03	9.52E-04	6.33E-04	6.56E-03	5.78E-03	1.65E-03	1.99E-04	2.04E-04	2.7128E-02
551401.07	4172839.32	3806.29225	6096.24146	1638.42912	16073.19484	2146.33696	3753.98118	3794.00189	3464.91172	911.15626	11254.2403	9191.96308	4772.45273	0.80083	0.82425	7.39E-04	1.90E-03	5.12E-04	4.39E-03	2.76E-04	4.82E-04	2.24E-03	1.34E-03	3.52E-04	8.44E-03	4.53E-03	2.35E-03	3.75E-04	3.91E-04	2.8315E-02
551494.81	4172669.19	4383.43102	4766.71966	2125.41578	15779.21754	3418.57216	2789.17616	4353.76908	2747.32419	1165.89065	10155.93916	11473.41179	3642.57268	0.61511	0.62822	8.51E-04	1.49E-03	6.64E-04	4.31E-03	4.39E-04	3.58E-04	2.57E-03	1.06E-03	4.50E-04	7.61E-03	5.65E-03	1.79E-03	2.88E-04	2.98E-04	2.7839E-02
551447.33	4172717.95	3898.33532	5180.38596	1792.29836	16634.783	2734.88086	3027.90361	3880.84121	2954.02141	984.48201	10616.35965	10992.15418	3920.90255	0.73964	0.7631	7.57E-04	1.62E-03	5.60E-04	4.55E-03	3.51E-04	3.89E-04	2.29E-03	1.14E-03	3.80E-04	7.96E-03	5.41E-03	1.93E-03	3.47E-04	3.62E-04	2.8045E-02
551592.28	4173247.93	5475.22783	7284.74974	1098.83013	5837.08117	992.59674	12532.44716	5557.88115	4350.9431	638.32147	5796.38875	2510.65841	14533.91724	2.16984	2.23163	1.06E-03	2.28E-03	3.43E-04	1.59E-03	1.28E-04	1.61E-03	3.28E-03	1.68E-03	2.46E-04	4.35E-03	1.24E-03	7.16E-03	1.02E-03	1.06E-03	2.7037E-02
551640.12	4172644.2	7111.93019	3725.17312	3556.09908	9635.49951	6579.81137	2329.94661	7020.52406	2238.27778	1868.20394	7383.61922	11950.25537	3140.6359	0.37115	0.37725	1.38E-03	1.16E-03	1.11E-03	2.63E-03	8.45E-04	2.99E-04	4.14E-03	8.64E-04	7.21E-04	5.54E-03	5.89E-03	1.55E-03	1.74E-04	1.79E-04	2.6483E-02
551614.45	4172638	6467.49165	3922.0515	3329.70534	10614.55855	6184.69934	2411.69792	6391.0961	2344.86621	1767.38454	8015.35487	11753.74356	3233.41857	0.38727	0.39256	1.26E-03	1.23E-03	1.04E-03	2.90E-03	7.95E-04	3.10E-04	3.77E-03	9.05E-04	6.82E-04	6.01E-03	5.79E-03	1.59E-03	1.82E-04	1.86E-04	2.6644E-02
552008.54	4172745.27	9046.84056	4927.59422	3213.30421	9797.8143	3528.99604	2731.04493	8899.89075	2937.43702	1782.72894	8431.28383	7402.44288	3669.35189	0.26059	0.26038	1.76E-03	1.54E-03	1.00E-03	2.68E-03	4.53E-04	3.51E-04	5.25E-03	1.13E-03	6.88E-04	6.32E-03	3.65E-03	1.81E-03	1.22E-04	1.23E-04	2.6876E-02
551478.17	4173160.82	4555.19083	8237.03927	1222.93682	8462.62518	1211.10479	9441.57636	4598.13712	4905.44771	699.44183	8066.88038	3484.36128	11332.69325	0.89849	0.91094	8.84E-04	2.57E-03	3.82E-04	2.31E-03	1.56E-04	1.21E-03	2.71E-03	1.89E-03	2.70E-04	6.05E-03	1.72E-03	5.58E-03	4.21E-04	4.32E-04	2.6597E-02
551967.91	4172726.3	7364.16906	4380.2384	3771.50663	11120.6687	4472.63601	2102.91767	7200.76872	2605.46176	2023.02738	9236.34015	9060.55369	2841.57264	0.28143	0.28159	1.43E-03	1.37E-03	1.18E-03	3.04E-03	5.75E-04	2.70E-04	4.25E-03	1.01E-03	7.81E-04	6.92E-03	4.46E-03	1.40E-03	1.32E-04	1.33E-04	2.6949E-02
551396.71	4172873	3874.40895	6420.71653	1594.16922	15315.68217	1951.5113	3989.52477	3865.04735	3650.33263	891.49334	11388.72851	8151.94503	5059.44248	0.77612	0.79653	7.52E-04	2.01E-03	4.98E-04	4.18E-03	2.51E-04	5.13E-04	2.28E-03	1.41E-03	3.44E-04	8.54E-03	4.02E-03	2.49E-03	3.64E-04	3.77E-04	2.8026E-02
551496.71	4173183.25	4679.15601	8172.40655	1202.78482	7869.92739	1160.00963	9926.29709	4725.60621	4898.19042	689.8852	7647.62545	3238.82144	11872.38213	0.97855	0.99275	9.08E-04	2.55E-03	3.76E-04	2.15E-03	1.49E-04	1.28E-03	2.79E-03	1.89E-03	2.66E-04	5.73E-03	1.60E-03	5.85E-03	4.59E-04	4.70E-04	2.6464E-02
551682.33	4172660.6	8158.77712	3390.72205	3629.95527	8866.93967	6377.75164	2164.16585	8044.02508	2034.9929	1878.87288	6411.55434	12162.64693	2939.70094	0.39168	0.40145	1.58E-03	1.06E-03	1.13E-03	2.42E-03	8.19E-04	2.78E-04	4.75E-03	7.86E-04	7.25E-04	4.81E-03	5.99E-03	1.45E-03	1.84E-04	1.90E-04	2.6176E-02
552086.95	4172931.62	12273.50214	5968.61485	1724.55519	6381.2084	1377.49307	5209.33889	12356.72608	3501.94647	1017.71676	6151.48949	3240.78226	6828.04657	0.24745	0.24606	2.38E-03	1.86E-03	5.39E-04	1.74E-03	1.77E-04	6.69E-04	7.29E-03	1.35E-03	3.93E-04	4.61E-03	1.60E-03	3.36E-03	1.16E-04	1.17E-04	2.6218E-02
552089.93	4172910.7	12097.15566	5880.52214	1840.88425	6636.38711	1505.73244	4918.93344	12152.03766	3458.40817	1081.19573	6338.3843	3501.62719	6472.33591	0.24292	0.24168	2.35E-03	1.84E-03	5.75E-04	1.81E-03	1.93E-04	6.32E-04	7.17E-03	1.34E-03	4.17E-04	4.75E-03	1.72E-03	3.19E-03	1.14E-04	1.15E-04	2.6217E-02
551460.34	4172697.79	3990.17639	4971.80011	1853.15213	16234.67383	2855.13469	2907.82749	3970.21554	2843.40236	1018.17202	10338.8816	10995.83659	3774.67828	0.69255	0.71219	7.74E-04	1.55E-03	5.79E-04	4.44E-03	3.67E-04	3.74E-04	2.34E-03	1.10E-03	3.93E-04	7.75E-03	5.42E-03	1.86E-03	3.25E-04	3.38E-04	2.7606E-02
551429.94	4172746.15	3755.33655	5357.78656	1704.06655	16337.24194	2545.49933	3160.59383	3740.00552	3045.47916	937.0023	10619.22763	10457.84173	4073.4379	0.76084	0.78643	7.29E-04	1.67E-03	5.32E-04	4.46E-03	3.27E-04	4.06E-04	2.21E-03	1.18E-03	3.62E-04	7.96E-03	5.15E-03	2.01E-03	3.57E-04	3.73E-04	2.7725E-02
551420.4	4173057.28	4313.25001	8378.24711	1270.46424	10710.86745	1409.98431	6941.04048	4341.19628	4981.70058	720.09257	9336.76867	4720.48448	8589.61525	0.74646	0.75829	8.37E-04	2.62E-03	3.97E-04	2.93E-03	1.81E-04	8.92E-04	2.56E-03	1.92E-03	2.78E-04	7.00E-03	2.33E-03	4.23E-03	3.50E-04	3.59E-04	2.6880E-02
551514.24	4173201.82	4783.01787	8012.52414	1175.78371	7362.23962	1116.29277	10296.46975	4833.52454	4818.13454	676.21439	7202.85164	3044.27203	12289.46865	1.06498	1.08119	9.28E-04	2.50E-03	3.67E-04	2.01E-03	1.43E-04	1.32E-03	2.85E-03	1.86E-03	2.61E-04	5.40E-03	1.50E-03	6.05E-03	4.99E-04	5.12E-04	2.6215E-02
551417.18	4173048.33	4295.95222	8372.50118	1273.14179	10906.18636	1423.3064	6707.27232	4321.93204	4975.65701	721.73065	9428.39802	4846.91488	8324.96184	0.74023	0.75191	8.34E-04	2.62E-03	3.98E-04	2.98E-03	1.83E-04	8.62E-04	2.55E-03	1.92E-03	2.79E-04	7.07E-03	2.39E-03	4.10E-03	3.47E-04	3.56E-04	2.6882E-02
551596.99	4172633.65	6005.08238	4007.40348	3103.75458	11220.42224	5708.57537	2438.07588	5938.75435	2383.47585	1658.8531	8309.04521	11451.60017	3257.39273	0.39953	0.40464	1.17E-03	1.25E-03	9.69E-04	3.07E-03	7.33E-04	3.13E-04	3.51E-03	9.20E-04	6.40E-04	6.23E-03	5.64E-03	1.60E-03	1.87E-04	1.92E-04	2.6419E-02
551839.3	4172696.53	5237.10587	2747.68569	2836.26969	12748.49003	7457.99415	1469.90708	5175.28377	1555.69666	1410.87646	8100.49673	14761.43184	1965.04179	0.42929	0.43218	1.02E-03	8.58E-04	8.86E-04	3.48E-03	9.58E-04	1.89E-04	3.06E-03	6.01E-04	5.45E-04	6.07E-03	7.27E-03	9.68E-04	2.01E-04	2.05E-04	2.6309E-02
551537.69	4173220.88	4934.82519	7781.67675	1143.69572	6825.02843	1072.69266	10867.85258	4992.53556	4680.23342	659.94058	6686.89257	2851.91364	12938.70449	1.22389	1.2447	9.58E-04	2.43E-03	3.57E-04	1.86E-03	1.38E-04	1.40E-03	2.95E-03	1.81E-03	2.55E-04	5.01E-03	1.40E-03	6.37E-03	5.74E-04	5.90E-04	2.6108E-02
551413.95	4173039.38	4283.8587	8365.96241	1279.7259	10981.51095	1437.88221	6484.28414	4307.63368	4963.42753	725.6839	9550.76316	4967.21542	8069.81673	0.73622	0.74807	8.31E-04	2.61E-03	4.00E-04	3.00E-03	1.85E-04	8.33E-04	2.54E-03	1.92E-03	2.80E-04	7.16E-03	2.45E-03	3.98E-03	3.45E-04	3.55E-04	2.6883E-02
551422.77	4172759.08	3714.40407	5430.70045	1677.80306	16178.30488	2474.83841	3223.73151	3699.5439	3084.16312	923.57075	10605.53821	10228.7629	4144.68305	0.76669	0.79264	7.21E-04	1.70E-03	5.24E-04	4.42E-03	3.18E-04	4.14E-04	2.18E-03	1.19E-03	3.57E-04	7.95E-03	5.04E-03	2.04E-03	3.59E-04	3.76E-04	2.7591E-02
551644.19	4173256.28	6051.82971	6563.728	1089.84882	5124.79716	931.56945	12643.92657	6163.91212	3925.88212	635.69663	5085.75893	2286.28288	14837.05468	6.80891	7.28786	1.17E-03	2.05E-03	3.40E-04	1.40E-03	1.20E-04	1.62E-03	3.64E-03	1.52E-03	2.45E-04	3.81E-03	1.13E-03	7.31E-03	3.19E-03	3.45E-03	3.1002E-02
551410.73	4173030.42	4269.00691	8336.33056	1287.79377	11168.48671	1452.31839	6263.12082	4290.46565	4932.97765	730.51737	9678.48613	5085.37816	7813.1268	0.73253	0.74424	8.28E-04	2.60E-03	4.02E-04	3.05E-03	1.87E-04	8.05E-04	2.53E-03	1.90E-03	2.82E-04	7.26E-03	2.51E-03	3.85E-03	3.43E-04	3.53E-04	2.6902E-02
552034.12	4172760.8	9658.17111	5034.2078	2915.81819	9064.41398	3038.46572	2981.30896	9543.51171	2991.29886	1630.62943	7938.67107	6468.00378	4030.3668	0.24721	0.24688	1.87E-03	1.57E-03	9.11E-04	2.48E-03	3.90E-04	3.83E-04	5.63E-03	1.15E-03	6.29E-04	5.95E-03	3.19E-03	1.99E-03	1.16E-04	1.17E-04	2.6381E-02
551393.35	4172894.92	3909.15625	6638.46806	1551.49555	14636.54402	1830.24171	4147.89775	3902.30548	3777.2082	871.30367	11312.65821	7453.7928	5253.35324	0.75605	0.77343	7.59E-04	2.07E-03	4.85E-04	4.00E-03	2.35E-04	5.33E-04	2.30E-03	1.46E-03	3.36E-04	8.48E-03	3.67E-03	2.59E-03	3.54E-04	3.67E-04	2.7644E-02
551982.85	4172729.62	7734.65051	4507.64293	3553.56817	10540.37112	4060.14077	2303.57948	7574.93463	2723.33983	1929.8814	8898.73306	8392.29186	3030.26077	0.27293	0.27294	1.50E-03	1.41E-03	1.11E-03	2.88E-03	5.22E-04	2.96E-04	4.47E-03	1.05E-03	7.45E-04	6.67E-03	4.13E-03	1.49E-03	1.28E-04	1.29E-04	2.6540E-02
551721	4172671.33	8580.32588	3087.94634	3197.28458	9779.25881	5477.40489	1978.30761	8459.93433	1836.21278	1657.30178	6060.76186	12407.93625	2686.72573	0.46749	0.48018	1.67E-03	9.65E-04	9.99E-04	2.67E-03	7.04E-04	2.54E-04	4.99E-03	7.09E-04	6.40E-04	4.54E-03	6.11E-03	1.32E-03	2.19E-04	2.28E-04	2.6027E-02
551520.77	4172651.67	4638.59032	4509.81576	2300.42856	14467.77307	3851.48344	2660.10936	4601.77213	2620.88605	1252.51716	9611.07517	11189.48145	3495.08654	0.53005	0.53868	9.00E-04	1.41E-03	7.19E-04	3.95E-03	4.95E-04	3.42E-04	2.72E-03	1.01E-03	4.84E-04	7.21E-03	5.51E-03	1.72E-03	2.48E-04	2.55E-04	2.6972E-02
551407.5	4173021.47	4250.82094	8280.75803	1297.45826	11357.35743	1466.57153	6045.75848	4269.88703	4883.24834	736.28857	9808.98312	5198.68134	7557.66839	0.72869	0.74118	8.25E-04	2.59E-03	4.05E-04	3.10E-03	1.88E-04	7.77E-04	2.52E-03	1.89E-03	2.84E-04	7.35E-03	2.56E-03	3.72E-03	3.42E-04	3.51E-04	2.6905E-02
551404.28	4173012.52	4233.2286	8208.89839	1310.47047	11565.09318	1481.83436	5839.8463	4249.8602	4820.74209	743.91615	9955.14404	5309.38718	7313.49485	0.72608	0.7388	8.21E-04	2.56E-03	4.09E-04	3.16E-03	1.90E-04	7.50E-04	2.51E-03	1.86E-03	2.87E-04	7.46E-03	2.62E-03	3.60E-03	3.40E-04	3.50E-04	2.6924E-02
551565.8	4172636.13	5344.71798	4216.21971	2744.09991	12557.14042	4904.20676	2520.71187	5292.83948	2483.15162	1479.82403	8910.06917	11221.4799	3347.96484	0.43896	0.44453	1.04E-03	1.32E-03	8.57E-04	3.43E-03	6.30E-04	3.24E-04	3.12E-03	9.59E-04	5.71E-04	6.68E-03	5.53E-03	1.65E-03	2.06E-04	2.11E-04	2.6524E-02
551429.19	4173081.98	4293.32995	8170.95014	1247.06449	10062.72977	1360.15475	7448.53397	4325.90629	4857.4346	707.00619	8917.4909	4380.83852	9136.35911	0.75327	0.76463	8.33E-04	2.55E-03	3.90E-04	2.75E-03	1.75E-04	9.57E-04	2.55E-03	1.88E-03	2.73E-04	6.69E-03	2.16E-03	4.50E-03	3.53E-04	3.62E-04	2.6417E-02
551481.26	4173169.41	4516.46565	8030.06336	1199.66294	8155.2677	1180.83579	9310.50441	4559.24257	4789.10533	686.57825	7805.79491	3368.33759	11169.93843	0.8958	0.90813	8.76E-04	2.51E-03	3.75E-04	2.23E-03	1.52E-04	1.20E-03	2.69E-03	1.85E-03	2.65E-04	5.85E-03	1.66E-03	5.50E-03	4.20E-04	4.30E-04	2.6004E-02
551400.14	4172827.72	3704.34617	5825.48581	1602.86132	15560.70252	2137.4658	3595.03476	3691.91893	3313.38098	890.20291	10774.86212	9061.65558	4574.51318	0.76941	0.79227	7.19E-04	1.82E-03	5.01E-04	4.25E-03	2.75E-04	4.62E-04	2.18E-03	1.28E-03	3.44E-04	8.08E-03	4.46E-03	2.25E-03	3.61E-04	3.75E-04	2.7361E-02
552093.08	4172919.5	11886.56714	5808.65503	1757.05146	6416.62091	1427.31374	4959.82062	11952.67706	3412.32232	1033.57546	6148.12985	3336.00555	6511.75929	0.24183	0.24054	2.31E-03	1.81E-03	5.49E-04	1.75E-03	1.83E-04	6.37E-04	7.06E-03	1.32E-03	3.99E-04	4.61E-03	1.64E-03	3.21E-03	1.13E-04	1.14E-04	2.5703E-02
551401.05	4173003.57	4197.75656	8077.8143	1319.33788	11715.78299	1494.14131	5621.63251	4211.96518	4724.43111	749.15163	10044.70074	5399.92136	7051.13335	0.72056	0.73325	8.15E-04	2.52E-03	4.12E-04	3.20E-03	1.92E-04	7.22E-04	2.49E-03	1.82E-03	2.89E-04	7.53E-03	2.66E-03	3.47E-03	3.38E-04	3.48E-04	2.6814E-02
552090.1	4172940.42	11973.20584	5866.53956	1638.84819	6147.23464	1302.7296	5228.10311	12066.98242	3437.99276	968.3434	5942.4781	3079.85863	6836.59815	0.24617	0.24474	2.32E-03	1.83E-03	5.12E-04	1.68E-03	1.67E-04	6.72E-04	7.12E-03	1.33E-03	3.74E-04	4.46E-03	1.52E-03	3.37E-03	1.15E-04	1.16E-04	2.5582E-02
552023.36	4172748.46	9073.70957	4878.64542	3006.54568	9292.60029	3244.72228	2797.03704	8942.69733	2899.47151	1669.95807	8039.18428	6855.69093	3777.15272	0.25076	0.25054	1.76E-03	1.52E-03	9.39E-04	2.54E-03	4.17E-04	3.59E-04	5.28E-03	1.12E-03	6.45E-04	6.03E-03	3.38E-03	1.86E-03	1.18E-04	1.19E-04	2.6083E-02
551659.95	4172647.6	7445.72763	3491.76639	3531.0671	8822.17412	6363.80298	2214.97208	7346.15718	2099.1799	1843.34193	6710.42149	11585.77652	2996.54661	0.35727	0.36421	1.44E-03	1.09E-03	1.10E-03	2.41E-03	8.18E-04	2.85E-04	4.34E-03	8.10E-04	7.12E-04	5.03E-03	5.71E-03	1.48E-03	1.67E-04	1.73E-04	2.5564E-02
551556.05	4172636.55	5139.09298	4244.32913	2618.13021	12840.11454	4619.07078	2530.30313	5091.24049	2492.58874	1414.37106	8989.45516	11071.33045	3353.59858	0.44979	0.45561	9.97E-04	1.33E-03	8.18E-04	3.51E-03	5.93E-04	3.25E-04	3.01E-03	9.62E-04	5.46E-04	6.74E-03	5.45E-03	1.65E-03	2.11E-04	2.16E-04	2.6353E-02
551997.75	4172732.89	8062.36789	4635.84057	3327.64818	9938.7446	3733.03448	2438.20395	7910.89236	2766.9113	1824.32205	8531.55266	7772.9204	3286.15064	0.26356	0.2635	1.56E-03	1.45E-03	1.04E-03	2.72E-03	4.80E-04	3.13E-04	4.67E-03	1.07E-03	7.04E-04	6.40E-03	3.83E-03	1.62E-03	1.24E-04	1.25E-04	2.6095E-02
552096.05	4172898.58	11630.41108	5694.47662	1860.66876	6635.72345	1550.43542	4669.15916	11670.55361	3352.44955	1089.04928	6297.87997	3582.98239	6151.86367	0.23727	0.23613	2.26E-03	1.78E-03	5.81E-04	1.81E-03	1.99E-04	6.00E-04	6.89E-03	1.29E-03	4.20E-04	4.72E-03	1.76E-03	3.03E-03	1.11E-04	1.12E-04	2.5573E-02
551631.15	4173258.18	5759.42178	6585.28031	1081.61011	5208.50098	935.38277	12254.95809	5860.73696	3955.69232	629.45101	5190.96704	2314.62436	14367.6902	4.47657	4.70593	1.12E-03	2.06E-03	3.38E-04	1.42E-03	1.20E-04	1.57E-03	3.46E-03	1.53E-03	2.43E-04	3.89E-03	1.14E-03	7.08E-03	2.10E-03	2.23E-03	2.8298E-02
551435.11	4173098.72	4270.81073	7990.24279	1234.46757	9627.49371	1320.11806	7712.12124	4305.50031	4744.28273	698.22756	8633.47899	4146.549	9405.11023	0.75904	0.76866	8.29E-04	2.50E-03	3.86E-04	2.63E-03	1.70E-04	9.91E-04	2.54E-03	1.83E-03	2.70E-04	6.47E-03	2.04E-03	4.63E-03	3.56E-04	3.64E-04	2.6012E-02
551393.41	4172852.77	3728.24373	5988.16315	1567.97421	15077.21653	2001.89637	3732.38766	3717.64121	3406.82105	873.78161	10833.81581	8397.33435	4738.0138	0.75191	0.77235	7.24E-04	1.87E-03	4.90E-04	4.12E-03	2.57E-04	4.79E-04	2.19E-03	1.32E-03	3.37E-04	8.12E-03	4.14E-03	2.33E-03	3.52E-04	3.66E-04	2.7098E-02
551397.83	4172994.62	4152.63448	7910.52456	1326.87638	11836.29783	1505.16295	5404.32367	4164.46322	4608.1213	753.52739	10103.14879	5474.40084	6787.67708	0.71349	0.72617	8.06E-04	2.47E-03	4.14E-04	3.23E-03	1.93E-04	6.94E-04	2.46E-03	1.78E-03	2.91E-04	7.57E-03	2.70E-03	3.34E-03	3.34E-04	3.44E-04	2.6634E-02
551508.61	4172654.58	4440.24136	4506.70046	2168.55852	14513.60926	3554.55503	2660.45301	4407.33013	2610.74959	1184.77857	9546.97223	10902.07044	3485.33584	0.54338	0.55312	8.62E-04	1.41E-03	6.77E-04	3.97E-03	4.57E-04	3.42E-04	2.60E-03	1.01E-03	4.57E-04	7.16E-03	5.37E-03	1.72E-03	2.55E-04	2.62E-04	2.6539E-02
551450.46	4172704.32	3851.16988	4936.32891	1765.79979	15794.01764	2695.92079	2899.97002	3833.3995	2820.03416	970.28843	10120.9521	10524.08815	3759.0645	0.68489	0.70513	7.47E-04	1.54E-03	5.52E-04	4.32E-03	3.46E-04	3.73E-04	2.26E-03	1.09E-03	3.75E-04	7.59E-03	5.18E-03	1.85E-03	3.21E-04	3.34E-04	2.6880E-02
551547.22	4173229.86	4929.67083	7458.1195	1116.97518	6506.40787	1046.53172	10865.78055	4989.94133	4521.3801	645.31414	6388.83315	2757.03232	12678.2895	1.29408	1.31534	9.57E-04	2.33E-03	3.49E-04	1.78E-03	1.34E-04	1.40E-03	2.95E-03	1.75E-03	2.49E-04	4.79E-03	1.36E-03	6.25E-03	6.07E-04	6.23E-04	2.5506E-02
551400.85	4172818.2	3655.43723	5683.37727	1590.25865	15355.42103	2152.3885	3502.86206	3642.78503	3232.81883	882.16518	10541.18362	9065.02172	4461.46746	0.75566	0.77857	7.09E-04	1.78E-03	4.97E-04	4.20E-03	2.77E-04	4.50E-04	2.15E-03	1.25E-03	3.41E-04	7.90E-03	4.47E-03	2.20E-03	3.54E-04	3.69E-04	2.6931E-02
551701.44	4172664.32	8291.18644	3174.56824	3363.93996	8835.38303	5691.77334	2040.05099	8174.79377	1897.59032	1739.7382	5991.1383	11744.54519	2772.52291	0.41044	0.42159	1.61E-03	9.92E-04	1.05E-03	2.41E-03	7.31E-04	2.62E-04	4.83E-03	7.33E-04	6.72E-04	4.49E-03	5.79E-03	1.37E-03	1.92E-04	2.00E-04	2.5323E-02
551437.62	4172724.36	3739.36632	5073.73135	1695.18453	15753.49556	2557.9854	2992.1243	3723.76838	2891.64453	931.65821	10186.73648	10244.70997	3867.73352	0.70706	0.72943	7.26E-04	1.58E-03	5.29E-04	4.30E-03	3.29E-04	3.84E-04	2.20E-03	1.12E-03	3.60E-04	7.64E-03	5.05E-03	1.91E-03	3.31E-04	3.46E-04	2.6797E-02
551500.85	4173194.8	4603.72739	7817.17374	1164.20792	7463.46398	1118.33457	9611.58331	4649.88032	4689.27458	668.34656	7254.48825	3093.47751	11499.99046	0.96916	0.98311	8.93E-04	2.44E-03	3.64E-04	2.04E-03	1.44E-04	1.23E-03	2.74E-03	1.81E-03	2.58E-04	5.44E-03	1.52E-03	5.66E-03	4.54E-04	4.66E-04	2.5477E-02
551601.42	4173256.54	5404.61906	6864.48888	1061.17458	5516.9059	957.38732	11794.84255	5489.30441	4129.15339	616.88121	5471.29707	2405.07632	13860.67898	2.40007	2.47596	1.05E-03	2.14E-03	3.31E-04	1.51E-03	1.23E-04	1.52E-03	3.24E-03	1.59E-03	2.38E-04	4.10E-03	1.18E-03	6.83E-03	1.12E-03	1.17E-03	2.6155E-02
551394.59	4172985.61	4107.51443	7732.0277	1337.14829	11969.30933	1506.40059	5200.12115	4117.01106	4486.43443	759.32165	10165.4021	5557.67684	6538.9122	0.70715	0.72009	7.97E-04	2.42E-03	4.18E-04	3.27E-03	1.94E-04	6.68E-04	2.43E-03	1.73E-03	2.93E-04	7.62E-03	2.74E-03	3.22E-03	3.31E-04	3.41E-04	2.6470E-02
551410	4172783.92	3619.32279	5452.81643	1608.71791	15428.9307	2291.9154	3301.10801	3605.6366	3098.23987	888.33359	10322.13045	9502.21241	4224.23054	0.74558	0.76985	7.02E-04	1.70E-03	5.02E-04	4.22E-03	2.94E-04	4.24E-04	2.13E-03	1.20E-03	3.43E-04	7.74E-03	4.68E-03	2.08E-03	3.49E-04	3.65E-04	2.6724E-02
551518.17	4173211.07	4701.02135	7675.71779	1139.86012	7053.17636	1084.54416	9959.26662	4751.36182	4611.87715	656.0515	6864.33747	2939.92613	11899.82655	1.05368	1.0696	9.12E-04	2.40E-03	3.56E-04	1.93E-03	1.39E-04	1.28E-03	2.80E-03	1.78E-03	2.53E-04	5.15E-03	1.45E-03	5.86E-03	4.94E-04	5.07E-04	2.5307E-02
552096.23	4172928.3	11643.41442	5725.30157	1674.7379	6196.1139	1352.30122	4988.9971	11720.07554	3359.54488	986.53153	5954.66096	3176.3324	6535.50981	0.24067	0.23934	2.26E-03	1.79E-03	5.23E-04	1.69E-03	1.74E-04	6.41E-04	6.92E-03	1.30E-03	3.81E-04	4.46E-03	1.56E-03	3.22E-03	1.13E-04	1.13E-04	2.5149E-02
551709.18	4172666.4	8339.56061	3107.75032	3256.42485	8999.46683	5466.59722	1998.9409	8223.01393	1853.99989	1685.96937	5910.80335	11724.00596	2716.07948	0.42445	0.43615	1.62E-03	9.71E-04	1.02E-03	2.46E-03	7.02E-04	2.57E-04	4.85E-03	7.16E-04	6.51E-04	4.43E-03	5.78E-03	1.34E-03	1.99E-04	2.07E-04	2.5195E-02
551484.35	4173178	4473.90806	7816.39521	1175.43158	7857.81718	1151.08422	9154.20214	4516.52331	4667.52081	673.13469	7542.65011	3257.45057	10980.17429	0.89186	0.90406	8.68E-04	2.44E-03	3.67E-04	2.15E-03	1.48E-04	1.18E-03	2.67E-03	1.80E-03	2.60E-04	5.65E-03	1.60E-03	5.41E-03	4.18E-04	4.28E-04	2.5390E-02
551926.94	4172706.94	5461.51457	3531.6196	3679.9285	11774.87334	5679.30145	1627.29896	5336.0902	2056.0782	1896.91248	8943.3831	11062.29683	2189.81659	0.30531	0.30561	1.06E-03	1.10E-03	1.15E-03	3.22E-03	7.30E-04	2.09E-04	3.15E-03	7.94E-04	7.32E-04	6.70E-03	5.45E-03	1.08E-03	1.43E-04	1.45E-04	2.5665E-02
551498.4	4172657.61	4297.86496	4514.41252	2074.84656	14576.29666	3347.46741	2665.43777	4267.86605	2608.31749	1136.51521	9521.00759	10714.53613	3484.1523	0.55679	0.56764	8.34E-04	1.41E-03	6.48E-04	3.98E-03	4.30E-04	3.42E-04	2.52E-03	1.01E-03	4.39E-04	7.14E-03	5.28E-03	1.72E-03	2.61E-04	2.69E-04	2.6275E-02
551539.9	4172638.01	4822.42773	4270.50165	2418.18822	13190.01746	4164.55478	2539.82683	4780.59734	2496.9175	1309.96019	9044.65922	10790.68343	3353.57067	0.46763	0.47405	9.36E-04	1.33E-03	7.55E-04	3.60E-03	5.35E-04	3.26E-04	2.82E-03	9.64E-04	5.06E-04	6.78E-03	5.32E-03	1.65E-03	2.19E-04	2.25E-04	2.5974E-02
552099.2	4172907.38	11473.75801	5640.49045	1781.96786	6432.96096	1473.4905	4718.37019	11524.64865	3317.14072	1044.79052	6125.77087	3422.4009	6203.79397	0.23636	0.23517	2.23E-03	1.76E-03	5.57E-04	1.76E-03	1.89E-04	6.06E-04	6.80E-03	1.28E-03	4.03E-04	4.59E-03	1.69E-03	3.06E-03	1.11E-04	1.11E-04	2.5142E-02
551441.03	4173115.46	4237.15362	7780.39721	1209.88197	9182.32002	1273.99672	7978.39243	4273.10793	4664.77611	688.18733	8380.66755	3916.62045	9556.95349	0.75812	0.76783	8.22E-04	2.43E-03	3.78E-04	2.51E-03	1.64E-04	1.02E-03	2.52E-03	1.80E-03	2.66E-04	6.28E-03	1.93E-03	4.71E-03	3.55E-04	3.64E-04	2.5556E-02
551664.88	4173262.23	6400.04341	6174.39717	1023.10186	4753.87904	885.57937	12086.58918	6527.89591	3654.42425	598.87402	4726.56089	2139.07866	14127.89596	16.7204	13.84824	1.24E-03	1.93E-03	3.20E-04	1.30E-03	1.14E-04	1.55E-03	3.85E-03	1.41E-03	2.31E-04	3.54E-03	1.05E-03	6.96E-03	7.84E-03	6.56E-03	3.7907E-02
552012.61	4172736.12	8344.22027	4650.80113	3098.55541	9458.8045	3437.92572	2548.1113	8205.78825	2773.24956	1711.76344	8135.23052	7210.9772	3424.60684	0.25383	0.25372	1.62E-03	1.45E-03	9.68E-04	2.58E-03	4.42E-04	3.27E-04	4.84E-03	1.07E-03	6.61E-04	6.10E-03	3.55E-03	1.69E-03	1.19E-04	1.20E-04	2.5546E-02
551390.13	4172885.96	3786.92167	6294.10858	1515.1459	14201.04284	1811.11419	3950.29664	3779.58422	3582.85709	849.52085	10840.91655	7371.40938	5005.72034	0.72617	0.74413	7.35E-04	1.97E-03	4.73E-04	3.88E-03	2.33E-04	5.07E-04	2.23E-03	1.38E-03	3.28E-04	8.13E-03	3.63E-03	2.47E-03	3.40E-04	3.53E-04	2.6654E-02
551911.78	4172703.37	5074.06233	3308.34928	3582.56552	11942.76982	6049.07704	1537.53088	4964.39102	1908.88122	1821.81911	8806.24879	11899.50507	2064.83114	0.32364	0.32409	9.85E-04	1.03E-03	1.12E-03	3.26E-03	7.77E-04	1.98E-04	2.93E-03	7.37E-04	7.03E-04	6.60E-03	5.86E-03	1.02E-03	1.52E-04	1.54E-04	2.5532E-02
551578.63	4172628.6	5478.4574	4009.04143	2799.03347	11510.19735	5034.92148	2423.45645	5422.80889	2370.63588	1505.16076	8351.38858	10818.38761	3226.15612	0.40267	0.40755	1.06E-03	1.25E-03	8.74E-04	3.15E-03	6.47E-04	3.11E-04	3.20E-03	9.15E-04	5.81E-04	6.26E-03	5.33E-03	1.59E-03	1.89E-04	1.93E-04	2.5551E-02
551401.79	4172808.81	3612.22655	5557.90695	1578.5657	15152.22645	2166.20568	3418.79346	3599.42879	3161.09916	874.67177	10330.93079	9056.68607	4359.05862	0.74176	0.76462	7.01E-04	1.74E-03	4.93E-04	4.14E-03	2.78E-04	4.39E-04	2.12E-03	1.22E-03	3.38E-04	7.75E-03	4.46E-03	2.15E-03	3.48E-04	3.62E-04	2.6534E-02
551391.36	4172976.65	4052.84652	7524.67195	1345.17698	12063.74101	1514.09339	4998.35122	4060.16497	4351.2163	763.73329	10186.21478	5632.96795	6291.71589	0.69853	0.71157	7.86E-04	2.35E-03	4.20E-04	3.30E-03	1.95E-04	6.42E-04	2.40E-03	1.68E-03	2.95E-04	7.64E-03	2.77E-03	3.10E-03	3.27E-04	3.37E-04	2.6237E-02
551646.43	4172638.95	6947.726	3510.59525	3359.70943	8862.7283	6077.20246	2219.01869	6859.01436	2109.23085	1764.05055	6820.31849	11046.06135	2992.58336	0.34172	0.34721	1.35E-03	1.10E-03	1.05E-03	2.42E-03	7.81E-04	2.85E-04	4.05E-03	8.14E-04	6.81E-04	5.11E-03	5.44E-03	1.47E-03	1.60E-04	1.65E-04	2.4879E-02
551737.74	4172672.32	8202.65783	2897.88879	2812.14357	10026.72919	5006.22406	1854.34409	8093.7813	1713.23769	1470.12732	5920.85253	11986.92765	2512.11878	0.47404	0.48602	1.59E-03	9.05E-04	8.78E-04	2.74E-03	6.43E-04	2.38E-04	4.78E-03	6.61E-04	5.68E-04	4.44E-03	5.90E-03	1.24E-03	2.22E-04	2.30E-04	2.5037E-02
552038.16	4172751.61	9032.32807	4793.64739	2810.45261	8802.82394	2985.41827	2825.64099	8920.79374	2846.60003	1567.21164	7661.87384	6348.54418	3817.41948	0.24132	0.24107	1.75E-03	1.50E-03	8.78E-04	2.41E-03	3.84E-04	3.63E-04	5.27E-03	1.10E-03	6.05E-04	5.74E-03	3.13E-03	1.88E-03	1.13E-04	1.14E-04	2.5229E-02
551405.75	4172792.19	3584.09081	5430.57722	1581.12132	15095.92645	2222.25487	3314.45954	3570.89521	3087.51411	874.18891	10179.57486	9204.65641	4235.08091	0.73208	0.75534	6.96E-04	1.70E-03	4.94E-04	4.12E-03	2.85E-04	4.26E-04	2.11E-03	1.19E-03	3.37E-04	7.63E-03	4.53E-03	2.09E-03	3.43E-04	3.58E-04	2.6312E-02
551611.42	4172628.63	6114.26151	3744.20812	3084.51078	10008.62365	5627.28266	2316.22092	6044.35204	2236.01236	1640.28119	7570.73807	10801.70242	3101.18547	0.3598	0.36425	1.19E-03	1.17E-03	9.63E-04	2.73E-03	7.23E-04	2.98E-04	3.57E-03	8.63E-04	6.33E-04	5.68E-03	5.32E-03	1.53E-03	1.69E-04	1.73E-04	2.5005E-02
551972.03	4172717.21	6698.7788	4080.2904	3522.25945	10639.46179	4341.38392	1957.90859	6551.34656	2419.90581	1882.42048	8725.98607	8704.24847	2644.53771	0.27181	0.27203	1.30E-03	1.27E-03	1.10E-03	2.91E-03	5.58E-04	2.52E-04	3.87E-03	9.34E-04	7.27E-04	6.54E-03	4.29E-03	1.30E-03	1.27E-04	1.29E-04	2.5308E-02
551388.14	4172967.68	3995.0013	7307.0206	1353.31812	12146.85047	1522.82508	4806.47229	4000.23328	4212.92604	768.00121	10188.09937	5710.65192	6055.70803	0.69073	0.70382	7.75E-04	2.28E-03	4.23E-04	3.32E-03	1.96E-04	6.17E-04	2.36E-03	1.63E-03	2.96E-04	7.64E-03	2.81E-03	2.98E-03	3.24E-04	3.34E-04	2.5988E-02
552102.35	4172916.18	11284.2031	5574.82074	1703.992	6227.66449	1399.25524	4756.83567	11345.34784	3275.16394	1000.61578	5948.87466	3266.16445	6241.11598	0.23536	0.23413	2.19E-03	1.74E-03	5.32E-04	1.70E-03	1.80E-04	6.11E-04	6.70E-03	1.26E-03	3.86E-04	4.46E-03	1.61E-03	3.07E-03	1.10E-04	1.11E-04	2.4668E-02
551652.44	4173264.04	6022.94153	6191.24193	1049.54447	4845.25317	894.37692	11737.68029	6136.75394	3679.36926	613.02294	4794.22684	2178.88313	13851.48481	8.41785	9.16379	1.17E-03	1.93E-03	3.28E-04	1.32E-03	1.15E-04	1.51E-03	3.62E-03	1.42E-03	2.37E-04	3.59E-03	1.07E-03	6.82E-03	3.95E-03	4.34E-03	3.1436E-02
552099.37	4172937.1	11373.04516	5632.04696	1594.65578	5977.16591	1281.15663	5007.30825	11459.40957	3301.22922	940.55226	5760.04917	3023.81122	6544.75843	0.2395	0.23812	2.21E-03	1.76E-03	4.98E-04	1.63E-03	1.65E-04	6.43E-04	6.76E-03	1.27E-03	3.63E-04	4.32E-03	1.49E-03	3.22E-03	1.12E-04	1.13E-04	2.4564E-02
551487.86	4172661.17	4136.88519	4490.564	1967.16611	14428.92441	3117.31065	2657.41887	4110.11359	2588.72311	1080.02961	9394.25025	10369.57317	3466.01689	0.56188	0.57355	8.03E-04	1.40E-03	6.14E-04	3.94E-03	4.00E-04	3.41E-04	2.43E-03	9.99E-04	4.17E-04	7.04E-03	5.11E-03	1.71E-03	2.63E-04	2.72E-04	2.5740E-02
551391.76	4172842.66	3618.25691	5703.78291	1528.06559	14548.98676	1978.35703	3570.06856	3607.53851	3248.10465	850.62545	10342.4673	8238.9515	4534.75385	0.71894	0.73855	7.02E-04	1.78E-03	4.77E-04	3.98E-03	2.54E-04	4.59E-04	2.13E-03	1.25E-03	3.28E-04	7.75E-03	4.06E-03	2.23E-03	3.37E-04	3.50E-04	2.6094E-02
551487.44	4173186.58	4422.61088	7588.84472	1149.39497	7573.43017	1122.44549	8963.18286	4464.97341	4535.44625	658.6881	7271.69264	3153.77843	10753.16648	0.88498	0.89695	8.58E-04	2.37E-03	3.59E-04	2.07E-03	1.44E-04	1.15E-03	2.64E-03	1.75E-03	2.54E-04	5.45E-03	1.55E-03	5.30E-03	4.15E-04	4.25E-04	2.4736E-02
551446.94	4173132.2	4186.52811	7529.70056	1180.66921	8711.74692	1226.58869	8004.05847	4222.9873	4507.4576	672.39263	8006.76147	3697.56815	9690.34131	0.7562	0.76607	8.12E-04	2.35E-03	3.69E-04	2.38E-03	1.58E-04	1.03E-03	2.49E-03	1.74E-03	2.60E-04	6.00E-03	1.82E-03	4.77E-03	3.54E-04	3.63E-04	2.4907E-02
552105.32	4172895.26	11040.85945	5465.46479	1798.90701	6429.65792	1514.93156	4485.02298	11078.34943	3217.3718	1051.19837	6084.61993	3497.75491	5904.45311	0.23097	0.22988	2.14E-03	1.71E-03	5.62E-04	1.76E-03	1.95E-04	5.76E-04	6.54E-03	1.24E-03	4.06E-04	4.56E-03	1.72E-03	2.91E-03	1.08E-04	1.09E-04	2.4537E-02
551523.8	4173219.98	4647.67009	7332.97197	1109.80248	6761.19696	1057.47209	9762.17777	4698.75054	4445.23051	639.28432	6568.84991	2847.54584	11669.8979	1.06014	1.07625	9.02E-04	2.29E-03	3.47E-04	1.85E-03	1.36E-04	1.25E-03	2.77E-03	1.72E-03	2.47E-04	4.92E-03	1.40E-03	5.75E-03	4.97E-04	5.10E-04	2.4596E-02
551428.29	4172733.26	3617.2212	5019.34541	1623.02426	15101.13025	2423.383	2984.94597	3602.93291	2858.75324	892.5088	9885.29645	9681.00529	3850.43061	0.68644	0.7081	7.02E-04	1.57E-03	5.07E-04	4.13E-03	3.11E-04	3.83E-04	2.13E-03	1.10E-03	3.45E-04	7.41E-03	4.77E-03	1.90E-03	3.22E-04	3.36E-04	2.5907E-02
551986.96	4172720.52	7085.51443	4219.42054	3372.80478	10136.65534	3912.3723	2098.77165	6939.5688	2514.78545	1822.30136	8501.57225	8095.70948	2829.03307	0.26354	0.26367	1.38E-03	1.32E-03	1.05E-03	2.77E-03	5.03E-04	2.70E-04	4.10E-03	9.71E-04	7.03E-04	6.37E-03	3.99E-03	1.39E-03	1.24E-04	1.25E-04	2.5063E-02
552027.43	4172739.3	8449.93237	4631.07453	2881.55279	8989.98242	3168.30353	2648.59999	8326.1442	2751.96238	1596.40971	7730.19042	6689.76017	3566.87745	0.24429	0.24414	1.64E-03	1.45E-03	9.00E-04	2.46E-03	4.07E-04	3.40E-04	4.92E-03	1.06E-03	6.16E-04	5.80E-03	3.30E-03	1.76E-03	1.14E-04	1.16E-04	2.4862E-02
551440.58	4172710.84	3693.71872	4848.30372	1668.51966	15052.64969	2520.13114	2870.16347	3678.06936	2767.95571	917.25578	9752.6791	9864.89505	3714.57952	0.65996	0.67966	7.17E-04	1.51E-03	5.21E-04	4.11E-03	3.24E-04	3.69E-04	2.17E-03	1.07E-03	3.54E-04	7.31E-03	4.86E-03	1.83E-03	3.09E-04	3.22E-04	2.5784E-02
551505.04	4173205.34	4522.48668	7482.04547	1126.86081	7122.81458	1083.57498	9290.57378	4568.4166	4487.33732	647.45731	6892.04786	2975.48064	11127.19476	0.95677	0.9703	8.78E-04	2.34E-03	3.52E-04	1.95E-03	1.39E-04	1.19E-03	2.70E-03	1.73E-03	2.50E-04	5.17E-03	1.47E-03	5.48E-03	4.48E-04	4.60E-04	2.4547E-02
551566.3	4173247.83	4947.53929	6952.67112	1064.63053	5916.13212	986.59036	10749.80586	5014.02119	4187.82515	616.35679	5823.14374	2549.62065	12486.13113	1.48566	1.51401	9.60E-04	2.17E-03	3.33E-04	1.62E-03	1.27E-04	1.38E-03	2.96E-03	1.62E-03	2.38E-04	4.37E-03	1.26E-03	6.15E-03	6.96E-04	7.18E-04	2.4589E-02
551387.38	4172876.15	3683.98078	6003.20132	1488.96619	13905.25749	1809.7511	3781.746	3676.07569	3419.10109	833.318	10459.16496	7371.3413	4794.10657	0.70182	0.71919	7.15E-04	1.88E-03	4.65E-04	3.80E-03	2.32E-04	4.86E-04	2.17E-03	1.32E-03	3.22E-04	7.84E-03	3.63E-03	2.36E-03	3.29E-04	3.41E-04	2.5888E-02
551384.91	4172958.72	3926.3204	7066.09847	1357.17383	12174.1994	1528.66247	4614.71183	3929.65753	4064.4513	769.68066	10135.32194	5778.12932	5819.02562	0.68061	0.694	7.62E-04	2.21E-03	4.24E-04	3.33E-03	1.96E-04	5.93E-04	2.32E-03	1.57E-03	2.97E-04	7.60E-03	2.85E-03	2.87E-03	3.19E-04	3.29E-04	2.5654E-02
551411.14	4173060.62	4069.81191	7654.91855	1195.37584	9947.73842	1334.91014	6410.16205	4096.2119	4549.5187	677.32952	8603.86867	4462.83768	7932.45443	0.6849	0.69538	7.90E-04	2.39E-03	3.73E-04	2.72E-03	1.71E-04	8.24E-04	2.42E-03	1.76E-03	2.61E-04	6.45E-03	2.20E-03	3.91E-03	3.21E-04	3.30E-04	2.4910E-02
551591.71	4172624.36	5614.96407	3815.37332	2835.90188	10530.41888	5102.81759	2336.21789	5555.78253	2265.49252	1519.68858	7807.11847	10405.82517	3116.29643	0.36945	0.37371	1.09E-03	1.19E-03	8.86E-04	2.88E-03	6.56E-04	3.00E-04	3.28E-03	8.75E-04	5.87E-04	5.85E-03	5.13E-03	1.54E-03	1.73E-04	1.77E-04	2.4605E-02
552105.5	4172924.98	11064.14798	5498.20011	1627.05246	6020.73205	1327.90007	4784.21185	11134.93082	3226.75835	956.79907	5768.28665	3114.62133	6263.64363	0.23427	0.23299	2.15E-03	1.72E-03	5.08E-04	1.65E-03	1.71E-04	6.15E-04	6.57E-03	1.25E-03	3.69E-04	4.32E-03	1.53E-03	3.09E-03	1.10E-04	1.10E-04	2.4156E-02
551452.4	4172691.47	3772.79888	4676.12888	1720.74078	14768.12259	2618.96076	2768.1483	3755.02996	2676.47342	946.19259	9542.80205	9899.73786	3589.96557	0.62601	0.6431	7.32E-04	1.46E-03	5.37E-04	4.04E-03	3.36E-04	3.56E-04	2.22E-03	1.03E-03	3.65E-04	7.15E-03	4.88E-03	1.77E-03	2.93E-04	3.05E-04	2.5470E-02
551450.37	4173141.74	4163.98618	7403.72233	1163.98908	8459.65669	1198.66764	7989.17119	4200.53952	4426.44313	663.36812	7800.92888	3573.48635	9657.94234	0.75652	0.76631	8.08E-04	2.31E-03	3.64E-04	2.31E-03	1.54E-04	1.03E-03	2.48E-03	1.71E-03	2.56E-04	5.85E-03	1.76E-03	4.76E-03	3.55E-04	3.63E-04	2.4504E-02
551656.68	4172638.3	7022.51922	3360.43049	3287.85688	8372.22043	5848.24643	2141.27859	6931.51512	2018.6141	1721.88749	6420.0779	10663.94355	2892.20955	0.33031	0.33603	1.36E-03	1.05E-03	1.03E-03	2.29E-03	7.51E-04	2.75E-04	4.09E-03	7.79E-04	6.65E-04	4.81E-03	5.25E-03	1.42E-03	1.55E-04	1.59E-04	2.4094E-02
551640.01	4173265.85	5678.97766	6174.08392	1042.94521	4923.14008	898.56595	11380.76831	5780.99891	3696.54625	607.50949	4878.96383	2212.16785	13391.70778	5.31372	5.64386	1.10E-03	1.93E-03	3.26E-04	1.35E-03	1.15E-04	1.46E-03	3.41E-03	1.43E-03	2.35E-04	3.66E-03	1.09E-03	6.60E-03	2.49E-03	2.67E-03	2.7863E-02
551771.82	4172683.44	7182.71091	2632.02811	2272.35488	11015.85509	5211.83375	1643.51406	7102.11023	1531.79165	1201.20061	6187.97469	12470.58174	2214.02385	0.48956	0.49931	1.39E-03	8.22E-04	7.10E-04	3.01E-03	6.70E-04	2.11E-04	4.19E-03	5.91E-04	4.64E-04	4.64E-03	6.14E-03	1.09E-03	2.29E-04	2.37E-04	2.4403E-02
552001.85	4172723.77	7364.96957	4306.22298	3172.88301	9611.56142	3614.60672	2269.67535	7224.63143	2593.78952	1731.83623	8168.7462	7533.24202	3060.09351	0.25576	0.25579	1.43E-03	1.35E-03	9.91E-04	2.63E-03	4.64E-04	2.92E-04	4.26E-03	1.00E-03	6.69E-04	6.12E-03	3.71E-03	1.51E-03	1.20E-04	1.21E-04	2.4666E-02
551404.69	4173042.71	4042.62637	7647.27734	1202.35434	10147.76945	1359.03823	6010.42842	4065.28477	4537.86078	681.66055	8775.6357	4676.15157	7478.5256	0.67534	0.68533	7.85E-04	2.39E-03	3.76E-04	2.77E-03	1.75E-04	7.72E-04	2.40E-03	1.75E-03	2.63E-04	6.58E-03	2.30E-03	3.68E-03	3.17E-04	3.25E-04	2.4891E-02
551407.91	4173051.67	4048.39587	7637.75383	1195.14441	9979.1527	1345.47348	6198.22075	4073.03374	4539.07631	677.30817	8657.96378	4573.31249	7692.08026	0.6778	0.68836	7.86E-04	2.39E-03	3.73E-04	2.73E-03	1.73E-04	7.96E-04	2.40E-03	1.75E-03	2.61E-04	6.49E-03	2.25E-03	3.79E-03	3.18E-04	3.26E-04	2.4835E-02
552108.47	4172904.06	10898.95643	5415.71281	1725.64589	6239.46601	1441.98976	4530.71233	10946.28937	3184.93816	1010.09726	5924.06874	3345.75463	5952.73472	0.23011	0.22897	2.12E-03	1.69E-03	5.39E-04	1.70E-03	1.85E-04	5.82E-04	6.46E-03	1.23E-03	3.90E-04	4.44E-03	1.65E-03	2.93E-03	1.08E-04	1.09E-04	2.4137E-02
551401.46	4173033.76	4030.21839	7626.79752	1209.5589	10305.33558	1371.58046	5816.81083	4050.78665	4515.5665	686.00552	8884.92204	4774.09796	7254.54641	0.67149	0.6824	7.82E-04	2.38E-03	3.78E-04	2.82E-03	1.76E-04	7.47E-04	2.39E-03	1.74E-03	2.65E-04	6.66E-03	2.35E-03	3.57E-03	3.15E-04	3.23E-04	2.4905E-02
551422.26	4172739.98	3551.29167	4998.35219	1585.03792	14743.30718	2349.45699	2989.42539	3537.627	2845.66276	872.03904	9724.70578	9372.8283	3850.28256	0.67632	0.69761	6.89E-04	1.56E-03	4.95E-04	4.03E-03	3.02E-04	3.84E-04	2.09E-03	1.10E-03	3.37E-04	7.29E-03	4.62E-03	1.90E-03	3.17E-04	3.31E-04	2.5435E-02
551398.24	4173024.81	4013.94249	7582.5245	1217.89819	10461.86344	1383.89848	5624.44688	4032.34826	4475.85503	691.00217	8994.61635	4861.06801	7029.12163	0.66809	0.67869	7.79E-04	2.37E-03	3.80E-04	2.86E-03	1.78E-04	7.23E-04	2.38E-03	1.73E-03	2.67E-04	6.74E-03	2.39E-03	3.46E-03	3.13E-04	3.22E-04	2.4897E-02
551533.5	4173229.12	4646.55226	7096.72497	1086.89263	6464.83466	1034.66105	9808.56336	4699.96618	4323.97391	626.84603	6301.64519	2760.42354	11476.27033	1.11531	1.13165	9.02E-04	2.22E-03	3.39E-04	1.77E-03	1.33E-04	1.26E-03	2.77E-03	1.67E-03	2.42E-04	4.72E-03	1.36E-03	5.65E-03	5.23E-04	5.36E-04	2.4099E-02
551395.01	4173015.86	3997.38024	7522.17145	1228.98661	10632.14143	1396.7704	5439.78905	4013.5762	4423.75662	697.51119	9116.35081	4946.14198	6810.74685	0.66509	0.67613	7.76E-04	2.35E-03	3.84E-04	2.91E-03	1.79E-04	6.99E-04	2.37E-03	1.71E-03	2.69E-04	6.83E-03	2.44E-03	3.35E-03	3.12E-04	3.20E-04	2.4897E-02
551381.68	4172949.75	3852.95969	6819.67344	1358.90792	12170.97803	1534.34483	4430.38473	3854.57855	3914.95687	769.96569	10049.66567	5845.31952	5591.17625	0.66949	0.68296	7.48E-04	2.13E-03	4.24E-04	3.33E-03	1.97E-04	5.69E-04	2.28E-03	1.51E-03	2.97E-04	7.53E-03	2.88E-03	2.75E-03	3.14E-04	3.24E-04	2.5283E-02
552052.92	4172754.73	8860.25967	4693.58352	2628.28414	8342.99633	2756.21639	2843.58957	8763.65777	2785.85391	1470.6393	7298.4119	5898.72423	3832.82878	0.23263	0.23237	1.72E-03	1.47E-03	8.21E-04	2.28E-03	3.54E-04	3.65E-04	5.17E-03	1.08E-03	5.68E-04	5.47E-03	2.91E-03	1.89E-03	1.09E-04	1.10E-04	2.4306E-02
551419.9	4173085.26	4043.26334	7452.41447	1173.86187	9380.09173	1289.63555	6831.65764	4073.7738	4427.51887	665.0979	8234.98919	4168.74163	8382.11014	0.68989	0.69955	7.85E-04	2.33E-03	3.67E-04	2.56E-03	1.66E-04	8.78E-04	2.40E-03	1.71E-03	2.57E-04	6.17E-03	2.05E-03	4.13E-03	3.23E-04	3.32E-04	2.4467E-02
551391.79	4173006.9	3973.79841	7431.2123	1240.07908	10790.28561	1409.23481	5255.65978	3987.73213	4353.04329	704.0243	9223.50372	5027.80569	6590.64098	0.6616	0.67266	7.71E-04	2.32E-03	3.87E-04	2.95E-03	1.81E-04	6.75E-04	2.35E-03	1.68E-03	2.72E-04	6.91E-03	2.48E-03	3.25E-03	3.10E-04	3.19E-04	2.4857E-02
551422.86	4173093.63	4043.31208	7401.03191	1170.25255	9208.54284	1275.89257	6967.07363	4074.82556	4393.32879	663.34594	8145.84597	4061.58096	8524.9002	0.6942	0.70412	7.85E-04	2.31E-03	3.66E-04	2.52E-03	1.64E-04	8.95E-04	2.41E-03	1.70E-03	2.56E-04	6.11E-03	2.00E-03	4.20E-03	3.25E-04	3.34E-04	2.4361E-02
551610.57	4173265.16	5251.88818	6376.02744	1040.84551	5198.45653	920.49697	10952.28114	5336.7635	3840.13307	603.70914	5198.96873	2305.83444	12875.33039	2.65361	2.75383	1.02E-03	1.99E-03	3.25E-04	1.42E-03	1.18E-04	1.41E-03	3.15E-03	1.48E-03	2.33E-04	3.90E-03	1.14E-03	6.34E-03	1.24E-03	1.31E-03	2.5072E-02
551453.46	4173150.32	4141.26875	7355.70098	1148.03912	8218.49678	1173.36553	7950.46275	4177.79738	4352.03855	654.7158	7611.24682	3465.02255	9600.93641	0.75568	0.76526	8.04E-04	2.30E-03	3.59E-04	2.25E-03	1.51E-04	1.02E-03	2.47E-03	1.68E-03	2.53E-04	5.71E-03	1.71E-03	4.73E-03	3.54E-04	3.63E-04	2.4136E-02
551601.52	4172621.5	5734.35957	3684.93333	2868.19445	9921.96371	5161.93747	2276.55548	5671.96371	2194.27931	1531.57645	7451.60177	10193.7015	3041.15142	0.35061	0.35462	1.11E-03	1.15E-03	8.96E-04	2.71E-03	6.63E-04	2.92E-04	3.35E-03	8.47E-04	5.91E-04	5.59E-03	5.02E-03	1.50E-03	1.64E-04	1.68E-04	2.4051E-02
552042.22	4172742.44	8446.89171	4564.90935	2704.55895	8538.78213	2925.07035	2679.73183	8339.50237	2708.87916	1504.19757	7388.02874	6215.79761	3617.89911	0.2354	0.23523	1.64E-03	1.43E-03	8.45E-04	2.33E-03	3.76E-04	3.44E-04	4.92E-03	1.05E-03	5.81E-04	5.54E-03	3.06E-03	1.78E-03	1.10E-04	1.11E-04	2.4117E-02
552016.7	4172726.99	7615.09833	4390.63804	2971.16039	9123.25162	3340.60497	2386.65757	7483.61439	2617.24219	1635.15939	7822.20852	7008.73073	3207.74817	0.24698	0.24696	1.48E-03	1.37E-03	9.28E-04	2.49E-03	4.29E-04	3.07E-04	4.42E-03	1.01E-03	6.31E-04	5.86E-03	3.45E-03	1.58E-03	1.16E-04	1.17E-04	2.4195E-02
551505.73	4172645.18	4234.68875	4250.2656	2034.27553	13311.45012	3301.32065	2535.68881	4204.00407	2464.21553	1111.28629	8859.00549	9948.03519	3320.05777	0.49534	0.5038	8.22E-04	1.33E-03	6.35E-04	3.64E-03	4.24E-04	3.26E-04	2.48E-03	9.51E-04	4.29E-04	6.64E-03	4.90E-03	1.64E-03	2.32E-04	2.39E-04	2.4682E-02
552111.62	4172912.86	10726.7822	5355.07226	1652.76975	6046.46461	1371.41499	4566.38115	10783.47535	3146.23329	968.94537	5758.68822	3197.42021	5987.43251	0.22915	0.22797	2.08E-03	1.67E-03	5.16E-04	1.65E-03	1.76E-04	5.87E-04	6.37E-03	1.21E-03	3.74E-04	4.32E-03	1.58E-03	2.95E-03	1.07E-04	1.08E-04	2.3697E-02
551627.58	4173267.66	5419.68481	6177.21816	1033.96318	4993.09248	901.19653	11015.86452	5512.63063	3712.33158	600.97876	4964.67499	2236.87855	12953.27606	3.7515	3.92255	1.05E-03	1.93E-03	3.23E-04	1.36E-03	1.16E-04	1.42E-03	3.25E-03	1.43E-03	2.32E-04	3.72E-03	1.10E-03	6.38E-03	1.76E-03	1.86E-03	2.5941E-02
551390.28	4172827.82	3504.4632	5407.99577	1491.31489	14049.55952	1976.213	3393.61804	3493.45856	3081.76875	828.77959	9841.55534	8140.4143	4314.88058	0.68815	0.70736	6.80E-04	1.69E-03	4.66E-04	3.84E-03	2.54E-04	4.36E-04	2.06E-03	1.19E-03	3.20E-04	7.38E-03	4.01E-03	2.13E-03	3.23E-04	3.35E-04	2.5107E-02
551409.14	4172764.49	3476.8153	5085.20311	1538.25438	14371.72835	2225.22925	3085.18208	3463.89487	2892.82831	848.11457	9626.25717	8952.44592	3955.609	0.67857	0.69991	6.75E-04	1.59E-03	4.80E-04	3.93E-03	2.86E-04	3.96E-04	2.04E-03	1.12E-03	3.27E-04	7.22E-03	4.41E-03	1.95E-03	3.18E-04	3.32E-04	2.5067E-02
551388.56	4172997.95	3935.83982	7295.05204	1247.89223	10902.1053	1410.70367	5064.12813	3947.56276	4257.24445	708.55104	9284.92008	5095.6026	6359.11216	0.65524	0.66672	7.64E-04	2.28E-03	3.90E-04	2.98E-03	1.81E-04	6.51E-04	2.33E-03	1.64E-03	2.74E-04	6.96E-03	2.51E-03	3.13E-03	3.07E-04	3.16E-04	2.4717E-02
551384.09	4172856.02	3553.60144	5621.64092	1468.75194	13746.86057	1858.51327	3552.38821	3544.40764	3203.52577	819.14144	10004.73166	7605.27512	4506.95168	0.68224	0.69969	6.90E-04	1.76E-03	4.59E-04	3.76E-03	2.39E-04	4.56E-04	2.09E-03	1.24E-03	3.16E-04	7.50E-03	3.75E-03	2.22E-03	3.20E-04	3.32E-04	2.5119E-02
552108.65	4172933.78	10816.51275	5411.28147	1551.55876	5813.18853	1259.48944	4800.45728	10896.19796	3172.39354	913.56673	5585.01602	2968.08375	6271.47483	0.23309	0.23177	2.10E-03	1.69E-03	4.85E-04	1.59E-03	1.62E-04	6.17E-04	6.43E-03	1.22E-03	3.53E-04	4.19E-03	1.46E-03	3.09E-03	1.09E-04	1.10E-04	2.3608E-02
551491.73	4173198.52	4349.68915	7270.82783	1112.74674	7191.72356	1083.09717	8679.57767	4391.69841	4349.19986	638.23592	6904.22894	3015.00233	10418.88625	0.87466	0.88634	8.44E-04	2.27E-03	3.48E-04	1.97E-03	1.39E-04	1.12E-03	2.59E-03	1.68E-03	2.46E-04	5.18E-03	1.49E-03	5.13E-03	4.10E-04	4.20E-04	2.3823E-02
552004.89	4173097.63	10297.12437	5722.61531	875.94405	4042.9137	680.88835	7746.1173	10629.56328	3258.94457	521.92451	4119.00285	1683.04071	9711.24297	0.33383	0.33025	2.00E-03	1.79E-03	2.74E-04	1.10E-03	8.75E-05	9.95E-04	6.27E-03	1.26E-03	2.01E-04	3.09E-03	8.29E-04	4.78E-03	1.56E-04	1.57E-04	2.2995E-02
551575.84	4173256.81	4918.34135	6641.9941	1034.38802	5619.99802	955.3275	10320.41123	4987.41922	4006.99657	603.81592	5532.44604	2448.28007	12183.06753	1.60488	1.64108	9.54E-04	2.07E-03	3.23E-04	1.54E-03	1.23E-04	1.33E-03	2.94E-03	1.55E-03	2.33E-04	4.15E-03	1.21E-03	6.00E-03	7.52E-04	7.78E-04	2.3945E-02
551428.78	4173110.37	4023.30959	7248.66564	1158.8812	8837.19187	1239.15957	7155.04209	4056.27367	4297.7912	656.08286	7983.18072	3852.15394	8711.80555	0.69923	0.70798	7.81E-04	2.26E-03	3.62E-04	2.41E-03	1.59E-04	9.19E-04	2.39E-03	1.66E-03	2.53E-04	5.98E-03	1.90E-03	4.29E-03	3.28E-04	3.36E-04	2.4044E-02
551509.26	4173215.25	4437.80386	7164.83837	1091.29309	6809.83215	1052.40503	8983.60145	4483.57351	4295.58077	627.50091	6559.89671	2872.14645	10772.43889	0.94452	0.95773	8.61E-04	2.24E-03	3.41E-04	1.86E-03	1.35E-04	1.15E-03	2.65E-03	1.66E-03	2.42E-04	4.92E-03	1.41E-03	5.31E-03	4.43E-04	4.54E-04	2.3673E-02
551598.15	4173265.64	5105.02238	6414.78033	1014.57417	5277.96142	923.07671	10618.50095	5183.60076	3859.52512	598.89453	5291.71168	2324.4973	12511.49173	2.1247	2.18537	9.91E-04	2.00E-03	3.17E-04	1.44E-03	1.19E-04	1.36E-03	3.06E-03	1.49E-03	2.31E-04	3.97E-03	1.15E-03	6.16E-03	9.96E-04	1.04E-03	2.4324E-02
551497.06	4172647.66	4122.0837	4254.14621	1962.20644	13348.04079	3143.42595	2538.83102	4093.62916	2461.28455	1074.35345	8834.52591	9798.59421	3317.9569	0.50461	0.51384	8.00E-04	1.33E-03	6.13E-04	3.65E-03	4.04E-04	3.26E-04	2.42E-03	9.50E-04	4.15E-04	6.62E-03	4.83E-03	1.63E-03	2.37E-04	2.44E-04	2.4465E-02
551442.82	4172697.8	3640.78143	4628.25007	1639.38892	14308.67161	2473.60701	2753.62002	3625.00815	2646.8262	901.61629	9309.42156	9445.17769	3566.47037	0.61456	0.63182	7.07E-04	1.45E-03	5.12E-04	3.91E-03	3.18E-04	3.54E-04	2.14E-03	1.02E-03	3.48E-04	6.98E-03	4.65E-03	1.76E-03	2.88E-04	2.99E-04	2.4731E-02
551378.46	4172940.79	3766.00176	6551.24424	1352.80813	12078.42244	1533.84261	4242.84877	3766.22908	3755.69206	765.62993	9889.40098	5817.81924	5358.43041	0.6548	0.66825	7.31E-04	2.05E-03	4.23E-04	3.30E-03	1.97E-04	5.45E-04	2.22E-03	1.45E-03	2.96E-04	7.41E-03	2.87E-03	2.64E-03	3.07E-04	3.17E-04	2.4754E-02
551456.55	4173158.91	4116.33033	7217.6743	1131.20817	7965.70218	1147.94	7890.13399	4152.75947	4275.55902	645.53023	7417.37692	3359.38032	9519.80495	0.75424	0.76377	7.99E-04	2.25E-03	3.53E-04	2.18E-03	1.47E-04	1.01E-03	2.45E-03	1.65E-03	2.49E-04	5.56E-03	1.65E-03	4.69E-03	3.54E-04	3.62E-04	2.3716E-02
551385.32	4172988.95	3883.35269	7116.41156	1251.73181	10961.19595	1413.93549	4865.57029	3893.02889	4138.7184	710.76126	9295.00601	5150.3176	6117.12505	0.64599	0.65727	7.54E-04	2.22E-03	3.91E-04	3.00E-03	1.82E-04	6.25E-04	2.30E-03	1.60E-03	2.74E-04	6.97E-03	2.54E-03	3.01E-03	3.03E-04	3.11E-04	2.4472E-02
551430.7	4172717.37	3541.85002	4743.53963	1578.09097	14251.93407	2358.86594	2833.56772	3527.95214	2706.87016	867.99498	9351.15535	9200.05624	3660.93381	0.63073	0.64946	6.87E-04	1.48E-03	4.93E-04	3.89E-03	3.03E-04	3.64E-04	2.08E-03	1.04E-03	3.35E-04	7.01E-03	4.53E-03	1.80E-03	2.96E-04	3.08E-04	2.4635E-02
551390.96	4172818.7	3457.98438	5282.51944	1478.53987	13847.88878	1984.90649	3312.63422	3446.77412	3010.23866	820.84913	9628.62594	8126.23251	4215.57267	0.67492	0.69409	6.71E-04	1.65E-03	4.62E-04	3.78E-03	2.55E-04	4.26E-04	2.03E-03	1.16E-03	3.17E-04	7.22E-03	4.00E-03	2.08E-03	3.16E-04	3.29E-04	2.4704E-02
551431.74	4173118.74	4001.02426	7142.45085	1147.00945	8630.8287	1218.64668	7199.69369	4034.42376	4234.52946	652.01278	7826.07414	3752.42626	8746.93085	0.69822	0.70696	7.76E-04	2.23E-03	3.58E-04	2.36E-03	1.57E-04	9.25E-04	2.38E-03	1.63E-03	2.52E-04	5.87E-03	1.85E-03	4.31E-03	3.27E-04	3.35E-04	2.3760E-02
552031.51	4172730.16	7867.30174	4395.59028	2758.60445	8691.88312	3087.91328	2510.19524	7750.30536	2612.82631	1524.48743	7429.40259	6518.48829	3364.38518	0.2379	0.23784	1.53E-03	1.37E-03	8.62E-04	2.37E-03	3.97E-04	3.22E-04	4.58E-03	1.01E-03	5.88E-04	5.57E-03	3.21E-03	1.66E-03	1.12E-04	1.13E-04	2.3690E-02
551552.9	4173247.39	4701.65179	6732.34636	1044.02236	5928.53604	980.07311	9712.94356	4761.141	4072.2282	603.4194	5802.63871	2561.3036	11516.3555	1.2672	1.28906	9.12E-04	2.10E-03	3.26E-04	1.62E-03	1.26E-04	1.25E-03	2.81E-03	1.57E-03	2.33E-04	4.35E-03	1.26E-03	5.67E-03	5.94E-04	6.11E-04	2.3440E-02
552114.77	4172921.66	10526.85718	5284.38401	1580.75439	5851.79029	1303.45311	4591.94722	10592.38494	3101.64397	928.04007	5589.76264	3053.31588	6008.61124	0.22811	0.22689	2.04E-03	1.65E-03	4.94E-04	1.60E-03	1.67E-04	5.90E-04	6.25E-03	1.20E-03	3.58E-04	4.19E-03	1.50E-03	2.96E-03	1.07E-04	1.08E-04	2.3221E-02
551998.09	4173105.85	9982.81252	5635.3206	847.80188	3926.55145	664.35101	7853.484	10319.75361	3203.75281	504.46187	4003.29119	1639.20149	9814.74731	0.34241	0.33862	1.94E-03	1.76E-03	2.65E-04	1.07E-03	8.53E-05	1.01E-03	6.09E-03	1.24E-03	1.95E-04	3.00E-03	8.07E-04	4.83E-03	1.60E-04	1.60E-04	2.2617E-02
551404.85	4172772.83	3430.12136	5051.32058	1506.82952	13986.43916	2152.4508	3091.20278	3417.69194	2875.2809	831.72315	9445.53996	8638.73986	3957.01229	0.66345	0.68385	6.66E-04	1.58E-03	4.71E-04	3.82E-03	2.77E-04	3.97E-04	2.02E-03	1.11E-03	3.21E-04	7.08E-03	4.26E-03	1.95E-03	3.11E-04	3.24E-04	2.4579E-02
551717.7	4172662.03	7880.24546	2895.27477	2894.15696	8484.89255	4747.37935	1874.78305	7774.97324	1722.29499	1507.40034	5492.32012	10558.02837	2543.42834	0.40057	0.41147	1.53E-03	9.04E-04	9.04E-04	2.32E-03	6.10E-04	2.41E-04	4.59E-03	6.65E-04	5.82E-04	4.12E-03	5.20E-03	1.25E-03	1.88E-04	1.95E-04	2.3297E-02
551675.8	4172642.02	7229.08395	3144.94852	3165.09994	7814.72094	5438.34423	2026.55748	7133.5962	1886.0349	1650.52661	5861.05422	10190.38624	2744.41068	0.32536	0.3321	1.40E-03	9.82E-04	9.89E-04	2.14E-03	6.99E-04	2.60E-04	4.21E-03	7.28E-04	6.37E-04	4.39E-03	5.02E-03	1.35E-03	1.52E-04	1.57E-04	2.3120E-02
551488.37	4172650.57	4011.36421	4252.0333	1890.75906	13333.48199	2989.74366	2539.65261	3985.16145	2455.30509	1037.38842	8789.93341	9619.48815	3313.18578	0.51215	0.52208	7.78E-04	1.33E-03	5.91E-04	3.64E-03	3.84E-04	3.26E-04	2.35E-03	9.48E-04	4.00E-04	6.59E-03	4.74E-03	1.63E-03	2.40E-04	2.47E-04	2.4199E-02
551862.74	4173191.13	8176.45784	5031.51337	811.21138	3474.86747	674.93099	10510.27635	8452.18997	2873.32045	477.70799	3501.69718	1602.62135	12625.38932	0.65844	0.64708	1.59E-03	1.57E-03	2.53E-04	9.49E-04	8.67E-05	1.35E-03	4.99E-03	1.11E-03	1.84E-04	2.63E-03	7.89E-04	6.22E-03	3.09E-04	3.07E-04	2.2330E-02
551382.1	4172979.98	3831.63899	6933.32808	1257.71143	11028.17882	1419.0682	4680.76481	3839.34786	4019.04528	714.03044	9305.67702	5211.57712	5891.14935	0.63832	0.64972	7.44E-04	2.17E-03	3.93E-04	3.01E-03	1.82E-04	6.01E-04	2.27E-03	1.55E-03	2.76E-04	6.98E-03	2.57E-03	2.90E-03	2.99E-04	3.08E-04	2.4245E-02
551698.18	4172655.03	7670.9103	3005.61937	3067.79405	7894.28362	5069.03262	1947.87972	7568.01515	1795.82578	1594.55053	5551.5063	10256.6144	2644.19276	0.35578	0.3649	1.49E-03	9.39E-04	9.58E-04	2.16E-03	6.51E-04	2.50E-04	4.47E-03	6.93E-04	6.16E-04	4.16E-03	5.05E-03	1.30E-03	1.67E-04	1.73E-04	2.3077E-02
551991.09	4172711.43	6490.177	3947.43137	3172.59418	9737.28127	3791.57174	1959.22969	6357.00478	2347.3794	1708.22631	8070.22721	7798.27367	2639.45572	0.25485	0.25504	1.26E-03	1.23E-03	9.91E-04	2.66E-03	4.87E-04	2.52E-04	3.75E-03	9.06E-04	6.59E-04	6.05E-03	3.84E-03	1.30E-03	1.19E-04	1.21E-04	2.3633E-02
551656.69	4173272.39	5816.70987	5793.38834	1005.95532	4602.73441	859.20202	10680.29741	5926.46005	3436.9173	587.51096	4532.76865	2090.54691	12649.6886	8.89717	9.78506	1.13E-03	1.81E-03	3.14E-04	1.26E-03	1.10E-04	1.37E-03	3.50E-03	1.33E-03	2.27E-04	3.40E-03	1.03E-03	6.23E-03	4.17E-03	4.64E-03	3.0511E-02
551643.76	4172629.47	6497.88151	3329.87095	3071.34252	8245.00081	5435.51444	2120.82258	6418.21245	1999.07687	1617.99017	6388.86719	9943.43838	2855.7076	0.3098	0.3141	1.26E-03	1.04E-03	9.59E-04	2.25E-03	6.98E-04	2.72E-04	3.79E-03	7.72E-04	6.25E-04	4.79E-03	4.90E-03	1.41E-03	1.45E-04	1.49E-04	2.3058E-02
551559.19	4172616.79	4862.78945	3840.0381	2416.28517	11124.25475	4206.68103	2325.09739	4817.96908	2258.61576	1305.1258	7940.39232	9711.69604	3082.66452	0.38727	0.39179	9.44E-04	1.20E-03	7.55E-04	3.04E-03	5.40E-04	2.99E-04	2.84E-03	8.72E-04	5.04E-04	5.95E-03	4.78E-03	1.52E-03	1.82E-04	1.86E-04	2.3619E-02

551400.56	4172781.18	3391.99851	5022.4335	1479.81561	13663.50875	2087.23832	3099.59194	3380.00477	2860.68955	817.75545
551392.06	4172807.34	3399.83235	5130.98608	1460.35859	13543.29535	1988.71022	3214.57887	3388.52386	2924.64775	809.75178
551478.34	4172654.76	3888.33111	4247.79467	1810.76895	13278.69314	2821.6086	2540.482	3864.69451	2447.89283	995.39227
551437.66	4173135.48	3957.2783	6935.76861	1121.77164	8222.48123	1176.04333	7312.80787	3991.0455	4150.52269	638.42347
552005.96	4172714.68	6772.41412	4043.06311	3008.70945	9278.46895	3491.5331	2129.29844	6642.89064	2437.75464	1637.00046
551547.92	4172617.54	4662.68206	3867.33362	2299.88028	11379.22908	3953.72691	2335.45102	4621.62024	2268.22085	1244.43905
552117.92	4172930.46	10300.83534	5203.77359	1509.75886	5655.7423	1237.9309	4606.86582	10374.54236	3051.25509	887.48763
551763.58	4172677.42	7153.66003	2580.22803	2225.40118	10082.68524	4545.8558	1637.04186	7072.37918	1508.78694	1179.29144
552046.29	4172733.3	7901.87149	4347.92385	2599.1094	8275.74905	2859.62651	2543.30482	7798.87857	2578.39529	1442.17214
551562.6	4173256.53	4680.22974	6461.90232	1021.44267	5646.1255	951.26188	9552.14155	4742.27359	3901.326	589.1452
551396.27	4172789.52	3368.92083	5013.76518	1460.92282	13462.86944	2036.39944	3116.55417	3357.25684	2857.06388	808.24511
551420.64	4172727.06	3425.62264	4696.60015	1511.94209	13687.41386	2238.9072	2829.13768	3412.889	2678.12461	831.98139
551401.87	4173063.96	3852.48193	7035.60903	1128.80912	9271.96655	1266.7663	5944.83766	3877.43563	4178.9147	639.43346
551375.64	4172962.05	3719.80581	6543.00489	1269.73031	11132.63989	1432.41496	4337.141	3723.78312	3772.13704	720.13591
551441.1	4173145.07	3945.2115	6848.99358	1108.04226	8014.63701	1150.1822	7306.13988	3979.0254	4088.83015	631.04962
551523.78	4173232.15	4408.65486	6697.6764	1049.38954	6302.33594	1009.86377	8787.00577	4457.27507	4047.2494	604.5324
552020.8	4172717.88	7075.38635	4157.50356	2827.11782	8792.12947	3237.19217	2259.6992	6953.2308	2476.88258	1552.06484
551462.73	4173176.08	4054.95015	6920.64302	1094.3276	7467.18069	1097.73388	7703.52287	4091.01332	4109.62473	625.272
551445.95	4172684.17	3594.80645	4414.41073	1615.72534	13566.96218	2434.84139	2640.96963	3578.62393	2528.96235	889.09113
551536.7	4172618.56	4468.94241	3877.97989	2182.96521	11544.09991	3698.81999	2339.58028	4431.38998	2268.48603	1183.0875
551395.42	4173046.05	3828.86807	7034.26572	1134.68157	9428.71855	1287.85256	5595.37949	3850.43345	4173.38559	643.16948
551631.25	4173276.08	5282.03994	5846.50909	997.66092	4761.23469	868.74943	10253.92589	5372.81197	3504.08763	580.0968
551398.65	4173055	3830.35067	7015.68588	1127.17229	9275.69092	1275.49325	5755.6564	3853.70395	4168.09931	638.65657
551653.41	4172629.01	6567.43734	3202.33788	3018.35349	7821.7037	5264.84614	2054.2745	6485.73211	1922.36509	1586.6497

551534.19	4172599.04	4070.46368	3458.61914	1917.12578	9785.10868	3165.11275	2127.2906	4038.32058	2025.23755	1040.82552	[illegible]
551464.37	4173209.67	3720.38538	5940.88056	979.01371	6396.44887	980.3069	6624.10903	3752.80881	3532.63834	560.18987	[illegible]
551356.29	4172908.26	3225.65447	5133.26021	1202.79201	10322.81112	1401.61149	3361.78786	3223.18209	2940.80131	677.13561	[illegible]
551383.34	4173070.63	3448.2149	5961.87915	1004.75453	7976.67807	1141.86367	5124.14472	3470.60689	3540.17318	568.88896	[illegible]
551425.66	4173160.33	3542.11001	5839.45311	995.99716	7051.00371	1041.21716	6147.88473	3571.14361	3474.20526	566.86228	[illegible]
551376.89	4173052.73	3440.12154	5990.15071	1012.16222	8169.38596	1159.352	4868.41876	3459.72792	3553.79073	573.50187	[illegible]
551380.11	4173061.68	3440.92556	5972.27725	1006.48987	8060.39496	1150.12045	4992.9869	3462.00966	3546.45192	570.03965	[illegible]
551385.84	4172767.6	3048.32926	4358.90322	1295.13737	11312.64444	1819.23576	2758.96283	3038.60494	2490.33811	715.86195	[illegible]
551481.5	4173225.42	3783.42425	5828.80594	967.97817	6119.29479	964.5688	6844.28964	3818.29296	3537.82165	555.12472	[illegible]
551373.67	4173043.77	3427.40951	5974.16185	1015.28889	8248.72195	1162.45077	4728.81257	3445.45857	3539.97456	575.47346	[illegible]
551447.29	4173191.34	3624.86618	5890.89189	983.77101	6635.28831	1000.30855	6376.88387	3655.29142	3489.52289	561.64396	[illegible]
551357.11	4172968.72	3334.79213	5618.55038	1110.18901	9325.86505	1256.15697	3833.79921	3339.875	3252.80023	629.79679	[illegible]
551370.44	4173034.82	3414.68976	5948.97072	1020.36828	8336.5732	1167.88197	4591.72873	3431.14183	3518.0177	578.56324	[illegible]
551570.92	4172589.64	4511.67308	3261.62557	2135.90571	8707.64643	3613.00106	2033.46098	4470.83185	1926.12173	1152.90561	[illegible]
551612.85	4173296.68	4564.0853	5202.84898	908.8276	4443.84405	810.46209	8293.35357	4636.13228	3123.56723	526.50255	[illegible]
551372.57	4172804.46	3041.67475	4430.43777	1268.3578	11121.71644	1705.47535	2863.98569	3032.7032	2534.37388	704.05564	[illegible]
551431.66	4172670.48	3237.36047	3912.67204	1408.13997	11355.49833	2075.57135	2394.03729	3224.44733	2245.74988	776.09	[illegible]
551392.05	4173095.11	3423.09044	5813.58298	991.0414	7643.26003	1110.99812	5387.8323	3448.38384	3448.61329	560.83733	[illegible]
551381.57	4172775.9	3026.13566	4342.9303	1279.74363	11152.94581	1779.35803	2768.73851	3016.63928	2482.59747	708.02609	[illegible]
551367.22	4173025.87	3397.69947	5905.02468	1025.83094	8419.57439	1172.7336	4453.51036	3412.43975	3483.25391	581.89549	[illegible]
551419.69	4172689.95	3150.43594	4000.03954	1354.82114	11345.15029	1982.87599	2454.80721	3139.42299	2292.05288	746.59629	[illegible]
551688.38	4172627.16	6437.25883	2695.02333	2552.50578	6467.97535	4108.30129	1772.323	6358.36393	1610.1404	1338.74763	[illegible]
551428.75	4173168.91	3523.77818	5807.50178	984.03666	6887.33709	1022.31047	6101.30451	3552.66352	3425.86422	560.40472	[illegible]
551374.62	4172794.89	3025.56579	4383.10432	1268.14295	11084.8035	1724.53225	2824.39442	3016.40385	2507.14735	703.1562	[illegible]
551517.54	4172602.01	3857.48827	3478.03083	1794.75414	9967.61203	2911.44087	2138.54923	3828.89647	2029.90494	976.18041	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

551529.83	4173286.57	3640.52487	4824.12707	831.76613	4815.74839	821.37453	6285.44971	3683.23107	2907.69661	477.417	4607.55954	2197.13671	7520.45905	0.81994	0.82941	7.06E-04
551449.86	4173226.47	3317.50957	5022.51686	881.19425	5677.43011	898.50265	5507.57465	3344.8038	3023.56607	503.85941	5259.67047	2542.92262	6615.35056	0.56435	0.56854	6.44E-04
551478.15	4173250.08	3425.68181	4971.75622	857.50152	5380.05309	874.87326	5748.47492	3456.9973	2993.88098	491.42461	4996.78617	2435.90383	6938.2529	0.63811	0.64498	6.65E-04
551405.61	4172676.13	2867.3231	3573.00607	1200.62411	9682.27738	1728.87014	2235.45658	2858.42589	2050.81671	662.48783	6658.29519	6144.45006	2885.31792	0.40749	0.41693	5.56E-04
551334.94	4172936.2	2941.79967	4609.22822	1029.65919	8401.0201	1176.76287	3121.783	2942.88459	2656.41913	582.04026	6871.57566	4227.88427	3947.73639	0.44691	0.45491	5.71E-04
551362.67	4172770.46	2746.81456	3839.37614	1135.00548	9487.52576	1562.46559	2509.4611	2738.97657	2199.94074	628.47619	6709.36413	5737.95009	3196.81568	0.44135	0.45211	5.33E-04
551413.31	4173184.17	3174.52469	4965.5774	889.25992	6102.9488	932.13028	5171.71469	3199.3207	2949.0024	506.11424	5510.16196	2738.17561	6293.82911	0.50954	0.51461	6.16E-04
551337.26	4172870.81	2823.1568	4166.63386	1082.50741	9074.03796	1324.92511	2769.51667	2819.09949	2389.80388	605.63191	6917.8848	4918.33433	3511.2514	0.44666	0.45557	5.48E-04
551418.56	4172656.01	2931.40511	3477.59384	1236.81041	9591.07829	1786.42004	2173.39209	2921.06794	1999.83742	682.75762	6571.58706	6203.01196	2809.45371	0.3948	0.40348	5.69E-04
551582.91	4173312.2	3883.81464	4648.83509	826.73288	4262.55931	768.02158	6670.76526	3939.09443	2800.01146	476.45138	4186.83444	1966.18972	7947.26395	1.22659	1.24979	7.54E-04
551561.67	4173304.38	3769.60104	4713.12809	825.90042	4460.56752	786.70117	6502.68318	3819.88047	2840.37768	474.9973	4350.00078	2047.57469	7755.78988	1.01388	1.02874	7.32E-04
551385.31	4173135.16	3086.66081	4911.83769	890.96262	6485.25496	978.6624	4853.31424	3110.48752	2901.94317	504.45473	5663.53324	3020.13907	5926.89287	0.48177	0.4864	5.99E-04
551630.12	4173321.06	4240.88605	4433.50149	823.15776	3872.6544	730.27351	6905.97379	4308.46564	2651.84968	477.29213	3797.00063	1810.99629	8247.09149	2.41271	2.52364	8.23E-04
551335.35	4172966.43	2977.57907	4773.64505	988.01322	7993.29303	1120.56585	3315.18697	2982.02054	2767.2898	560.13421	6665.02788	3952.74066	4181.24667	0.44318	0.45086	5.78E-04
551353.09	4172801.52	2748.32908	3876.39883	1117.19951	9369.32951	1487.77108	2569.35898	2741.10622	2223.16726	620.68792	6718.70207	5521.36403	3264.37743	0.44284	0.45318	5.33E-04
551334.53	4172905.97	2870.63514	4371.82477	1052.32166	8651.39125	1228.84161	2923.45638	2869.10431	2511.63275	592.11637	6890.60807	4485.37827	3702.83511	0.4434	0.45169	5.57E-04
551733.47	4173296.85	5709.00162	3906.49889	774.81666	3320.69196	674.73853	6396.26514	5839.02774	2261.24957	453.71399	3241.32893	1602.02532	7778.48731	3.41271	3.16285	1.11E-03
551693.03	4172613.45	5754.90755	2402.55449	2150.5943	5556.69146	3316.75699	1604.10587	5689.63483	1432.34964	1134.90122	4214.87415	6524.25993	2165.25635	0.22655	0.23053	1.12E-03
551539.31	4173295.5	3633.7219	4707.43443	819.11259	4727.61125	801.56939	6227.17742	3678.26973	2836.68359	470.29818	4464.05702	2125.93715	7444.90182	0.8537	0.86472	7.05E-04
551355.17	4172791.83	2728.89465	3829.79224	1113.63678	9295.7263	1497.21914	2534.75935	2721.54523	2196.27499	618.10908	6640.48119	5525.65473	3222.41661	0.4371	0.4474	5.30E-04
551720.95	4172625.84	5958.90447	2297.89019	2015.56967	5872.08707	3070.83605	1530.59103	5891.985	1362.84438	1065.68832	4111.5748	6670.30479	2065.47393	0.26259	0.26871	1.16E-03
551358.34	4172778.87	2719.85803	3801.02849	1116.74482	9298.76103	1521.63462	2502.86809	2712.30665	2179.15351	618.99013	6608.10137	5586.27725	3185.17558	0.43439	0.44478	5.28E-04
551391.23	4173151.9	3078.00083	4853.51839	884.96573	6293.54668	956.81946	4876.70273	3101.84492	2865.65963	501.45308	5590.51542	2895.95804	5944.58897	0.48308	0.48746	5.97E-04
551416.4	4173192.75	3152.23388	4890.60491	877.81577	5958.29394	916.55766	5110.12559	3176.77359	2906.88387	499.92142	5395.68806	2675.8433	6219.0648	0.50629	0.51123	6.12E-04
551331.71	4172927.23	2886.22648	4463.27432	1024.49739	8342.57453	1178.62837	3014.98594	2886.47287	2569.68633	578.33198	6769.01831	4241.36582	3815.02744	0.43908	0.44653	5.60E-04
551617.02	4173322.96	4086.53159	4439.8996	816.59813	3921.4543	732.05876	6745.02133	4149.45998	2660.64499	472.67273	3857.24019	1828.27476	8051.23448	1.85084	1.91341	7.93E-04
551332.12	4172957.46	2928.08569	4637.14901	986.8704	7966.45642	1120.73506	3200.83219	2931.40299	2683.86949	559.06527	6608.76399	3962.97527	4040.2482	0.43524	0.44277	5.68E-04
551335.56	4172860.37	2769.08314	4031.34292	1069.63388	8954.80391	1328.75193	2685.43173	2764.59021	2312.39712	597.69292	6750.17219	4920.91342	3405.5863	0.43673	0.44554	5.37E-04
551383.87	4172709.15	2737.9689	3632.60672	1135.84332	9360.00943	1621.31117	2305.1998	2730.27959	2080.65216	626.70715	6540.91946	5802.9473	2960.62074	0.41105	0.42088	5.31E-04
551394.77	4173161.75	3069.67266	4812.37503	877.44138	6174.51769	941.07871	4914.54562	3093.40026	2861.09606	498.31605	5502.91058	2823.72626	5931.56278	0.47998	0.48469	5.96E-04
551656.2	4172586.28	5139.0615	2507.29219	2125.64769	5717.55165	3422.54761	1661.19841	5083.17325	1499.31797	1128.09567	4497.91119	6420.88494	2231.2913	0.21005	0.21215	9.97E-04
551627.72	4172572.6	4733.50487	2610.56508	2046.65767	6119.523	3359.69644	1710.96112	4685.13268	1559.00052	1091.73739	4799.71795	6405.34506	2286.47231	0.21524	0.21693	9.19E-04
551378.8	4172717.99	2715.21981	3644.45347	1125.16756	9278.47605	1600.39626	2324.66999	2707.61483	2087.12401	620.96601	6507.57858	5731.08525	2981.06259	0.41191	0.42179	5.27E-04
551571.02	4173313.19	3737.47687	4552.83437	809.82032	4361.47958	763.92355	6345.03249	3788.79721	2742.70279	466.02537	4177.13878	1973.16672	7569.40985	1.06189	1.07839	7.25E-04
551341.04	4172827.78	2719.63866	3863.98017	1080.1722	9050.61528	1396.91788	2576.6604	2713.58041	2216.32946	601.79847	6618.27535	5180.61914	3270.1139	0.43293	0.44236	5.28E-04
551437.01	4173220.82	3198.2119	4848.0615	863.38539	5631.31972	887.69524	5200.31301	3223.63794	2905.49312	493.04708	5176.85661	2533.96509	6262.12044	0.52735	0.53251	6.21E-04
551740.78	4172636.11	5859.78388	2195.34817	1831.76542	6205.81474	2832.42831	1457.66631	5797.5336	1295.97355	974.38177	4052.52495	6726.99147	1963.95001	0.28826	0.29554	1.14E-03
551408.68	4172662.54	2834.65604	3433.46179	1183.37899	9299.23009	1699.13043	2155.82652	2825.61667	1973.4447	653.29097	6408.49491	5940.06813	2784.27919	0.38607	0.39464	5.50E-04
551548.79	4173304.43	3626.54615	4593.21271	807.35232	4556.39168	781.45232	6155.92151	3672.77861	2766.8166	463.79081	4321.40857	2053.89391	7356.84143	0.89151	0.90271	7.04E-04
551419.49	4173201.34	3129.07213	4812.43262	865.75362	5812.10519	900.83044	5042.96931	3153.34574	2863.5736	493.32944	5278.36794	2614.32215	6138.49033	0.50273	0.50746	6.07E-04
551454.78	4173238.04	3256.04311	4825.59873	849.29485	5433.32709	874.62993	5296.89479	3283.19206	2893.37096	485.89803	4998.18424	2462.99555	6418.93805	0.56882	0.57378	6.32E-04
551397.86	4173170.33	3058.01633	4766.89904	869.74656	6062.45045	927.14925	4888.10038	3081.57392	2831.06577	494.21219	5418.31748	2762.44095	5902.23372	0.47897	0.48377	5.93E-04
551374.52	4172726.31	2691.11049	3641.52537	1112.59085	9157.76045	1574.70039	2337.07166	2683.63826	2085.80338	614.29265	6447.67438	5636.06378	2992.66306	0.4101	0.4199	5.22E-04
551331.34	4172894.83	2791.84159	4178.55885	1034.49603	8486.76997	1221.20444	2796.91555	2789.70359	2400.23389	581.02363	6682.14672	4457.63652	3544.13682	0.4278	0.43581	5.42E-04
551592.55	4173321.28	3836.39452	4449.16675	806.38955	4061.54149	742.4119	6432.70581	3892.05512	2677.09653	465.11103	3988.87998	1887.12867	7672.36305	1.2988	1.32504	7.44E-04
551328.49	4172918.27	2824.03419	4308.61634	1014.3372	8235.15217	1175.05624	2906.7272	2823.60231	2479.10651	571.76735	6632.14142	4232.491	3679.87688	0.4285	0.43625	5.48E-04
551328.9	4172948.5	2871.74013	4489.329	981.2252	7898.31115	1116.91714	3084.48166	2874.12139	2594.62102	555.3489	6516.20435	3957.75433	3896.5635	0.4262	0.43355	5.57E-04
551333.86	4172849.93	2714.85414	3901.80193	1055.34032	8808.07681	1329.31944	2605.67611	2709.99451	2238.23472	589.12298	6574.48595	4907.06247	3305.47113	0.42633	0.43505	5.27E-04

551321.35	4172827.73	2466.81377	3401.80702	955.89778	7705.28088	1225.04938	2309.53537	2462.15301	1955.36172	533.02244	5711.95977	4395.01965	2930.66021	0.36672	0.37402	4.79E-04	1.06E-03	2.99E-04	2.11E-03	1.57E-04	2.97E-04	1.45E-03	7.55E-04	2.06E-04	4.28E-03	2.16E-03	1.44E-03	1.72E-04	1.77E-04	1.5053E-02
551574.09	4173340.44	3374.58985	3943.92965	733.36668	3876.10855	693.58846	5339.20793	3420.51818	2372.6961	421.77841	3688.53605	1784.61638	6395.62698	0.91895	0.93069	6.55E-04	1.23E-03	2.29E-04	1.06E-03	8.91E-05	6.86E-04	2.02E-03	9.16E-04	1.63E-04	2.77E-03	8.79E-04	3.15E-03	4.31E-04	4.41E-04	1.4715E-02
551360.15	4172712.05	2452.66537	3239.72243	990.16754	7851.52404	1387.20742	2118.02411	2446.67683	1859.16131	547.12683	5613.45487	4808.67466	2710.71965	0.34787	0.35548	4.76E-04	1.01E-03	3.09E-04	2.15E-03	1.78E-04	2.72E-04	1.44E-03	7.18E-04	2.11E-04	4.21E-03	2.37E-03	1.34E-03	1.63E-04	1.68E-04	1.5010E-02
551324.11	4173051.51	2685.19474	4206.17334	787.24756	6010.94134	908.5335	3401.07675	2698.65781	2489.49114	445.98935	5060.06945	3008.03063	4245.39158	0.37292	0.37739	5.21E-04	1.31E-03	2.46E-04	1.64E-03	1.17E-04	4.37E-04	1.59E-03	9.61E-04	1.72E-04	3.79E-03	1.48E-03	2.09E-03	1.75E-04	1.79E-04	1.4723E-02
551315.26	4172856.65	2485.70663	3491.36548	939.43868	7559.18161	1165.28304	2367.53644	2482.37893	2006.74704	525.09513	5740.43828	4172.72964	3003.69037	0.36534	0.37212	4.82E-04	1.09E-03	2.93E-04	2.07E-03	1.50E-04	3.04E-04	1.47E-03	7.75E-04	2.03E-04	4.30E-03	2.06E-03	1.48E-03	1.71E-04	1.76E-04	1.5015E-02
551310.78	4172985.39	2642.17695	4071.60526	842.19982	6528.22585	957.99139	2942.78357	2648.13737	2373.42407	477.60605	5473.12279	3270.47694	3706.06477	0.36818	0.37389	5.13E-04	1.27E-03	2.63E-04	1.78E-03	1.23E-04	3.78E-04	1.56E-03	9.16E-04	1.84E-04	4.10E-03	1.61E-03	1.83E-03	1.73E-04	1.77E-04	1.4886E-02
551355.83	4172720.45	2440.75679	3245.05652	985.08769	7807.60434	1375.41278	2133.0059	2434.75554	1862.53338	544.49567	5591.82595	4772.38412	2726.3229	0.34901	0.35666	4.74E-04	1.01E-03	3.08E-04	2.13E-03	1.77E-04	2.74E-04	1.44E-03	7.19E-04	2.10E-04	4.19E-03	2.35E-03	1.34E-03	1.64E-04	1.69E-04	1.4964E-02
551385.51	4173194.17	2759.31221	4117.03573	783.13242	5304.07049	836.41407	4179.57632	2779.57473	2443.3721	444.99135	4729.64696	2463.24606	5060.42992	0.41605	0.41961	5.35E-04	1.29E-03	2.45E-04	1.45E-03	1.07E-04	5.37E-04	1.64E-03	9.43E-04	1.72E-04	3.55E-03	1.21E-03	2.49E-03	1.95E-04	1.99E-04	1.4561E-02
551479.19	4173287.61	3035.87787	4067.43684	737.68481	4565.39196	765.66303	4754.3102	3064.65415	2449.28651	422.50726	4146.23136	2126.6734	5743.67102	0.54878	0.55364	5.89E-04	1.27E-03	2.30E-04	1.25E-03	9.84E-05	6.11E-04	1.81E-03	9.45E-04	1.63E-04	3.11E-03	1.05E-03	2.83E-03	2.57E-04	2.62E-04	1.4469E-02
551357.46	4173145	2701.09556	4079.15817	780.06691	5563.80411	866.193	3979.02917	2720.96927	2405.69891	441.24698	4812.45141	2653.8694	4874.30288	0.3987	0.40218	5.24E-04	1.27E-03	2.44E-04	1.52E-03	1.11E-04	5.11E-04	1.61E-03	9.29E-04	1.70E-04	3.61E-03	1.31E-03	2.40E-03	1.87E-04	1.91E-04	1.4584E-02
551351.51	4172728.86	2431.96712	3249.87919	981.47275	7777.59551	1364.80029	2147.83249	2425.93542	1865.79159	542.72061	5577.07735	4745.16082	2741.85193	0.3506	0.3583	4.72E-04	1.02E-03	3.07E-04	2.13E-03	1.75E-04	2.76E-04	1.43E-03	7.20E-04	2.10E-04	4.18E-03	2.34E-03	1.35E-03	1.64E-04	1.70E-04	1.4935E-02
551668.78	4172571.41	4688.72394	2195.98789	1808.73636	4842.23514	2786.56271	1480.55473	4640.57661	1310.07397	962.56224	3819.54173	5313.61029	1988.21812	0.17979	0.18152	9.10E-04	6.86E-04	5.65E-04	1.32E-03	3.58E-04	1.90E-04	2.74E-03	5.06E-04	3.72E-04	2.86E-03	2.62E-03	9.79E-04	8.43E-05	8.60E-05	1.4279E-02
551320.89	4173042.56	2675.70788	4189.2976	790.52496	6049.74954	910.42472	3319.91525	2688.06341	2475.73549	448.02717	5094.20486	3032.17617	4150.98231	0.37035	0.37488	5.19E-04	1.31E-03	2.47E-04	1.65E-03	1.17E-04	4.27E-04	1.59E-03	9.56E-04	1.73E-04	3.82E-03	1.49E-03	2.04E-03	1.74E-04	1.78E-04	1.4695E-02
551322.06	4172818.27	2447.6757	3354.54487	954.33793	7670.95279	1234.26297	2279.86952	2442.72721	1928.39877	531.72278	5653.12796	4418.3277	2893.31875	0.36365	0.37102	4.75E-04	1.05E-03	2.98E-04	2.10E-03	1.59E-04	2.93E-04	1.44E-03	7.44E-04	2.05E-04	4.24E-03	2.18E-03	1.43E-03	1.70E-04	1.76E-04	1.4946E-02
551608.04	4173351.15	3536.75488	3814.87014	729.30649	3521.14962	664.93062	5429.82566	3587.8757	2286.67916	421.08275	3442.9421	1670.56911	6514.74446	1.26329	1.28773	6.86E-04	1.19E-03	2.28E-04	9.62E-04	8.54E-05	6.98E-04	2.12E-03	8.83E-04	1.63E-04	2.58E-03	8.23E-04	3.21E-03	5.92E-04	6.10E-04	1.4830E-02
551317.66	4173033.6	2657.89296	4152.46837	791.98795	6069.12692	910.3348	3231.72597	2669.18063	2449.55227	449.00668	5111.20373	3051.40442	4046.85028	0.36665	0.37122	5.16E-04	1.30E-03	2.47E-04	1.66E-03	1.17E-04	4.15E-04	1.58E-03	9.46E-04	1.73E-04	3.83E-03	1.50E-03	1.99E-03	1.72E-04	1.76E-04	1.4621E-02
551347.19	4172737.26	2415.16777	3235.9144	972.65655	7690.35862	1344.70982	2153.00458	2409.18664	1858.56493	538.16061	5526.29968	4679.56162	2745.18939	0.34913	0.35676	4.69E-04	1.01E-03	3.04E-04	2.10E-03	1.73E-04	2.77E-04	1.42E-03	7.17E-04	2.08E-04	4.14E-03	2.31E-03	1.35E-03	1.64E-04	1.69E-04	1.4814E-02
551309.31	4172880.55	2489.26255	3553.76002	919.38787	7322.16214	1108.13698	2415.65161	2487.22437	2044.39015	515.17282	5695.55245	3940.86204	3063.19484	0.3616	0.368	4.83E-04	1.11E-03	2.87E-04	2.00E-03	1.42E-04	3.10E-04	1.47E-03	7.89E-04	1.99E-04	4.27E-03	1.94E-03	1.51E-03	1.69E-04	1.74E-04	1.4854E-02
551551.57	4173331.41	3231.86873	3913.89045	722.91043	4030.67453	708.70567	5116.2047	3273.58241	2359.39617	414.7424	3776.38538	1857.6477	6128.94129	0.77505	0.78343	6.27E-04	1.22E-03	2.26E-04	1.10E-03	9.10E-05	6.57E-04	1.93E-03	9.11E-04	1.60E-04	2.83E-03	9.15E-04	3.02E-03	3.63E-04	3.71E-04	1.4428E-02
551307.55	4172976.43	2607.65168	3980.89934	843.27798	6527.22221	958.96187	2853.80229	2612.61395	2316.13603	478.01927	5453.96694	3280.30366	3597.21262	0.36303	0.36802	5.06E-04	1.24E-03	2.63E-04	1.78E-03	1.23E-04	3.67E-04	1.54E-03	8.94E-04	1.85E-04	4.09E-03	1.62E-03	1.77E-03	1.70E-04	1.74E-04	1.4728E-02
551322.77	4172808.8	2424.1755	3301.79362	949.74338	7600.47341	1238.34074	2247.0326	2419.02155	1898.2807	528.72787	5574.84837	4416.6192	2852.06536	0.35878	0.36615	4.70E-04	1.03E-03	2.97E-04	2.08E-03	1.59E-04	2.89E-04	1.43E-03	7.33E-04	2.04E-04	4.18E-03	2.18E-03	1.40E-03	1.68E-04	1.74E-04	1.4789E-02
551658.01	4172564.49	4521.54807	2208.6355	1777.94007	4860.58778	2755.36155	1487.98641	4476.15294	1318.37644	948.25351	3856.21709	5235.23904	1995.05954	0.17635	0.17778	8.77E-04	6.90E-04	5.55E-04	1.33E-03	3.54E-04	1.91E-04	2.64E-03	5.09E-04	3.66E-04	2.89E-03	2.58E-03	9.83E-04	8.27E-05	8.43E-05	1.4133E-02
551388.6	4173202.76	2742.65737	4067.79203	774.88182	5199.52312	824.45307	4135.22677	2762.67172	2415.6138	440.53263	4649.65208	2415.01072	5007.09957	0.41362	0.41707	5.32E-04	1.27E-03	2.42E-04	1.42E-03	1.06E-04	5.31E-04	1.63E-03	9.32E-04	1.70E-04	3.49E-03	1.19E-03	2.47E-03	1.94E-04	1.98E-04	1.4370E-02
551488.76	4173296.61	3030.46033	3977.97279	724.3157	4443.36358	752.14297	4746.87916	3060.7745	2395.86363	414.82083	4038.66386	2072.45806	5724.85197	0.56246	0.56752	5.88E-04	1.24E-03	2.26E-04	1.21E-03	9.66E-05	6.10E-04	1.81E-03	9.25E-04	1.60E-04	3.03E-03	1.02E-03	2.82E-03	2.64E-04	2.69E-04	1.4271E-02
551373.18	4172676.87	2460.28497	3107.45954	990.18054	7749.95229	1392.20639	2006.94522	2454.42607	1785.18692	547.16725	5502.16944	4792.50653	2580.93793	0.33038	0.33733	4.77E-04	9.71E-04	3.09E-04	2.12E-03	1.79E-04	2.58E-04	1.45E-03	6.89E-04	2.11E-04	4.12E-03	2.36E-03	1.27E-03	1.55E-04	1.60E-04	1.4733E-02
551314.44	4173024.65	2639.86675	4110.54847	794.70443	6094.8485	911.33712	3146.44037	2650.0519	2419.64375	450.70136	5133.0814	3053.63489	3945.3756	0.36315	0.3678	5.12E-04	1.28E-03	2.48E-04	1.67E-03	1.17E-04	4.04E-04	1.56E-03	9.34E-04	1.74E-04	3.85E-03	1.50E-03	1.94E-03	1.70E-04	1.74E-04	1.4544E-02
551363.37	4173161.74	2672.26748	3997.8235	771.72558	5402.76236	848.61001	3959.09109	2692.06605	2357.64026	436.80506	4706.187	2569.76784	4840.91864	0.3974	0.40142	5.19E-04	1.25E-03	2.41E-04	1.48E-03	1.09E-04	5.09E-04	1.59E-03	9.10E-04	1.69E-04	3.53E-03	1.27E-03	2.38E-03	1.86E-04	1.90E-04	1.4325E-02
551323.88	4172797.11	2406.5848	3261.76214	949.22856	7572.79284	1250.76815	2219.24807	2401.16429	1875.14122	527.85827	5522.10707	4446.95603	2817.63412	0.35581	0.36325	4.67E-04	1.02E-03	2.96E-04	2.07E-03	1.61E-04	2.85E-04	1.42E-03	7.24E-04	2.04E-04	4.14E-03	2.19E-03	1.39E-03	1.67E-04	1.72E-04	1.4700E-02
551955.01	4173205.79	4827.05793	3359.40559	572.31029	2534.5756	494.00964	5640.76166	4967.89098	1918.08606	335.17038	2515.62501	1188.40654	6867.45414	0.39872	0.39186	9.37E-04	1.05E-03	1.79E-04	6.93E-04	6.35E-05	7.25E-04	2.93E-03	7.40E-04	1.29E-04	1.89E-03	5.85E-04	3.38E-03	1.87E-04	1.86E-04	1.3675E-02
551387.79	4172641.64	2517.26665	2985.9753	1021.01363	7714.53377	1440.36411	1914.46259	2510.28732	1718.93634	564.39838	5424.11063	4876.7172	2470.08699	0.31823	0.32467	4.89E-04	9.33E-04	3.19E-04	2.11E-03	1.85E-04	2.46E-04	1.48E-03	6.64E-04	2.18E-04	4.07E-03	2.40E-03	1.22E-03	1.49E-04	1.54E-04	1.4631E-02
551651.45	4173353.8	3841.98006	3605.76876	717.36317	3249.47296	636.34761	5387.20342	3902.76374	2142.82959	416.3174	3139.37891	1562.3872	6497.4863	2.70508	2.83332	7.46E-04	1.13E-03	2.24E-04	8.88E-04	8.18E-05	6.92E-04	2.30E-03	8.27E-04	1.61E-04	2.35E-03	7.70E-04	3.20E-03	1.27E-03	1.34E-03	1.5984E-02
551313.57	4172846.32	2433.23248	3374.70567	924.1046	7397.79288	1159.0291	2295.90464	2429.62111	1940.36517	516.13595	5577.29954	4132.17056	2913.11466	0.35496	0.3616	4.72E-04	1.05E-03	2.89E-04	2.02E-03	1.49E-04	2.95E-04	1.43E-03	7.49E-04	1.99E-04	4.18E-03	2.04E-03	1.44E-03	1.66E-04	1.71E-04	1.4652E-02
551304.32	4172967.46	2571.05321	3886.2348	843.43496	6517.84941	959.87994	2766.61077	2575.10249	2257.26565	477.83664	5423.23228	3289.51868	3490.31218	0.35747	0.36266	4.99E-04	1.21E-03	2.63E-04	1.78E-03	1.23E-04	3.55E-04	1.52E-03	8.71E-04	1.84E-04	4.07E-03	1.62E-03	1.72E-03	1.68E-04	1.72E-04	1.4557E-02
551664.64	4173351.88	3973.09165	3551.48383	713.53445	3187.42321	630.30184	5357.76711	4038.35068	2102.77257	414.71918	3062.29926	1538.26592	6475.70623	3.92974	4.18403	7.71E-04	1.11E-03	2.23E-04	8.71E-04	8.10E-05	6.88E-04	2.38E-03	8.12E-04	1.60E-04	2.30E-03	7.58E-04	3.19E-03	1.84E-03	1.98E-03	1.7167E-02
551561.27	4173340.55	3241.57557	3848.73075	716.74643	3891.58633	690.78789	5079.51063	3284.35685	2317.02681	411.60655	3672.08073	1795.32837	6089.16871	0.80732	0.81751	6.29E-04	1.20E-03	2.24E-04	1.06E-03	8.87E-05	6.53E-04	1.94E-03	8.94E-04	1.59E-04	2.75E-03	8.84E-04	3.00E-03	3.78E-04	3.87E-04	1.4255E-02
551638.27	4173355.72	3714.8314	3645.30834	717.95013	3304.5546	640.89312	5369.9759	3771.64288	2172.72603	416.01512	3208.7494	1583.39918	6466.40606	1.96946	2.04756	7.21E-04	1.14E-03	2.24E-04	9.03E-04	8.23E-05	6.90E-04	2.23E-03	8.39E-04	1.61E-04	2.41E-03	7.80E-04	3.19E-03	9.23E-04	9.70E-04	1.5249E-02
551498.32	4173305.62	3034.62616	3911.00912	714.85018	4333.43563	738.8779	4748.14279	3066.56375	2354.58527	409.36762	3951.63533	2018.10283	5718.95106	0.57849	0.58361	5.89E-04	1.22E-03	2.23E-04	1.18E-03	9.49E-05	6.10E-04	1.81E-03	9.09E-04	1.58E-04	2.96E-03	9.94E-04	2.82E-03	2.71E-04	2.77E-04	1.4121E-02
551399.76	4172622.17	2564.6168	2914.26491	1048.50023	7623.75824	1484.71516	1868.08879	2556.28168	1679.83329	579.83918	5349.38298	4906.7541	2412.4958	0.30995	0.31597	4.98E-04	9.10E-04	3.27E-04	2.08E-03	1.91E-04	2.40E-04	1.51E-03	6.48E-04	2.24E-04	4.01E-03	2.42E-03	1.19E-03	1.45E-04	1.50E-04	1.4542E-02
551342.86	4172745.67	2386.03346	3195.94892	956.14402	7519.60592	1311.58154	2144.31688	2380.24776	1836.72816	529.44117	5423.67307	4558.17994	2730.91473	0.34327	0.35066	4.63E-04	9.98E-04	2.99E-04	2.05E-03	1.68E-04	2.75E-04	1.41E-03	7.09E-04	2.04E-04	4.07E-03	2.25E-03	1.35E-03	1.61E-04	1.66E-04	1.4561E-02
551311.19	4173015.62	2611.46342	4045.51692	794.51698	6091.13033	909.30171	3053.53409	2620.56238	2376.32312	450.66112	5129.65389	3056.70311	3833.22506	0.35809	0.36277	5.07E-04	1.26E-03	2.48E-04	1.66E-03	1.17E-04	3.92E-04	1.55E-03	9.17E-04	1.74E-04	3.85E-03	1.51E-03	1.89E-03	1.68E-04	1.72E-04	1.4410E-02
551583.68	4173349.48	3335.45332	3799.38129	717.72058	3707.78239	672.40212	5178.8031	3381.41051	2284.20109	413.08948	3534.46772	1718.01229	6209.43003	0.95281	0.96712	6.47E-04	1.19E-03	2.24E-04	1.01E-03	8.64E-05	6.65E-04	2.00E-03	8.82E-04	1.59E-04	2.65E-03	8.46E-04	3.06E-03	4.47E-04	4.58E-04	1.4320E-02
551428.05	4173250.63	2822.07999	4038.32432	754.09089	4822.69642	788.46581	4244.06971	2843.58759	2417.8856	430.71416	4337.54714	2254.97525	5166.85016	0.45654	0.45983	5.48E-04	1.26E-03	2.36E-04	1.32E-03	1.01E-04	5.45E-04	1.68E-03	9.33E-04	1.66E-04	3.25E-03	1.11E-03	2.55E-03	2.14E-04	2.18E-04	1.4127E-02
551325.99	4172787.28	2386.8404	3220.34512	944.56034	7493.52019	1253.88086	2192.41181	2381.3234	1851.51004	524.84224	5449.3693	4435.15335	2784.29272	0.35041	0.35777	4.63E-04	1.01E-03	2.95E-04	2.05E-03	1.61E-04	2.82E-04	1.41E-03	7.15E-04	2.03E-04	4.09E-03	2.18E-03	1.37E-03	1.64E-04	1.70E-04	1.4553E-02
551366.97	4173171.75	2655.90562	3952.34515	766.29084	5304.65953	837.61605	3936.11379	2675.53461	2331.47296	433.96815	4639.84782	2518.80779	4809.28925	0.39671	0.40063	5.15E-04	1.23E-03	2.39E-04	1.45E-03	1.08E-04	5.06E-04	1.58E-03	9.00E-04	1.68E-04	3.48E-03	1.24E-03	2.37E-03	1.86E-04	1.90E-04	1.4163E-02
551391.69	4173211.35	2720.21543	4007.3058	765.53552	5086.51079	812.53285	4047.5506	2739.93121	2371.79664	435.44225	4562.18768	2368.77703	4939.14469	0.41336	0.41615	5.28E-04	1.25E-03	2.39E-04	1.39E-03	1.04E-04	5.20E-04	1.62E-03	9.16E-04	1.68E-04	3.42E-03	1.17E-03	2.43E-03	1.94E-04	1.97E-04	1.4145E-02
551367.01	4172683.76	2418.89382	3088.53113	970.40217	7594.19607	1361.40673	2005.31659	2413.27484	1773.89373	536.24877	5416.91799	4675.71948	2575.4586	0.32678	0.33364	4.69E-04	9.65E-04	3.03E-04	2.08E-03	1.75E-04	2.58E-04	1.42E-03	6.85E-04	2.07E-04	4.06E-03	2.30E-03	1.27E-03	1.53E-04	1.58E-04	1.4505E-02
551677.83	4173349.97	4097.63768	3479.88521	706.19348	3118.66997	622.69716	5276.45936	4167.69749	2052.3341	410.99438	2977.79602	1511.36923	6392.95294	6.3722	7.002	7.95E-04	1.09E-03	2.21E-04	8.52E-04	8.00E-05	6.78E-04	2.46E-03	7.92E-04	1.59E-04	2.23E-03	7.45E-04	3.15E-03	2.99E-03	3.32E-03	1.9555E-02
551595	4173353.05	3378.93363	3752.70555	715.95457	3611.54326	663.01752	5197.91139	3426.3522	2254.40289	412.56178	3452.89241	1681.49562	6234.79758	1.0498	1.06524	6.56E-04	1.17E-03	2.24E-04	9.87E-04	8.52E-05	6.68E-04	2.02E-03	8.70E-04	1.59E-04	2.59E-03	8.28E-04	3.07E-03	4.92E-04	5.05E-04	1.4328E-02
551436.62	4173259.69	2833.04981	4000.00976	744.28796	4734.39819	778.46352	4270.68893	2855.28065	2401.41219	425.4612	4249.43139	2220.48396	5194.18781	0.46482	0.46815	5.50E-04	1.25E-03	2.32E-04	1.29E-03	1.00E-04	5.49E-04	1.69E-03	9.27E-04	1.64E-04	3.19E-03	1.09E-03	2.56E-03	2.18E-04	2.22E-04	1.4029E-02
551307.96	4173006.66	2586.02353	3982.13153	796.52193	6103.39603	909.57404	2967.58586	2594.06196	2333.74117	451.80554	5136.75803	3065.28669	3729.31266	0.35415	0.35871	5.02E-04	1.24E-03	2.49E-04	1.67E-03	1.17E-04	3.81E-04	1.53E-03	9.01E-04	1.74E-04	3.85E-03	1.51E-03	1.84E-03	1.66E-04	1.70E-04	1.4301E-02
551507.88	4173314.63	3042.16827	3855.5431	707.65839	4227.12813	725.37269	4746.47322	3075.67065	2320.01509	405.25694	3873.24103	1964.20674	5711.86256	0.59647	0.60172	5.90E-04	1.20E-03	2.21E-04	1.16E-03	9.32E-05	6.10E-04	1.82E-03	8.96E-04	1.56E-04	2.90E-03	9.68E-04	2.81E-03	2.80E-04	2.85E-04	1.3991E-02
551691.01	4173348.05	4247.48525	3415.36075	696.84666	3047.44179	614.1863	5187.51832	4323.55408	2003.56121	406.12715	2899.16652	1480.82169	6305.73106	12.69787	14.71007	8.24E-04	1.07E-03	2.18E-04	8.33E-04	7.89E-05	6.66E-04	2.55E-03	7.73E-04	1.57E-04	2.17E-03	7.29E-04	3.11E-03	5.95E-03	6.97E-03	2.6101E-02
551307.63	4172870.26	2432.02558	3424.17865	902.516	7167.07315	1099.0667	2332.41382	2429.66706	1969.62948	505.19652	5527.806	3895.37751	2958.81283	0.34959	0.35577	4.72E-04	1.07E-03	2.82E-04	1.96E-03	1.41E-04	3.00E-04	1.43E-03	7.60E-04	1.95E-04	4.14E-03	1.92E-03	1.46E-03	1.64E-04	1.69E-04	1.4465E-02
551338.54	4172754.07	2369.07285	3173.33805	946.15584	7424.66211	1288.53507	2142.75988	2363.38588	1824.46434	524.28576	5367.95767	4483.70463	2726.30166	0.34082	0.34808	4.60E-04	9.91E-04	2.96E-04	2.03E-03	1.66E-04	2.75E-04	1.40E-03	7.04E-04	2.02E-04	4.02E-03	2.21E-03	1.34E-03	1.60E-04	1.65E-04	1.4419E-02
551688.08	4172578.4	4759.04146	2083.53994	1728.55995	4599.34502	2595.55742	1413.11658	4710.46878	1240.25737	919.01063	3579.74973	5070.1397	1900.1364	0.17836	0.18057	9.24E-04	6.51E-04	5.40E-04	1.26E-03	3.33E-04	1.82E-04	2.78E-03	4.79E-04	3.55E-04	2.68E-03	2.50E-03	9.36E-04	8.36E-05	8.56E-05	1.3787E-02
551301.1	4172958.5	2531.20433	3787.54393	841.83238	6492.70003	959.87661	2680.40968	2534.42064	2196.41881	476.54258	5376.32133	3294.9	3384.52281	0.35178	0.3569	4.91E-04	1.18E-03	2.63E-04	1.77E-03	1.23E-04	3.44E-04	1.50E-03	8.48E-04	1.84E-04	4.03E-03	1.62E-03	1.67E-03	1.65E-04	1.69E-04	1.4362E-02
551370.06	4173180.34	2646.17627	3921.82052	761.91668	5223.10458	828.4336	3915.99972	2665.61769	2314.0578	431.74272	4586.81582	2473.30816	4783.274	0.39655	0.39969	5.14E-04	1.22E-03	2.38E-04	1.43E-03	1.06E-04	5.03E-04	1.57E-03	8.93E-04	1.67E-04	3.44E-03	1.22E-03	2.36E-03	1.86E-04	1.89E-04	1.4035E-02
551539.98	4173332.68	3123.78545	3806.34842	705.82612	4006.04618	701.38713	4875.99872	3162.70964	2292.58887	404.62712	3728.57234	1852.10838	5850.50979	0.69835	0.70462	6.06E-04	1.19E-03	2.20E-04	1.09E-03	9.01E-05	6.26E-04	1.87E-03	8.85E-04	1.56E-04	2.80E-03	9.12E-04	2.88E-03	3.27E-04	3.34E-04	1.3986E-02
551327.74	4173090.65	2592.3605	3954.45343	746.70675	5557.70321	863.31716	3497.82737	2608.85896	2342.46919	422.38595	4682.11012	2769.39608	4333.1247	0.36216	0.36638	5.03E-04	1.24E-03	2.33E-04	1.52E-03	1.11E-04	4.49E-04	1.54E-03	9.04E-04	1.63E-04	3.51E-03	1.36E-03	2.13E-03	1.70E-04	1.74E-04	1.4010E-02
551304.74	4172997.69	2561.21917	3916.81884	799.65807	6124.0444	911.50121	2885.72493	2568.21985	2290.22386	453.5304	5146.49075	3078.1198	3630.09867	0.35051	0.3551	4.97E-04	1.22E-03	2.50E-04	1.67E-03	1.17E-04	3.71E-04	1.52E-03	8.84E-04	1.75E-04	3.86E-03	1.52E-03	1.79E-03	1.64E-04	1.68E-04	1.4202E-02
551465.59	4173286.98	2901.34078	3898.47394	717.5806	4464.85172	750.59072	4434.2108	2927.37727	2347.26648	410.82172	4028.49849	2101.68278	5370.2051	0.50243	0.50663	5.63E-04	1.22E-03	2.24E-04	1.22E-03	9.64E-05	5.70E-04	1.73E-03	9.06E-04	1.59E-04	3.02E-03	1.04E-03	2.65E-03	2.35E-04	2.40E-04	1.3860E-02
551324.52	4173081.7	2590.27131	3965.00122	747.54245	5589.50274	865.16268	3435.23639	2606.00527	2349.44479	423.00061	4702.90093	2792.98088	4264.10869	0.35834	0.36259	5.03E-04	1.24E-03	2.33E-04	1.53E-03	1.11E-04	4.41E-04	1.54E-03	9.07E-04	1.63E-04	3.53E-03	1.38E-03	2.10E-03	1.68E-04	1.72E-04	1.4005E-02
551336.34	4173114.81	2589.27068	3904.29776	745.30029	5454.99531	852.92277	3631.75286	2607.25934	2308.69431	421.31009	4626.80677	2696.04633	4475.50547	0.36784	0.37189	5.02E-04	1.22E-03	2.33E-04	1.49E-03	1.10E-04	4.67E-04	1.54E-03	8.91E-04	1.63E-04	3.47E-03	1.33E-03	2.20E-03	1.72E-04	1.76E-04	1.3964E-02
551394.78	4173219.93	2698.51196	3946.82217	755.882	4974.45164	800.38617	3991.10664	2717.96078	2339.18515	430.33613	4447.56934	2322.35746	4870.99914	0.41158	0.41452	5.24E-04	1.23E-03	2.36E-04	1.36E-03	1.03E-04	5.13E-04	1.60E-03	9.03E-04	1.66E-04	3.33E-03	1.14E-03	2.40E-03	1.93E-04	1.96E-04	1.3908E-02
551339.29	4173123.18	2590.2774	3891.10606	746.28664	5421.63539	848.44868	3669.71501	2608.62181	2298.81523	421.82476	4616.62003	2660.83716	4515.2915	0.36981	0.37379	5.03E-04	1.22E-03	2.33E-04	1.48E-03	1.09E-04	4.71E-04	1.54E-03	8.87E-04	1.63E-04	3.46E-03	1.31E-03	2.22E-03	1.73E-04	1.77E-04	1.3950E-02
551373.15	4173188.92	2641.78561	3900.70534	757.84041	5145.83645	818.33659	3899.05895	2661.01713	2301.98915	429.74665	4538.59416	2425.91736	4762.47347	0.39527	0.39876	5.13E-04	1.22E-03	2.37E-04	1.41E-03	1.05E-04	5.01E-04	1.57E-03	8.89E-04	1.66E-04	3.40E-03	1.20E-03	2.35E-03	1.85E-04	1.89E-04	1.3923E-02
551321.3	4173072.75	2586.96825	3971.03908	748.91098	5621.30985	866.69401	3368.41681	2601.8309	2352.85402	423.90503	4726.69952	2815.82151	4189.40359	0.35616	0.36048	5.02E-04	1.24E-03	2.34E-04	1.54E-03	1.11E-04	4.33E-04	1.54E-03	9.08E-04	1.64E-04	3.54E-03	1.39E-03	2.06E-03	1.67E-04	1.71E-04	1.3996E-02
551611.89	4173359.55	3454.43962	3655.85922	708.58585	3387.77168	644.90419	5172.3609	3504.11312	2188.75546	409.19618	3307.52534	1615.98875	6217.07444	1.23666	1.25926	6.70E-04	1.14E-03	2.21E-04	9.26E-04	8.28E-05	6.64E-04	2.07E-03	8.45E-04	1.58E-04	2.48E-03	7.96E-04	3.06E-03	5.80E-04	5.97E-04	1.4293E-02
551517.44	4173323.63	3044.54334	3797.01793	700.64788	4116.00942	711.14811	4726.98077	3079.55627	2284.02842	401.31272	3790.97325	1909.44321	5684.95369	0.61467	0.62044	5.91E-04	1.19E-03	2.19E-04	1.12E-03	9.14E-05	6.07E-04	1.82E-03	8.82E-04	1.55E-04	2.84E-03	9.41E-04	2.80E-03	2.88E-04	2.94E-04	1.3839E-02
551390.07	4172628.57	2493.07989	2887.40176	1010.20744	7460.0137	1423.24474	1856.41024	2485.8188	1663.68447	558.64122	5253.39953	4747.39165	2396.02018	0.30522	0.3112	4.84E-04	9.02E-04	3.16E-04	2.04E-03	1.83E-04	2.38E-04	1.47E-03	6.42E-04	2.16E-04	3.94E-03	2.34E-03	1.18E-03	1.43E-04	1.47E-04	1.4234E-02
551570.97	4173349.68	3222.57578	3741.68581	705.40769	3738.32243	671.4885	4978.83484	3265.77642	2250.69307	405.4269	3541.81047	1730.79777	5972.95606	0.8371	0.84614	6.25E-04	1.17E-03	2.20E-04	1.02E-03	8.63E-05	6.40E-04	1.93E-03	8.69E-04	1.57E-04	2.66E-03	8.53E-04	2.94E-03	3.92E-04	4.01E-04	1.3958E-02
551318.07	4173063.8	2583.84558	3974.39278	751.48816	5658.61489	868.66627	3300.28351	2597.76098	2353.62141	425.52286	4758.09592	2839.03662	4112.43519	0.35419	0.35821	5.01E-04	1.24E-03	2.35E-04	1.55E-03	1.12E-04	4.24E-04	1.53E-03	9.09E-04	1.64E-04	3.57E-03	1.40E-03	2.03E-03	1.66E-04	1.70E-04	1.3993E-02
551360.83	4172690.65	2376.12749	3060.49294	949.96171	7415.63548	1328.93322	1999.80315	2370.7188	1757.76837	525.00651	5314.98191	4548.88908	2564.7424	0.32201	0.32873	4.61E-04	9.56E-04	2.97E-04	2.03E-03	1.71E-04	2.57E-04	1.40E-03	6.79E-04	2.03E-04	3.98E-03	2.24E-03	1.26E-03	1.51E-04	1.56E-04	1.4244E-02
551345.21	4173139.92	2592.19886	3867.30689	748.20959	5354.10707	838.62155	3726.54251	2610.90532	2280.87213	423.0216	4593.44506	2583.8279	4573.76349	0.37387	0.37775	5.03E-04	1.21E-03	2.34E-04	1.46E-03	1.08E-04	4.79E-04	1.54E-03	8.80E-04	1.63E-04	3.44E-03	1.27E-03	2.25E-03	1.75E-04	1.79E-04	1.3903E-02
551377.91	4172648.17	2429.85388	2931.31714	975.85665	7421.22345	1369.53654	1890.97387	2423.78824	1686.93183	539.55017	5253.33495	4642.4669	2437.37494	0.30856	0.31476	4.72E-04	9.16E-04	3.05E-04	2.03E-03	1.76E-04	2.43E-04	1.43E-03	6.51E-04	2.08E-04	3.94E-03	2.29E-03	1.20E-03	1.45E-04	1.49E-04	1.4149E-02
551301.51	4172988.73	2530.94964	3839.60977	800.99861	6127.14602	911.96382	2801.98851	2536.9526	2240.40685	454.19089	5138.17718	3085.74487	3528.05587	0.34578	0.35097	4.91E-04	1.20E-03	2.50E-04	1.67E-03	1.17E-04	3.60E-04	1.50E-03	8.65E-04	1.75E-04	3.85E-03	1.52E-03	1.74E-03	1.62E-04	1.66E-04	1.4068E-02
551305.95	4172859.97	2387.77455	3321.5437	891.6895	7066.07153	1099.6282	2266.82055	2385.05122	1910.75117	498.64168	5403.24723	3888.31275	2876.08326	0.34181	0.3479	4.63E-04	1.04E-03	2.79E-04	1.93E-03	1.41E-04	2.91E-04	1.41E-03	7.38E-04	1.92E-04	4.05E-03	1.92E-03	1.42E-03	1.60E-04	1.65E-04	1.4189E-02
551314.85	4173054.85	2567.17543	3949.46175	750.20242	5661.13295	866.78471	3216.69375	2580.13892	2337.58806	424.94539	4759.05413	2853.8752	4015.09898	0.35023	0.35468	4.98E-04	1.23E-03	2.34E-04	1.55E-03	1.11E-04	4.13E-04	1.52E-03	9.02E-04	1.64E-04	3.57E-03	1.41E-03	1.98E-03	1.64E-04	1.68E-04	1.3911E-02
551346.11	4172718.26	2337.78283	3084.96642	934.87819	7298.95227	1298.21397	2049.09721	2332.2996	1772.1054	516.97864	5260.58543	4452.00058	2616.74706	0.3267	0.33363	4.54E-04	9.64E-04	2.92E-04	1.99E-03	1.67E-04	2.63E-04	1.38E-03	6.84E-04	2.00E-04	3.94E-03	2.19E-03	1.29E-03	1.53E-04	1.58E-04	1.4131E-02
551297.87	4172949.53	2485.38806	3681.06011	836.75189	6436.19158	956.70956	2592.78299	2487.87299	2131.55037	473.28855	5303.69335	3288.0509	3276.94664	0.3453	0.35035	4.82E-04	1.15E-03	2.61E-04	1.76E-03	1.23E-04	3.33E-04	1.47E-03	8.23E-04	1.83E-04	3.98E-03	1.62E-03	1.61E-03	1.62E-04	1.66E-04	1.4120E-02
551350.39	4172709.93	2343.38684	3074.79291	936.42157	7306.91628	1303.78319	2032.55198	2337.97438	1766.06938	517.68529	5263.04721	4462.80406	2598.71846	0.32425	0.33108	4.55E-04	9.60E-04	2.92E-04	2.00E-03	1.67E-04	2.61E-04	1.38E-03	6.82E-04	2.00E-04	3.95E-03	2.20E-03	1.28E-03	1.52E-04	1.57E-04	1.4128E-02
551354.68	4172701.6	2350.2195	3061.28121	938.36099	7317.44545	1308.85835	2014.53421	2344.87994	1758.29106	518.67517	5264.78226	4474.9555	2578.92688	0.32172	0.32846	4.56E-04	9.56E-04	2.93E-04	2.00E-03	1.68E-04	2.59E-04	1.38E-03	6.79E-04	2.00E-04	3.95E-03	2.20E-03	1.27E-03	1.51E-04	1.56E-04	1.4123E-02
551475.25	4173296.07	2899.09735	3817.35328	704.23104	4352.12077	738.45994	4438.5329	2926.41657	2299.41767	403.1734	3926.90226	2050.39805	5365.77717	0.5139	0.51818	5.63E-04	1.19E-03	2.20E-04	1.19E-03	9.49E-05	5.70E-04	1.73E-03	8.88E-04	1.56E-04	2.94E-03	1.01E-03	2.64E-03	2.41E-04	2.46E-04	1.3684E-02
551376.24	4173197.51	2630.54824	3865.99909	750.74275	5058.44436	807.56078	3868.27225	2649.53972	2282.7711	426.59426	4475.6109	2380.38938	4724.81017	0.39323	0.39613	5.10E-04	1.21E-03	2.34E-04	1.38E-03	1.04E-04	4.97E-04	1.56E-03	8.81E-04	1.65E-04	3.36E-03	1.17E-03	2.33E-03	1.84E-04	1.88E-04	1.3773E-02
551311.62	4173045.89	2557.30059	3933.11931	752.66335	5690.32262	867.83181	3141.67981	2569.23697	2324.74644	426.51513	4785.85893	2873.9612	3927.91439	0.34759	0.35211	4.96E-04	1.23E-03	2.35E-04	1.55E-03	1.11E-04	4.04E-04	1.52E-03	8.97E-04	1.65E-04	3.59E-03	1.42E-03	1.93E-03	1.63E-04	1.67E-04	1.3877E-02
551549.44	4173341.59	3104.84781	3718.70222	696.403	3871.02339	684.27798	4797.84884	3144.5851	2239.74995	399.4051	3618.27782	1792.63789	5757.01922	0.71954	0.72633	6.03E-04	1.16E-03	2.18E-04	1.06E-03	8.79E-05	6.16E-04	1.86E-03	8.65E-04	1.54E-04	2.71E-03	8.83E-04	2.84E-03	3.37E-04	3.44E-04	1.3732E-02
551311.5	4172827.8	2352.92239	3199.58981	901.02256	7136.24494	1150.10292	2189.36721	2348.86621	1840.77442	502.62866	5322.60186	4063.80032	2778.26333	0.3391	0.34558	4.57E-04	9.99E-04	2.81E-04	1.95E-03	1.48E-04	2.81E-04	1.39E-03	7.11E-04	1.94E-04	3.99E-03	2.00E-03	1.37E-03	1.59E-04	1.64E-04	1.4091E-02
551707.63	4172588.66	4835.96186	1996.77387	1640.97848	4518.07181	2412.44176	1357.60729	4787.40744	1185.27129	873.34544	3422.90509	4922.69487	1826.06655	0.18506	0.18804	9.38E-04	6.24E-04	5.13E-04	1.23E-03	3.10E-04	1.74E-04	2.83E-03	4.58E-04	3.37E-04	2.57E-03	2.42E-03	9.00E-04	8.67E-05	8.91E-05	1.3481E-02
551351.13	4173156.66	2570.06164	3801.47735	742.66814	5219.63122	824.1075	3725.70832	2588.81896	2240.99369	420.02674	4513.4133	2508.26658	4563.43571	0.37438	0.37765	4.99E-04	1.19E-03	2.32E-04	1.43E-03	1.06E-04	4.79E-04	1.53E-03	8.65E-04	1.62E-04	3.38E-03	1.24E-03	2.25E-03	1.75E-04	1.79E-04	1.3706E-02
551299.99	4172883.77	2390.33767	3378.04946	872.9504	6846.97452	1047.52452	2312.38162	2388.83325	1945.02625	489.3818	5356.0291	3679.93715	2932.4582	0.33868	0.34446	4.64E-04	1.06E-03	2.73E-04	1.87E-03	1.35E-04	2.97E-04	1.41E-03	7.51E-04	1.89E-04	4.02E-03	1.81E-03	1.44E-03	1.59E-04	1.63E-04	1.4039E-02
551308.4	4173036.94	2540.18284	3899.58725	753.59759	5703.0866	867.21125	3060.90229	2551.14089	2301.22308	427.18358	4798.46928	2875.73592	3832.57605	0.344	0.34856	4.93E-04	1.22E-03	2.35E-04	1.56E-03	1.11E-04	3.93E-04	1.51E-03	8.88E-04	1.65E-04	3.60E-03	1.42E-03	1.89E-03	1.61E-04	1.65E-04	1.3797E-02
551341.83	4172726.58	2317.19326	3065.37724	924.3551	7192.43221	1276.83689	2050.70616	2311.78787	1761.66827	511.4343	5196.75383	4376.87046	2615.58409	0.32423	0.33106	4.50E-04	9.57E-04	2.89E-04	1.97E-03	1.64E-04	2.63E-04	1.36E-03	6.80E-04	1.97E-04	3.90E-03	2.16E-03	1.29E-03	1.52E-04	1.57E-04	1.3980E-02
551379.33	4173206.1	2620.34206	3831.98406	743.91883	4970.54818	796.38295	3836.14437	2639.10416	2264.05889	422.70762	4428.92135	2334.45519	4686.19365	0.39055	0.39438	5.09E-04	1.20E-03	2.32E-04	1.36E-03	1.02E-04	4.93E-04	1.56E-03	8.74E-04	1.63E-04	3.32E-03	1.15E-03	2.31E-03	1.83E-04	1.87E-04	1.3635E-02
551298.28	4172979.76	2496.72452	3753.6709	800.70943	6115.20705	911.19837	2717.52956	2501.80702	2186.15971	453.86758	5113.18655	3088.97472	3424.76688	0.34058	0.34542	4.85E-04	1.17E-03	2.50E-04	1.67E-03	1.17E-04	3.49E-04	1.48E-03	8.44E-04	1.75E-04	3.83E-03	1.52E-03	1.69E-03	1.60E-04	1.64E-04	1.3905E-02
551598.7	4173361.47	3303.11953	3606.21182	696.9836	3477.91371	643.76093	4972.93647	3349.23581	2164.2264	401.72057	3323.694	1627.85276	5974.21623	1.02507	1.03902	6.41E-04	1.13E-03	2.18E-04	9.50E-04	8.27E-05	6.39E-04	1.98E-03	8.35E-04	1.55E-04	2.49E-03	8.02E-04	2.94E-03	4.80E-04	4.92E-04	1.3834E-02
551646.87	4173363.43	3656.46205	3461.0574	694.2488	3155.90708	618.86419	5070.19639	3712.71911	2058.50714	402.51571	3049.59309	1523.09571	6121.48022	2.14883	2.23647	7.10E-04	1.08E-03	2.17E-04	8.62E-04	7.95E-05	6.51E-04	2.19E-03	7.95E-04	1.55E-04	2.29E-03	7.50E-04	3.02E-03	1.01E-03	1.06E-03	1.4861E-02
551484.9	4173305.17	2897.41561	3742.12203	692.72614	4244.09429	726.08208	4436.86292	2926.27859	2253.77717	396.52489	3835.04661	1998.71399	5355.16076	0.52651	0.53086	5.62E-04	1.17E-03	2.16E-04	1.16E-03	9.33E-05	5.70E-04	1.73E-03	8.70E-04	1.53E-04	2.88E-03	9.85E-04	2.64E-03	2.47E-04	2.52E-04	1.3517E-02
551312.18	4172818.59	2331.80522	3150.16253	897.56474	7082.0139	1154.83178	2159.16937	2327.50227	1812.43692	500.35337	5255.60226	4069.31389	2740.19845	0.33518	0.34168	4.53E-04	9.84E-04	2.80E-04	1.94E-03	1.48E-04	2.77E-04	1.37E-03	7.00E-04	1.93E-04	3.94E-03	2.00E-03	1.35E-03	1.57E-04	1.62E-04	1.3958E-02
551659.73	4173361.56	3768.3411	3410.73325	691.25737	3099.79293	613.53848	5048.51712	3828.33639	2022.60331	401.31999	2978.13301	1501.61415	6105.90336	2.98095	3.12873	7.31E-04	1.07E-03	2.16E-04	8.47E-04	7.88E-05	6.49E-04	2.26E-03	7.81E-04	1.55E-04	2.23E-03	7.40E-04	3.01E-03	1.40E-03	1.48E-03	1.5643E-02
551634	4173365.3	3549.70152	3499.38149	694.53229	3205.9361	622.89331	5054.55427	3602.67278	2085.73175	402.10963	3114.22177	1541.59783	6095.18219	1.63135	1.67693	6.89E-04	1.09E-03	2.17E-04	8.76E-04	8.00E-05	6.49E-04	2.13E-03	8.05E-04	1.55E-04	2.33E-03	7.59E-04	3.00E-03	7.65E-04	7.95E-04	1.4347E-02
551365.52	4172670.68	2356.84912	2954.28098	938.6973	7243.31806	1311.94204	1923.45456	2351.59484	1698.31476	518.96932	5178.5905	4463.81888	2472.5015	0.30819	0.31444	4.57E-04	9.23E-04	2.93E-04	1.98E-03	1.69E-04	2.47E-04	1.39E-03	6.56E-04	2.00E-04	3.88E-03	2.20E-03	1.22E-03	1.44E-04	1.49E-04	1.3905E-02
551305.17	4173027.99	2523.63682	3862.73222	756.02053	5724.56408	867.92406	2983.21657	2533.56406	2275.06608	428.70577	4818.2248	2886.97755	3740.14337	0.34073	0.34532	4.90E-04	1.21E-03	2.36E-04	1.56E-03	1.12E-04	3.83E-04	1.50E-03	8.78E-04	1.65E-04	3.61E-03	1.42E-03	1.84E-03	1.60E-04	1.64E-04	1.3731E-02
551294.65	4172940.57	2442.00777	3580.46466	832.64588	6388.01676	955.6604	2511.80332	2443.81764	2071.30786	470.48038	5235.79565	3288.12581	3176.71532	0.33925	0.34459	4.74E-04	1.12E-03	2.60E-04	1.75E-03	1.23E-04	3.23E-04	1.44E-03	8.00E-04	1.82E-04	3.93E-03	1.62E-03	1.56E-03	1.59E-04	1.63E-04	1.3899E-02
551380.39	4172634.97	2419.65322	2853.5287	972.19513	7262.79401	1363.81121	1841.76547	2413.29595	1643.46612	537.63776	5138.19535	4574.66062	2375.50893	0.29922	0.30509	4.70E-04	8.91E-04	3.04E-04	1.98E-03	1.75E-04	2.37E-04	1.42E-03	6.34E-04	2.08E-04	3.85E-03	2.25E-03	1.17E-03	1.40E-04	1.45E-04	1.3888E-02
551494.56	4173314.26	2917.63871	3709.19324	687.69565	4159.86406	714.60641	4466.57899	2948.0882	2231.74221	393.65746	3778.64203	1950.71072	5385.86887	0.54309	0.547	5.66E-04	1.16E-03	2.15E-04	1.14E-03	9.18E-05	5.74E-04	1.74E-03	8.62E-04	1.52E-04	2.83E-03	9.61E-04	2.65E-03	2.55E-04	2.59E-04	1.3456E-02
551672.59	4173359.69	3888.01687	3352.89388	685.70028	3038.6441	607.00554	4995.52063	3952.30408	1980.82434	398.64052	2903.37462	1477.25965	6055.53659	4.45229	4.77234	7.55E-04	1.05E-03	2.14E-04	8.30E-04	7.80E-05	6.42E-04	2.33E-03	7.65E-04	1.54E-04	2.18E-03	7.28E-04	2.98E-03	2.09E-03	2.26E-03	1.7053E-02
551354.61	4173166.5	2550.70695	3752.58076	737.42411	5130.36098	814.04127	3704.68109	2569.35324	2212.56051	417.19285	4451.16522	2464.19791	4533.41122	0.37334	0.37651	4.95E-04	1.17E-03	2.30E-04	1.40E-03	1.05E-04	4.76E-04	1.52E-03	8.54E-04	1.61E-04	3.34E-03	1.21E-03	2.23E-03	1.75E-04	1.78E-04	1.3549E-02
551580.67	4173358.82	3189.11593	3613.87629	691.35345	3580.47992	651.41741	4842.14232	3232.32697	2172.20829	397.65707	3400.25449	1666.98338	5814.5691	0.86357	0.87274	6.19E-04	1.13E-03	2.16E-04	9.78E-04	8.37E-05	6.22E-04	1.91E-03	8.39E-04	1.54E-04	2.55E-03	8.21E-04	2.86E-03	4.05E-04	4.14E-04	1.3601E-02
551400.53	4173235.69	2652.55196	3821.1078	735.17835	4763.58292	776.25947	3876.41343	2671.53981	2271.84517	418.72351	4260.81974	2239.16825	4732.24612	0.40827	0.41174	5.15E-04	1.19E-03	2.30E-04	1.30E-03	9.97E-05	4.98E-04	1.58E-03	8.77E-04	1.62E-04	3.19E-03	1.10E-03	2.33E-03	1.91E-04	1.95E-04	1.3468E-02
551304.27	4172849.69	2337.3503	3210.53451	876.87346	6915.95719	1093.00334	2197.85434	2334.34766	1847.44513	489.99497	5251.0358	3847.92487	2788.8803	0.33199	0.33794	4.54E-04	1.00E-03	2.74E-04	1.89E-03	1.40E-04	2.82E-04	1.38E-03	7.13E-04	1.89E-04	3.94E-03	1.90E-03	1.37E-03	1.56E-04	1.60E-04	1.3845E-02
551295.06	4172970.8	2464.16694	3671.00311	801.45356	6112.12842	912.61991	2638.52855	2468.37953	2134.32143	454.06185	5090.51581	3098.86034	3328.14084	0.33582	0.34088	4.78E-04	1.15E-03	2.50E-04	1.67E-03	1.17E-04	3.39E-04	1.46E-03	8.24E-04	1.75E-04	3.82E-03	1.53E-03	1.64E-03	1.57E-04	1.62E-04	1.3759E-02
551746.97	4172609.18	4789.55099	1871.64418	1444.3401	4913.2376	2158.50182	1262.68923	4744.99708	1103.52627	773.61624	3349.58994	5055.34972	1694.34469	0.22266	0.22773	9.29E-04	5.85E-04	4.51E-04	1.34E-03	2.77E-04	1.62E-04	2.80E-03	4.26E-04	2.99E-04	2.51E-03	2.49E-03	8.35E-04	1.04E-04	1.08E-04	1.3321E-02
551558.9	4173350.5	3089.4777	3633.54171	687.39405	3735.79947	666.98485	4722.32102	3129.77505	2187.46697	394.49721	3508.02254	1733.87899	5668.77861	0.7412	0.74932	6.00E-04	1.13E-03	2.15E-04	1.02E-03	8.57E-05	6.07E-04	1.85E-03	8.44E-04	1.52E-04	2.63E-03	8.54E-04	2.79E-03	3.47E-04	3.55E-04	1.3486E-02
551312.87	4172809.38	2309.87677	3102.14332	893.23274	7016.0002	1157.63188	2129.89288	2305.37486	1785.02932	497.57487	5184.80091	4066.03678	2703.21831	0.33075	0.33724	4.48E-04	9.69E-04	2.79E-04	1.92E-03	1.49E-04	2.74E-04	1.36E-03	6.89E-04	1.92E-04	3.89E-03	2.00E-03	1.33E-03	1.55E-04	1.60E-04	1.3814E-02
551685.45	4173357.82	4003.34651	3283.68923	677.2504	2972.50861	599.19003	4905.82291	4072.27028	1932.22226	394.21078	2824.68303	1450.4781	5961.90558	7.64129	8.53488	7.77E-04	1.03E-03	2.12E-04	8.12E-04	7.70E-05	6.30E-04	2.40E-03	7.46E-04	1.52E-04	2.12E-03	7.15E-04	2.94E-03	3.58E-03	4.04E-03	2.0231E-02
551301.92	4173018.96	2499.60894	3808.61512	756.59695	5727.25547	866.69511	2900.40173	2508.52122	2238.64341	429.09048	4821.30485	2891.03065	3640.43932	0.33641	0.34108	4.85E-04	1.19E-03	2.36E-04	1.56E-03	1.11E-04	3.73E-04	1.48E-03	8.64E-04	1.66E-04	3.61E-03	1.42E-03	1.79E-03	1.58E-04	1.62E-04	1.3622E-02
551382.42	4173214.68	2601.13003	3781.15299	735.67577	4870.72846	785.36861	3787.92522	2619.61728	2236.60115	418.59801	4330.18963	2291.49281	4627.67218	0.38913	0.39246	5.05E-04	1.18E-03	2.30E-04	1.33E-03	1.01E-04	4.87E-04	1.55E-03	8.63E-04	1.62E-04	3.25E-03	1.13E-03	2.28E-03	1.82E-04	1.86E-04	1.3428E-02
551504.21	4173323.36	2927.96599	3665.14381	681.90944	4065.24097	702.04061	4470.08062	2960.00424	2203.87543	390.36255	3712.15538	1900.40146	5386.03803	0.55914	0.56312	5.68E-04	1.14E-03	2.13E-04	1.11E-03	9.02E-05	5.74E-04	1.75E-03	8.51E-04	1.51E-04	2.78E-03	9.36E-04	2.65E-03	2.62E-04	2.67E-04	1.3351E-02
551316.02	4172786.87	2291.50641	3056.68727	898.38171	7029.55539	1187.32383	2096.2764	2286.48	1758.57839	499.38494	5138.71327	4152.61817	2661.68197	0.32856	0.33524	4.45E-04	9.55E-04	2.81E-04	1.92E-03	1.53E-04	2.69E-04	1.35E-03	6.79E-04	1.93E-04	3.85E-03	2.05E-03	1.31E-03	1.54E-04	1.59E-04	1.3766E-02
551357.7	4173175.09	2538.68785	3719.89315	733.65043	5056.19946	805.60689	3686.80068	2557.17823	2193.67511	415.24803	4403.27639	2424.28963	4509.06352	0.37299	0.37606	4.93E-04	1.16E-03	2.29E-04	1.38E-03	1.03E-04	4.74E-04	1.51E-03	8.47E-04	1.60E-04	3.30E-03	1.19E-03	2.22E-03	1.75E-04	1.78E-04	1.3429E-02
551314.14	4172795.64	2293.64372	3064.71283	894.42594	7005.00759	1172.99393	2104.03178	2288.81708	1763.37597	497.60092	5141.48019	4108.81306	2670.94895	0.32852	0.33511	4.45E-04	9.57E-04	2.79E-04	1.91E-03	1.51E-04	2.70E-04	1.35E-03	6.81E-04	1.92E-04	3.85E-03	2.02E-03	1.32E-03	1.54E-04	1.59E-04	1.3748E-02
551298.31	4172873.53	2344.83554	3273.47814	861.58275	6750.85653	1045.65098	2242.91178	2342.9671	1884.4097	482.46192	5234.50043	3666.49494	2845.35096	0.33022	0.33588	4.55E-04	1.02E-03	2.69E-04	1.84E-03	1.34E-04	2.88E-04	1.38E-03	7.27E-04	1.86E-04	3.92E-03	1.81E-03	1.40E-03	1.55E-04	1.59E-04	1.3756E-02
551337.54	4172734.91	2284.92218	3021.48263	906.79308	7010.14081	1243.36428	2039.43061	2279.71792	1737.6699	502.08994	5085.34148	4252.4665	2598.04652	0.31786	0.32443	4.43E-04	9.44E-04	2.83E-04	1.92E-03	1.60E-04	2.62E-04	1.35E-03	6.71E-04	1.94E-04	3.81E-03	2.09E-03	1.28E-03	1.49E-04	1.54E-04	1.3708E-02
551698.32	4173355.95	4142.12505	3223.92509	667.15803	2904.73341	590.72466	4815.9376	4216.86614	1886.92317	388.81375	2753.35576	1420.08169	5872.29975	8.8191	13.39336	8.04E-04	1.01E-03	2.08E-04	7.94E-04	7.59E-05	6.19E-04	2.49E-03	7.28E-04	1.50E-04	2.06E-03	7.00E-04	2.89E-03	4.13E-03	6.35E-03	2.3013E-02
551333.26	4172743.24	2275.11944	3011.33376	901.50975	6964.41179	1229.38478	2043.75603	2269.92573	1732.27369	499.44796	5057.63665	4213.50521	2601.12685	0.31775	0.3243	4.42E-04	9.41E-04	2.82E-04	1.90E-03	1.58E-04	2.63E-04	1.34E-03	6.69E-04	1.93E-04	3.79E-03	2.08E-03	1.28E-03	1.49E-04	1.54E-04	1.3640E-02
551455.56	4173289.72	2777.33895	3715.27633	694.37977	4323.52332	731.07128	4149.40614	2801.15967	2236.78603	397.38551	3880.74406	2055.54206	5034.28107	0.46662	0.46973	5.39E-04	1.16E-03	2.17E-04	1.18E-03	9.39E-05	5.33E-04	1.65E-03	8.63E-04	1.53E-04	2.91E-03	1.01E-03	2.48E-03	2.19E-04	2.23E-04	1.3238E-02
551360.79	4173183.67	2532.29477	3697.87143	730.52954	4985.98158	797.5851	3671.53048	2550.6018	2180.95136	413.73199	4361.67873	2382.38962	4489.42936	0.37277	0.37627	4.91E-04	1.16E-03	2.28E-04	1.36E-03	1.02E-04	4.72E-04	1.51E-03	8.42E-04	1.60E-04	3.27E-03	1.17E-03	2.21E-03	1.75E-04	1.78E-04	1.3326E-02
551685.07	4172569.12	4508.28532	2005.039	1627.20696	4356.60719	2422.0862	1366.90347	4463.82066	1193.24043	867.12414	3417.5994	4722.19049	1836.25668	0.16628	0.16808	8.75E-04	6.26E-04	5.08E-04	1.19E-03	3.11E-04	1.76E-04	2.64E-03	4.61E-04	3.35E-04	2.56E-03	2.33E-03	9.05E-04	7.79E-05	7.97E-05	1.3067E-02
551298.69	4173009.99	2475.27309	3750.53111	757.94253	5733.90924	866.36562	2820.75455	2483.20128	2199.75962	429.87311	4825.12126	2896.43171	3544.14882	0.33276	0.33727	4.80E-04	1.17E-03	2.37E-04	1.57E-03	1.11E-04	3.62E-04	1.47E-03	8.49E-04	1.66E-04	3.62E-03	1.43E-03	1.75E-03	1.56E-04	1.60E-04	1.3516E-02
551766.78	4172619.45	4551.80599	1802.32835	1326.68304	5261.69247	2097.51776	1205.70019	4512.70008	1058.28836	713.18093	3375.16326	5254.79213	1614.23457	0.24321	0.24902	8.83E-04	5.63E-04	4.14E-04	1.44E-03	2.69E-04	1.55E-04	2.66E-03	4.09E-04	2.75E-04	2.53E-03	2.59E-03	7.95E-04	1.14E-04	1.18E-04	1.3217E-02
551359.34	4172677.58	2311.30357	2925.72258	916.62022	7062.19701	1277.58026	1916.70332	2306.33175	1681.75563	506.80238	5075.47762	4332.50482	2460.47624	0.30317	0.30927	4.49E-04	9.14E-04	2.86E-04	1.93E-03	1.64E-04	2.46E-04	1.36E-03	6.49E-04	1.96E-04	3.81E-03	2.13E-03	1.21E-03	1.42E-04	1.47E-04	1.3635E-02
551291.83	4172961.83	2428.18362	3583.89911	800.55147	6094.21721	913.15799	2559.85334	2431.60807	2080.18524	453.21653	5052.65753	3105.21368	3231.91515	0.3309	0.33526	4.71E-04	1.12E-03	2.50E-04	1.67E-03	1.17E-04	3.29E-04	1.44E-03	8.03E-04	1.75E-04	3.79E-03	1.53E-03	1.59E-03	1.55E-04	1.59E-04	1.3589E-02
551291.42	4172931.6	2392.77804	3471.75319	824.73028	6305.81631	950.31113	2428.48643	2394.03541	2007.03594	465.48234	5143.36386	3271.87943	3073.13924	0.33079	0.336	4.64E-04	1.08E-03	2.58E-04	1.72E-03	1.22E-04	3.12E-04	1.41E-03	7.75E-04	1.80E-04	3.86E-03	1.61E-03	1.51E-03	1.55E-04	1.59E-04	1.3627E-02
551608.28	4173369.04	3295.07787	3487.47321	683.40898	3334.79943	625.61644	4839.96946	3341.43602	2088.37571	394.31597	3193.43532	1571.07697	5825.50846	1.07993	1.09726	6.39E-04	1.09E-03	2.13E-04	9.11E-04	8.04E-05	6.22E-04	1.97E-03	8.06E-04	1.52E-04	2.39E-03	7.74E-04	2.87E-03	5.06E-04	5.20E-04	1.3550E-02
551751.51	4173330.29	4648.76558	3035.38432	640.67515	2757.32967	575.44878	4557.23751	4748.57122	1763.20855	374.19864	2563.37859	1367.27012	5579.92799	2.51468	2.31116	9.02E-04	9.48E-04	2.00E-04	7.53E-04	7.39E-05	5.85E-04	2.80E-03	6.81E-04	1.44E-04	1.92E-03	6.74E-04	2.75E-03	1.18E-03	1.10E-03	1.4709E-02
551315.25	4173085.04	2484.17811	3739.27901	715.81598	5299.36951	829.00346	3251.04169	2499.20165	2214.56665	405.00021	4452.64687	2662.16873	4036.23898	0.33815	0.34205	4.82E-04	1.17E-03	2.24E-04	1.45E-03	1.07E-04	4.18E-04	1.48E-03	8.55E-04	1.56E-04	3.34E-03	1.31E-03	1.99E-03	1.58E-04	1.62E-04	1.3291E-02
551318.48	4173093.99	2481.85135	3721.84354	713.68385	5261.8713	826.5088	3302.32196	2497.57896	2203.93386	403.67476	4424.08126	2638.97572	4091.81208	0.34128	0.34478	4.82E-04	1.16E-03	2.23E-04	1.44E-03	1.06E-04	4.24E-04	1.47E-03	8.51E-04	1.56E-04	3.32E-03	1.30E-03	2.02E-03	1.60E-04	1.63E-04	1.3272E-02
551385.51	4173223.27	2577.66176	3721.743	726.89995	4765.68222	773.91854	3731.3727	2595.86818	2204.84724	413.25285	4240.2951	2249.48463	4559.07507	0.38876	0.39151	5.00E-04	1.16E-03	2.27E-04	1.30E-03	9.94E-05	4.79E-04	1.53E-03	8.51E-04	1.60E-04	3.18E-03	1.11E-03	2.25E-03	1.82E-04	1.86E-04	1.3214E-02
551363.88	4173192.26	2524.45945	3672.8841	726.41814	4912.03578	789.04519	3650.143	2542.55772	2166.82626	411.65381	4313.71458	2340.39418	4462.92765	0.37244	0.37523	4.90E-04	1.15E-03	2.27E-04	1.34E-03	1.01E-04	4.69E-04	1.50E-03	8.36E-04	1.59E-04	3.23E-03	1.15E-03	2.20E-03	1.75E-04	1.78E-04	1.3210E-02
551302.59	4172839.4	2292.93818	3113.89741	864.31948	6782.68353	1088.68071	2138.00355	2289.66427	1792.30615	482.66489	5116.9247	3815.34595	2713.14394	0.3238	0.32967	4.45E-04	9.73E-04	2.70E-04	1.85E-03	1.40E-04	2.75E-04	1.35E-03	6.92E-04	1.86E-04	3.84E-03	1.88E-03	1.34E-03	1.52E-04	1.56E-04	1.3545E-02
551295.47	4173001.03	2449.30543	3686.71605	759.28207	5739.08621	866.30888	2742.61101	2456.28826	2157.65563	430.59882	4824.32019	2901.90853	3449.33042	0.32893	0.33368	4.75E-04	1.15E-03	2.37E-04	1.57E-03	1.11E-04	3.52E-04	1.45E-03	8.33E-04	1.66E-04	3.62E-03	1.43E-03	1.70E-03	1.54E-04	1.58E-04	1.3403E-02
551312.03	4173076.09	2475.97751	3735.48704	715.13269	5311.94947	828.61824	3184.79479	2490.20787	2212.79443	404.74164	4459.56299	2678.78767	3961.31058	0.33562	0.33923	4.80E-04	1.17E-03	2.23E-04	1.45E-03	1.06E-04	4.09E-04	1.47E-03	8.54E-04	1.56E-04	3.34E-03	1.32E-03	1.95E-03	1.57E-04	1.61E-04	1.3250E-02
551513.87	4173332.45	2905.90141	3576.84878	670.91759	3945.69728	694.25563	4407.16764	2939.12164	2151.62712	384.04562	3611.99638	1845.51445	5305.39608	0.57196	0.57669	5.64E-04	1.12E-03	2.10E-04	1.08E-03	8.92E-05	5.66E-04	1.74E-03	8.31E-04	1.48E-04	2.71E-03	9.09E-04	2.61E-03	2.68E-04	2.73E-04	1.3110E-02
551324.69	4172759.9	2255.37176	2984.64819	889.2813	6864.875	1197.1812	2044.45382	2250.28139	1717.74884	493.30544	5000.90779	4122.715	2598.14826	0.31646	0.3229	4.38E-04	9.32E-04	2.78E-04	1.88E-03	1.54E-04	2.63E-04	1.33E-03	6.63E-04	1.90E-04	3.75E-03	2.03E-03	1.28E-03	1.48E-04	1.53E-04	1.3483E-02
551704.31	4172579.36	4620.982	1939.76609	1571.85901	4314.24279	2301.39458	1323.77958	4575.65447	1151.51856	837.66814	3305.06358	4652.18626	1779.19472	0.17355	0.17607	8.97E-04	6.06E-04	4.91E-04	1.18E-03	2.96E-04	1.70E-04	2.70E-03	4.45E-04	3.23E-04	2.48E-03	2.29E-03	8.76E-04	8.13E-05	8.34E-05	1.2918E-02
551465.01	4173298.62	2772.39506	3636.40728	680.77481	4217.04599	720.12396	4151.14404	2797.56653	2190.93593	389.59662	3781.80012	2007.66688	5027.10248	0.47551	0.47924	5.38E-04	1.14E-03	2.13E-04	1.15E-03	9.25E-05	5.33E-04	1.65E-03	8.46E-04	1.50E-04	2.84E-03	9.89E-04	2.48E-03	2.23E-04	2.27E-04	1.3063E-02
551318.14	4172777	2255.75737	2990.22257	884.26128	6848.77988	1174.37294	2056.89281	2250.80885	1721.15702	491.22402	5008.23186	4071.90813	2611.85646	0.3184	0.32481	4.38E-04	9.34E-04	2.76E-04	1.87E-03	1.51E-04	2.64E-04	1.33E-03	6.64E-04	1.90E-04	3.75E-03	2.01E-03	1.29E-03	1.49E-04	1.54E-04	1.3467E-02
551568.36	4173359.41	3062.58	3530.74819	676.15599	3594.61871	648.95597	4619.91061	3103.03934	2124.74818	388.30416	3386.41526	1674.74832	5549.18913	0.76139	0.76969	5.94E-04	1.10E-03	2.11E-04	9.82E-04	8.34E-05	5.94E-04	1.83E-03	8.20E-04	1.50E-04	2.54E-03	8.25E-04	2.73E-03	3.57E-04	3.65E-04	1.3188E-02
551370.7	4172641.37	2338.10371	2801.96897	930.62493	6994.43678	1299.18885	1819.27383	2332.57053	1613.28083	514.75495	4980.286	4362.24101	2344.294	0.29038	0.29603	4.54E-04	8.75E-04	2.91E-04	1.91E-03	1.67E-04	2.34E-04	1.38E-03	6.23E-04	1.99E-04	3.73E-03	2.15E-03	1.15E-03	1.36E-04	1.40E-04	1.3444E-02
551308.8	4173067.14	2465.56402	3725.38706	714.64053	5321.52336	827.70869	3114.65925	2478.93893	2206.49629	404.6094	4466.57419	2694.25409	3881.03346	0.33254	0.33658	4.78E-04	1.16E-03	2.23E-04	1.45E-03	1.06E-04	4.00E-04	1.46E-03	8.52E-04	1.56E-04	3.35E-03	1.33E-03	1.91E-03	1.56E-04	1.60E-04	1.3200E-02
551405.96	4173248.99	2612.31147	3707.58281	715.65795	4590.37394	754.10741	3781.69524	2631.06353	2211.58768	407.99094	4095.49886	2172.5758	4616.7844	0.40298	0.40629	5.07E-04	1.16E-03	2.24E-04	1.25E-03	9.69E-05	4.86E-04	1.55E-03	8.54E-04	1.57E-04	3.07E-03	1.07E-03	2.27E-03	1.89E-04	1.93E-04	1.3086E-02
551546.13	4173350.65	2981.5459	3541.18282	671.57372	3734.38789	663.00405	4507.64798	3019.26568	2131.49816	384.99458	3478.7312	1737.63709	5416.74575	0.66505	0.67102	5.79E-04	1.11E-03	2.10E-04	1.02E-03	8.52E-05	5.79E-04	1.78E-03	8.23E-04	1.49E-04	2.61E-03	8.56E-04	2.67E-03	3.12E-04	3.18E-04	1.3095E-02
551327.05	4173118.09	2458.45123	3638.63803	706.19867	5130.81922	815.54779	3396.17381	2475.55175	2152.82072	399.1271	4329.83203	2564.42992	4185.93055	0.34387	0.34757	4.77E-04	1.14E-03	2.21E-04	1.40E-03	1.05E-04	4.36E-04	1.46E-03	8.31E-04	1.54E-04	3.25E-03	1.26E-03	2.06E-03	1.61E-04	1.65E-04	1.3121E-02
551296.64	4172863.28	2297.45696	3167.59691	848.54293	6630.28234	1041.11648	2174.67227	2295.27273	1823.62524	474.71202	5101.41385	3639.45999	2759.33068	0.3212	0.32672	4.46E-04	9.89E-04	2.65E-04	1.81E-03	1.34E-04	2.79E-04	1.35E-03	7.04E-04	1.83E-04	3.82E-03	1.79E-03	1.36E-03	1.51E-04	1.55E-04	1.3449E-02
551353.15	4172684.48	2271.2714	2899.02142	897.89516	6900.42551	1248.38155	1911.25824	2266.48097	1666.42502	496.48373	4981.54956	4219.47154	2450.05587	0.29893	0.30493	4.41E-04	9.06E-04	2.80E-04	1.89E-03	1.60E-04	2.46E-04	1.34E-03	6.43E-04	1.92E-04	3.73E-03	2.08E-03	1.21E-03	1.40E-04	1.45E-04	1.3396E-02
551320.41	4172768.23	2245.27799	2969.92363	882.17749	6809.73907	1179.20959	2041.27031	2240.2911	1709.54399	489.72077	4971.70407	4070.15803	2592.79519	0.31528	0.32164	4.36E-04	9.28E-04	2.76E-04	1.86E-03	1.51E-04	2.62E-04	1.32E-03	6.60E-04	1.89E-04	3.73E-03	2.00E-03	1.28E-03	1.48E-04	1.52E-04	1.3394E-02
551332.97	4173134.83	2458.33389	3612.42813	708.24469	5074.34181	807.23986	3454.42226	2475.92582	2133.77233	400.19357	4313.83467	2515.84372	4245.78712	0.34761	0.35121	4.77E-04	1.13E-03	2.21E-04	1.39E-03	1.04E-04	4.44E-04	1.46E-03	8.24E-04	1.54E-04	3.23E-03	1.24E-03	2.09E-03	1.63E-04	1.66E-04	1.3095E-02
551292.24	4172992.06	2425.26641	3623.87499	762.11113	5756.48523	868.43548	2669.14253	2431.28306	2116.45022	432.10208	4828.55339	2914.01706	3360.13112	0.32524	0.3296	4.71E-04	1.13E-03	2.38E-04	1.57E-03	1.12E-04	3.43E-04	1.44E-03	8.17E-04	1.67E-04	3.62E-03	1.44E-03	1.66E-03	1.52E-04	1.56E-04	1.3306E-02
551366.97	4173200.84	2513.88082	3642.23648	721.14028	4833.19618	779.41275	3621.49026	2531.73751	2149.91251	408.9215	4257.91048	2298.95334	4427.92021	0.37141	0.37414	4.88E-04	1.14E-03	2.25E-04	1.32E-03	1.00E-04	4.65E-04	1.49E-03	8.30E-04	1.58E-04	3.19E-03	1.13E-03	2.18E-03	1.74E-04	1.77E-04	1.3076E-02
551288.61	4172952.87	2385.56589	3487.56926	796.00137	6042.82856	909.99963	2479.04705	2388.3006	2021.49542	450.31222	4988.28962	3097.96141	3132.6229	0.32507	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551341.06	4172706.98	2247.14458	2927.67961	890.09469	6847.92934	1233.05593	1953.88696	2242.2039	1682.84052	492.27238	4962.13825	4174.42282	2496.17223	0.30425	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
551335.93	4173143.2	2458.38095	3600.92083	709.34644	5041.32432	802.53939	3474.63584	2476.09315	2125.22296	400.82435	4305.0029	2482.43542	4266.07365	0.34916	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

551451.49	4173298.06	2654.72251	3492.41562	663.17047	4117.19012	698.96251	3887.4072	2677.50431	2104.22902	379.39725
551292.65	4173022.29	2375.14689	3557.67906	713.10789	5323.53719	818.16026	2738.74457	2383.95059	2093.15693	404.40052
551282.56	4172965.17	2328.97798	3392.08529	761.09332	5720.83438	868.33536	2444.91097	2332.5838	1970.38823	430.92368
551351.53	4173187.01	2410.41732	3464.97399	697.56245	4748.58748	766.38127	3428.51742	2427.67017	2044.06005	394.73159
551284.64	4172910.4	2270.79747	3211.01046	797.39296	6062.20476	928.6158	2237.55737	2271.08321	1854.33767	448.77415
551303.1	4172808.44	2198.28044	2909.79411	840.08491	6475.15492	1083.43143	2014.99662	2194.34546	1675.97829	468.17831
551289.43	4173013.33	2361.6087	3521.03985	717.76255	5359.34329	821.34872	2674.47499	2369.47782	2066.95257	407.05675
551376.24	4173226.6	2459.41738	3505.5517	698.02191	4564.03783	746.43973	3488.34823	2476.46846	2076.50719	396.50844
551763.31	4172610.15	4370.73132	1740.50486	1270.432	4821.78136	1943.84649	1172.82628	4333.89242	1023.00535	683.58395
551655.39	4173380.11	3491.54696	3161.02862	649.90589	2916.16273	580.26366	4536.60607	3545.04248	1873.01873	376.93176
551293.3	4172842.79	2208.39511	2973.49997	823.08322	6376.19446	1031.08591	2052.45813	2205.64916	1712.59232	459.8461
551599.09	4173379.34	3084.40313	3306.06661	654.35932	3244.23887	606.54683	4459.59296	3126.37413	1982.35481	376.94152
551642.26	4173382.02	3379.90905	3196.90656	651.72761	2965.4744	584.80357	4536.98996	3429.92449	1900.25253	377.43433
551461.03	4173307.04	2664.73468	3443.93195	653.72746	4036.72626	689.86332	3913.26717	2688.7134	2074.64091	373.98808
551512.25	4173343.11	2786.40166	3381.24025	644.00329	3773.44024	668.99039	4131.67171	2818.30203	2033.26599	368.47659
551319.54	4172748.83	2168.8702	2838.43708	849.53307	6461.06005	1146.32454	1953.91632	2164.18009	1634.41297	471.11751
551668.51	4173378.2	3599.49522	3110.74847	645.15756	2860.92555	574.41806	4497.24764	3656.74465	1836.85307	374.67411
551302.76	4173079.42	2370.55975	3517.73184	683.09328	5023.01492	792.48616	3013.64472	2384.19959	2083.4619	386.56885
551736.9	4173350.34	4257.27543	2906.84395	620.25596	2673.38276	557.03146	4273.88359	4342.22393	1692.234	361.83051
551305.99	4173088.38	2367.05733	3500.88529	679.94717	4984.76957	790.0309	3060.73955	2381.42751	2073.97243	384.66404
551565.25	4173368.66	2918.31463	3345.22569	649.6188	3466.3153	628.63789	4308.64416	2956.29358	2013.70007	372.78563
551756.95	4173338.46	4411.60742	2852.45802	611.1526	2633.08611	552.89478	4203.16671	4504.94093	1658.54629	356.67201
551354.62	4173195.59	2397.51528	3433.31876	693.13928	4676.85508	757.79163	3400.31461	2414.5456	2026.44801	392.41021
551345.47	4172678.32	2187.59509	2771.91781	858.02785	6516.70162	1188.15424	1839.32189	2183.20918	1594.17572	474.59626
551363.86	4172634.32	2246.2089	2671.19594	885.09186	6567.91337	1228.21002	1746.72357	2241.23294	1538.89532	489.81733
551306.29	4172785.36	2168.71348	2846.35397	838.59402	6416.74356	1100.56094	1974.08296	2164.3554	1639.57821	466.42008
551286.2	4173004.36	2338.49988	3464.63922	718.95187	5364.30575	821.00626	2603.10639	2345.468	2029.46542	407.70594
551315.24	4172757.2	2157.9732	2821.5891	842.67994	6405.39566	1129.66875	1949.98354	2153.35491	1625.0509	467.62331
551701.81	4172570.12	4371.44783	1860.25561	1476.34925	4053.89661	2140.26148	1276.87471	4330.11422	1104.04437	788.46306
551309.21	4173097.33	2353.40446	3463.95098	674.20725	4924.4916	785.11444	3093.15483	2368.42205	2052.65755	381.29127
551720.56	4173360.82	4081.83898	2933.13745	623.18487	2692.72045	557.22489	4292.37101	4158.88357	1710.62492	363.2905

551667.95	4173396.21	3348.24162	2869.04975	605.89879	2682.9253	542.573	4039.95429	3399.92044	1693.44097	351.56892
551495.58	4173351.78	2570.83245	3088.16728	601.327	3569.68124	633.69637	3682.93182	2598.8634	1856.31143	343.70576
551629.05	4173401.87	3056.93375	2965.5894	611.72921	2816.11149	555.23525	4050.6441	3099.59206	1765.59396	353.49286
551283.82	4173055.91	2210.85211	3231.20982	640.83686	4672.51237	742.89869	2647.12722	2221.79122	1912.49533	363.08934
551755.08	4173356.66	4043.43383	2641.59723	575.97477	2483.09303	523.85823	3791.28871	4125.11369	1537.66803	335.73508
551725.69	4173374.32	3824.2668	2705.52153	586.10521	2531.38811	528.08613	3866.62625	3895.15292	1578.45966	341.36359
551270.13	4172881.85	2086.94084	2833.85117	744.8262	5606.57048	894.10164	1978.71879	2086.3056	1635.28249	417.52501
551293.5	4173082.76	2204.57733	3202.78515	628.62542	4561.99213	735.59845	2781.91215	2217.82156	1900.44012	355.7836
551443.53	4173314.93	2457.014	3140.43267	611.96256	3771.91004	649.91891	3471.88172	2477.77091	1892.13612	349.89922
551301.45	4172762.9	2035.75788	2619.95042	781.70419	5820.8161	1034.48743	1836.05675	2031.83911	1510.80869	434.33486
551296.72	4173091.71	2200.30498	3184.75111	625.77169	4531.78645	734.11032	2821.96187	2214.1919	1890.01211	354.01652
551537.32	4173378.91	2650.82523	3072.78694	603.94549	3353.11519	616.74027	3775.71311	2683.26084	1846.45275	345.82329
551559.49	4173387.61	2705.57402	3063.34188	607.34439	3241.23805	591.59962	3847.42692	2739.75377	1841.27551	348.26877
551264.03	4172971.84	2159.52471	3068.8141	696.49157	5121.61897	795.66143	2246.91178	2163.28702	1785.45397	394.31835
551282.63	4172818.65	2049.12806	2673.04538	765.28014	5779.26688	973.82752	1866.55711	2046.21565	1541.04088	427.0826
551287.05	4173064.86	2201.69108	3212.44931	632.85586	4604.96554	736.4972	2685.06924	2213.48561	1904.01014	358.44856
551265.97	4172916.7	2109.10096	2924.35549	728.54731	5407.95338	846.82902	2067.76677	2109.93875	1691.62211	410.25886
551280.6	4173046.95	2199.89464	3212.17904	641.86923	4680.92649	741.97856	2588.77098	2210.00571	1898.72886	363.77172
551680.91	4173394.32	3431.85693	2811.53876	598.82874	2628.57071	536.05441	3972.84717	3486.83541	1654.36259	347.83185
551330.11	4172665.99	2043.14775	2555.67865	791.04925	5889.22521	1088.19802	1714.34081	2039.37713	1470.97235	437.77638
551505.2	4173360.84	2574.48508	3060.34159	598.0638	3498.62377	626.5161	3671.19328	2603.58631	1838.99596	341.91226
551277.38	4173038	2194.36299	3199.25793	646.12989	4715.2968	744.53724	2537.17193	2203.63083	1887.7801	366.26252
551274.12	4173028.96	2189.91913	3184.99353	652.00044	4762.19672	749.05009	2487.55783	2198.29934	1875.52111	369.61851
551616.08	4173403.75	2948.28924	2963.20223	607.85441	2896.34781	556.83688	3980.57921	2988.22853	1768.7178	350.68318
551376.41	4173254.79	2288.94348	3161.37152	644.10651	4092.98738	688.49308	3133.0686	2304.32212	1881.83283	366.2192
551348.44	4173207.51	2210.72616	3087.6439	643.44761	4278.51816	715.75507	3068.90603	2226.42234	1828.93152	363.74975
551347.13	4172633.8	2079.72969	2487.89933	803.80306	5898.92652	1103.44695	1650.84997	2075.89829	1433.92921	445.1798
551263.62	4172941.61	2122.77673	2976.31569	711.85849	5241.06826	816.81582	2135.53996	2124.83779	1725.4696	402.07788
551299.95	4173100.67	2183.58232	3143.57837	619.20687	4469.96429	728.78756	2845.41649	2198.09065	1865.97956	350.18225
551270.89	4173020	2179.94909	3158.42495	656.47779	4796.24234	752.30843	2434.58509	2187.49699	1856.08491	372.16787

551249.79	4172877.94	1913.78359	2534.02838	675.44888	4969.47505	814.16962	1789.19945	1913.46562	1463.96593	378.48486	3912.24688	2715.96142	2270.46271	0.24307	0.24666	3.71E-04	7.92E-04	2.11E-04	1.36E-03	1.05E-04	2.30E-04	1.13E-03	5.65E-04	1.46E-04	2.93E-03	1.34E-03	1.12E-03	1.14E-04	1.17E-04	1.0527E-02
551540.53	4173406.29	2430.88529	2747.55465	556.52812	3038.73009	569.54225	3318.62984	2460.17771	1650.02095	318.53534	2797.84432	1447.5983	4014.16901	0.46478	0.46557	4.72E-04	8.58E-04	1.74E-04	8.30E-04	7.32E-05	4.26E-04	1.45E-03	6.37E-04	1.23E-04	2.10E-03	7.13E-04	1.98E-03	2.18E-04	2.21E-04	1.0272E-02
551278.19	4173098.39	2014.75618	2829.52446	569.80584	4049.84717	669.93322	2527.12551	2027.51383	1678.66772	322.32044	3371.48571	2137.86824	3136.6243	0.2621	0.26472	3.91E-04	8.84E-04	1.78E-04	1.11E-03	8.61E-05	3.25E-04	1.20E-03	6.48E-04	1.24E-04	2.53E-03	1.05E-03	1.55E-03	1.23E-04	1.25E-04	1.0313E-02
551282.49	4172757.58	1873.74612	2359.40735	707.65229	5134.22369	929.88865	1675.44105	1870.53265	1362.2339	393.41656	3830.98178	3058.05896	2126.34608	0.23715	0.24124	3.64E-04	7.37E-04	2.21E-04	1.40E-03	1.19E-04	2.15E-04	1.10E-03	5.26E-04	1.52E-04	2.87E-03	1.51E-03	1.05E-03	1.11E-04	1.14E-04	1.0493E-02
551311.03	4173161.41	1993.83764	2731.92099	569.34785	3957.41624	675.00027	2713.88477	2008.99558	1619.99785	321.23225	3301.5036	2088.47049	3325.89517	0.27767	0.28034	3.87E-04	8.53E-04	1.78E-04	1.08E-03	8.67E-05	3.49E-04	1.19E-03	6.25E-04	1.24E-04	2.48E-03	1.03E-03	1.64E-03	1.30E-04	1.33E-04	1.0275E-02
551370.83	4173266.98	2089.26529	2811.62404	592.22219	3708.68224	640.30462	2787.1097	2103.2342	1683.46291	336.3796	3243.44824	1883.45976	3410.72748	0.30409	0.30584	4.05E-04	8.78E-04	1.85E-04	1.01E-03	8.23E-05	3.58E-04	1.24E-03	6.50E-04	1.30E-04	2.43E-03	9.28E-04	1.68E-03	1.43E-04	1.45E-04	1.0271E-02
551509.47	4173389.22	2368.36878	2735.00786	550.85725	3165.25414	578.46346	3237.68738	2395.62233	1643.001	314.7477	2860.69187	1523.06538	3916.71673	0.41867	0.41983	4.60E-04	8.54E-04	1.72E-04	8.65E-04	7.43E-05	4.16E-04	1.41E-03	6.34E-04	1.22E-04	2.14E-03	7.50E-04	1.93E-03	1.96E-04	1.99E-04	1.0230E-02
551245.91	4173008.74	2002.01411	2801.74373	612.92638	4392.25207	700.95324	2139.33276	2007.73799	1641.72163	347.28583	3683.02768	2268.05235	2691.6821	0.24807	0.2512	3.89E-04	8.75E-04	1.91E-04	1.20E-03	9.01E-05	2.75E-04	1.19E-03	6.34E-04	1.34E-04	2.76E-03	1.12E-03	1.33E-03	1.16E-04	1.19E-04	1.0413E-02
551306.44	4172668.8	1869.37981	2329.27189	711.61489	5168.67215	968.78662	1598.88355	1866.32365	1342.52943	394.09129	3829.05781	3131.33215	2041.96327	0.2267	0.23067	3.63E-04	7.28E-04	2.22E-04	1.41E-03	1.24E-04	2.05E-04	1.10E-03	5.18E-04	1.52E-04	2.87E-03	1.54E-03	1.01E-03	1.06E-04	1.09E-04	1.0461E-02
551243.89	4172902.11	1919.53881	2572.26097	665.89515	4853.3228	787.95961	1830.54935	1920.01261	1488.04369	374.03347	3882.84344	2618.92209	2320.77184	0.24357	0.24706	3.73E-04	8.03E-04	2.08E-04	1.33E-03	1.01E-04	2.35E-04	1.13E-03	5.74E-04	1.44E-04	2.91E-03	1.29E-03	1.14E-03	1.14E-04	1.17E-04	1.0474E-02
551281.42	4173107.34	2005.18779	2803.39453	566.20073	4016.03046	667.60499	2550.83841	2018.45035	1663.22926	320.16358	3338.42971	2124.25788	3159.97031	0.26283	0.2654	3.89E-04	8.76E-04	1.77E-04	1.10E-03	8.58E-05	3.28E-04	1.19E-03	6.42E-04	1.24E-04	2.50E-03	1.05E-03	1.56E-03	1.23E-04	1.26E-04	1.0264E-02
551294.62	4172712.89	1860.9275	2342.81337	707.77355	5114.18722	952.0849	1646.86488	1857.72775	1351.97506	392.47966	3801.82997	3088.22162	2093.97128	0.23142	0.23548	3.61E-04	7.32E-04	2.21E-04	1.40E-03	1.22E-04	2.12E-04	1.10E-03	5.22E-04	1.52E-04	2.85E-03	1.52E-03	1.03E-03	1.08E-04	1.12E-04	1.0438E-02
551810.67	4173342.58	3752.89472	2297.09903	529.48116	2217.10318	476.76912	3217.60595	3831.76925	1339.29827	297.02081	2116.85236	1131.93143	3956.13553	0.88716	0.84288	7.28E-04	7.17E-04	1.65E-04	6.06E-04	6.12E-05	4.13E-04	2.26E-03	5.17E-04	1.15E-04	1.59E-03	5.58E-04	1.95E-03	4.16E-04	3.99E-04	1.0494E-02
551985.01	4173243.64	3395.29407	2395.70838	456.73639	2006.02794	406.26459	3779.30803	3475.70596	1392.40324	266.26254	1957.51489	976.94807	4615.40683	0.33125	0.32489	6.59E-04	7.48E-04	1.43E-04	5.48E-04	5.22E-05	4.86E-04	2.05E-03	5.38E-04	1.03E-04	1.47E-03	4.81E-04	2.27E-03	1.55E-04	1.54E-04	9.8593E-03
551284.64	4173116.29	1994.69354	2775.19969	563.00199	3983.72542	665.45209	2570.14982	2008.3565	1646.35015	318.21759	3307.83845	2110.1791	3177.80479	0.26322	0.26601	3.87E-04	8.67E-04	1.76E-04	1.09E-03	8.55E-05	3.30E-04	1.19E-03	6.36E-04	1.23E-04	2.48E-03	1.04E-03	1.57E-03	1.23E-04	1.26E-04	1.0212E-02
551242.68	4172999.77	1984.09537	2760.64249	614.65306	4401.28858	702.55049	2090.51182	1989.15251	1614.85162	348.16716	3683.22815	2275.76307	2632.40769	0.24556	0.24841	3.85E-04	8.62E-04	1.92E-04	1.20E-03	9.03E-05	2.69E-04	1.17E-03	6.23E-04	1.34E-04	2.76E-03	1.12E-03	1.30E-03	1.15E-04	1.18E-04	1.0345E-02
551241.86	4172939.31	1939.12205	2642.36821	647.02455	4657.25011	744.64882	1917.57124	1941.08364	1533.14707	365.19854	3821.72667	2456.89578	2425.74915	0.24373	0.24705	3.76E-04	8.25E-04	2.02E-04	1.27E-03	9.57E-05	2.46E-04	1.15E-03	5.92E-04	1.41E-04	2.87E-03	1.21E-03	1.19E-03	1.14E-04	1.17E-04	1.0399E-02
551302.14	4172677.15	1855.10719	2318.65349	705.65239	5112.19935	958.90196	1601.49658	1852.05366	1336.8437	390.8478	3792.99199	3095.66341	2042.92462	0.22596	0.22992	3.60E-04	7.24E-04	2.20E-04	1.40E-03	1.23E-04	2.06E-04	1.09E-03	5.16E-04	1.51E-04	2.84E-03	1.52E-03	1.01E-03	1.06E-04	1.09E-04	1.0380E-02
551467.71	4173362.08	2280.35513	2701.09683	542.71643	3268.4392	582.51331	3116.99384	2303.16231	1623.23152	309.81833	2886.77494	1618.13614	3778.21112	0.36783	0.36955	4.43E-04	8.44E-04	1.70E-04	8.93E-04	7.48E-05	4.00E-04	1.36E-03	6.27E-04	1.20E-04	2.16E-03	7.97E-04	1.86E-03	1.72E-04	1.75E-04	1.0100E-02
551584.56	4173426.26	2528.24042	2676.803	554.96434	2785.25571	525.96886	3371.96461	2559.66547	1603.27591	318.78143	2615.09681	1335.43419	4086.81328	0.52911	0.52939	4.91E-04	8.36E-04	1.73E-04	7.61E-04	6.76E-05	4.33E-04	1.51E-03	6.19E-04	1.23E-04	1.96E-03	6.58E-04	2.01E-03	2.48E-04	2.51E-04	1.0145E-02
551396.41	4173307.09	2141.70771	2780.37512	569.98577	3500.46701	607.99467	2844.0568	2156.70419	1673.56362	325.22996	3075.52107	1761.71751	3479.1156	0.31153	0.31346	4.16E-04	8.68E-04	1.78E-04	9.56E-04	7.81E-05	3.65E-04	1.27E-03	6.46E-04	1.26E-04	2.31E-03	8.68E-04	1.71E-03	1.46E-04	1.49E-04	1.0089E-02
551518.99	4173398.19	2352.08165	2693.14089	545.61561	3088.50468	570.00168	3196.29344	2379.62858	1618.21921	311.84431	2803.63853	1483.32877	3866.78469	0.42341	0.42435	4.56E-04	8.41E-04	1.70E-04	8.44E-04	7.32E-05	4.11E-04	1.40E-03	6.25E-04	1.20E-04	2.10E-03	7.31E-04	1.90E-03	1.98E-04	2.01E-04	1.0083E-02
551406.07	4173316.2	2161.66723	2768.5108	563.67582	3455.53595	601.8195	2883.53643	2177.44803	1668.24958	321.87385	3033.84656	1739.36028	3523.64602	0.31736	0.31885	4.19E-04	8.65E-04	1.76E-04	9.44E-04	7.73E-05	3.70E-04	1.29E-03	6.44E-04	1.24E-04	2.27E-03	8.57E-04	1.74E-03	1.49E-04	1.51E-04	1.0073E-02
551342.27	4173219.44	1988.65312	2694.14764	579.73153	3799.55562	660.74489	2700.1928	2003.04933	1601.60455	327.23522	3253.68182	1970.28806	3299.76959	0.28863	0.29075	3.86E-04	8.42E-04	1.81E-04	1.04E-03	8.49E-05	3.47E-04	1.18E-03	6.18E-04	1.26E-04	2.44E-03	9.71E-04	1.63E-03	1.35E-04	1.38E-04	1.0114E-02
551248.08	4172867.46	1880.32617	2464.05349	666.5343	4897.67641	811.36646	1740.1545	1879.7472	1423.35613	373.18277	3830.71363	2698.1397	2208.85645	0.23745	0.24096	3.65E-04	7.70E-04	2.08E-04	1.34E-03	1.04E-04	2.24E-04	1.11E-03	5.49E-04	1.44E-04	2.87E-03	1.33E-03	1.09E-03	1.11E-04	1.14E-04	1.0326E-02
551289.91	4173131.22	1972.59826	2720.41783	557.38643	3923.61871	661.03552	2587.35903	1986.74836	1613.46202	314.84607	3254.83659	2082.15852	3189.34507	0.26395	0.26637	3.83E-04	8.50E-04	1.74E-04	1.07E-03	8.49E-05	3.32E-04	1.17E-03	6.23E-04	1.22E-04	2.44E-03	1.03E-03	1.57E-03	1.24E-04	1.26E-04	1.0100E-02
551477.31	4173371.11	2284.47893	2678.92536	539.85724	3220.99252	577.70681	3113.29816	2308.34016	1609.24419	308.15885	2856.5454	1584.93432	3771.53497	0.37452	0.37579	4.43E-04	8.37E-04	1.69E-04	8.80E-04	7.42E-05	4.00E-04	1.36E-03	6.21E-04	1.19E-04	2.14E-03	7.81E-04	1.86E-03	1.76E-04	1.78E-04	1.0040E-02
552035.98	4173220.4	3443.1992	2431.21044	439.70003	1980.75841	387.75475	3628.84387	3533.74791	1397.27135	256.69875	1942.77063	941.32379	4453.61338	0.27385	0.26931	6.68E-04	7.59E-04	1.37E-04	5.41E-04	4.98E-05	4.66E-04	2.09E-03	5.39E-04	9.91E-05	1.46E-03	4.64E-04	2.19E-03	1.28E-04	1.28E-04	9.7167E-03
551290.29	4172721.29	1840.44241	2310.60395	697.38435	5017.86454	933.02004	1634.3063	1837.3323	1333.91116	386.94108	3737.9818	3023.82166	2076.49433	0.22821	0.23216	3.57E-04	7.22E-04	2.18E-04	1.37E-03	1.20E-04	2.10E-04	1.08E-03	5.15E-04	1.49E-04	2.80E-03	1.49E-03	1.02E-03	1.07E-04	1.10E-04	1.0278E-02
551316.95	4173178.15	1962.5179	2666.38439	564.00126	3866.10569	666.02876	2675.09356	1977.42215	1581.44183	318.07241	3240.85867	2037.72856	3273.447	0.27688	0.27913	3.81E-04	8.33E-04	1.76E-04	1.06E-03	8.56E-05	3.44E-04	1.17E-03	6.10E-04	1.23E-04	2.43E-03	1.00E-03	1.61E-03	1.30E-04	1.32E-04	1.0084E-02
551297.85	4172685.5	1838.69203	2301.17312	698.39925	5042.28909	946.47919	1600.07409	1835.66825	1327.27694	386.93535	3747.10355	3051.50266	2038.8975	0.22447	0.22839	3.57E-04	7.19E-04	2.18E-04	1.38E-03	1.22E-04	2.06E-04	1.08E-03	5.12E-04	1.49E-04	2.81E-03	1.50E-03	1.00E-03	1.05E-04	1.08E-04	1.0274E-02
551242.19	4172891.68	1884.42844	2502.06644	656.94504	4786.2336	783.03442	1777.79956	1884.63424	1446.76389	368.59575	3806.08615	2598.3256	2255.032	0.23734	0.24074	3.66E-04	7.82E-04	2.05E-04	1.31E-03	1.01E-04	2.28E-04	1.11E-03	5.58E-04	1.42E-04	2.85E-03	1.28E-03	1.11E-03	1.11E-04	1.14E-04	1.0272E-02
551239.46	4172990.81	1952.78898	2699.01588	610.43528	4361.40216	697.6879	2031.91684	1957.30477	1575.73985	345.73541	3643.73943	2262.8775	2560.91088	0.24136	0.24394	3.79E-04	8.43E-04	1.91E-04	1.19E-03	8.96E-05	2.61E-04	1.16E-03	6.08E-04	1.33E-04	2.73E-03	1.11E-03	1.26E-03	1.13E-04	1.16E-04	1.0189E-02
551528.5	4173407.15	2351.74312	2669.59597	542.99003	3017.98257	562.1553	3180.17347	2379.5575	1603.21703	310.51814	2757.33304	1444.61165	3849.02742	0.42955	0.43024	4.56E-04	8.34E-04	1.70E-04	8.25E-04	7.22E-05	4.09E-04	1.40E-03	6.19E-04	1.20E-04	2.07E-03	7.12E-04	1.90E-03	2.01E-04	2.04E-04	9.9887E-03
551345.36	4173228.02	1981.75447	2677.97298	577.72491	3749.82631	653.35818	2674.25849	1995.8601	1593.31412	326.28016	3221.79728	1940.85376	3268.98448	0.28805	0.29011	3.85E-04	8.36E-04	1.80E-04	1.02E-03	8.39E-05	3.44E-04	1.18E-03	6.15E-04	1.26E-04	2.42E-03	9.56E-04	1.61E-03	1.35E-04	1.37E-04	1.0027E-02
551486.9	4173380.15	2284.44585	2655.78591	537.05005	3169.374	572.46188	3100.51112	2309.20346	1595.15325	306.57212	2823.69991	1550.45003	3754.69767	0.38085	0.38199	4.43E-04	8.30E-04	1.68E-04	8.66E-04	7.35E-05	3.98E-04	1.36E-03	6.16E-04	1.18E-04	2.12E-03	7.64E-04	1.85E-03	1.78E-04	1.81E-04	9.9655E-03
551374.58	4173275.79	2054.74538	2737.62928	577.67101	3591.37807	624.53584	2724.62112	2068.5104	1643.53138	328.37549	3134.65398	1830.70678	3334.09324	0.29975	0.30184	3.99E-04	8.55E-04	1.80E-04	9.81E-04	8.02E-05	3.50E-04	1.22E-03	6.34E-04	1.27E-04	2.35E-03	9.02E-04	1.64E-03	1.40E-04	1.43E-04	1.0006E-02
551415.74	4173325.3	2161.40132	2721.22045	552.3923	3383.49975	592.12753	2892.71274	2178.00398	1641.42504	315.55141	2962.59365	1711.83934	3529.63384	0.32098	0.32283	4.19E-04	8.50E-04	1.73E-04	9.24E-04	7.61E-05	3.72E-04	1.29E-03	6.34E-04	1.22E-04	2.22E-03	8.43E-04	1.74E-03	1.50E-04	1.53E-04	9.9618E-03
551237.96	4172926.13	1898.15971	2559.63472	641.9351	4617.10809	744.96833	1847.69361	1899.57277	1483.84916	361.70151	3757.8775	2456.76762	2339.34453	0.23765	0.24091	3.68E-04	8.00E-04	2.01E-04	1.26E-03	9.57E-05	2.37E-04	1.12E-03	5.73E-04	1.40E-04	2.82E-03	1.21E-03	1.15E-03	1.11E-04	1.14E-04	1.0202E-02
551425.41	4173334.41	2175.87496	2696.64246	545.50256	3336.69668	586.01546	2923.47039	2193.47686	1625.70704	311.63478	2921.08539	1686.1786	3562.43214	0.32637	0.32817	4.22E-04	8.42E-04	1.70E-04	9.12E-04	7.53E-05	3.76E-04	1.29E-03	6.28E-04	1.20E-04	2.19E-03	8.31E-04	1.75E-03	1.53E-04	1.56E-04	9.9241E-03
551239.05	4172960.58	1923.08865	2631.91068	622.79223	4448.74855	710.85072	1941.35447	1926.11354	1530.27485	352.30961	3694.49174	2326.16302	2452.13157	0.23915	0.2423	3.73E-04	8.22E-04	1.95E-04	1.22E-03	9.13E-05	2.49E-04	1.14E-03	5.91E-04	1.36E-04	2.77E-03	1.15E-03	1.21E-03	1.12E-04	1.15E-04	1.0160E-02
551295.83	4173147.96	1947.20522	2660.08379	552.46459	3859.43189	656.33833	2590.11735	1961.61156	1577.1942	311.84669	3204.04817	2048.34611	3183.53318	0.264	0.2666	3.78E-04	8.31E-04	1.73E-04	1.05E-03	8.43E-05	3.33E-04	1.16E-03	6.09E-04	1.20E-04	2.40E-03	1.01E-03	1.57E-03	1.24E-04	1.26E-04	9.9695E-03
551293.56	4172693.84	1822.0133	2280.1598	690.8397	4969.37829	933.09988	1596.00582	1819.02245	1315.65079	382.8821	3698.47087	3005.13857	2031.72254	0.22269	0.22655	3.54E-04	7.12E-04	2.16E-04	1.36E-03	1.20E-04	2.05E-04	1.07E-03	5.08E-04	1.48E-04	2.77E-03	1.48E-03	1.00E-03	1.04E-04	1.07E-04	1.0159E-02
552054.51	4173212.58	3417.08661	2421.3867	434.84755	1974.17259	382.05118	3537.98392	3507.26835	1392.22772	254.08112	1937.8978	931.18371	4351.42708	0.25713	0.25306	6.63E-04	7.56E-04	1.36E-04	5.39E-04	4.91E-05	4.55E-04	2.07E-03	5.37E-04	9.81E-05	1.45E-03	4.59E-04	2.14E-03	1.21E-04	1.20E-04	9.5997E-03
551285.97	4172729.7	1824.81876	2285.03658	689.27763	4945.71394	917.23435	1623.69753	1821.7723	1319.54371	382.66073	3690.33329	2973.30453	2061.88508	0.22595	0.22982	3.54E-04	7.14E-04	2.15E-04	1.35E-03	1.18E-04	2.09E-04	1.08E-03	5.09E-04	1.48E-04	2.77E-03	1.46E-03	1.02E-03	1.06E-04	1.09E-04	1.0155E-02
551320.64	4173188.43	1944.13447	2629.46783	560.91436	3807.48706	659.71629	2644.66	1958.79776	1559.898	316.28731	3203.23161	2004.85149	3234.57169	0.27606	0.27822	3.77E-04	8.21E-04	1.75E-04	1.04E-03	8.48E-05	3.40E-04	1.16E-03	6.02E-04	1.22E-04	2.40E-03	9.88E-04	1.59E-03	1.29E-04	1.32E-04	9.9629E-03
551236.23	4172981.84	1933.06856	2655.33969	611.92746	4367.16977	699.99113	1985.68668	1936.99568	1547.91077	346.41168	3636.84839	2272.46281	2504.69484	0.23889	0.24149	3.75E-04	8.29E-04	1.91E-04	1.19E-03	8.99E-05	2.55E-04	1.14E-03	5.98E-04	1.34E-04	2.73E-03	1.12E-03	1.23E-03	1.12E-04	1.14E-04	1.0115E-02
551246.37	4172856.98	1850.12206	2400.3487	658.654	4829.97716	809.60035	1696.15758	1849.27644	1386.3482	368.54765	3755.48724	2683.58002	2153.53809	0.2326	0.23607	3.59E-04	7.50E-04	2.06E-04	1.32E-03	1.04E-04	2.18E-04	1.09E-03	5.35E-04	1.42E-04	2.82E-03	1.32E-03	1.06E-03	1.09E-04	1.12E-04	1.0144E-02
551571.37	4173428.18	2437.45535	2630.35021	544.49315	2796.46362	523.78746	3250.52731	2467.17154	1576.7175	312.3382	2610.33868	1338.67481	3939.37622	0.48035	0.48054	4.73E-04	8.22E-04	1.70E-04	7.64E-04	6.73E-05	4.18E-04	1.46E-03	6.09E-04	1.21E-04	1.96E-03	6.59E-04	1.94E-03	2.25E-04	2.28E-04	9.9091E-03
551496.5	4173389.18	2280.28455	2630.75989	534.04441	3112.74217	566.64093	3080.41977	2305.75471	1580.24271	304.91197	2786.91419	1514.91433	3729.66636	0.38638	0.38766	4.43E-04	8.22E-04	1.67E-04	8.51E-04	7.28E-05	3.96E-04	1.36E-03	6.10E-04	1.18E-04	2.09E-03	7.46E-04	1.84E-03	1.81E-04	1.84E-04	9.8766E-03
551386.74	4173297.99	2078.1581	2716.96178	565.25156	3477.83118	605.90398	2741.21526	2092.28782	1635.95837	322.15028	3043.7127	1772.18458	3354.52872	0.30184	0.30376	4.03E-04	8.49E-04	1.77E-04	9.50E-04	7.78E-05	3.52E-04	1.24E-03	6.32E-04	1.24E-04	2.28E-03	8.73E-04	1.65E-03	1.41E-04	1.44E-04	9.8925E-03
551435.07	4173343.51	2182.12399	2660.79324	537.79455	3282.96816	579.24311	2939.12814	2200.79548	1602.69766	307.16843	2873.56558	1658.15383	3576.55274	0.33152	0.33287	4.23E-04	8.31E-04	1.68E-04	8.97E-04	7.44E-05	3.78E-04	1.30E-03	6.19E-04	1.19E-04	2.15E-03	8.17E-04	1.76E-03	1.55E-04	1.58E-04	9.8541E-03
551235.82	4172951.61	1903.09667	2587.18344	624.52826	4459.00937	716.02959	1897.93003	1905.59824	1503.03775	352.90888	3681.76378	2345.41506	2398.96404	0.23656	0.23969	3.69E-04	8.08E-04	1.95E-04	1.22E-03	9.20E-05	2.44E-04	1.12E-03	5.80E-04	1.36E-04	2.76E-03	1.16E-03	1.18E-03	1.11E-04	1.14E-04	1.0090E-02
551267.6	4172778.27	1824.06686	2284.23752	679.56149	4914.79965	878.47268	1626.08727	1821.2897	1319.21631	378.46488	3694.89043	2888.87762	2063.8092	0.22882	0.23262	3.54E-04	7.13E-04	2.12E-04	1.34E-03	1.13E-04	2.09E-04	1.08E-03	5.09E-04	1.46E-04	2.77E-03	1.42E-03	1.02E-03	1.07E-04	1.10E-04	1.0102E-02
551348.45	4173236.61	1964.21266	2643.19531	571.78923	3674.3691	642.88534	2633.29853	1978.02073	1574.50709	323.12229	3164.42174	1904.17549	3219.5587	0.28598	0.28796	3.81E-04	8.26E-04	1.79E-04	1.00E-03	8.26E-05	3.38E-04	1.17E-03	6.08E-04	1.25E-04	2.37E-03	9.38E-04	1.59E-03	1.34E-04	1.36E-04	9.8773E-03
551233	4172972.88	1911.52511	2609.11876	612.70499	4366.6191	702.05366	1939.75859	1914.89049	1519.11444	346.65703	3623.14244	2281.24218	2448.5389	0.23628	0.23907	3.71E-04	8.15E-04	1.91E-04	1.19E-03	9.02E-05	2.49E-04	1.13E-03	5.86E-04	1.34E-04	2.72E-03	1.12E-03	1.21E-03	1.11E-04	1.13E-04	1.0031E-02
551323.73	4173197.01	1930.12717	2601.82636	558.64041	3758.76039	654.1164	2617.37497	1944.56038	1543.9208	314.99958	3172.65887	1977.03271	3200.50136	0.27536	0.27775	3.75E-04	8.13E-04	1.74E-04	1.03E-03	8.40E-05	3.36E-04	1.15E-03	5.96E-04	1.22E-04	2.38E-03	9.74E-04	1.58E-03	1.29E-04	1.32E-04	9.8642E-03
551281.65	4172738.1	1811.12405	2262.13001	681.86757	4882.68218	902.3403	1612.97909	1808.14412	1306.63989	378.76556	3649.36367	2926.98774	2047.47086	0.22398	0.22777	3.51E-04	7.07E-04	2.13E-04	1.33E-03	1.16E-04	2.07E-04	1.07E-03	5.04E-04	1.46E-04	2.74E-03	1.44E-03	1.01E-03	1.05E-04	1.08E-04	1.0046E-02
551240.48	4172881.24	1848.85116	2430.69705	647.28985	4711.79951	777.55911	1725.91064	1848.80671	1405.17193	362.82407	3724.05693	2573.69788	2190.04251	0.23101	0.23432	3.59E-04	7.59E-04	2.02E-04	1.29E-03	9.99E-05	2.22E-04	1.09E-03	5.42E-04	1.40E-04	2.79E-03	1.27E-03	1.08E-03	1.08E-04	1.11E-04	1.0061E-02
551444.74	4173352.62	2187.23947	2626.93832	531.34747	3232.69892	573.22986	2949.2885	2206.98635	1580.63327	303.39223	2831.84915	1637.80033	3584.46841	0.33655	0.3382	4.24E-04	8.21E-04	1.66E-04	8.83E-04	7.36E-05	3.79E-04	1.30E-03	6.10E-04	1.17E-04	2.12E-03	8.07E-04	1.77E-03	1.58E-04	1.60E-04	9.7904E-03
551269.51	4172769.36	1813.03723	2264.73231	677.0454	4877.62446	879.5347	1615.01956	1810.19983	1308.14971	376.85104	3661.46927	2882.2023	2049.58722	0.22642	0.23019	3.52E-04	7.07E-04	2.11E-04	1.33E-03	1.13E-04	2.07E-04	1.07E-03	5.05E-04	1.45E-04	2.75E-03	1.42E-03	1.01E-03	1.06E-04	1.09E-04	1.0033E-02
552092.91	4173195.34	3487.90612	2399.38075	429.68923	1974.25648	373.79512	3340.53346	3578.56215	1381.3289	251.46635	1939.81732	918.17191	4128.93726	0.22768	0.22439	6.77E-04	7.49E-04	1.34E-04	5.39E-04	4.80E-05	4.29E-04	2.11E-03	5.33E-04	9.71E-05	1.45E-03	4.52E-04	2.03E-03	1.07E-04	1.06E-04	9.4735E-03
551301.74	4173164.7	1920.46375	2600.85209	548.0771	3790.63813	650.67946	2573.38501	1934.85912	1541.83605	309.21053	3155.52918	2009.57848	3156.28126	0.26384	0.26633	3.73E-04	8.12E-04	1.71E-04	1.04E-03	8.36E-05	3.31E-04	1.14E-03	5.95E-04	1.19E-04	2.37E-03	9.90E-04	1.55E-03	1.24E-04	1.26E-04	9.8232E-03
551253.13	4172818.03	1821.2649	2307.66744	663.65324	4839.78297	837.57952	1634.33977	1819.31997	1332.48295	370.66183	3693.28254	2767.71651	2075.27383	0.22882	0.23247	3.53E-04	7.21E-04	2.07E-04	1.32E-03	1.08E-04	2.10E-04	1.07E-03	5.14E-04	1.43E-04	2.77E-03	1.36E-03	1.02E-03	1.07E-04	1.10E-04	1.0025E-02
551506.09	4173398.22	2269.14734	2598.66964	530.03565	3048.20323	559.76147	3049.29787	2295.07004	1561.29057	302.69756	2741.86869	1478.03037	3691.77131	0.39106	0.39213	4.40E-04	8.12E-04	1.66E-04	8.33E-04	7.19E-05	3.92E-04	1.35E-03	6.03E-04	1.17E-04	2.06E-03	7.28E-04	1.82E-03	1.83E-04	1.86E-04	9.7599E-03
551277.33	4172746.51	1803.40929	2248.95409	677.25965	4848.99112	891.54995	1606.1522	1800.46769	1299.19726	376.41375	3628.69755	2897.29848	2038.36739	0.22325	0.227	3.50E-04	7.02E-04	2.12E-04	1.32E-03	1.15E-04	2.06E-04	1.06E-03	5.02E-04	1.45E-04	2.72E-03	1.43E-03	1.00E-03	1.05E-04	1.08E-04	9.9834E-03
551232.59	4172942.65	1876.77524	2533.69988	622.6699	4441.42174	717.15376	1850.68312	1878.84949	1470.99211	351.46922	3647.68104	2350.23299	2340.70824	0.23284	0.23593	3.64E-04	7.91E-04	1.94E-04	1.21E-03	9.21E-05	2.38E-04	1.11E-03	5.68E-04	1.36E-04	2.73E-03	1.16E-03	1.15E-03	1.09E-04	1.12E-04	9.9726E-03
551234.57	4172905.33	1850.08766	2458.34227	636.39919	4587.28257	750.59071	1761.18614	1850.80175	1423.06566	357.60716	3682.93004	2474.71227	2232.65153	0.23063	0.23383	3.59E-04	7.68E-04	1.99E-04	1.25E-03	9.64E-05	2.26E-04	1.09E-03	5.49E-04	1.38E-04	2.76E-03	1.22E-03	1.10E-03	1.08E-04	1.11E-04	9.9806E-03
551326.82	4173205.6	1918.68572	2579.15668	556.97416	3713.2104	648.52571	2590.90968	1932.86446	1531.06152	314.0906	3145.23602	1949.84672	3167.92729	0.2748	0.27684	3.72E-04	8.06E-04	1.74E-04	1.01E-03	8.33E-05	3.33E-04	1.14E-03	5.91E-04	1.21E-04	2.36E-03	9.60E-04	1.56E-03	1.29E-04	1.31E-04	9.7749E-03
551990.2	4173248.87	3241.32125	2290.91204	442.3876	1941.96617	395.03312	3576.14836	3316.22498	1333.20408	257.75376	1890.94378	949.97959	4369.89849	0.32073	0.31452	6.29E-04	7.16E-04	1.38E-04	5.31E-04	5.07E-05	4.59E-04	1.96E-03	5.15E-04	9.95E-05	1.42E-03	4.68E-04	2.15E-03	1.50E-04	1.49E-04	9.4329E-03
551581.23	4173435.71	2433.36997	2571.89545	537.56658	2705.91532	511.79274	3200.74214	2463.09189	1540.09668	308.62078	2533.79886	1300.66341	3883.32203	0.48263	0.48094	4.72E-04	8.03E-04	1.68E-04	7.39E-04	6.57E-05	4.11E-04	1.45E-03	5.95E-04	1.19E-04	1.90E-03	6.41E-04	1.91E-03	2.26E-04	2.28E-04	9.7348E-03
551273.01	4172754.92	1796.98511	2238.48458	672.96835	4820.73312	881.12603	1599.69684	1794.09556	1293.23379	374.24296	3612.74072	2869.41318	2030.02283	0.22269	0.2264	3.49E-04	6.99E-04	2.10E-04	1.32E-03	1.13E-04	2.06E-04	1.06E-03	4.99E-04	1.44E-04	2.71E-03	1.41E-03	1.00E-03	1.04E-04	1.07E-04	9.9304E-03
551297.11	4172665.83	1791.85578	2217.85847	675.92161	4848.19105	915.49058	1536.7111	1789.15293	1279.25598	374.4894	3611.36784	2931.96377	1961.07431	0.21318	0.21679	3.48E-04	6.93E-04	2.11E-04	1.32E-03	1.18E-04	1.97E-04	1.06E-03	4.94E-04	1.45E-04	2.71E-03	1.44E-03	9.66E-04	9.99E-05	1.03E-04	9.9063E-03
551253.86	4172808.38	1802.70996	2269.2791	659.37696	4785.43345	836.03384	1611.09167	1800.59987	1310.5795	368.06755	3640.54556	2754.18629	2045.57215	0.22533	0.22895	3.50E-04	7.09E-04	2.06E-04	1.31E-03	1.07E-04	2.07E-04	1.06E-03	5.06E-04	1.42E-04	2.73E-03	1.36E-03	1.01E-03	1.06E-04	1.09E-04	9.9053E-03
551301.42	4172657.45	1792.87531	2207.77734	674.75829	4837.49329	913.43143	1523.71358	1790.28585	1273.40308	373.88974	3603.84715	2924.17341	1946.52399	0.21099	0.21453	3.48E-04	6.90E-04	2.11E-04	1.32E-03	1.17E-04	1.96E-04	1.06E-03	4.92E-04	1.44E-04	2.70E-03	1.44E-03	9.59E-04	9.89E-05	1.02E-04	9.8776E-03
551352.6	4173248	1945.81601	2603.81171	564.31833	3581.5584	629.3349	2585.86645	1959.2303	1553.90711	319.23462	3093.08686	1857.87377	3162.66613	0.28421	0.28569	3.78E-04	8.13E-04	1.76E-04	9.79E-04	8.08E-05	3.32E-04	1.16E-03	6.00E-04	1.23E-04	2.32E-03	9.15E-04	1.56E-03	1.33E-04	1.35E-04	9.6991E-03
551292.81	4172674.21	1783.11149	2213.18508	672.90576	4818.74216	910.33921	1541.77628	1780.36442	1276.8531	372.85276	3591.78485	2914.21733	1965.47455	0.21349	0.21712	3.46E-04	6.91E-04	2.10E-04	1.32E-03	1.17E-04	1.98E-04	1.05E-03	4.93E-04	1.44E-04	2.69E-03	1.44E-03	9.68E-04	1.00E-04	1.03E-04	9.8665E-03
551515.68	4173407.26	2258.9275	2568.36956	526.29784	2981.47089	552.54359	3020.30166	2285.12051	1543.19572	300.66748	2695.67006	1440.74074	3657.13623	0.39544	0.39601	4.38E-04	8.02E-04	1.64E-04	8.15E-04	7.10E-05	3.88E-04	1.35E-03	5.96E-04	1.16E-04	2.02E-03	7.10E-04	1.80E-03	1.85E-04	1.88E-04	9.6445E-03
551329.91	4173214.18	1907.87385	2557.89427	555.14981	3665.85559	642.36187	2563.34979	1921.77804	1519.16354	313.11317	3116.08427	1921.99823	3134.44831	0.27413	0.27611	3.70E-04	7.99E-04	1.73E-04	1.00E-03	8.25E-05	3.29E-04	1.13E-03	5.86E-04	1.21E-04	2.34E-03	9.47E-04	1.54E-03	1.28E-04	1.31E-04	9.6841E-03
551238.78	4172870.81	1818.00737	2366.85204	639.25624	4649.58711	775.37603	1680.05566	1817.70467	1368.01236	358.02106	3651.61944	2558.91694	2132.52693	0.22594	0.22918	3.53E-04	7.39E-04	2.00E-04	1.27E-03	9.96E-05	2.16E-04	1.07E-03	5.28E-04	1.38E-04	2.74E-03	1.26E-03	1.05E-03	1.06E-04	1.09E-04	9.8801E-03
551473.73	4173379.93	2201.47655	2556.51888	520.94224	3102.37965	559.33095	2952.59293	2224.38372	1535.13599	297.24857	2742.81411	1537.52907	3579.96316	0.35354	0.35452	4.27E-04	7.99E-04	1.63E-04	8.48E-04	7.19E-05	3.79E-04	1.31E-03	5.93E-04	1.15E-04	2.06E-03	7.57E-04	1.76E-03	1.66E-04	1.68E-04	9.6186E-03
551307.66	4173181.44	1893.20525	2544.40415	543.92376	3714.62734	643.49317	2539.55537	1907.35906	1508.59443	306.7258	3106.1611	1965.67099	3110.54534	0.26345	0.26553	3.67E-04	7.95E-04	1.70E-04	1.01E-03	8.27E-05	3.26E-04	1.13E-03	5.82E-04	1.18E-04	2.33E-03	9.68E-04	1.53E-03	1.23E-04	1.26E-04	9.6612E-03
551307.05	4172647.52	1795.77115	2193.24793	673.96678	4827.02915	911.1222	1507.02612	1793.30692	1265.12798	373.55503	3594.50507	2916.58817	1927.78486	0.20834	0.21177	3.48E-04	6.85E-04	2.11E-04	1.32E-03	1.17E-04	1.94E-04	1.06E-03	4.88E-04	1.44E-04	2.69E-03	1.44E-03	9.50E-04	9.76E-05	1.00E-04	9.8440E-03
551232.87	4172894.93	1825.05484	2406.0581	632.03199	4560.24858	752.35495	1719.25479	1825.4681	1392.10758	354.71732	3636.44914	2479.24539	2180.53882	0.22688	0.23005	3.54E-04	7.52E-04	1.97E-04	1.25E-03	9.67E-05	2.21E-04	1.08E-03	5.37E-04	1.37E-04	2.73E-03	1.22E-03	1.07E-03	1.06E-04	1.09E-04	9.8556E-03
551402.05	4173324.59	2076.61407	2623.73871	540.33578	3299.20396	579.28295	2729.70985	2091.72905	1582.08884	308.50124	2885.01935	1680.70513	3336.94912	0.30098	0.30267	4.03E-04	8.20E-04	1.69E-04	9.01E-04	7.44E-05	3.51E-04	1.23E-03	6.11E-04	1.19E-04	2.16E-03	8.28E-04	1.64E-03	1.41E-04	1.43E-04	9.6016E-03
551229.78	4172963.91	1868.95542	2533.26673	603.50444	4279.17578	690.92702	1878.34397	1871.96344	1473.69572	341.31624	3549.35822	2246.59774	2372.27297	0.22999	0.23295	3.63E-04	7.91E-04	1.89E-04	1.17E-03	8.88E-05	2.41E-04	1.11E-03	5.69E-04	1.32E-04	2.66E-03	1.11E-03	1.17E-03	1.08E-04	1.10E-04	9.8019E-03
551525.28	4173416.29	2267.62098	2558.9268	525.57579	2921.8317	546.08386	3020.49738	2294.12499	1536.22897	300.45384	2661.84905	1404.55817	3659.477	0.40127	0.40187	4.40E-04	7.99E-04	1.64E-04	7.98E-04	7.02E-05	3.88E-04	1.35E-03	5.93E-04	1.16E-04	2.00E-03	6.92E-04	1.80E-03	1.88E-04	1.90E-04	9.5920E-03
551483.4	4173389.03	2206.16418	2543.225	519.5977	3060.55056	555.2792	2948.30989	2229.96297	1526.89842	296.51465	2719.90833	1505.41891	3573.69237	0.3593	0.36015	4.28E-04	7.94E-04	1.62E-04	8.36E-04	7.13E-05	3.79E-04	1.32E-03	5.89E-04	1.14E-04	2.04E-03	7.42E-04	1.76E-03	1.68E-04	1.71E-04	9.5716E-03
551288.5	4172682.58	1769.24844	2197.72637	667.03457	4762.13101	900.20359	1540.59918	1766.50391	1268.35602	369.69064	3553.72617	2879.02414	1962.0146	0.21245	0.21605	3.43E-04	6.86E-04	2.08E-04	1.30E-03	1.16E-04	1.98E-04	1.04E-03	4.90E-04	1.43E-04	2.66E-03	1.42E-03	9.66E-04	9.96E-05	1.02E-04	9.7789E-03
551228.62	4172929.27	1837.5603	2456.35425	617.95334	4404.03484	717.3805	1784.28443	1839.09756	1424.85544	348.23046	3588.73744	2350.46836	2258.67271	0.22716	0.23021	3.57E-04	7.67E-04	1.93E-04	1.20E-03	9.22E-05	2.29E-04	1.09E-03	5.50E-04	1.34E-04	2.69E-03	1.16E-03	1.11E-03	1.06E-04	1.09E-04	9.7882E-03
551411.78	4173333.76	2083.66526	2590.25282	531.23552	3242.18146	571.45257	2749.23727	2099.61069	1562.40323	303.39992	2830.07471	1656.36616	3356.45922	0.3051	0.30673	4.04E-04	8.09E-04	1.66E-04	8.86E-04	7.34E-05	3.53E-04	1.24E-03	6.03E-04	1.17E-04	2.12E-03	8.16E-04	1.65E-03	1.43E-04	1.45E-04	9.5309E-03
551641.3	4173444.89	2674.33943	2431.54183	528.22138	2403.91061	481.86792	3193.81148	2710.32619	1442.50708	305.11807	2280.99134	1188.96027	3900.86763	0.6613	0.65264	5.19E-04	7.59E-04	1.65E-04	6.57E-04	6.19E-05	4.10E-04	1.60E-03	5.57E-04	1.18E-04	1.71E-03	5.86E-04	1.92E-03	3.10E-04	3.09E-04	9.6837E-03
551280.69	4172718.88	1765.82503	2194.84586	663.45302	4714.69058	883.61975	1564.71944	1763.03007	1267.8618	368.26369	3527.85901	2838.31534	1987.35624	0.2147	0.21829	3.43E-04	6.86E-04	2.07E-04	1.29E-03	1.14E-04	2.01E-04	1.04E-03	4.89E-04	1.42E-04	2.64E-03	1.40E-03	9.79E-04	1.01E-04	1.03E-04	9.7366E-03
551702.32	4173427.06	3051.75587	2310.60487	516.13797	2243.0615	469.05148	3120.65287	3100.48179	1354.8539	299.57432	2099.20064	1131.94674	3839.29163	1.60353	1.48359	5.92E-04	7.22E-04	1.61E-04	6.13E-04	6.03E-05	4.01E-04	1.83E-03	5.23E-04	1.16E-04	1.57E-03	5.58E-04	1.89E-03	7.52E-04	7.03E-04	1.0495E-02
551654.44	4173442.98	2752.58292	2406.73475	526.22535	2344.02753	478.16799	3188.74713	2790.89882	1423.71096	304.3616	2237.2583	1173.14472	3901.67652	0.754	0.74078	5.34E-04	7.52E-04	1.64E-04	6.40E-04	6.14E-05	4.10E-04	1.65E-03	5.50E-04	1.17E-04	1.68E-03	5.78E-04	1.92E-03	3.53E-04	3.51E-04	9.7580E-03
551333	4173222.77	1893.32599	2530.30943	551.6395	3606.43711	634.45319	2529.25142	1906.94573	1503.76058	311.21342	3075.48572	1890.46815	3093.15109	0.27281	0.275	3.67E-04	7.90E-04	1.72E-04	9.85E-04	8.15E-05	3.25E-04	1.13E-03	5.80E-04	1.20E-04	2.31E-03	9.31E-04	1.52E-03	1.28E-04	1.30E-04	9.5671E-03
551311.37	4173191.76	1877.27205	2512.73589	541.57631	3665.30644	638.33489	2512.98577	1891.19624	1490.09685	305.34593	3075.65115	1936.81508	3076.61547	0.26289	0.2649	3.64E-04	7.85E-04	1.69E-04	1.00E-03	8.20E-05	3.23E-04	1.12E-03	5.75E-04	1.18E-04	2.31E-03	9.54E-04	1.52E-03	1.23E-04	1.26E-04	9.5583E-03
551421.52	4173342.93	2096.4714	2565.42526	524.45348	3197.80196	565.5854	2776.35898	2113.37176	1546.34227	299.53305	2790.48332	1631.19667	3385.04864	0.30984	0.31142	4.07E-04	8.01E-04	1.64E-04	8.74E-04	7.27E-05	3.57E-04	1.25E-03	5.97E-04	1.16E-04	2.09E-03	8.04E-04	1.67E-03	1.45E-04	1.48E-04	9.4910E-03
551493.07	4173398.14	2201.85853	2520.8687	516.90662	3008.37762	549.90195	2929.3748	2226.28465	1513.62144	295.03544	2686.6617	1471.5536	3550.18079	0.36417	0.36486	4.27E-04	7.87E-04	1.61E-04	8.22E-04	7.06E-05	3.76E-04	1.31E-03	5.84E-04	1.14E-04	2.01E-03	7.25E-04	1.75E-03	1.71E-04	1.73E-04	9.4890E-03
551226.55	4172954.95	1844.23691	2483.5211	602.35706	4264.91935	691.62197	1832.8232	1846.78935	1443.62092	340.36847	3521.94395	2250.67032	2316.28431	0.22648	0.22941	3.58E-04	7.76E-04	1.88E-04	1.17E-03	8.89E-05	2.35E-04	1.09E-03	5.57E-04	1.31E-04	2.64E-03	1.11E-03	1.14E-03	1.06E-04	1.09E-04	9.6952E-03
551237.08	4172860.37	1789.31343	2307.08552	631.72794	4587.40491	773.5797	1637.89311	1788.75524	1333.2027	353.58555	3582.0677	2545.04223	2079.60753	0.22136	0.22457	3.47E-04	7.21E-04	1.97E-04	1.25E-03	9.94E-05	2.10E-04	1.06E-03	5.15E-04	1.36E-04	2.69E-03	1.25E-03	1.02E-03	1.04E-04	1.06E-04	9.7093E-03
551667.58	4173441.07	2816.42958	2366.84969	521.76383	2302.81733	473.38102	3154.20339	2856.94495	1396.79453	302.10209	2185.90492	1155.92712	3865.81182	0.86093	0.84006	5.47E-04	7.39E-04	1.63E-04	6.29E-04	6.08E-05	4.05E-04	1.69E-03	5.39E-04	1.17E-04	1.64E-03	5.69E-04	1.90E-03	4.04E-04	3.98E-04	9.8005E-03
551377.08	4173288.89	1977.81927	2587.88317	549.39538	3382.03975	595.59725	2589.26748	1991.11988	1558.7139	312.58227	2940.15636	1745.97626	3168.45386	0.28899	0.2905	3.84E-04	8.08E-04	1.72E-04	9.24E-04	7.65E-05	3.33E-04	1.18E-03	6.02E-04	1.21E-04	2.20E-03	8.60E-04	1.56E-03	1.35E-04	1.38E-04	9.4930E-03
552001.38	4173247.62	3145.98149	2241.66323	432.13954	1904.53738	386.28145	3466.46487	3218.90209	1305.48034	251.75075	1854.12023	930.36318	4239.22314	0.3054	0.29961	6.11E-04	7.00E-04	1.35E-04	5.20E-04	4.96E-05	4.45E-04	1.90E-03	5.04E-04	9.72E-05	1.39E-03	4.58E-04	2.09E-03	1.43E-04	1.42E-04	9.1840E-03
551284.19	4172690.96	1753.06781	2176.10036	659.76239	4692.72651	887.43784	1535.26529	1750.35418	1256.31709	365.78973	3506.78873	2835.23622	1953.44259	0.21068	0.21422	3.40E-04	6.80E-04	2.06E-04	1.28E-03	1.14E-04	1.97E-04	1.03E-03	4.85E-04	1.41E-04	2.63E-03	1.40E-03	9.62E-04	9.87E-05	1.02E-04	9.6671E-03
551431.25	4173352.1	2100.17367	2528.61367	516.68533	3145.47321	558.92711	2787.13445	2118.1113	1522.7275	295.01747	2743.78867	1606.38271	3393.58574	0.31419	0.31533	4.08E-04	7.90E-04	1.61E-04	8.59E-04	7.18E-05	3.58E-04	1.25E-03	5.88E-04	1.14E-04	2.06E-03	7.91E-04	1.67E-03	1.47E-04	1.49E-04	9.4168E-03
551358.17	4173262.22	1924.15307	2553.51694	553.42265	3463.18206	611.60476	2530.71543	1937.18348	1528.1582	313.5355	2997.90623	1800.23101	3096.43683	0.28109	0.2827	3.73E-04	7.98E-04	1.73E-04	9.46E-04	7.86E-05	3.25E-04	1.14E-03	5.90E-04	1.21E-04	2.25E-03	8.87E-04	1.53E-03	1.32E-04	1.34E-04	9.4737E-03
551231.17	4172884.53	1792.09351	2341.16301	623.24393	4494.19401	747.30483	1670.94014	1792.27308	1354.17946	349.43094	3563.3701	2457.31542	2120.11999	0.22112	0.22421	3.48E-04	7.31E-04	1.95E-04	1.23E-03	9.60E-05	2.15E-04	1.06E-03	5.23E-04	1.35E-04	2.67E-03	1.21E-03	1.04E-03	1.04E-04	1.06E-04	9.6642E-03
551314.46	4173200.35	1864.37216	2487.77609	539.62151	3622.08216	633.47587	2488.09579	1878.08629	1475.64852	304.22588	3049.09029	1911.67057	3045.52818	0.26228	0.26423	3.62E-04	7.77E-04	1.69E-04	9.90E-04	8.14E-05	3.20E-04	1.11E-03	5.70E-04	1.17E-04	2.29E-03	9.42E-04	1.50E-03	1.23E-04	1.25E-04	9.4698E-03
551242.56	4172827.74	1772.20761	2241.78861	638.31499	4627.56627	800.02222	1590.94322	1770.71747	1294.81679	356.75533	3555.43093	2628.5217	2020.52791	0.2198	0.22318	3.44E-04	7.00E-04	1.99E-04	1.26E-03	1.03E-04	2.04E-04	1.05E-03	5.00E-04	1.38E-04	2.67E-03	1.29E-03	9.95E-04	1.03E-04	1.06E-04	9.6624E-03
551336.09	4173231.36	1882.00304	2508.00773	548.67212	3551.71662	626.72445	2498.77487	1895.33513	1491.70322	309.66218	3038.44928	1860.36792	3056.51769	0.27169	0.27381	3.65E-04	7.83E-04	1.71E-04	9.70E-04	8.05E-05	3.21E-04	1.12E-03	5.76E-04	1.20E-04	2.28E-03	9.16E-04	1.51E-03	1.27E-04	1.30E-04	9.4633E-03
551680.72	4173439.16	2876.89872	2321.17224	515.51519	2258.55623	467.82186	3103.2588	2919.76207	1366.2114	298.77264	2132.21758	1136.95538	3810.4968	0.99976	0.96255	5.58E-04	7.25E-04	1.61E-04	6.17E-04	6.01E-05	3.99E-04	1.72E-03	5.27E-04	1.15E-04	1.60E-03	5.60E-04	1.88E-03	4.69E-04	4.56E-04	9.8469E-03
551392.32	4173315.42	2012.76653	2565.20518	535.18532	3270.36893	576.15512	2626.30025	2026.81589	1548.58737	305.31443	2848.24243	1678.44176	3212.74271	0.29156	0.29326	3.91E-04	8.01E-04	1.67E-04	8.94E-04	7.40E-05	3.37E-04	1.20E-03	5.98E-04	1.18E-04	2.14E-03	8.27E-04	1.58E-03	1.37E-04	1.39E-04	9.3965E-03
551276.39	4172727.22	1747.32879	2164.60523	653.93129	4630.33284	866.09719	1550.37089	1744.62209	1250.83179	363.18849	3471.80102	2780.84569	1968.16758	0.21176	0.21525	3.39E-04	6.76E-04	2.04E-04	1.27E-03	1.11E-04	1.99E-04	1.03E-03	4.83E-04	1.40E-04	2.60E-03	1.37E-03	9.70E-04	9.92E-05	1.02E-04	9.5915E-03
551223.33	4172945.98	1820.53261	2435.70956	601.24766	4253.2104	693.49075	1789.55721	1822.66358	1414.88054	339.37529	3494.02011	2258.16091	2263.02266	0.22327	0.22617	3.53E-04	7.61E-04	1.88E-04	1.16E-03	8.91E-05	2.30E-04	1.08E-03	5.46E-04	1.31E-04	2.62E-03	1.11E-03	1.11E-03	1.05E-04	1.07E-04	9.5946E-03
551502.73	4173407.24	2189.68315	2490.1661	512.98978	2947.53893	543.35922	2898.50306	2214.48272	1495.56594	292.87023	2644.13184	1436.30022	3512.57777	0.36748	0.36825	4.25E-04	7.78E-04	1.60E-04	8.05E-04	6.98E-05	3.72E-04	1.31E-03	5.77E-04	1.13E-04	1.98E-03	7.08E-04	1.73E-03	1.72E-04	1.75E-04	9.3750E-03
551440.99	4173361.27	2105.3236	2498.16355	510.90519	3100.56525	553.53519	2796.50246	2124.30454	1502.68681	291.60852	2707.01325	1582.83157	3400.84921	0.31871	0.32011	4.09E-04	7.80E-04	1.60E-04	8.47E-04	7.11E-05	3.59E-04	1.25E-03	5.80E-04	1.13E-04	2.03E-03	7.80E-04	1.68E-03	1.49E-04	1.52E-04	9.3582E-03
551450.72	4173370.43	2117.98374	2484.08004	508.57271	3069.6482	550.25931	2813.11557	2138.10084	1492.5318	290.18348	2687.84049	1561.86632	3417.94537	0.32446	0.32543	4.11E-04	7.76E-04	1.59E-04	8.39E-04	7.07E-05	3.61E-04	1.26E-03	5.76E-04	1.12E-04	2.02E-03	7.69E-04	1.68E-03	1.52E-04	1.54E-04	9.3414E-03
551715.36	4173425.16	3080.38232	2246.16207	505.59108	2190.50961	461.2744	3026.28438	3131.12517	1314.56549	293.58468	2038.85142	1109.30648	3729.11701	1.77243	1.57329	5.98E-04	7.02E-04	1.58E-04	5.99E-04	5.93E-05	3.89E-04	1.85E-03	5.07E-04	1.13E-04	1.53E-03	5.46E-04	1.84E-03	8.31E-04	7.46E-04	1.0461E-02
551361.76	4173270.8	1921.87517	2538.47766	548.89819	3411.62473	603.05345	2514.42939	1934.75014	1521.79555	311.30455	2957.19269	1772.02532	3077.38732	0.28041	0.28196	3.73E-04	7.93E-04	1.71E-04	9.32E-04	7.75E-05	3.23E-04	1.14E-03	5.87E-04	1.20E-04	2.22E-03	8.73E-04	1.52E-03	1.31E-04	1.34E-04	9.3906E-03
551279.88	4172699.34	1736.53657	2151.81078	652.08465	4620.75501	873.69518	1527.36206	1733.85878	1242.72304	361.69223	3457.90369	2789.08945	1941.82722	0.20863	0.21211	3.37E-04	6.72E-04	2.04E-04	1.26E-03	1.12E-04	1.96E-04	1.02E-03	4.80E-04	1.40E-04	2.59E-03	1.37E-03	9.57E-04	9.78E-05	1.01E-04	9.5478E-03
551317.55	4173208.93	1852.41534	2464.94474	537.75865	3578.15234	628.2163	2462.15606	1865.8922	1462.62318	303.19341	3022.30125	1885.9873	3013.55219	0.26163	0.26352	3.59E-04	7.70E-04	1.68E-04	9.78E-04	8.07E-05	3.16E-04	1.10E-03	5.65E-04	1.17E-04	2.27E-03	9.29E-04	1.48E-03	1.23E-04	1.25E-04	9.3820E-03
551243.27	4172818.3	1755.54099	2205.98554	634.8877	4583.81422	799.20177	1568.54865	1753.86967	1274.32776	354.68702	3510.54129	2619.56129	1991.99355	0.21681	0.22018	3.41E-04	6.89E-04	1.98E-04	1.25E-03	1.03E-04	2.02E-04	1.04E-03	4.92E-04	1.37E-04	2.63E-03	1.29E-03	9.81E-04	1.02E-04	1.04E-04	9.5583E-03
551339.18	4173239.94	1871.81086	2487.16026	545.45009	3496.84905	618.67854	2469.52415	1884.86796	1480.72088	308.0169	3000.2871	1830.34025	3021.5476	0.27052	0.27257	3.63E-04	7.77E-04	1.70E-04	9.55E-04	7.95E-05	3.17E-04	1.11E-03	5.72E-04	1.19E-04	2.25E-03	9.02E-04	1.49E-03	1.27E-04	1.29E-04	9.3612E-03
551257.87	4172776.78	1745.67732	2161.65423	644.25496	4596.38436	829.29327	1548.37514	1743.246	1249.2993	358.93335	3472.60349	2699.52295	1965.16657	0.21401	0.21743	3.39E-04	6.75E-04	2.01E-04	1.26E-03	1.07E-04	1.99E-04	1.03E-03	4.82E-04	1.39E-04	2.60E-03	1.33E-03	9.68E-04	1.00E-04	1.03E-04	9.5310E-03
551225.24	4172908.54	1785.40446	2353.12401	609.42374	4347.46617	716.81142	1696.81534	1786.3279	1363.04058	342.55977	3501.23693	2345.92169	2150.7474	0.21901	0.22197	3.46E-04	7.35E-04	1.90E-04	1.19E-03	9.21E-05	2.18E-04	1.05E-03	5.26E-04	1.32E-04	2.62E-03	1.16E-03	1.06E-03	1.03E-04	1.05E-04	9.5305E-03
551693.86	4173437.25	2918.40571	2263.57303	507.28186	2210.66226	461.33616	3028.83157	2963.30677	1329.69284	294.18378	2073.47649	1117.04466	3724.89623	1.13313	1.07066	5.66E-04	7.07E-04	1.58E-04	6.04E-04	5.93E-05	3.89E-04	1.75E-03	5.13E-04	1.14E-04	1.55E-03	5.50E-04	1.83E-03	5.31E-04	5.07E-04	9.8385E-03
551512.4	4173416.34	2177.53735	2460.05059	509.15286	2883.94682	536.42747	2868.47882	2202.52381	1477.7154	290.77024	2599.65348	1400.56063	3476.62029	0.37064	0.37117	4.23E-04	7.68E-04	1.59E-04	7.88E-04	6.89E-05	3.69E-04	1.30E-03	5.70E-04	1.12E-04	1.95E-03	6.90E-04	1.71E-03	1.74E-04	1.76E-04	9.2594E-03
551320.64	4173217.52	1841.85194	2444.82906	536.05836	3534.40275	622.62815	2436.30194	1855.0735	1451.30367	302.27352	2995.83266	1860.09282	2982.06279	0.26096	0.26279	3.57E-04	7.64E-04	1.67E-04	9.66E-04	8.00E-05	3.13E-04	1.10E-03	5.60E-04	1.17E-04	2.25E-03	9.16E-04	1.47E-03	1.22E-04	1.25E-04	9.2973E-03
551272.1	4172735.57	1728.18125	2133.17613	643.80221	4542.6743	847.56589	1533.97284	1725.5928	1233.114	357.78644	3414.09754	2720.08907	1946.63897	0.20855	0.21193	3.35E-04	6.66E-04	2.01E-04	1.24E-03	1.09E-04	1.97E-04	1.02E-03	4.76E-04	1.38E-04	2.56E-03	1.34E-03	9.59E-04	9.77E-05	1.00E-04	9.4393E-03
551229.47	4172874.14	1758.25911	2274.32664	613.48398	4418.22101	741.5261	1622.7524	1758.21609	1315.29285	343.68067	3483.2709	2429.61562	2059.71031	0.21519	0.21819	3.41E-04	7.10E-04	1.92E-04	1.21E-03	9.53E-05	2.08E-04	1.04E-03	5.08E-04	1.33E-04	2.61E-03	1.20E-03	1.01E-03	1.01E-04	1.03E-04	9.4596E-03
551223.55	4172898.18	1765.17288	2310.05209	607.02548	4336.69112	720.98215	1660.4507	1765.78963	1337.40442	340.77821	3468.53687	2359.34551	2105.68993	0.21632	0.21927	3.43E-04	7.22E-04	1.90E-04	1.18E-03	9.26E-05	2.13E-04	1.04E-03	5.16E-04	1.32E-04	2.60E-03	1.16E-03	1.04E-03	1.01E-04	1.04E-04	9.4399E-03
551243.97	4172808.86	1737.11926	2168.37307	630.31621	4528.4629	796.69399	1545.59154	1735.29591	1252.82341	351.95469	3458.50796	2603.22695	1962.68439	0.21334	0.21667	3.37E-04	6.77E-04	1.97E-04	1.24E-03	1.02E-04	1.99E-04	1.02E-03	4.84E-04	1.36E-04	2.59E-03	1.28E-03	9.67E-04	1.00E-04	1.03E-04	9.4381E-03
551259.79	4172767.85	1730.08313	2134.98157	639.26248	4537.16326	826.35398	1533.63507	1727.63131	1234.24086	355.97632	3424.80013	2677.74274	1946.1268	0.21066	0.21402	3.36E-04	6.67E-04	2.00E-04	1.24E-03	1.06E-04	1.97E-04	1.02E-03	4.76E-04	1.37E-04	2.57E-03	1.32E-03	9.59E-04	9.87E-05	1.01E-04	9.4244E-03
551275.58	4172707.71	1718.24625	2123.33119	643.24065	4539.64996	857.88879	1515.83586	1715.63185	1226.71233	356.96496	3403.06381	2736.29527	1925.85625	0.20602	0.20942	3.33E-04	6.63E-04	2.01E-04	1.24E-03	1.10E-04	1.95E-04	1.01E-03	4.74E-04	1.38E-04	2.55E-03	1.35E-03	9.49E-04	9.66E-05	9.92E-05	9.4107E-03
551267.81	4172743.92	1724.27904	2125.85615	641.24807	4527.99652	840.40405	1529.51701	1721.6986	1228.92357	356.53746	3405.49334	2703.09204	1940.81227	0.20858	0.21195	3.35E-04	6.64E-04	2.00E-04	1.24E-03	1.08E-04	1.96E-04	1.02E-03	4.74E-04	1.38E-04	2.55E-03	1.33E-03	9.56E-04	9.78E-05	1.00E-04	9.4079E-03
551479.92	4173397.94	2127.34939	2431.76949	502.08211	2952.90003	538.2553	2800.12204	2150.1898	1459.55487	286.42077	2616.52526	1461.80069	3397.03118	0.33879	0.33969	4.13E-04	7.60E-04	1.57E-04	8.07E-04	6.91E-05	3.60E-04	1.27E-03	5.63E-04	1.11E-04	1.96E-03	7.20E-04	1.67E-03	1.59E-04	1.61E-04	9.1831E-03
551645.56	4173453.23	2617.19783	2338.70322	513.14422	2300.41806	468.36909	3053.56538	2652.36538	1385.89421	296.44352	2199.38348	1153.68942	3735.47403	0.61511	0.605	5.08E-04	7.30E-04	1.60E-04	6.29E-04	6.02E-05	3.92E-04	1.57E-03	5.35E-04	1.14E-04	1.65E-03	5.68E-04	1.84E-03	2.88E-04	2.87E-04	9.3272E-03
551658.79	4173451.31	2691.65451	2312.17411	510.39986	2264.13224	464.50599	3041.62095	2729.09297	1366.07097	295.24796	2155.73505	1137.60953	3727.93422	0.69349	0.67826	5.22E-04	7.22E-04	1.59E-04	6.19E-04	5.97E-05	3.91E-04	1.61E-03	5.27E-04	1.14E-04	1.62E-03	5.60E-04	1.84E-03	3.25E-04	3.21E-04	9.3848E-03
551728.4	4173423.26	3095.09012	2180.45283	494.14426	2136.88821	452.96262	2926.63388	3147.56687	1274.00401	287.0083	1979.76985	1085.68779	3611.60968	1.70948	1.47538	6.01E-04	6.81E-04	1.54E-04	5.84E-04	5.82E-05	3.76E-04	1.86E-03	4.92E-04	1.11E-04	1.48E-03	5.35E-04	1.78E-03	8.01E-04	6.99E-04	1.0213E-02
551365.63	4173279.9	1901.70842	2491.3354	538.09528	3319.82762	589.3905	2472.93564	1914.39958	1496.80081	305.51537	2877.1859	1730.92777	3026.98767	0.27818	0.27975	3.69E-04	7.78E-04	1.68E-04	9.07E-04	7.57E-05	3.18E-04	1.13E-03	5.78E-04	1.18E-04	2.16E-03	8.53E-04	1.49E-03	1.30E-04	1.33E-04	9.2054E-03
551632.33	4173455.16	2534.77326	2352.36779	513.42989	2364.35676	471.25119	3039.79961	2567.72012	1398.18129	296.18362	2235.90155	1168.0275	3711.93733	0.55011	0.5431	4.92E-04	7.35E-04	1.60E-04	6.46E-04	6.05E-05	3.91E-04	1.52E-03	5.40E-04	1.14E-04	1.68E-03	5.75E-04	1.83E-03	2.58E-04	2.57E-04	9.2493E-03
551343.41	4173251.51	1857.06569	2456.03109	539.72005	3416.56644	606.66643	2428.91453	1869.74965	1464.59053	305.07764	2941.11016	1788.24865	2973.00133	0.26855	0.27051	3.60E-04	7.67E-04	1.69E-04	9.34E-04	7.79E-05	3.12E-04	1.10E-03	5.65E-04	1.18E-04	2.20E-03	8.81E-04	1.46E-03	1.26E-04	1.28E-04	9.2109E-03
551323.73	4173226.11	1830.0425	2422.71989	533.56298	3484.58853	616.01656	2407.50325	1843.00119	1438.95803	300.92815	2963.61094	1832.30601	2947.25602	0.25996	0.26173	3.55E-04	7.57E-04	1.67E-04	9.52E-04	7.91E-05	3.09E-04	1.09E-03	5.55E-04	1.16E-04	2.22E-03	9.03E-04	1.45E-03	1.22E-04	1.24E-04	9.2008E-03
551244.68	4172799.41	1724.5604	2142.18555	628.3463	4498.62829	797.92461	1529.55785	1722.57917	1237.74136	350.64368	3425.08442	2601.95781	1942.21337	0.21118	0.21449	3.35E-04	6.69E-04	1.96E-04	1.23E-03	1.03E-04	1.96E-04	1.02E-03	4.78E-04	1.35E-04	2.57E-03	1.28E-03	9.57E-04	9.90E-05	1.02E-04	9.3652E-03
551489.66	4173407.11	2127.64974	2418.27676	500.66923	2909.376	533.93685	2789.76571	2151.09194	1451.46244	285.68641	2592.08708	1430.07875	3384.13015	0.34344	0.34388	4.13E-04	7.55E-04	1.56E-04	7.95E-04	6.86E-05	3.58E-04	1.27E-03	5.60E-04	1.10E-04	1.94E-03	7.04E-04	1.67E-03	1.61E-04	1.63E-04	9.1257E-03
551749.44	4173411.24	3183.08773	2136.22797	487.21106	2105.41454	449.70161	2872.28563	3239.90117	1246.84064	283.11122	1935.96538	1074.10211	3546.69672	1.57921	1.35386	6.18E-04	6.67E-04	1.52E-04	5.75E-04	5.78E-05	3.69E-04	1.91E-03	4.81E-04	1.09E-04	1.45E-03	5.29E-04	1.75E-03	7.40E-04	6.42E-04	1.0052E-02
551263.52	4172752.26	1714.39286	2109.77098	635.32743	4483.70629	828.07173	1519.39742	1711.88817	1219.80416	353.45194	3378.25236	2666.46469	1927.86406	0.20718	0.21048	3.33E-04	6.59E-04	1.98E-04	1.23E-03	1.06E-04	1.95E-04	1.01E-03	4.71E-04	1.36E-04	2.53E-03	1.31E-03	9.50E-04	9.71E-05	9.98E-05	9.3274E-03
551411.18	4173345.38	2013.5855	2459.16436	508.7017	3093.57518	549.76112	2624.15779	2029.2702	1482.97812	290.47742	2691.85489	1588.94723	3204.10693	0.29161	0.29304	3.91E-04	7.68E-04	1.59E-04	8.45E-04	7.06E-05	3.37E-04	1.20E-03	5.72E-04	1.12E-04	2.02E-03	7.83E-04	1.58E-03	1.37E-04	1.39E-04	9.1080E-03
551672.03	4173449.39	2746.90487	2269.11737	505.23327	2222.78655	459.48533	2999.33809	2786.3703	1337.8097	292.52156	2103.9108	1120.40018	3681.86464	0.77332	0.75022	5.33E-04	7.09E-04	1.58E-04	6.07E-04	5.90E-05	3.85E-04	1.64E-03	5.16E-04	1.13E-04	1.58E-03	5.52E-04	1.81E-03	3.62E-04	3.56E-04	9.3864E-03
551707	4173435.34	2949.67917	2201.95486	497.67657	2160.67682	454.14612	2942.81234	2996.52298	1291.14232	288.74595	2014.02453	1095.8451	3624.74523	1.24985	1.15173	5.72E-04	6.88E-04	1.55E-04	5.90E-04	5.83E-05	3.78E-04	1.77E-03	4.98E-04	1.11E-04	1.51E-03	5.40E-04	1.79E-03	5.86E-04	5.46E-04	9.7881E-03
551619.1	4173457.08	2455.2207	2358.10852	511.72374	2403.51715	473.27349	3008.55591	2486.20111	1404.83003	294.76838	2267.00473	1180.12654	3668.7113	0.49963	0.49444	4.76E-04	7.37E-04	1.60E-04	6.57E-04	6.08E-05	3.87E-04	1.47E-03	5.42E-04	1.14E-04	1.70E-03	5.81E-04	1.81E-03	2.34E-04	2.34E-04	9.1572E-03
551420.75	4173354.39	2025.3588	2436.50443	502.81271	3055.13453	544.70118	2647.86849	2041.95332	1467.83076	287.0883	2658.41359	1569.18062	3228.84144	0.29585	0.29721	3.93E-04	7.61E-04	1.57E-04	8.35E-04	7.00E-05	3.40E-04	1.21E-03	5.67E-04	1.11E-04	1.99E-03	7.73E-04	1.59E-03	1.39E-04	1.41E-04	9.0749E-03
551382.58	4173306.25	1932.30779	2475.34291	524.79649	3204.82492	568.97679	2501.58401	1945.43655	1494.96991	299.02082	2779.33049	1665.82096	3061.5044	0.2817	0.28302	3.75E-04	7.73E-04	1.64E-04	8.76E-04	7.31E-05	3.21E-04	1.15E-03	5.77E-04	1.15E-04	2.08E-03	8.21E-04	1.51E-03	1.32E-04	1.34E-04	9.1017E-03
551219.29	4172932.41	1765.16466	2337.17435	587.95354	4145.79576	680.1236	1710.57521	1766.90666	1356.57473	331.48662	3389.89325	2209.51494	2164.97876	0.21415	0.21693	3.43E-04	7.30E-04	1.84E-04	1.13E-03	8.74E-05	2.20E-04	1.04E-03	5.24E-04	1.28E-04	2.54E-03	1.09E-03	1.07E-03	1.00E-04	1.03E-04	9.2903E-03
551221.86	4172887.82	1736.73895	2254.2362	600.04584	4286.87864	718.15071	1617.44887	1737.11714	1304.64432	336.50932	3409.26252	2346.18293	2052.03292	0.2116	0.21449	3.37E-04	7.04E-04	1.87E-04	1.17E-03	9.23E-05	2.08E-04	1.03E-03	5.04E-04	1.30E-04	2.56E-03	1.16E-03	1.01E-03	9.92E-05	1.02E-04	9.2822E-03
551227.78	4172863.74	1728.7786	2214.7245	605.26314	4351.48357	738.1995	1580.18062	1728.51008	1280.51291	338.86688	3412.11361	2410.37882	2006.37389	0.21034	0.21329	3.35E-04	6.92E-04	1.89E-04	1.19E-03	9.48E-05	2.03E-04	1.02E-03	4.94E-04	1.31E-04	2.56E-03	1.19E-03	9.88E-04	9.86E-05	1.01E-04	9.2821E-03
551326.82	4173234.69	1818.82439	2401.46707	530.80525	3433.2575	608.89905	2378.82779	1831.51746	1427.34699	299.46721	2929.45664	1804.05076	2912.69556	0.25886	0.26056	3.53E-04	7.50E-04	1.66E-04	9.38E-04	7.82E-05	3.06E-04	1.08E-03	5.51E-04	1.16E-04	2.20E-03	8.89E-04	1.43E-03	1.21E-04	1.23E-04	9.1031E-03
551283.46	4172671.28	1696.51949	2086.19731	632.65381	4460.69057	850.02028	1470.14048	1694.2133	1204.81202	350.7662	3347.59281	2691.9492	1872.61573	0.1981	0.20132	3.29E-04	6.52E-04	1.98E-04	1.22E-03	1.09E-04	1.89E-04	1.00E-03	4.65E-04	1.35E-04	2.51E-03	1.33E-03	9.22E-04	9.28E-05	9.54E-05	9.2424E-03
551430.32	4173363.41	2029.55635	2405.37192	496.4179	3010.97263	539.13718	2657.55797	2047.16538	1447.45178	283.32813	2620.29833	1547.23067	3236.50492	0.29984	0.30077	3.94E-04	7.51E-04	1.55E-04	8.23E-04	6.93E-05	3.41E-04	1.21E-03	5.59E-04	1.09E-04	1.96E-03	7.62E-04	1.59E-03	1.41E-04	1.43E-04	9.0142E-03
551279.14	4172679.69	1691.65219	2082.42795	631.47064	4446.89257	847.4088	1474.29908	1689.26888	1202.78826	350.15708	3336.99187	2684.51671	1876.34267	0.19881	0.20205	3.28E-04	6.50E-04	1.97E-04	1.22E-03	1.09E-04	1.89E-04	9.97E-04	4.64E-04	1.35E-04	2.50E-03	1.32E-03	9.24E-04	9.32E-05	9.58E-05	9.2233E-03
551685.26	4173447.46	2798.86157	2221.71017	498.4557	2178.89828	453.73782	2943.56125	2840.48455	1306.67168	288.8427	2050.65586	1101.56386	3619.80005	0.86904	0.83169	5.43E-04	6.94E-04	1.56E-04	5.95E-04	5.83E-05	3.78E-04	1.68E-03	5.04E-04	1.12E-04	1.54E-03	5.43E-04	1.78E-03	4.07E-04	3.94E-04	9.3819E-03
551499.39	4173416.28	2114.14845	2388.30162	496.75007	2851.53906	527.64334	2758.57425	2137.88321	1433.90813	283.51328	2551.3555	1396.29819	3346.1258	0.34608	0.34634	4.10E-04	7.46E-04	1.55E-04	7.79E-04	6.78E-05	3.54E-04	1.26E-03	5.54E-04	1.09E-04	1.91E-03	6.88E-04	1.65E-03	1.62E-04	1.64E-04	9.0130E-03
551439.9	4173372.42	2039.49153	2387.11029	493.01957	2979.44086	535.49393	2672.15982	2058.11964	1434.72735	281.28128	2597.51846	1527.95092	3250.94452	0.30413	0.30531	3.96E-04	7.46E-04	1.54E-04	8.14E-04	6.88E-05	3.43E-04	1.21E-03	5.54E-04	1.09E-04	1.95E-03	7.53E-04	1.60E-03	1.43E-04	1.45E-04	8.9876E-03
551401.61	4173336.36	1971.4244	2435.66932	507.67256	3089.07377	549.41648	2554.00575	1986.0048	1471.05085	289.83074	2681.33842	1595.84269	3121.50505	0.28449	0.28595	3.83E-04	7.61E-04	1.59E-04	8.44E-04	7.06E-05	3.28E-04	1.17E-03	5.68E-04	1.12E-04	2.01E-03	7.86E-04	1.54E-03	1.33E-04	1.36E-04	8.9996E-03
551349.04	4173265.94	1843.48452	2422.02595	532.097	3320.63906	591.63739	2387.00212	1855.79241	1447.95638	301.21887	2867.71961	1737.94373	2923.07761	0.26639	0.26824	3.58E-04	7.57E-04	1.66E-04	9.07E-04	7.60E-05	3.07E-04	1.10E-03	5.59E-04	1.16E-04	2.15E-03	8.56E-04	1.44E-03	1.25E-04	1.27E-04	9.0391E-03
551274.82	4172688.09	1682.5607	2070.28154	627.91387	4412.39343	840.63406	1473.01131	1680.14341	1196.00174	348.27929	3312.41454	2663.13476	1873.27215	0.19847	0.2017	3.27E-04	6.47E-04	1.96E-04	1.21E-03	1.08E-04	1.89E-04	9.92E-04	4.62E-04	1.34E-04	2.48E-03	1.31E-03	9.23E-04	9.30E-05	9.56E-05	9.1667E-03
551459.04	4173390.45	2060.56961	2367.35909	490.51716	2926.06558	530.11621	2692.48214	2081.21792	1420.53124	279.75055	2568.97759	1488.64013	3271.41354	0.31387	0.31483	4.00E-04	7.39E-04	1.53E-04	8.00E-04	6.81E-05	3.46E-04	1.23E-03	5.48E-04	1.08E-04	1.93E-03	7.33E-04	1.61E-03	1.47E-04	1.49E-04	8.9581E-03
551232.71	4172827.79	1704.59814	2137.09292	609.19774	4368.80642	761.58918	1523.56244	1703.36952	1235.00186	340.56395	3368.68764	2480.80156	1935.15771	0.20754	0.21064	3.31E-04	6.68E-04	1.90E-04	1.19E-03	9.78E-05	1.96E-04	1.01E-03	4.77E-04	1.31E-04	2.53E-03	1.22E-03	9.53E-04	9.73E-05	9.98E-05	9.1875E-03
551449.47	4173381.44	2044.94421	2367.38331	489.98444	2945.72814	531.76005	2676.16461	2064.59496	1421.63416	279.45691	2574.16872	1507.25735	3253.13125	0.30847	0.30953	3.97E-04	7.39E-04	1.53E-04	8.05E-04	6.83E-05	3.44E-04	1.22E-03	5.49E-04	1.08E-04	1.93E-03	7.42E-04	1.60E-03	1.45E-04	1.47E-04	8.9479E-03
552008.68	4173253.38	2972.51992	2120.22545	415.97942	1833.09603	373.47122	3252.47476	3039.37939	1241.42147	242.16354	1780.25006	899.81286	3980.02923	0.29282	0.28724	5.77E-04	6.62E-04	1.30E-04	5.01E-04	4.80E-05	4.18E-04	1.79E-03	4.79E-04	9.35E-05	1.33E-03	4.43E-04	1.96E-03	1.37E-04	1.36E-04	8.7145E-03
551329.91	4173243.28	1808.3768	2381.14531	527.76069	3380.92624	601.34738	2350.82362	1820.79892	1416.48434	297.88537	2893.60714	1775.50478	2879.09263	0.25766	0.2593	3.51E-04	7.44E-04	1.65E-04	9.24E-04	7.73E-05	3.02E-04	1.07E-03	5.47E-04	1.15E-04	2.17E-03	8.75E-04	1.42E-03	1.21E-04	1.23E-04	9.0051E-03
551720.14	4173433.43	2974.92192	2141.8216	487.20479	2109.82332	446.48168	2854.25382	3023.66666	1253.30996	282.78627	1957.29302	1073.28493	3521.53046	1.31232	1.17908	5.77E-04	6.69E-04	1.52E-04	5.76E-04	5.74E-05	3.67E-04	1.78E-03	4.84E-04	1.09E-04	1.47E-03	5.29E-04	1.73E-03	6.15E-04	5.59E-04	9.6816E-03
551372.85	4173297.09	1887.61033	2435.37536	522.93561	3196.61073	569.49595	2432.60359	1900.1791	1468.10592	297.51322	2769.95875	1669.35996	2978.45228	0.27489	0.27658	3.66E-04	7.61E-04	1.63E-04	8.73E-04	7.32E-05	3.13E-04	1.12E-03	5.67E-04	1.15E-04	2.08E-03	8.22E-04	1.47E-03	1.29E-04	1.31E-04	8.9788E-03
551245.96	4172785.4	1693.86891	2086.42039	618.95105	4391.53661	790.46509	1496.79005	1691.77165	1206.02833	345.13259	3335.75357	2562.27492	1900.19898	0.20516	0.20836	3.29E-04	6.52E-04	1.93E-04	1.20E-03	1.02E-04	1.92E-04	9.99E-04	4.66E-04	1.33E-04	2.50E-03	1.26E-03	9.36E-04	9.62E-05	9.87E-05	9.1589E-03
551741.45	4173421.37	3079.47462	2105.19004	481.41646	2081.10948	443.982	2812.32355	3132.83515	1229.47648	279.62042	1916.74355	1062.17212	3473.41348	1.45237	1.25672	5.98E-04	6.58E-04	1.50E-04	5.69E-04	5.70E-05	3.61E-04	1.85E-03	4.75E-04	1.08E-04	1.44E-03	5.23E-04	1.71E-03	6.81E-04	5.96E-04	9.7719E-03
551782.37	4173397.49	3184.70534	2029.00743	475.64608	2016.90522	434.93361	2816.83373	3244.42909	1229.59217	276.41252	1917.69393	1034.93797	3353.89943	0.9467	0.86945	6.18E-04	6.34E-04	1.49E-04	5.51E-04	5.59E-05	3.62E-04	1.92E-03	4.75E-04	1.07E-04	1.44E-03	5.10E-04	1.65E-03	4.44E-04	4.12E-04	9.3212E-03
551352.69	4173274.61	1838.24958	2404.0921	527.25349	3266.05195	582.76266	2367.51527	1850.38483	1439.74791	298.77422	2824.46165	1709.27474	2899.98756	0.26535	0.26712	3.57E-04	7.51E-04	1.65E-04	8.92E-04	7.49E-05	3.04E-04	1.09E-03	5.56E-04	1.15E-04	2.12E-03	8.42E-04	1.43E-03	1.24E-04	1.27E-04	8.9462E-03
551270.49	4172696.5	1671.41919	2053.44475	623.06778	4367.48948	831.49142	1468.0274	1668.99581	1186.52767	345.71792	3280.91926	2634.26836	1865.69991	0.19752	0.20072	3.24E-04	6.41E-04	1.95E-04	1.19E-03	1.07E-04	1.89E-04	9.85E-04	4.58E-04	1.33E-04	2.46E-03	1.30E-03	9.19E-04	9.26E-05	9.51E-05	9.0900E-03
551698.49	4173445.54	2833.91328	2164.70399	489.93281	2131.79486	447.18672	2868.52532	2877.41462	1270.81233	284.05491	1993.52624	1081.75598	3532.87031	0.9501	0.89433	5.50E-04	6.76E-04	1.53E-04	5.82E-04	5.74E-05	3.69E-04	1.70E-03	4.91E-04	1.10E-04	1.49E-03	5.33E-04	1.74E-03	4.45E-04	4.24E-04	9.3232E-03
551215.92	4172911.75	1722.41828	2251.81929	583.36729	4119.5032	684.01474	1634.44278	1723.53091	1305.17074	328.04168	3328.17326	2222.62659	2071.3675	0.2079	0.21063	3.34E-04	7.03E-04	1.82E-04	1.13E-03	8.79E-05	2.10E-04	1.02E-03	5.04E-04	1.27E-04	2.50E-03	1.09E-03	1.02E-03	9.74E-05	9.98E-05	9.0988E-03
551762.38	4173409.36	3149.85481	2065.65302	479.32012	2048.73017	439.82875	2761.82792	3206.99681	1205.17201	275.32919	1878.24869	1048.68602	3412.73039	1.19818	1.06185	6.11E-04	6.45E-04	1.50E-04	5.60E-04	5.65E-05	3.55E-04	1.89E-03	4.65E-04	1.06E-04	1.41E-03	5.17E-04	1.68E-03	5.62E-04	5.03E-04	9.5126E-03

551233.4	4172818.53	1689.98618	2105.37169	606.37692	4332.41846	761.20491	1503.42136	1688.57968	1216.79886	338.84913	3330.33009	2474.12457	1909.50825	0.20499	0.20808	3.28E-04	6.58E-04	1.89E-04	1.18E-03	9.78E-05	1.93E-04	9.97E-04	4.70E-04	1.31E-04	2.50E-03	1.22E-03	9.41E-04	9.61E-05	9.86E-05	9.0978E-03
551641.05	4173462.85	2513.24705	2264.08272	499.54587	2270.20246	457.58709	2921.50201	2546.24285	1342.65346	288.3608	2147.63617	1129.41721	3575.3077	0.53355	0.52565	4.88E-04	7.07E-04	1.56E-04	6.20E-04	5.88E-05	3.75E-04	1.50E-03	5.18E-04	1.11E-04	1.61E-03	5.56E-04	1.76E-03	2.50E-04	2.49E-04	8.9649E-03
551654.06	4173460.96	2584.06851	2242.0662	497.57697	2212.91421	454.14088	2916.37905	2619.13653	1325.866	287.58817	2108.07573	1114.70181	3575.40257	0.58903	0.57659	5.01E-04	7.00E-04	1.55E-04	6.05E-04	5.83E-05	3.75E-04	1.55E-03	5.12E-04	1.11E-04	1.58E-03	5.49E-04	1.76E-03	2.76E-04	2.73E-04	9.0039E-03
551220.17	4172877.45	1702.84125	2189.2495	589.96616	4209.75292	711.02319	1569.95547	1703.01831	1266.78249	330.59709	3330.43761	2314.46572	1992.54893	0.20557	0.20837	3.30E-04	6.84E-04	1.84E-04	1.15E-03	9.13E-05	2.02E-04	1.01E-03	4.89E-04	1.28E-04	2.50E-03	1.14E-03	9.82E-04	9.63E-05	9.88E-05	9.0774E-03
551214.23	4172901.42	1708.35787	2219.58635	583.60302	4130.22948	691.80313	1604.75013	1709.14679	1285.79591	327.71088	3312.37604	2249.03353	2034.77332	0.20656	0.2093	3.32E-04	6.93E-04	1.82E-04	1.13E-03	8.89E-05	2.06E-04	1.01E-03	4.96E-04	1.27E-04	2.48E-03	1.11E-03	1.00E-03	9.68E-05	9.92E-05	9.0520E-03
551628.04	4173464.74	2433.43828	2272.69882	499.10221	2310.35725	460.02191	2901.52264	2464.37021	1351.71128	287.69462	2179.51486	1142.53536	3544.68152	0.48521	0.47979	4.72E-04	7.10E-04	1.56E-04	6.31E-04	5.91E-05	3.73E-04	1.45E-03	5.22E-04	1.11E-04	1.63E-03	5.63E-04	1.75E-03	2.27E-04	2.27E-04	8.8865E-03
551392.04	4173327.34	1918.36694	2393.60548	504.13062	3065.4982	546.93534	2468.20654	1931.96584	1447.19682	287.66843	2654.40171	1595.7288	3019.28543	0.27762	0.27876	3.72E-04	7.48E-04	1.57E-04	8.38E-04	7.03E-05	3.17E-04	1.14E-03	5.59E-04	1.11E-04	1.99E-03	7.86E-04	1.49E-03	1.30E-04	1.32E-04	8.8381E-03
551667.07	4173459.07	2641.39182	2206.62931	493.37431	2175.46053	449.71247	2886.05436	2678.42532	1301.91153	285.45529	2061.65185	1098.73288	3543.9573	0.64695	0.62939	5.13E-04	6.89E-04	1.54E-04	5.94E-04	5.78E-05	3.71E-04	1.58E-03	5.03E-04	1.10E-04	1.55E-03	5.41E-04	1.75E-03	3.03E-04	2.98E-04	9.0069E-03
551334.21	4173255.03	1795.17474	2354.08095	522.94085	3307.53214	590.38106	2314.20783	1807.24429	1402.44179	295.42484	2841.26896	1736.17071	2835.31603	0.2559	0.25772	3.48E-04	7.35E-04	1.63E-04	9.04E-04	7.58E-05	2.97E-04	1.07E-03	5.41E-04	1.14E-04	2.13E-03	8.55E-04	1.40E-03	1.20E-04	1.22E-04	8.8703E-03
551356.69	4173284.01	1832.82247	2382.83614	521.21457	3206.0382	572.92414	2347.9288	1844.82463	1429.8332	295.69772	2775.15212	1678.2035	2876.69156	0.26408	0.26578	3.56E-04	7.44E-04	1.63E-04	8.76E-04	7.36E-05	3.02E-04	1.09E-03	5.52E-04	1.14E-04	2.08E-03	8.27E-04	1.42E-03	1.24E-04	1.26E-04	8.8431E-03
551248.06	4172775.64	1672.05639	2048.31538	611.38606	4306.5618	783.73724	1475.73033	1669.94714	1184.57489	340.7435	3268.83276	2526.66349	1872.99351	0.20058	0.20367	3.24E-04	6.40E-04	1.91E-04	1.18E-03	1.01E-04	1.90E-04	9.86E-04	4.57E-04	1.32E-04	2.45E-03	1.24E-03	9.23E-04	9.40E-05	9.65E-05	9.0053E-03
551234.09	4172809.28	1676.0252	2075.81922	603.63812	4296.31509	760.8186	1484.99963	1674.45315	1199.79647	337.15019	3292.91503	2467.43052	1886.02472	0.20251	0.20559	3.25E-04	6.48E-04	1.89E-04	1.17E-03	9.77E-05	1.91E-04	9.88E-04	4.63E-04	1.30E-04	2.47E-03	1.22E-03	9.29E-04	9.49E-05	9.74E-05	9.0119E-03
551615.03	4173466.64	2368.05946	2281.76451	497.63047	2347.03281	461.89159	2877.03464	2397.3864	1359.12164	286.48017	2210.30862	1153.30966	3511.26929	0.44927	0.44439	4.60E-04	7.13E-04	1.55E-04	6.41E-04	5.93E-05	3.70E-04	1.42E-03	5.25E-04	1.11E-04	1.66E-03	5.68E-04	1.73E-03	2.11E-04	2.11E-04	8.8244E-03
551266.17	4172704.9	1655.89127	2028.83641	615.70288	4301.23039	818.20433	1457.54249	1653.51029	1172.65963	341.78612	3235.5256	2591.02473	1851.29948	0.19548	0.19862	3.21E-04	6.34E-04	1.92E-04	1.18E-03	1.05E-04	1.87E-04	9.76E-04	4.53E-04	1.32E-04	2.43E-03	1.28E-03	9.12E-04	9.16E-05	9.41E-05	8.9754E-03
551733.28	4173431.52	2980.54123	2077.53701	475.77625	2057.60104	438.19829	2757.51604	3030.67734	1213.98497	276.22856	1900.10166	1050.11175	3406.63146	1.23495	1.09529	5.78E-04	6.49E-04	1.49E-04	5.62E-04	5.63E-05	3.54E-04	1.79E-03	4.69E-04	1.07E-04	1.42E-03	5.17E-04	1.68E-03	5.79E-04	5.19E-04	9.4308E-03
551487.75	4173417.5	2051.82006	2313.47954	483.9996	2804.28504	517.38145	2650.52821	2074.34153	1388.25997	276.09723	2493.24921	1385.16194	3217.96478	0.32424	0.32474	3.98E-04	7.23E-04	1.51E-04	7.66E-04	6.65E-05	3.41E-04	1.22E-03	5.36E-04	1.07E-04	1.87E-03	6.82E-04	1.59E-03	1.52E-04	1.54E-04	8.7548E-03
551234.78	4172800.03	1666.93937	2055.67499	603.08755	4281.22702	763.57637	1472.41063	1665.1994	1188.14515	336.64504	3270.83462	2473.13103	1869.94619	0.20111	0.20418	3.23E-04	6.42E-04	1.88E-04	1.17E-03	9.81E-05	1.89E-04	9.83E-04	4.59E-04	1.30E-04	2.45E-03	1.22E-03	9.21E-04	9.43E-05	9.68E-05	8.9652E-03
551680.09	4173457.18	2690.69718	2163.45734	487.44803	2134.88304	444.5163	2838.44599	2729.6557	1273.60253	282.26271	2011.73018	1081.35766	3491.19839	0.70859	0.6821	5.22E-04	6.76E-04	1.52E-04	5.83E-04	5.71E-05	3.65E-04	1.61E-03	4.92E-04	1.09E-04	1.51E-03	5.33E-04	1.72E-03	3.32E-04	3.23E-04	8.9832E-03
551711.73	4173443.61	2854.7847	2102.34274	480.05901	2082.68923	439.90769	2781.17922	2899.93237	1232.38388	278.43427	1934.85237	1060.9569	3429.90883	0.9981	0.92192	5.54E-04	6.57E-04	1.50E-04	5.69E-04	5.65E-05	3.57E-04	1.71E-03	4.76E-04	1.07E-04	1.45E-03	5.23E-04	1.69E-03	4.68E-04	4.37E-04	9.2061E-03
551382.47	4173318.33	1877.90221	2367.34773	503.9672	3061.80775	547.47038	2402.43359	1890.71395	1430.82801	287.30214	2649.71513	1600.64496	2941.22137	0.27155	0.2728	3.64E-04	7.39E-04	1.57E-04	8.37E-04	7.03E-05	3.09E-04	1.12E-03	5.52E-04	1.11E-04	1.99E-03	7.88E-04	1.45E-03	1.27E-04	1.29E-04	8.7366E-03
551754.49	4173419.47	3051.8487	2033.30322	468.39181	2025.73585	434.58827	2702.03652	3105.72558	1187.15046	272.02623	1857.32677	1037.97215	3339.703	1.17051	1.0339	5.92E-04	6.35E-04	1.46E-04	5.54E-04	5.58E-05	3.47E-04	1.83E-03	4.58E-04	1.05E-04	1.39E-03	5.11E-04	1.65E-03	5.49E-04	4.90E-04	9.3142E-03
551602.02	4173468.53	2291.13419	2272.74206	493.43103	2376.22243	462.65566	2824.4241	2318.79162	1356.27249	283.6678	2229.48748	1161.98138	3443.4738	0.41562	0.41166	4.45E-04	7.10E-04	1.54E-04	6.49E-04	5.94E-05	3.63E-04	1.37E-03	5.24E-04	1.10E-04	1.67E-03	5.72E-04	1.70E-03	1.95E-04	1.95E-04	8.7121E-03
551212.54	4172891.09	1681.89356	2168.59983	577.26016	4085.99095	689.31473	1564.54236	1682.45764	1255.79132	323.82088	3259.20024	2237.54349	1984.68253	0.20224	0.20494	3.26E-04	6.77E-04	1.80E-04	1.12E-03	8.86E-05	2.01E-04	9.93E-04	4.85E-04	1.25E-04	2.44E-03	1.10E-03	9.78E-04	9.48E-05	9.71E-05	8.9082E-03
551250.16	4172765.88	1655.81806	2020.81514	606.11786	4245.91239	780.45694	1460.63702	1653.68757	1168.96198	337.6388	3219.77618	2504.18752	1853.49396	0.19721	0.20023	3.21E-04	6.31E-04	1.89E-04	1.16E-03	1.00E-04	1.88E-04	9.76E-04	4.51E-04	1.30E-04	2.41E-03	1.23E-03	9.13E-04	9.24E-05	9.49E-05	8.8955E-03
551218.48	4172867.09	1672.29014	2129.39341	580.97393	4137.86972	706.01543	1526.7657	1672.25933	1231.82247	325.35437	3257.04852	2289.34822	1938.49946	0.2004	0.20314	3.25E-04	6.65E-04	1.81E-04	1.13E-03	9.07E-05	1.96E-04	9.87E-04	4.76E-04	1.26E-04	2.44E-03	1.13E-03	9.55E-04	9.39E-05	9.63E-05	8.8915E-03
551372.9	4173309.31	1851.40049	2358.0755	507.2719	3083.90341	551.76992	2359.48442	1863.66495	1422.84845	288.80582	2670.45935	1613.39628	2890.47576	0.26651	0.26778	3.59E-04	7.37E-04	1.58E-04	8.43E-04	7.09E-05	3.03E-04	1.10E-03	5.49E-04	1.11E-04	2.00E-03	7.95E-04	1.42E-03	1.25E-04	1.27E-04	8.7043E-03
551497.32	4173426.51	2044.90639	2294.51456	481.63661	2756.26321	512.30048	2631.43023	2067.70903	1377.03918	274.8249	2462.75894	1354.20028	3194.96292	0.3269	0.32695	3.97E-04	7.17E-04	1.50E-04	7.53E-04	6.58E-05	3.38E-04	1.22E-03	5.32E-04	1.06E-04	1.85E-03	6.67E-04	1.57E-03	1.53E-04	1.55E-04	8.6746E-03
551258.35	4172741.22	1647.90257	2008.99061	606.87643	4227.45633	791.76761	1455.99245	1645.66281	1162.20361	337.55976	3195.3279	2521.66604	1847.19636	0.19488	0.1979	3.20E-04	6.28E-04	1.90E-04	1.16E-03	1.02E-04	1.87E-04	9.71E-04	4.49E-04	1.30E-04	2.40E-03	1.24E-03	9.10E-04	9.13E-05	9.38E-05	8.8639E-03
551775.31	4173407.48	3094.4606	1993.11405	468.315	1992.13699	429.71599	2649.3897	3151.18665	1163.08238	267.23885	1892.88776	1023.66026	3275.24267	0.95395	0.86776	6.01E-04	6.23E-04	1.46E-04	5.44E-04	5.52E-05	3.40E-04	1.86E-03	4.49E-04	1.03E-04	1.42E-03	5.04E-04	1.61E-03	4.47E-04	4.11E-04	9.1167E-03
551261.85	4172713.31	1637.69313	1999.51398	606.7249	4222.25136	802.25963	1443.14191	1635.3852	1156.11537	336.97873	3181.96781	2538.78509	1832.13091	0.19274	0.19578	3.18E-04	6.25E-04	1.90E-04	1.15E-03	1.03E-04	1.85E-04	9.65E-04	4.46E-04	1.30E-04	2.39E-03	1.25E-03	9.03E-04	9.03E-05	9.28E-05	8.8375E-03
551339.92	4173269.66	1779.66951	2319.09395	515.39538	3211.5255	575.58742	2271.59199	1791.36505	1384.87338	291.57607	2768.58751	1686.56868	2784.30482	0.25388	0.25523	3.45E-04	7.24E-04	1.61E-04	8.78E-04	7.39E-05	2.92E-04	1.06E-03	5.35E-04	1.13E-04	2.08E-03	8.31E-04	1.37E-03	1.19E-04	1.21E-04	8.6965E-03
551693.1	4173455.28	2727.8958	2112.70945	479.92369	2091.57565	438.59073	2774.714	2768.66435	1241.38811	278.07727	1958.83854	1062.93997	3417.97142	0.76399	0.72635	5.29E-04	6.60E-04	1.50E-04	5.71E-04	5.63E-05	3.56E-04	1.63E-03	4.79E-04	1.07E-04	1.47E-03	5.24E-04	1.68E-03	3.58E-04	3.44E-04	8.9226E-03
551795.55	4173395.58	3106.3324	1958.72274	463.45844	1959.04176	423.98359	2700.36148	3164.75311	1187.31616	269.28961	1859.89438	1008.36434	3218.88403	0.79623	0.74334	6.03E-04	6.12E-04	1.45E-04	5.35E-04	5.45E-05	3.47E-04	1.87E-03	4.58E-04	1.04E-04	1.39E-03	4.97E-04	1.59E-03	3.73E-04	3.52E-04	8.9287E-03
551363.32	4173300.3	1822.46347	2339.22428	508.84387	3100.73101	555.55016	2315.26109	1834.31897	1408.11685	289.25965	2685.11642	1624.20995	2837.56309	0.26123	0.26279	3.54E-04	7.31E-04	1.59E-04	8.47E-04	7.14E-05	2.97E-04	1.08E-03	5.44E-04	1.12E-04	2.01E-03	8.00E-04	1.40E-03	1.22E-04	1.25E-04	8.6553E-03
551222.87	4172827.71	1649.62031	2053.91543	586.19526	4170.21265	731.91215	1468.9447	1648.57254	1187.31413	327.74432	3223.40913	2368.97522	1866.0003	0.19822	0.20112	3.20E-04	6.42E-04	1.83E-04	1.14E-03	9.40E-05	1.89E-04	9.73E-04	4.58E-04	1.27E-04	2.42E-03	1.17E-03	9.19E-04	9.29E-05	9.53E-05	8.8160E-03
551254.04	4172749.6	1637.90799	1992.83016	601.04256	4183.81249	780.00679	1445.35483	1635.74496	1153.01993	334.50366	3168.0338	2486.53396	1833.68812	0.19344	0.1964	3.18E-04	6.22E-04	1.88E-04	1.14E-03	1.00E-04	1.86E-04	9.66E-04	4.45E-04	1.29E-04	2.38E-03	1.22E-03	9.03E-04	9.07E-05	9.31E-05	8.7839E-03
551589	4173470.42	2217.40594	2255.03882	487.6711	2398.80083	462.57036	2759.20227	2243.55678	1347.46944	279.97898	2241.23214	1168.33819	3361.60462	0.38674	0.38374	4.30E-04	7.04E-04	1.52E-04	6.55E-04	5.94E-05	3.54E-04	1.32E-03	5.20E-04	1.08E-04	1.68E-03	5.76E-04	1.66E-03	1.81E-04	1.82E-04	8.5838E-03
551724.96	4173441.69	2876.45371	2046.44173	469.73962	2033.51262	432.40601	2698.5008	2923.33497	1197.042	272.56285	1881.7697	1038.51369	3333.63657	1.01538	0.92394	5.58E-04	6.39E-04	1.47E-04	5.56E-04	5.56E-05	3.47E-04	1.73E-03	4.62E-04	1.05E-04	1.41E-03	5.12E-04	1.64E-03	4.76E-04	4.38E-04	9.0733E-03
551343.62	4173278.43	1773.51354	2301.17369	510.72663	3157.32116	566.88279	2251.77575	1785.02494	1376.47939	289.21225	2726.21356	1658.42993	2760.69282	0.25272	0.25401	3.44E-04	7.19E-04	1.60E-04	8.63E-04	7.28E-05	2.89E-04	1.05E-03	5.31E-04	1.12E-04	2.04E-03	8.17E-04	1.36E-03	1.18E-04	1.20E-04	8.6035E-03
551746.42	4173429.61	2961.85765	2007.70202	463.3996	2004.04131	429.34709	2652.08022	3012.73033	1172.60868	269.038	1841.17815	1026.92274	3279.10089	1.07894	0.96066	5.75E-04	6.27E-04	1.45E-04	5.48E-04	5.52E-05	3.41E-04	1.78E-03	4.53E-04	1.04E-04	1.38E-03	5.06E-04	1.62E-03	5.06E-04	4.55E-04	9.0875E-03
551236.23	4172783.93	1632.15862	1992.97511	592.3297	4161.40115	754.44185	1435.40703	1630.29529	1152.48835	330.35914	3171.32689	2427.11197	1822.46494	0.19443	0.19738	3.17E-04	6.23E-04	1.85E-04	1.14E-03	9.69E-05	1.84E-04	9.62E-04	4.45E-04	1.28E-04	2.38E-03	1.20E-03	8.98E-04	9.11E-05	9.35E-05	8.7330E-03
551210.86	4172880.75	1650.69754	2109.69627	568.19839	4018.65254	683.03085	1520.49257	1651.07033	1221.38913	318.4761	3189.30917	2209.91487	1929.58709	0.19681	0.19942	3.20E-04	6.59E-04	1.77E-04	1.10E-03	8.77E-05	1.95E-04	9.75E-04	4.71E-04	1.23E-04	2.39E-03	1.09E-03	9.51E-04	9.22E-05	9.45E-05	8.7239E-03
551257.53	4172721.71	1619.82481	1970.45695	597.6925	4144.90211	786.12805	1427.60475	1617.60368	1139.71006	332.14677	3129.82987	2486.48377	1811.77236	0.18995	0.19291	3.14E-04	6.15E-04	1.87E-04	1.13E-03	1.01E-04	1.83E-04	9.55E-04	4.40E-04	1.28E-04	2.35E-03	1.22E-03	8.92E-04	8.90E-05	9.14E-05	8.7007E-03
551767.53	4173417.57	3015.46905	1968.14933	461.67087	1971.51985	424.87603	2601.03781	3069.47404	1148.59762	264.56649	1871.89692	1013.03474	3217.19184	0.94961	0.8582	5.85E-04	6.15E-04	1.44E-04	5.39E-04	5.46E-05	3.34E-04	1.81E-03	4.43E-04	1.02E-04	1.40E-03	4.99E-04	1.58E-03	4.45E-04	4.07E-04	8.9680E-03
551706.11	4173453.39	2752.5703	2056.52005	471.07594	2045.93695	431.96773	2698.61136	2794.9598	1206.4478	273.06638	1904.22126	1043.50744	3328.79516	0.8031	0.75317	5.34E-04	6.42E-04	1.47E-04	5.59E-04	5.55E-05	3.47E-04	1.65E-03	4.66E-04	1.05E-04	1.43E-03	5.14E-04	1.64E-03	3.76E-04	3.57E-04	8.8207E-03
551223.58	4172818.15	1631.01266	2016.008	581.38347	4116.05641	728.3969	1444.86224	1629.80983	1165.5989	324.94258	3173.26133	2350.38014	1835.36455	0.19479	0.19766	3.17E-04	6.30E-04	1.82E-04	1.12E-03	9.36E-05	1.86E-04	9.62E-04	4.50E-04	1.25E-04	2.38E-03	1.16E-03	9.04E-04	9.13E-05	9.37E-05	8.6950E-03
551807.69	4173390.87	3066.12743	1921.41115	456.30252	1924.8462	417.30154	2634.90097	3124.0842	1162.48417	265.12161	1825.11159	991.98057	3149.70221	0.71409	0.67207	5.95E-04	6.00E-04	1.43E-04	5.26E-04	5.36E-05	3.39E-04	1.84E-03	4.49E-04	1.02E-04	1.37E-03	4.89E-04	1.55E-03	3.35E-04	3.19E-04	8.7127E-03
551347.74	4173288.12	1768.98777	2282.99182	505.37951	3100.69478	557.48398	2234.15858	1780.36025	1368.25936	286.51588	2680.7527	1628.61114	2739.79406	0.25153	0.25275	3.43E-04	7.13E-04	1.58E-04	8.47E-04	7.16E-05	2.87E-04	1.05E-03	5.28E-04	1.11E-04	2.01E-03	8.02E-04	1.35E-03	1.18E-04	1.20E-04	8.5092E-03
551788.25	4173405.6	3030.64433	1927.46873	457.05402	1937.12047	419.36939	2644.99692	3086.5184	1169.43969	265.4682	1838.25688	998.19405	3150.43741	0.79828	0.74096	5.88E-04	6.02E-04	1.43E-04	5.29E-04	5.39E-05	3.40E-04	1.82E-03	4.51E-04	1.02E-04	1.38E-03	4.92E-04	1.55E-03	3.74E-04	3.51E-04	8.7789E-03
551215.09	4172846.36	1631.35984	2044.59955	571.92373	4060.05842	706.4581	1465.1935	1630.8577	1182.40161	320.00759	3166.14295	2281.16719	1861.10442	0.19468	0.19741	3.17E-04	6.39E-04	1.79E-04	1.11E-03	9.08E-05	1.88E-04	9.63E-04	4.56E-04	1.24E-04	2.37E-03	1.12E-03	9.17E-04	9.12E-05	9.36E-05	8.6638E-03
552013.69	4173261.9	2796.96324	1993.34402	399.12022	1755.5292	360.25004	3024.71566	2857.50043	1170.72064	232.163	1699.6603	867.69782	3703.69108	0.2821	0.27663	5.43E-04	6.23E-04	1.25E-04	4.80E-04	4.63E-05	3.89E-04	1.69E-03	4.52E-04	8.96E-05	1.27E-03	4.27E-04	1.82E-03	1.32E-04	1.31E-04	8.2224E-03
551269.43	4172677.46	1605.56586	1955.51678	591.91481	4102.56158	788.56986	1401.17459	1603.61058	1130.65106	328.44187	3099.2036	2471.32215	1781.82828	0.18395	0.18681	3.12E-04	6.11E-04	1.85E-04	1.12E-03	1.01E-04	1.80E-04	9.47E-04	4.36E-04	1.27E-04	2.32E-03	1.22E-03	8.78E-04	8.62E-05	8.85E-05	8.6128E-03
551265.14	4172685.82	1602.76873	1951.51122	591.53834	4096.15811	786.85879	1403.28405	1600.72589	1128.40907	328.29726	3093.2307	2468.18566	1783.41752	0.1847	0.18758	3.11E-04	6.10E-04	1.85E-04	1.12E-03	1.01E-04	1.80E-04	9.45E-04	4.36E-04	1.27E-04	2.32E-03	1.22E-03	8.79E-04	8.66E-05	8.89E-05	8.6020E-03
551260.84	4172694.17	1598.57153	1944.30452	590.2151	4083.14676	783.35069	1402.44153	1596.46482	1124.2978	327.64796	3082.8277	2459.77963	1781.47762	0.18505	0.18793	3.10E-04	6.07E-04	1.84E-04	1.12E-03	1.01E-04	1.80E-04	9.42E-04	4.34E-04	1.26E-04	2.31E-03	1.21E-03	8.78E-04	8.67E-05	8.91E-05	8.5775E-03
551738.19	4173439.76	2873.6732	1983.90516	458.39254	1982.78276	424.1322	2605.09762	2921.65174	1159.10704	266.02263	1826.64258	1015.85461	3222.0113	0.94859	0.85808	5.58E-04	6.20E-04	1.43E-04	5.42E-04	5.45E-05	3.35E-04	1.72E-03	4.47E-04	1.03E-04	1.37E-03	5.00E-04	1.59E-03	4.45E-04	4.07E-04	8.8346E-03
551224.3	4172808.59	1612.35089	1979.20165	576.29886	4058.35834	724.41962	1422.00797	1611.01308	1144.43643	321.96425	3121.54405	2330.29695	1806.27132	0.19131	0.19414	3.13E-04	6.18E-04	1.80E-04	1.11E-03	9.31E-05	1.83E-04	9.51E-04	4.42E-04	1.24E-04	2.34E-03	1.15E-03	8.90E-04	8.97E-05	9.20E-05	8.5724E-03
551238.33	4172774.14	1604.81955	1946.40695	581.89313	4051.77152	743.36817	1409.48046	1602.985	1126.22022	324.40566	3087.84001	2375.73346	1789.02489	0.18878	0.1916	3.11E-04	6.08E-04	1.82E-04	1.11E-03	9.55E-05	1.81E-04	9.46E-04	4.35E-04	1.25E-04	2.31E-03	1.17E-03	8.81E-04	8.85E-05	9.08E-05	8.5369E-03
551209.17	4172870.42	1620.76977	2052.31804	559.23659	3948.94613	677.51234	1478.42233	1620.94974	1187.82257	313.25378	3118.87046	2183.52412	1876.98471	0.19171	0.19426	3.15E-04	6.41E-04	1.75E-04	1.08E-03	8.70E-05	1.90E-04	9.57E-04	4.59E-04	1.21E-04	2.34E-03	1.08E-03	9.25E-04	8.99E-05	9.21E-05	8.5429E-03
551719.12	4173451.5	2768.04448	1999.14718	461.28758	1999.30449	424.81893	2617.01572	2811.89827	1170.95679	267.49475	1850.43495	1023.0958	3232.61731	0.82286	0.7621	5.37E-04	6.24E-04	1.44E-04	5.46E-04	5.46E-05	3.36E-04	1.66E-03	4.52E-04	1.03E-04	1.39E-03	5.04E-04	1.59E-03	3.86E-04	3.61E-04	8.6884E-03
551256.55	4172702.52	1588.21325	1927.18467	585.50573	4041.89059	774.3973	1394.95692	1586.10437	1114.59469	325.15785	3053.78257	2432.44599	1771.21136	0.18402	0.18687	3.08E-04	6.02E-04	1.83E-04	1.10E-03	9.95E-05	1.79E-04	9.36E-04	4.30E-04	1.26E-04	2.29E-03	1.20E-03	8.73E-04	8.62E-05	8.86E-05	8.5032E-03
551759.56	4173427.69	2930.25007	1940.51023	450.82693	1950.80378	420.16418	2549.97894	2981.41175	1133.00815	261.69617	1785.37049	1003.2371	3155.09024	0.91421	0.82555	5.69E-04	6.06E-04	1.41E-04	5.33E-04	5.40E-05	3.28E-04	1.76E-03	4.37E-04	1.01E-04	1.34E-03	4.94E-04	1.55E-03	4.28E-04	3.91E-04	8.7352E-03
551213.01	4172827.76	1601.14739	1981.75228	566.20847	4000.64218	706.5013	1421.12236	1600.24753	1145.88376	316.5936	3098.50665	2274.41861	1805.44843	0.19035	0.1931	3.11E-04	6.19E-04	1.77E-04	1.09E-03	9.08E-05	1.83E-04	9.45E-04	4.42E-04	1.22E-04	2.32E-03	1.12E-03	8.89E-04	8.92E-05	9.15E-05	8.4957E-03
551225.01	4172799.02	1596.82484	1949.00622	572.59045	4013.36609	722.33588	1403.55333	1595.3625	1127.15626	319.72755	3079.89377	2317.7268	1782.63354	0.18853	0.19132	3.10E-04	6.09E-04	1.79E-04	1.10E-03	9.28E-05	1.80E-04	9.42E-04	4.35E-04	1.23E-04	2.31E-03	1.14E-03	8.78E-04	8.84E-05	9.07E-05	8.4754E-03
551780.57	4173415.68	2956.25344	1899.46957	450.87875	1917.05312	414.98985	2496.21608	3009.62744	1108.8734	261.73618	1818.26486	988.68426	3088.63083	0.79417	0.73244	5.74E-04	5.93E-04	1.41E-04	5.24E-04	5.33E-05	3.21E-04	1.78E-03	4.28E-04	1.01E-04	1.36E-03	4.87E-04	1.52E-03	3.72E-04	3.47E-04	8.6023E-03
551240.43	4172764.35	1587.70014	1918.00573	576.11509	3988.10393	738.97333	1393.98692	1585.85701	1110.1281	321.03474	3037.34025	2350.50365	1768.91569	0.18536	0.18811	3.08E-04	5.99E-04	1.80E-04	1.09E-03	9.49E-05	1.79E-04	9.36E-04	4.29E-04	1.24E-04	2.28E-03	1.16E-03	8.71E-04	8.69E-05	8.92E-05	8.4218E-03
551252.25	4172710.87	1574.19909	1904.21033	578.71557	3983.88479	762.09153	1383.08011	1572.13803	1101.59958	321.53539	3013.88447	2393.56957	1755.50408	0.18213	0.18491	3.05E-04	5.95E-04	1.81E-04	1.09E-03	9.79E-05	1.78E-04	9.28E-04	4.25E-04	1.24E-04	2.26E-03	1.18E-03	8.65E-04	8.54E-05	8.76E-05	8.3989E-03
551207.49	4172860.09	1598.35534	2007.40639	553.59836	3903.36065	676.34802	1445.26977	1598.31799	1161.62844	309.94674	3068.6753	2174.11765	1835.4129	0.18838	0.19091	3.10E-04	6.27E-04	1.73E-04	1.07E-03	8.69E-05	1.86E-04	9.44E-04	4.48E-04	1.20E-04	2.30E-03	1.07E-03	9.04E-04	8.83E-05	9.05E-05	8.4152E-03
551801.19	4173403.72	2954.28328	1864.33653	445.51213	1883.4989	409.00615	2539.75992	3008.79188	1130.60255	258.74626	1784.70092	973.04582	3030.67084	0.69372	0.65046	5.73E-04	5.82E-04	1.39E-04	5.15E-04	5.25E-05	3.26E-04	1.78E-03	4.36E-04	9.99E-05	1.34E-03	4.79E-04	1.49E-03	3.25E-04	3.08E-04	8.4444E-03
551732.13	4173449.61	2780.11147	1946.689	451.15709	1952.54256	417.41156	2539.04953	2825.35271	1138.03513	261.7072	1801.30128	1001.28214	3141.18476	0.8067	0.74161	5.40E-04	6.08E-04	1.41E-04	5.34E-04	5.36E-05	3.26E-04	1.67E-03	4.39E-04	1.01E-04	1.35E-03	4.93E-04	1.55E-03	3.78E-04	3.51E-04	8.5306E-03
551751.43	4173437.84	2848.81634	1916.94596	446.27566	1930.93485	415.35096	2505.08617	2897.27576	1119.60867	258.95829	1770.22716	993.1077	3100.54608	0.84673	0.76918	5.53E-04	5.99E-04	1.39E-04	5.28E-04	5.34E-05	3.22E-04	1.71E-03	4.32E-04	1.00E-04	1.33E-03	4.89E-04	1.53E-03	3.97E-04	3.65E-04	8.5413E-03
551995.03	4173278.23	2733.08052	1898.99782	395.73346	1721.7806	359.06082	2882.39075	2788.52982	1123.34527	230.04477	1659.61323	861.9242	3502.559	0.29721	0.29097	5.30E-04	5.93E-04	1.24E-04	4.70E-04	4.61E-05	3.70E-04	1.65E-03	4.34E-04	8.88E-05	1.24E-03	4.25E-04	1.73E-03	1.39E-04	1.38E-04	7.9739E-03
551213.72	4172818.38	1577.29072	1936.29295	558.70864	3923.46015	698.60881	1392.21839	1576.28178	1119.88619	312.32873	3033.34392	2239.75407	1768.70915	0.18577	0.18845	3.06E-04	6.05E-04	1.75E-04	1.07E-03	8.97E-05	1.79E-04	9.31E-04	4.32E-04	1.21E-04	2.27E-03	1.10E-03	8.71E-04	8.71E-05	8.93E-05	8.3345E-03
551244.56	4172746.93	1569.91404	1890.68156	571.17142	3929.31045	738.5467	1379.34169	1568.03167	1094.56762	317.98292	2987.62936	2333.99392	1749.83194	0.18181	0.1845	3.05E-04	5.91E-04	1.78E-04	1.07E-03	9.49E-05	1.77E-04	9.26E-04	4.23E-04	1.23E-04	2.24E-03	1.15E-03	8.62E-04	8.52E-05	8.74E-05	8.3144E-03
551772.7	4173425.78	2886.93779	1877.32504	444.87191	1898.39516	410.61238	2453.67822	2937.92992	1095.92486	258.16066	1799.29989	979.06756	3037.73386	0.77774	0.71428	5.60E-04	5.86E-04	1.39E-04	5.19E-04	5.28E-05	3.15E-04	1.73E-03	4.23E-04	9.97E-05	1.35E-03	4.82E-04	1.50E-03	3.65E-04	3.39E-04	8.4599E-03
551247.96	4172719.22	1559.57103	1880.2565	571.38288	3922.88835	748.85115	1369.59868	1557.57498	1088.04695	317.62358	2972.41682	2351.78778	1737.95294	0.18	0.18271	3.03E-04	5.87E-04	1.78E-04	1.07E-03	9.62E-05	1.76E-04	9.19E-04	4.20E-04	1.23E-04	2.23E-03	1.16E-03	8.56E-04	8.44E-05	8.66E-05	8.2885E-03
551205.8	4172849.76	1577.09882	1964.96021	548.37161	3857.72097	674.76114	1414.55831	1576.85099	1136.95082	306.91184	3020.69747	2163.65879	1796.78856	0.18525	0.18777	3.06E-04	6.14E-04	1.71E-04	1.05E-03	8.67E-05	1.82E-04	9.31E-04	4.39E-04	1.18E-04	2.26E-03	1.07E-03	8.85E-04	8.68E-05	8.90E-05	8.2931E-03
551226.49	4172782.46	1565.20079	1892.15167	563.2375	3910.41096	714.92014	1369.89513	1563.61035	1094.84723	314.22615	2992.2827	2279.55692	1739.37653	0.18274	0.18541	3.04E-04	5.91E-04	1.76E-04	1.07E-03	9.18E-05	1.76E-04	9.23E-04	4.23E-04	1.21E-04	2.24E-03	1.12E-03	8.57E-04	8.56E-05	8.79E-05	8.2705E-03
551793.61	4173413.78	2887.5907	1835.79448	439.87473	1864.0151	404.97127	2492.0603	2939.91195	1114.94686	255.3573	1765.67727	964.23249	2969.30776	0.68838	0.64341	5.60E-04	5.73E-04	1.37E-04	5.09E-04	5.20E-05	3.20E-04	1.74E-03	4.30E-04	9.86E-05	1.32E-03	4.75E-04	1.46E-03	3.23E-04	3.05E-04	8.3061E-03
551813.21	4173399.03	2910.89677	1828.68037	438.646	1851.10343	402.65069	2479.13359	2964.76393	1107.33902	254.73229	1751.94468	957.62427	2965.53703	0.63274	0.59721	5.65E-04	5.71E-04	1.37E-04	5.06E-04	5.17E-05	3.18E-04	1.75E-03	4.27E-04	9.83E-05	1.31E-03	4.72E-04	1.46E-03	2.97E-04	2.83E-04	8.2506E-03
551825.61	4173390.64	2902.88586	1818.96119	436.01764	1837.97937	399.84734	2459.14226	2956.99252	1097.964	253.22219	1737.51174	950.6317	3053.19849	0.5937	0.56343	5.63E-04	5.68E-04	1.36E-04	5.02E-04	5.14E-05	3.16E-04	1.75E-03	4.24E-04	9.78E-05	1.30E-03	4.68E-04	1.50E-03	2.78E-04	2.67E-04	8.2245E-03
551214.42	4172809	1558.58167	1900.06612	553.38568	3865.00373	693.90113	1369.4931	1557.45498	1099.04986	309.23875	2982.10616	2217.71359	1739.81114	0.1823	0.18493	3.02E-04	5.93E-04	1.73E-04	1.06E-03	8.91E-05	1.76E-04	9.19E-04	4.24E-04	1.19E-04	2.24E-03	1.09E-03	8.57E-04	8.54E-05	8.76E-05	8.2112E-03
551833.7	4173385.11	2893.69797	1812.99298	434.21867	1829.90821	397.93722	2447.06018	2947.8227	1091.89384	252.1595	1728.31982	946.11592	3037.08091	0.56985	0.54248	5.62E-04	5.66E-04	1.36E-04	5.00E-04	5.11E-05	3.14E-04	1.74E-03	4.21E-04	9.73E-05	1.30E-03	4.66E-04	1.50E-03	2.67E-04	2.57E-04	8.1700E-03
551841.8	4173379.57	2885.72649	1872.25132	432.30952	1822.47712	395.959	2438.69052	2939.831	1086.48944	251.08795	1719.65711	941.35611	3024.23308	0.54756	0.52276	5.60E-04	5.85E-04	1.35E-04	4.98E-04	5.09E-05	3.13E-04	1.74E-03	4.19E-04	9.69E-05	1.29E-03	4.64E-04	1.49E-03	2.57E-04	2.48E-04	8.1408E-03
551204.11	4172839.43	1557.59429	1926.11998	543.85917	3815.66834	673.16938	1386.85561	1557.1368	1114.3823	304.29487	2976.81239	2153.93205	1761.8656	0.18242	0.18494	3.02E-04	6.02E-04	1.70E-04	1.04E-03	8.65E-05	1.78E-04	9.19E-04	4.30E-04	1.17E-04	2.23E-03	1.06E-03	8.68E-04	8.55E-05	8.76E-05	8.1816E-03
551745.15	4173447.71	2762.60759	1883.88446	439.90057	1903.7624	409.31958	2446.74306	2808.46981	1100.77323	255.16613	1747.3945	979.97823	3029.362	0.75066	0.68925	5.36E-04	5.88E-04	1.37E-04	5.20E-04	5.26E-05	3.14E-04	1.66E-03	4.25E-04	9.85E-05	1.31E-03	4.83E-04	1.49E-03	3.52E-04	3.27E-04	8.2938E-03
551243.66	4172727.57	1542.05776	1852.17871	562.39022	3849.03311	733.10039	1352.89308	1540.16444	1072.16591	312.80834	2922.74874	2301.08583	1716.43872	0.1772	0.17983	2.99E-04	5.79E-04	1.76E-04	1.05E-03	9.42E-05	1.74E-04	9.09E-04	4.14E-04	1.21E-04	2.19E-03	1.13E-03	8.46E-04	8.31E-05	8.52E-05	8.1554E-03
551849.9	4173374.03	2872.06478	1861.3058	430.22238	1813.97623	393.98067	2429.86456	2926.02069	1080.66727	249.88913	1710.64205	936.68317	3010.61606	0.52644	0.50387	5.57E-04	5.81E-04	1.34E-04	4.96E-04	5.06E-05	3.12E-04	1.73E-03	4.17E-04	9.65E-05	1.28E-03	4.61E-04	1.48E-03	2.47E-04	2.39E-04	8.0849E-03
551228.6	4172772.64	1544.16406	1856.09038	555.75886	3830.54403	707.84236	1349.90919	1542.56655	1074.42383	309.91778	2929.56888	2245.08422	1713.55492	0.17856	0.18114	3.00E-04	5.80E-04	1.74E-04	1.05E-03	9.09E-05	1.73E-04	9.11E-04	4.15E-04	1.20E-04	2.20E-03	1.11E-03	8.44E-04	8.37E-05	8.58E-05	8.1249E-03
551764.66	4173435.92	2810.12238	1851.62486	438.69301	1879.40987	406.3261	2407.27526	2858.59137	1081.35429	251.76096	1716.13523	970.141	2981.21234	0.74248	0.68165	5.45E-04	5.78E-04	1.37E-04	5.14E-04	5.22E-05	3.09E-04	1.69E-03	4.17E-04	9.72E-05	1.29E-03	4.78E-04	1.47E-03	3.48E-04	3.23E-04	8.2419E-03
551203.17	4172827.68	1546.64493	1900.32547	543.54216	3807.38763	677.0367	1367.77533	1545.92686	1099.23818	303.96975	2956.79989	2164.95622	1737.81756	0.18122	0.18377	3.00E-04	5.94E-04	1.70E-04	1.04E-03	8.70E-05	1.76E-04	9.13E-04	4.24E-04	1.17E-04	2.22E-03	1.07E-03	8.56E-04	8.49E-05	8.71E-05	8.1320E-03
552019.6	4173271.82	2610.15946	1856.71477	380.72619	1671.47853	345.71457	2784.48419	2664.27281	1095.53064	221.27233	1612.62168	832.46858	3398.16991	0.26971	0.2644	5.07E-04	5.80E-04	1.19E-04	4.57E-04	4.44E-05	3.58E-04	1.57E-03	4.23E-04	8.54E-05	1.21E-03	4.10E-04	1.67E-03	1.26E-04	1.25E-04	7.6900E-03
551785.84	4173423.87	2821.80937	1810.11306	434.23518	1845.72265	401.02263	2353.04162	2871.94409	1057.22767	251.93742	1747.50466	955.65259	2913.63582	0.67554	0.62926	5.48E-04	5.65E-04	1.36E-04	5.04E-04	5.15E-05	3.02E-04	1.70E-03	4.08E-04	9.73E-05	1.31E-03	4.71E-04	1.44E-03	3.17E-04	2.98E-04	8.1384E-03
551251.45	4172691.34	1519.09755	1826.73626	554.14947	3776.96829	730.69937	1331.09203	1517.37042	1057.25265	307.81929	2868.95587	2271.34801	1689.9706	0.17156	0.1741	2.95E-04	5.71E-04	1.73E-04	1.03E-03	9.39E-05	1.71E-04	8.96E-04	4.08E-04	1.19E-04	2.15E-03	1.12E-03	8.32E-04	8.04E-05	8.25E-05	8.0232E-03
551215.12	4172799.63	1532.40187	1853.42676	544.45099	3772.81522	683.98775	1341.29645	1531.2252	1072.54769	304.13181	2908.54451	2176.07121	1703.7022	0.17735	0.17988	2.97E-04	5.79E-04	1.70E-04	1.03E-03	8.79E-05	1.72E-04	9.04E-04	4.14E-04	1.17E-04	2.18E-03	1.07E-03	8.39E-04	8.31E-05	8.52E-05	8.0328E-03
551230.7	4172762.82	1527.54394	1828.8091	550.15645	3770.35425	703.40538	1335.02113	1525.93057	1058.97532	306.6543	2881.68005	2220.85451	1694.19178	0.17536	0.17788	2.96E-04	5.71E-04	1.72E-04	1.03E-03	9.04E-05	1.72E-04	9.01E-04	4.09E-04	1.18E-04	2.16E-03	1.09E-03	8.35E-04	8.22E-05	8.43E-05	8.0150E-03
551247.14	4172699.71	1514.72197	1818.19407	552.4743	3762.37022	726.61131	1327.54717	1512.94985	1052.37151	306.97723	2857.72944	2261.11743	1684.98211	0.17162	0.17415	2.94E-04	5.68E-04	1.73E-04	1.03E-03	9.33E-05	1.71E-04	8.93E-04	4.06E-04	1.19E-04	2.14E-03	1.11E-03	8.30E-04	8.04E-05	8.25E-05	7.9935E-03
551806.66	4173411.88	2811.09958	1776.61583	428.6624	1812.70844	394.94141	2393.84843	2861.96416	1078.18094	248.80985	1714.47296	939.93352	2858.56962	0.60935	0.57363	5.46E-04	5.55E-04	1.34E-04	4.95E-04	5.07E-05	3.08E-04	1.69E-03	4.16E-04	9.60E-05	1.29E-03	4.63E-04	1.41E-03	2.86E-04	2.72E-04	8.0036E-03
551203.89	4172818.01	1523.82478	1857.07042	536.44681	3735.38567	669.54246	1339.87138	1522.98998	1074.44087	299.93464	2895.68313	2132.42539	1702.40107	0.17691	0.1794	2.96E-04	5.80E-04	1.68E-04	1.02E-03	8.60E-05	1.72E-04	8.99E-04	4.15E-04	1.16E-04	2.17E-03	1.05E-03	8.39E-04	8.29E-05	8.50E-05	7.9796E-03
551242.83	4172708.09	1508.72598	1807.13959	549.75533	3740.57071	720.71857	1321.58402	1506.93733	1046.07878	305.56956	2842.05317	2245.23646	1677.07634	0.17126	0.17379	2.93E-04	5.64E-04	1.72E-04	1.02E-03	9.26E-05	1.70E-04	8.90E-04	4.04E-04	1.18E-04	2.13E-03	1.11E-03	8.26E-04	8.03E-05	8.24E-05	7.9502E-03
551758.16	4173445.82	2731.04592	1821.31371	428.24659	1854.80443	400.87014	2354.19003	2777.09556	1064.02341	248.38598	1694.8514	958.23468	2916.55157	0.68173	0.62899	5.30E-04	5.69E-04	1.34E-04	5.07E-04	5.15E-05	3.02E-04	1.64E-03	4.11E-04	9.59E-05	1.27E-03	4.72E-04	1.44E-03	3.20E-04	2.98E-04	8.0363E-03
551232.81	4172753.01	1515.04732	1809.31433	546.23892	3727.95736	701.31562	1324.43198	1513.41664	1047.89566	304.32324	2847.00527	2205.59706	1680.38788	0.173	0.17548	2.94E-04	5.65E-04	1.71E-04	1.02E-03	9.01E-05	1.70E-04	8.93E-04	4.05E-04	1.17E-04	2.13E-03	1.09E-03	8.28E-04	8.11E-05	8.32E-05	7.9369E-03
551777.89	4173433.99	2760.67644	1790.04304	428.80798	1828.72152	397.02712	2315.01092	2808.74555	1045.44168	248.69512	1730.33516	946.86236	2868.19547	0.65414	0.60786	5.36E-04	5.59E-04	1.34E-04	5.00E-04	5.10E-05	2.97E-04	1.66E-03	4.04E-04	9.60E-05	1.30E-03	4.66E-04	1.41E-03	3.07E-04	2.88E-04	8.0057E-03
551215.82	4172790.25	1515.1741	1822.11459	539.44702	3718.79799	679.92644	1322.49131	1513.91172	1054.70623	301.18946	2861.89257	2156.01454	1679.55117	0.17428	0.17676	2.94E-04	5.69E-04	1.68E-04	1.02E-03	8.73E-05	1.70E-04	8.94E-04	4.07E-04	1.16E-04	2.15E-03	1.06E-03	8.27E-04	8.17E-05	8.38E-05	7.9225E-03
551238.52	4172716.47	1498.3295	1789.66594	544.60374	3699.44383	711.02902	1311.12704	1496.57057	1036.16472	302.8404	2813.76891	2216.21229	1663.56148	0.16996	0.17244	2.91E-04	5.59E-04	1.70E-04	1.01E-03	9.13E-05	1.68E-04	8.83E-04	4.00E-04	1.17E-04	2.11E-03	1.09E-03	8.19E-04	7.97E-05	8.17E-05	7.8729E-03
551818.72	4173407.19	2768.39667	1744.60619	422.01162	1782.13617	388.68971	2337.76921	2818.56146	1056.29892	244.92546	1683.45903	924.75623	2905.54245	0.56325	0.53306	5.37E-04	5.45E-04	1.32E-04	4.87E-04	4.99E-05	3.00E-04	1.66E-03	4.08E-04	9.45E-05	1.26E-03	4.56E-04	1.43E-03	2.64E-04	2.53E-04	7.8829E-03
551798.98	4173421.96	2754.50412	1752.00338	423.61628	1795.17636	391.21039	2352.32182	2803.52349	1064.28586	245.76186	1697.43491	931.72125	2805.89924	0.59982	0.56337	5.35E-04	5.47E-04	1.32E-04	4.91E-04	5.03E-05	3.02E-04	1.65E-03	4.11E-04	9.49E-05	1.27E-03	4.59E-04	1.38E-03	2.81E-04	2.67E-04	7.8796E-03
551204.62	4172808.34	1502.92663	1817.88835	530.07737	3667.95331	663.09917	1315.21219	1501.98607	1051.94587	296.27588	2838.83154	2104.52684	1671.01846	0.17304	0.17546	2.92E-04	5.68E-04	1.66E-04	1.00E-03	8.52E-05	1.69E-04	8.87E-04	4.06E-04	1.14E-04	2.13E-03	1.04E-03	8.23E-04	8.11E-05	8.32E-05	7.8409E-03
551216.75	4172780.99	1500.05858	1795.25144	535.09976	3671.16046	676.87542	1306.69805	1498.72625	1039.3568	298.62088	2820.75312	2139.37815	1659.23374	0.17161	0.17404	2.91E-04	5.61E-04	1.67E-04	1.00E-03	8.70E-05	1.68E-04	8.85E-04	4.01E-04	1.15E-04	2.11E-03	1.05E-03	8.17E-04	8.04E-05	8.25E-05	7.8270E-03
551831.17	4173398.77	2753.81547	1732.8465	419.30035	1768.62287	385.96749	2316.99458	2804.01114	1046.85124	243.35439	1669.01599	918.21603	2879.03018	0.53414	0.50789	5.34E-04	5.41E-04	1.31E-04	4.83E-04	4.96E-05	2.98E-04	1.66E-03	4.04E-04	9.39E-05	1.25E-03	4.52E-04	1.42E-03	2.50E-04	2.41E-04	7.8033E-03
551839.26	4173393.23	2743.86495	1727.66683	417.49153	1760.99094	384.12294	2305.58783	2794.00628	1041.09245	242.34298	1660.28107	913.78976	2863.79908	0.5161	0.49204	5.32E-04	5.40E-04	1.30E-04	4.81E-04	4.93E-05	2.96E-04	1.65E-03	4.02E-04	9.36E-05	1.24E-03	4.50E-04	1.41E-03	2.42E-04	2.33E-04	7.7547E-03
551847.36	4173387.7	2732.94545	1783.55246	415.57735	1753.80919	382.23156	2295.89654	2782.9767	1035.54151	241.2098	1651.59674	909.31473	2849.89002	0.49868	0.47664	5.30E-04	5.57E-04	1.30E-04	4.79E-04	4.91E-05	2.95E-04	1.64E-03	4.00E-04	9.31E-05	1.24E-03	4.48E-04	1.40E-03	2.34E-04	2.26E-04	7.7258E-03
551771.17	4173443.93	2690.38098	1762.61231	422.24406	1806.65745	392.15037	2267.14661	2736.26443	1029.64624	241.59905	1708.11921	936.14479	2810.16682	0.61489	0.57183	5.22E-04	5.51E-04	1.32E-04	4.94E-04	5.04E-05	2.91E-04	1.62E-03	3.97E-04	9.33E-05	1.28E-03	4.61E-04	1.38E-03	2.88E-04	2.71E-04	7.8310E-03
551234.21	4172724.85	1481.82571	1763.45457	536.21008	3631.88662	696.47415	1294.98242	1480.1633	1021.31124	298.34113	2768.00482	2169.91799	1642.86668	0.1674	0.1698	2.88E-04	5.51E-04	1.67E-04	9.92E-04	8.95E-05	1.66E-04	8.74E-04	3.94E-04	1.15E-04	2.08E-03	1.07E-03	8.09E-04	7.85E-05	8.05E-05	7.7495E-03
551218.86	4172771.15	1487.27743	1772.5937	531.52967	3628.73825	675.05495	1294.36164	1485.88823	1026.50647	296.48203	2784.40615	2126.02208	1643.17096	0.16924	0.17161	2.89E-04	5.54E-04	1.66E-04	9.92E-04	8.67E-05	1.66E-04	8.77E-04	3.96E-04	1.14E-04	2.09E-03	1.05E-03	8.09E-04	7.93E-05	8.13E-05	7.7455E-03
551855.46	4173382.16	2720.0424	1773.40407	413.56385	1745.74396	380.3017	2287.71664	2769.93185	1030.17957	240.06991	1643.09904	904.73158	2837.25851	0.48203	0.46175	5.28E-04	5.54E-04	1.29E-04	4.77E-04	4.89E-05	2.94E-04	1.64E-03	3.98E-04	9.27E-05	1.23E-03	4.46E-04	1.40E-03	2.26E-04	2.19E-04	7.6761E-03
551863.55	4173376.62	2712.94678	1765.48995	411.68779	1737.52904	378.23091	2288.55528	2762.81231	1026.55073	238.90296	1636.53535	899.82473	2832.94316	0.46652	0.44788	5.26E-04	5.51E-04	1.29E-04	4.75E-04	4.86E-05	2.94E-04	1.63E-03	3.96E-04	9.22E-05	1.23E-03	4.43E-04	1.40E-03	2.19E-04	2.12E-04	7.6399E-03
551229.9	4172733.23	1475.19364	1752.35607	532.52088	3606.18098	688.79068	1286.90696	1473.56901	1014.97263	296.4187	2751.37382	2148.58065	1632.70829	0.16665	0.16903	2.86E-04	5.47E-04	1.66E-04	9.85E-04	8.85E-05	1.65E-04	8.70E-04	3.92E-04	1.14E-04	2.06E-03	1.06E-03	8.04E-04	7.81E-05	8.01E-05	7.6988E-03
551791.13	4173432.07	2697.00573	1728.88274	418.49482	1778.51072	387.60324	2224.28608	2744.16382	1050.7802	242.72183	1680.93074	923.83048	2756.3379	0.58379	0.54723	5.23E-04	5.40E-04	1.31E-04	4.86E-04	4.98E-05	2.86E-04	1.62E-03	4.06E-04	9.37E-05	1.26E-03	4.55E-04	1.36E-03	2.74E-04	2.59E-04	7.7409E-03
551871.65	4173371.08	2696.75752	1755.41142	409.53724	1729.76062	376.31775	2284.13998	2746.34507	1021.53829	237.68623	1628.18373	895.49792	2823.79848	0.45126	0.43406	5.23E-04	5.48E-04	1.28E-04	4.73E-04	4.83E-05	2.93E-04	1.62E-03	3.94E-04	9.18E-05	1.22E-03	4.41E-04	1.39E-03	2.11E-04	2.06E-04	7.5913E-03
551879.75	4173365.54	2683.94236	1747.08515	407.52125	1722.07198	374.37507	2287.17565	2733.37341	1017.93734	236.4777	1621.2972	891.10884	2821.87594	0.43694	0.42103	5.21E-04	5.46E-04	1.27E-04	4.71E-04	4.81E-05	2.94E-04	1.61E-03	3.93E-04	9.13E-05	1.22E-03	4.39E-04	1.39E-03	2.05E-04	2.00E-04	7.5529E-03
551205.34	4172798.67	1476.25929	1770.94028	520.88523	3575.54693	652.74448	1286.63152	1475.27565	1025.26795	291.02957	2765.06624	2061.82382	1634.43844	0.1681	0.17043	2.86E-04	5.53E-04	1.63E-04	9.77E-04	8.39E-05	1.65E-04	8.71E-04	3.96E-04	1.12E-04	2.07E-03	1.02E-03	8.05E-04	7.88E-05	8.08E-05	7.6608E-03
551220.98	4172761.3	1472.80588	1748.82468	526.8807	3578.71627	671.75002	1281.43685	1471.3951	1013.04119	293.75214	2743.69486	2106.87269	1626.31763	0.16656	0.16889	2.86E-04	5.46E-04	1.65E-04	9.78E-04	8.63E-05	1.65E-04	8.69E-04	3.91E-04	1.13E-04	2.06E-03	1.04E-03	8.01E-04	7.81E-05	8.00E-05	7.6525E-03
551812.12	4173420.05	2679.85514	1697.60135	412.78988	1746.35886	381.47817	2261.0957	2727.42266	1029.51615	239.45839	1648.65436	908.15195	2705.10554	0.53878	0.50921	5.20E-04	5.30E-04	1.29E-04	4.77E-04	4.90E-05	2.90E-04	1.61E-03	3.97E-04	9.24E-05	1.24E-03	4.47E-04	1.33E-03	2.53E-04	2.41E-04	7.6055E-03
551223.09	4172751.46	1463.06435	1733.53654	524.22116	3548.28322	671.22101	1273.26315	1461.61732	1004.321	292.12574	2717.45937	2098.15422	1615.62437	0.1648	0.1671	2.84E-04	5.41E-04	1.64E-04	9.70E-04	8.62E-05	1.64E-04	8.63E-04	3.88E-04	1.13E-04	2.04E-03	1.03E-03	7.96E-04	7.72E-05	7.92E-05	7.5949E-03
551784.18	4173442.04	2638.13474	1705.75371	412.78845	1759.05318	383.24547	2183.10746	2683.41844	1035.22809	239.28021	1661.51762	914.08142	2706.85441	0.55678	0.52171	5.12E-04	5.33E-04	1.29E-04	4.81E-04	4.92E-05	2.80E-04	1.58E-03	4.00E-04	9.24E-05	1.25E-03	4.50E-04	1.33E-03	2.61E-04	2.47E-04	7.5976E-03
551206.06	4172789	1460.36547	1742.02538	516.42937	3527.53436	649.32016	1269.12348	1459.29	1008.71307	288.39857	2722.92015	2044.79872	1611.97684	0.16535	0.16763	2.83E-04	5.44E-04	1.61E-04	9.64E-04	8.34E-05	1.63E-04	8.61E-04	3.89E-04	1.11E-04	2.04E-03	1.01E-03	7.94E-04	7.75E-05	7.94E-05	7.5610E-03
551824.24	4173415.35	2631.70495	1663.88756	406.18409	1716.24692	375.49695	2206.89142	2678.41768	1008.25915	235.58343	1618.46334	893.81769	2744.94281	0.50287	0.47743	5.11E-04	5.20E-04	1.27E-04	4.69E-04	4.82E-05	2.84E-04	1.58E-03	3.89E-04	9.09E-05	1.21E-03	4.40E-04	1.35E-03	2.36E-04	2.26E-04	7.4870E-03
551804.36	4173430.14	2629.57876	1674.55105	408.17926	1730.18475	378.10956	2224.02055	2675.53922	1016.9626	236.69583	1633.11623	900.64002	2656.72449	0.52691	0.49701	5.10E-04	5.23E-04	1.27E-04	4.73E-04	4.86E-05	2.86E-04	1.58E-03	3.93E-04	9.14E-05	1.22E-03	4.44E-04	1.31E-03	2.47E-04	2.36E-04	7.4905E-03
551207.01	4172779.52	1444.38309	1714.15586	511.62869	3476.51825	645.43831	1252.72972	1443.24619	992.80888	285.59002	2679.92476	2025.64718	1590.84993	0.16257	0.1648	2.80E-04	5.35E-04	1.60E-04	9.50E-04	8.29E-05	1.61E-04	8.52E-04	3.83E-04	1.10E-04	2.01E-03	9.98E-04	7.84E-04	7.62E-05	7.81E-05	7.4597E-03
551836.73	4173406.9	2617.76062	1654.79322	403.56972	1703.81218	372.75378	2188.05256	2664.43893	999.4994	234.09078	1604.90656	887.15226	2720.75181	0.48196	0.45918	5.08E-04	5.17E-04	1.26E-04	4.66E-04	4.79E-05	2.81E-04	1.57E-03	3.86E-04	9.04E-05	1.20E-03	4.37E-04	1.34E-03	2.26E-04	2.18E-04	7.4185E-03
551224.76	4172722.14	1431.04835	1689.67266	514.7297	3457.43738	666.7805	1245.56429	1429.55156	978.91534	286.45393	2642.29743	2065.02715	1580.21154	0.15952	0.16175	2.78E-04	5.28E-04	1.61E-04	9.45E-04	8.57E-05	1.60E-04	8.44E-04	3.78E-04	1.11E-04	1.98E-03	1.02E-03	7.78E-04	7.48E-05	7.67E-05	7.4170E-03
551229.08	4172713.73	1430.02638	1690.00637	514.44329	3450.74596	668.25052	1247.19952	1428.56446	979.15916	286.20919	2637.48721	2064.97431	1582.1203	0.15882	0.16104	2.78E-04	5.28E-04	1.61E-04	9.43E-04	8.58E-05	1.60E-04	8.43E-04	3.78E-04	1.10E-04	1.98E-03	1.02E-03	7.79E-04	7.44E-05	7.63E-05	7.4114E-03
551844.82	4173401.36	2605.88803	1649.19223	401.7271	1696.26553	370.9546	2176.71465	2652.43348	993.88851	233.04827	1596.33355	882.97551	2705.67458	0.46831	0.4472	5.06E-04	5.15E-04	1.25E-04	4.63E-04	4.77E-05	2.80E-04	1.57E-03	3.84E-04	9.00E-05	1.20E-03	4.35E-04	1.33E-03	2.19E-04	2.12E-04	7.3725E-03
551852.92	4173395.82	2594.79076	1701.88111	399.84995	1689.18845	369.11673	2167.62034	2641.22678	988.66764	231.94433	1588.16326	878.59389	2692.56497	0.45493	0.43537	5.04E-04	5.32E-04	1.25E-04	4.62E-04	4.74E-05	2.78E-04	1.56E-03	3.82E-04	8.95E-05	1.19E-03	4.33E-04	1.33E-03	2.13E-04	2.06E-04	7.3472E-03
551209.13	4172769.65	1433.22123	1694.26983	508.72049	3441.48026	644.32015	1241.91743	1432.02216	981.52493	283.82672	2649.02068	2015.59415	1576.72487	0.16059	0.16278	2.78E-04	5.29E-04	1.59E-04	9.40E-04	8.28E-05	1.60E-04	8.45E-04	3.79E-04	1.10E-04	1.99E-03	9.93E-04	7.77E-04	7.53E-05	7.71E-05	7.3907E-03
551220.44	4172730.54	1426.6508	1682.05796	512.17807	3441.58162	660.96979	1239.32686	1425.17976	974.53522	285.14811	2632.26781	2050.08569	1572.45383	0.15917	0.16138	2.77E-04	5.25E-04	1.60E-04	9.40E-04	8.49E-05	1.59E-04	8.41E-04	3.76E-04	1.10E-04	1.97E-03	1.01E-03	7.75E-04	7.46E-05	7.65E-05	7.3833E-03
551797.19	4173440.15	2573.39543	1648.8596	402.9379	1711.98556	374.31645	2182.89582	2617.64864	1002.77556	233.59683	1615.21058	892.3642	2604.11213	0.50707	0.478	4.99E-04	5.15E-04	1.26E-04	4.68E-04	4.81E-05	2.80E-04	1.55E-03	3.87E-04	9.02E-05	1.21E-03	4.40E-04	1.28E-03	2.38E-04	2.27E-04	7.3566E-03
551861.02	4173390.29	2581.22517	1692.03766	397.88706	1681.32757	367.27151	2159.21023	2627.48817	983.45889	230.81732	1579.89737	874.25106	2679.92456	0.44178	0.42362	5.01E-04	5.29E-04	1.24E-04	4.59E-04	4.72E-05	2.77E-04	1.55E-03	3.80E-04	8.91E-05	1.18E-03	4.31E-04	1.32E-03	2.07E-04	2.01E-04	7.3005E-03
551903.63	4173360.99	2631.35392	1652.11392	387.68875	1643.84926	357.48723	2173.85995	2678.4919	966.27418	224.79748	1546.11807	852.01379	2671.20638	0.38036	0.3679	5.11E-04	5.16E-04	1.21E-04	4.49E-04	4.59E-05	2.79E-04	1.58E-03	3.73E-04	8.68E-05	1.16E-03	4.20E-04	1.32E-03	1.78E-04	1.74E-04	7.2104E-03
551869.11	4173384.75	2570.35309	1683.43816	395.95445	1673.54748	365.32047	2155.79194	2616.4748	979.16385	229.6426	1572.66781	869.73432	2671.95754	0.42923	0.41238	4.99E-04	5.26E-04	1.24E-04	4.57E-04	4.69E-05	2.77E-04	1.54E-03	3.78E-04	8.86E-05	1.18E-03	4.28E-04	1.32E-03	2.01E-04	1.95E-04	7.2609E-03
551918.16	4173350.8	2607.22241	1644.43773	384.56505	1634.35967	354.56547	2200.49807	2653.83634	964.71988	222.90631	1538.32625	845.60588	2692.13379	0.36223	0.35118	5.06E-04	5.14E-04	1.20E-04	4.47E-04	4.56E-05	2.83E-04	1.57E-03	3.72E-04	8.60E-05	1.15E-03	4.17E-04	1.33E-03	1.70E-04	1.66E-04	7.1718E-03
551211.25	4172759.78	1420.40188	1673.17561	504.75727	3398.91767	641.78805	1230.44998	1419.17321	969.55807	281.48633	2613.70887	2000.04935	1561.74812	0.1583	0.16045	2.76E-04	5.23E-04	1.58E-04	9.29E-04	8.24E-05	1.58E-04	8.38E-04	3.74E-04	1.09E-04	1.96E-03	9.85E-04	7.69E-04	7.42E-05	7.60E-05	7.3101E-03
551216.11	4172738.95	1416.19164	1666.20445	506.50561	3400.0969	650.55262	1228.05455	1414.80447	965.48563	282.13461	2605.2615	2018.71216	1558.27238	0.15762	0.15979	2.75E-04	5.20E-04	1.58E-04	9.29E-04	8.36E-05	1.58E-04	8.35E-04	3.73E-04	1.09E-04	1.95E-03	9.94E-04	7.68E-04	7.39E-05	7.57E-05	7.3054E-03
551877.21	4173379.21	2557.18343	1674.5194	393.96197	1665.9934	363.48623	2153.43598	2603.10885	974.90206	228.50862	1565.31985	865.41873	2664.96456	0.41696	0.40131	4.96E-04	5.23E-04	1.23E-04	4.55E-04	4.67E-05	2.77E-04	1.54E-03	3.76E-04	8.82E-05	1.17E-03	4.26E-04	1.31E-03	1.95E-04	1.90E-04	7.2203E-03
551885.31	4173373.67	2542.77819	1665.70249	391.94972	1658.69321	361.59319	2152.15293	2588.50184	970.70644	227.33515	1557.90322	861.31272	2659.22818	0.40506	0.39048	4.93E-04	5.20E-04	1.22E-04	4.53E-04	4.65E-05	2.76E-04	1.53E-03	3.75E-04	8.78E-05	1.17E-03	4.24E-04	1.31E-03	1.90E-04	1.85E-04	7.1799E-03
551817.59	4173428.22	2552.30819	1620.75929	397.6239	1682.89238	368.69548	2137.67891	2596.75638	983.68226	230.56878	1586.01296	878.13476	2558.70691	0.4789	0.45411	4.95E-04	5.06E-04	1.24E-04	4.60E-04	4.74E-05	2.75E-04	1.53E-03	3.80E-04	8.90E-05	1.19E-03	4.33E-04	1.26E-03	2.24E-04	2.15E-04	7.2309E-03
551893.41	4173368.13	2529.8865	1657.80712	389.89583	1651.71098	359.77923	2155.43538	2575.4191	967.36634	226.0993	1551.23948	857.11022	2658.04803	0.39366	0.38006	4.91E-04	5.18E-04	1.22E-04	4.51E-04	4.62E-05	2.77E-04	1.52E-03	3.73E-04	8.73E-05	1.16E-03	4.22E-04	1.31E-03	1.85E-04	1.80E-04	7.1452E-03
551829.75	4173423.51	2508.05229	1591.90785	391.2829	1654.84508	362.84471	2088.22751	2551.68363	963.85411	226.83082	1557.6457	864.03612	2599.12901	0.45163	0.42981	4.87E-04	4.97E-04	1.22E-04	4.52E-04	4.66E-05	2.68E-04	1.51E-03	3.72E-04	8.76E-05	1.17E-03	4.26E-04	1.28E-03	2.12E-04	2.04E-04	7.1282E-03
551810.2	4173438.25	2506.33823	1598.3101	393.09056	1666.73315	365.34451	2102.25287	2549.3685	971.35043	227.81014	1570.49094	870.55018	2512.60919	0.46475	0.44026	4.86E-04	4.99E-04	1.23E-04	4.55E-04	4.69E-05	2.70E-04	1.50E-03	3.75E-04	8.79E-05	1.18E-03	4.29E-04	1.24E-03	2.18E-04	2.09E-04	7.1191E-03
551842.29	4173415.03	2490.5768	1581.9	388.63135	1642.48972	360.16065	2069.52846	2534.03449	955.27378	225.31285	1544.39748	857.62991	2575.09456	0.4361	0.41632	4.83E-04	4.94E-04	1.21E-04	4.49E-04	4.63E-05	2.66E-04	1.50E-03	3.69E-04	8.70E-05	1.16E-03	4.22E-04	1.27E-03	2.04E-04	1.97E-04	7.0619E-03
551850.38	4173409.49	2478.81689	1635.13932	386.85167	1635.45293	358.45451	2059.06658	2522.154	950.04116	224.29761	1536.25669	853.57007	2561.02408	0.42592	0.40741	4.81E-04	5.11E-04	1.21E-04	4.47E-04	4.61E-05	2.65E-04	1.49E-03	3.67E-04	8.66E-05	1.15E-03	4.20E-04	1.26E-03	2.00E-04	1.93E-04	7.0387E-03
551858.48	4173403.95	2466.65059	1625.80691	384.98843	1627.99997	356.65009	2049.98489	2509.82341	944.95774	223.20755	1528.32703	849.34945	2548.09035	0.41566	0.39831	4.79E-04	5.08E-04	1.20E-04	4.45E-04	4.58E-05	2.63E-04	1.48E-03	3.65E-04	8.62E-05	1.15E-03	4.18E-04	1.26E-03	1.95E-04	1.89E-04	6.9962E-03
551866.58	4173398.41	2453.91379	1616.61031	383.1169	1620.47741	354.85604	2042.42461	2496.88147	940.13093	222.09801	1520.64418	845.1776	2536.46184	0.40542	0.38921	4.76E-04	5.05E-04	1.20E-04	4.43E-04	4.56E-05	2.62E-04	1.47E-03	3.63E-04	8.57E-05	1.14E-03	4.16E-04	1.25E-03	1.90E-04	1.84E-04	6.9545E-03
551956.27	4173335.84	2427.61282	1578.70681	365.49128	1560.05481	336.88662	2194.19435	2470.20337	935.59146	211.59771	1480.38868	805.05389	2655.49307	0.30924	0.30111	4.71E-04	4.93E-04	1.14E-04	4.26E-04	4.33E-05	2.82E-04	1.46E-03	3.61E-04	8.17E-05	1.11E-03	3.97E-04	1.31E-03	1.45E-04	1.43E-04	6.8330E-03
551874.68	4173392.88	2442.2053	1608.12876	381.1987	1612.86342	352.98891	2038.07	2485.00261	935.8365	220.96123	1513.45597	840.8059	2527.88399	0.39539	0.3802	4.74E-04	5.02E-04	1.19E-04	4.41E-04	4.53E-05	2.62E-04	1.47E-03	3.61E-04	8.53E-05	1.13E-03	4.14E-04	1.25E-03	1.85E-04	1.80E-04	6.9162E-03
551909.29	4173369.05	2499.72506	1577.79102	373.23709	1584.22834	345.47886	2050.80663	2543.47999	923.10658	216.27747	1487.73661	823.75467	2523.01362	0.35513	0.3436	4.85E-04	4.93E-04	1.17E-04	4.33E-04	4.44E-05	2.63E-04	1.50E-03	3.56E-04	8.35E-05	1.12E-03	4.06E-04	1.24E-03	1.66E-04	1.63E-04	6.8698E-03
551945.6	4173343.57	2440.55317	1568.83944	366.37431	1563.46881	338.60044	2136.79781	2483.18012	925.84815	212.20669	1475.05312	808.81092	2598.32084	0.31857	0.3098	4.74E-04	4.90E-04	1.14E-04	4.27E-04	4.35E-05	2.75E-04	1.47E-03	3.57E-04	8.19E-05	1.11E-03	3.98E-04	1.28E-03	1.49E-04	1.47E-04	6.8088E-03
551823.22	4173436.36	2433.43078	1549.86031	383.16483	1622.66244	356.41552	2023.70877	2474.97897	940.60635	222.04587	1526.62158	849.13674	2520.19581	0.4277	0.40693	4.72E-04	4.84E-04	1.20E-04	4.43E-04	4.58E-05	2.60E-04	1.46E-03	3.63E-04	8.57E-05	1.14E-03	4.18E-04	1.24E-03	2.00E-04	1.93E-04	6.9325E-03
551938.34	4173348.67	2451.96456	1566.95858	367.52558	1566.95514	339.94961	2109.2856	2494.75934	922.63227	212.86019	1475.13604	811.75384	2572.11979	0.32538	0.31613	4.76E-04	4.89E-04	1.15E-04	4.28E-04	4.37E-05	2.71E-04	1.47E-03	3.56E-04	8.22E-05	1.11E-03	4.00E-04	1.27E-03	1.53E-04	1.50E-04	6.8090E-03
551882.77	4173387.34	2428.22664	1599.2292	379.28662	1605.74247	351.23888	2033.95317	2470.81221	931.45532	219.83304	1506.12801	836.84079	2519.53492	0.38544	0.37122	4.71E-04	5.00E-04	1.18E-04	4.39E-04	4.51E-05	2.61E-04	1.46E-03	3.60E-04	8.49E-05	1.13E-03	4.12E-04	1.24E-03	1.81E-04	1.76E-04	6.8765E-03
551923.81	4173358.86	2475.36095	1567.51291	370.04873	1575.20338	342.74747	2064.31129	2518.5461	919.11653	214.3785	1477.78048	817.92357	2531.49404	0.33961	0.32928	4.80E-04	4.90E-04	1.16E-04	4.30E-04	4.40E-05	2.65E-04	1.49E-03	3.55E-04	8.28E-05	1.11E-03	4.03E-04	1.25E-03	1.59E-04	1.56E-04	6.8225E-03
551890.87	4173381.8	2415.08432	1590.96613	377.29662	1598.67743	349.40538	2032.62252	2457.50172	927.51188	218.71357	1499.15713	832.75548	2514.04848	0.37573	0.36241	4.69E-04	4.97E-04	1.18E-04	4.37E-04	4.49E-05	2.61E-04	1.45E-03	3.58E-04	8.44E-05	1.12E-03	4.10E-04	1.24E-03	1.76E-04	1.72E-04	6.8399E-03
551898.97	4173376.26	2400.31033	1582.33506	375.29718	1592.06224	347.72297	2031.08784	2442.53228	923.4135	217.52611	1491.80459	828.9626	2508.5464	0.36615	0.35366	4.66E-04	4.94E-04	1.17E-04	4.35E-04	4.47E-05	2.61E-04	1.44E-03	3.56E-04	8.40E-05	1.12E-03	4.08E-04	1.24E-03	1.72E-04	1.68E-04	6.8019E-03
551835.27	4173431.67	2388.15479	1521.54944	377.07686	1595.785	350.86896	1977.39872	2428.83989	921.88532	218.47002	1499.60277	836.00225	2462.84826	0.4067	0.3881	4.63E-04	4.75E-04	1.18E-04	4.36E-04	4.51E-05	2.54E-04	1.43E-03	3.56E-04	8.43E-05	1.12E-03	4.12E-04	1.21E-03	1.91E-04	1.84E-04	6.7894E-03
551847.85	4173423.16	2372.22905	1572.72181	374.47187	1584.59821	348.17096	1960.56438	2412.77014	913.94269	216.97695	1487.27912	829.50303	2440.98542	0.3958	0.3786	4.60E-04	4.91E-04	1.17E-04	4.33E-04	4.47E-05	2.52E-04	1.42E-03	3.53E-04	8.38E-05	1.12E-03	4.09E-04	1.20E-03	1.86E-04	1.79E-04	6.7500E-03
551855.94	4173417.62	2359.79631	1563.61871	372.72562	1577.586	346.55481	1950.42475	2400.1676	908.92954	215.98963	1479.44437	825.64137	2427.34996	0.38824	0.37197	4.58E-04	4.88E-04	1.16E-04	4.31E-04	4.45E-05	2.51E-04	1.42E-03	3.51E-04	8.34E-05	1.11E-03	4.07E-04	1.20E-03	1.82E-04	1.76E-04	6.7098E-03
551989.41	4173325.24	2270.29688	1527.57165	347.46045	1494.20232	320.9952	2172.4306	2310.02905	911.25997	201.38698	1421.80129	768.82517	2614.75269	0.27136	0.26495	4.41E-04	4.77E-04	1.09E-04	4.08E-04	4.12E-05	2.79E-04	1.36E-03	3.52E-04	7.77E-05	1.07E-03	3.79E-04	1.29E-03	1.27E-04	1.26E-04	6.5334E-03
551864.04	4173412.08	2346.84227	1554.56054	370.92265	1570.12467	344.82781	1941.31408	2387.01915	903.96807	214.93981	1471.73206	821.59581	2414.61751	0.38042	0.36504	4.55E-04	4.86E-04	1.16E-04	4.29E-04	4.43E-05	2.49E-04	1.41E-03	3.49E-04	8.30E-05	1.10E-03	4.05E-04	1.19E-03	1.78E-04	1.73E-04	6.6694E-03
551981.43	4173330.65	2279.36006	1518.05145	348.73255	1496.37479	322.36457	2134.88777	2318.92982	904.20633	202.13725	1422.39659	771.62305	2574.86744	0.2773	0.27055	4.42E-04	4.74E-04	1.09E-04	4.09E-04	4.14E-05	2.74E-04	1.37E-03	3.49E-04	7.80E-05	1.07E-03	3.80E-04	1.27E-03	1.30E-04	1.28E-04	6.5190E-03
551872.14	4173406.54	2335.92674	1546.22403	369.124	1562.87036	343.01597	1935.24066	2375.95886	899.68701	213.85214	1464.74485	817.42871	2404.63335	0.37258	0.35808	4.53E-04	4.83E-04	1.15E-04	4.27E-04	4.41E-05	2.49E-04	1.40E-03	3.47E-04	8.26E-05	1.10E-03	4.03E-04	1.18E-03	1.75E-04	1.70E-04	6.6333E-03
551973.46	4173336.05	2288.76593	1507.44883	350.05316	1499.22003	323.83805	2090.35767	2328.13868	894.92261	202.50236	1420.75413	774.77959	2529.03392	0.28331	0.2762	4.44E-04	4.71E-04	1.09E-04	4.10E-04	4.16E-05	2.69E-04	1.37E-03	3.45E-04	7.82E-05	1.07E-03	3.82E-04	1.25E-03	1.33E-04	1.31E-04	6.4984E-03
551880.24	4173401	2324.26082	1538.07034	367.30992	1555.51481	341.28478	1930.7565	2364.13767	895.57015	212.8042	1457.85182	813.29838	2396.17324	0.36466	0.35099	4.51E-04	4.80E-04	1.15E-04	4.25E-04	4.38E-05	2.48E-04	1.40E-03	3.46E-04	8.21E-05	1.09E-03	4.01E-04	1.18E-03	1.71E-04	1.66E-04	6.5978E-03
551914.94	4173377.11	2377.94767	1508.83126	359.62394	1527.84873	334.03705	1939.41663	2418.5781	883.06842	208.29156	1432.97892	796.90831	2388.38244	0.33167	0.32104	4.61E-04	4.71E-04	1.12E-04	4.17E-04	4.29E-05	2.49E-04	1.43E-03	3.41E-04	8.04E-05	1.07E-03	3.93E-04	1.18E-03	1.55E-04	1.52E-04	6.5546E-03
551962.09	4173343.78	2305.77727	1499.57534	351.41793	1504.11779	325.88517	2042.57043	2345.24663	887.14307	203.37454	1418.03449	779.24112	2480.98608	0.29112	0.28447	4.42E-04	4.72E-04	1.10E-04	4.11E-04	4.19E-05	2.66E-04	1.38E-03	3.44E-04	7.85E-05	1.06E-03	3.86E-04	1.22E-03	1.37E-04	1.35E-04	6.4872E-03
551888.33	4173395.47	2313.03744	1530.38782	365.49195	1548.52363	339.49802	1929.01421	2352.74745	891.99182	211.74948	1451.49409	809.24327	2390.38468	0.35679	0.34391	4.49E-04	4.78E-04	1.14E-04	4.23E-04	4.36E-05	2.48E-04	1.39E-03	3.44E-04	8.17E-05	1.09E-03	3.99E-04	1.18E-03	1.67E-04	1.63E-04	6.5651E-03
551951.26	4173351.64	2320.70977	1498.04859	352.95492	1507.31558	327.43043	2010.86563	2360.32467	883.92025	204.32337	1419.34836	782.48043	2449.46113	0.30055	0.29231	4.50E-04	4.68E-04	1.10E-04	4.12E-04	4.21E-05	2.58E-04	1.39E-03	3.41E-04	7.89E-05	1.06E-03	3.85E-04	1.21E-03	1.41E-04	1.39E-04	6.4897E-03
551936.73	4173361.83	2343.59103	1498.66323	355.39446	1514.62629	330.04102	1971.9703	2383.57132	880.94474	205.76825	1422.49772	788.10258	2413.63133	0.31254	0.30342	4.55E-04	4.68E-04	1.11E-04	4.14E-04	4.24E-05	2.53E-04	1.41E-03	3.40E-04	7.94E-05	1.07E-03	3.88E-04	1.19E-03	1.46E-04	1.44E-04	6.5040E-03
551896.43	4173389.93	2296.12277	1521.02192	363.46404	1541.91208	337.86885	1922.1198	2335.57961	887.01504	210.55309	1443.4737	805.68705	2379.86925	0.34864	0.3365	4.46E-04	4.75E-04	1.14E-04	4.21E-04	4.34E-05	2.47E-04	1.38E-03	3.42E-04	8.13E-05	1.08E-03	3.97E-04	1.17E-03	1.39E-04	1.33E-04	6.5225E-03
551904.53	4173384.39	2283.96011	1513.38417	361.58572	1535.48377	336.17582	1922.2828	2321.26934	883.53889	209.46729	1437.0155	801.9063	2376.10869	0.34085	0.32939	4.43E-04	4.73E-04	1.13E-04	4.20E-04	4.32E-05	2.48E-04	1.37E-03	3.41E-04	8.09E-05	1.07E-03	3.96E-04	1.16E-03	1.36E-04	1.31E-04	6.4906E-03
551929.47	4173366.92	2255.31943	1496.56178	356.37688	1519.14763	331.4751	1942.81084	2294.38248	877.26282	206.36724	1421.36251	791.51177	2387.20641	0.31837	0.30878	4.38E-04	4.67E-04	1.11E-04	4.16E-04	4.26E-05	2.50E-04	1.35E-03	3.39E-04	7.97E-05	1.07E-03	3.90E-04	1.18E-03	1.49E-04	1.46E-04	6.4234E-03

CONCUNIT ug/m^3
DEPUNIT g/m^2

Scenario 2

Existing Phase 2 Receptors—Midway Village Project

Summary Offsite Construction Emissions (No Mitigation)

Route 1 - From the project site towards US-101
Route 2 - From US-101 towards the project site

Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)

Route 1 DPM		Route 2 DPM	
Road Segment 1 Phase 1—Demolition	7.66093E-07	Road Segment 1 Phase 1—Demolition	2.05881E-05
Road Segment 2 Phase 1—Demolition	1.54931E-06	Road Segment 2 Phase 1—Demolition	2.08182E-05
Road Segment 1 Phase 1—Construction	4.72844E-06	Road Segment 1 Phase 1—Construction	1.16131E-04
Road Segment 2 Phase 1—Construction	4.79746E-06	Road Segment 2 Phase 1—Construction	1.17429E-04

Scenario				
Existing Phase 2 Receptors: Exposed to Phase 1 Demolition and Phase 1 Construction	Road Segment 1	5.49454E-06	Road Segment 1	1.36719E-04
	Road Segment 2	6.34678E-06	Road Segment 2	1.38247E-04

Cancer Risk Calculations Using OEHHA/BAAQMD Cancer Risk Assumptions
Existing Phase 2 Receptors—Midway Village Project
Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant

UTM: 551717.25 4172890.87

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Age	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.466984169	10	361	0.85	0.25	5.4
0-1	0.466984169	10	1,090	0.85	0.68	44.3
					Total	49.65

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.031589852	10	361	0.85	0.25	0.4
0-1	0.031589852	10	1,090	0.85	0.68	3.0
					Total	3.36

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child

UTM: 551717.25 4172890.87

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Period	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.466984169	3	572	1	0.93	11.2
					Total	11.21

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.031589852	3	572	1	0.93	0.8
					Total	0.76

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult

UTM: 551717.25 4172890.87

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.466984169	1	261	0.73	0.93	1.2
					Total	1.25

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.031589852	1	261	0.73	0.93	0.1
					Total	0.084

Existing Phase 2 Receptors—Midway Village Project

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551717.25	4172890.87	0.4670	0.4670	0.09340

Unmitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551717.25	4172890.87	0.5911	0.5911

Mitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551717.25	4172890.87	0.0316	0.0316	0.00632

Mitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551717.25	4172890.87	0.1557	0.1557

Existing Phase 2 Receptors—Midway Village Project

Construction Annual DPM Emissions (PM2.5 Exhaust)

Unmitigated Concentrations

Annual Average Onsite DPM Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.46E-06
Annual Average Onsite DPM Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	9.48E-07
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	5.49E-06
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	6.35E-06

X	Y	Unit Emissions Demolition Area 1A (Phase 1) AREA2	Unit Emissions Construction Area 1B (Phase 1) AREA8	Unit Emissions Road Segment 1 LINE1	Unit Emissions Road Segment 2 LINE2	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
551717.25	4172890.87	189488.7774	200867.3043	1.18432	1.16461	2.77E-01	1.90E-01	6.51E-06	7.39E-06	4.6698E-01
551734.05	4173023.09	189586.9875	184135.9886	1.20989	1.19226	2.77E-01	1.75E-01	6.65E-06	7.57E-06	4.5127E-01
551709.45	4172893.99	177371.0694	187380.8749	1.252	1.23026	2.59E-01	1.78E-01	6.88E-06	7.81E-06	4.3651E-01
551734.96	4173037.77	161830.3745	155342.1522	1.23949	1.22111	2.36E-01	1.47E-01	6.81E-06	7.75E-06	3.8346E-01
551699.31	4172897.89	148600.3725	156482.4383	1.34993	1.32522	2.17E-01	1.48E-01	7.42E-06	8.41E-06	3.6524E-01
551736.19	4173046.34	147208.1645	140132.7696	1.25101	1.23227	2.15E-01	1.33E-01	6.87E-06	7.82E-06	3.4771E-01
551717.53	4173024.62	121058.8721	117473.1016	1.38804	1.36586	1.77E-01	1.11E-01	7.63E-06	8.67E-06	2.8806E-01
551727.97	4172863.96	107928.0841	113964.2659	1.1285	1.10987	1.58E-01	1.08E-01	6.20E-06	7.04E-06	2.6557E-01
551684.15	4172907.46	102475.8911	105700.5412	1.51938	1.48967	1.50E-01	1.00E-01	8.35E-06	9.45E-06	2.4978E-01
551708.05	4173024.01	96825.70694	94201.70612	1.50705	1.48157	1.41E-01	8.93E-02	8.28E-06	9.40E-06	2.3063E-01
551681.29	4172897.32	90820.23852	94108.22623	1.56398	1.53203	1.33E-01	8.92E-02	8.59E-06	9.72E-06	2.2178E-01
551723.55	4172849.41	78354.34262	82091.53493	1.19918	1.17769	1.14E-01	7.78E-02	6.59E-06	7.47E-06	1.9219E-01
551705.82	4172857.59	78182.99615	81767.42505	1.38939	1.35934	1.14E-01	7.75E-02	7.63E-06	8.63E-06	1.9164E-01
551676.61	4172888.22	77588.60074	80415.9829	1.64832	1.61197	1.13E-01	7.62E-02	9.06E-06	1.02E-05	1.8949E-01
551696.2	4172861.22	73990.50985	77232.13464	1.50839	1.47195	1.08E-01	7.32E-02	8.29E-06	9.34E-06	1.8122E-01
551696.13	4173024.93	74360.01898	72561.77371	1.69302	1.66198	1.09E-01	6.88E-02	9.30E-06	1.05E-05	1.7733E-01
551685.02	4172863.04	65324.89106	67910.99855	1.67578	1.63078	9.54E-02	6.44E-02	9.21E-06	1.04E-05	1.5974E-01
551667.23	4172981.92	58326.21423	57967.05867	2.01725	1.97172	8.51E-02	5.49E-02	1.11E-05	1.25E-05	1.4010E-01
551675.02	4173008.95	56547.65002	55692.9637	2.02529	1.9816	8.25E-02	5.28E-02	1.11E-05	1.26E-05	1.3535E-01
551671.39	4173000.11	56441.45747	55761.54439	2.04651	2.00119	8.24E-02	5.29E-02	1.12E-05	1.27E-05	1.3526E-01
551678.4	4173018.57	55672.09666	54647.98617	2.01643	1.97387	8.13E-02	5.18E-02	1.11E-05	1.25E-05	1.3308E-01
551655.53	4172985.04	46856.31361	46560.81857	2.35018	2.28886	6.84E-02	4.41E-02	1.29E-05	1.45E-05	1.1255E-01
551678.08	4173037.77	47031.60603	45942.55815	2.17803	2.1307	6.87E-02	4.35E-02	1.20E-05	1.35E-05	1.1222E-01
551670.13	4173040.53	40804.96278	39915.83224	2.45163	2.39124	5.96E-02	3.78E-02	1.35E-05	1.52E-05	9.7422E-02
551642.79	4172988.94	37783.53604	37537.00871	2.90684	2.80544	5.52E-02	3.56E-02	1.60E-05	1.78E-05	9.0762E-02
551638.89	4172973.08	37209.64011	37106.93371	2.87402	2.77242	5.43E-02	3.52E-02	1.58E-05	1.76E-05	8.9517E-02
551635.25	4172958.26	36756.14155	36784.02187	2.83917	2.74241	5.37E-02	3.49E-02	1.56E-05	1.74E-05	8.8548E-02
551661.57	4173042.97	35386.35307	34666.79183	2.85371	2.77112	5.17E-02	3.29E-02	1.57E-05	1.76E-05	8.4542E-02
551653.31	4173045.72	31080.25762	30484.92215	3.40582	3.29139	4.54E-02	2.89E-02	1.87E-05	2.09E-05	7.4300E-02
551638.33	4173050.92	24927.21715	24494.26971	5.15616	4.92621	3.64E-02	2.32E-02	2.83E-05	3.13E-05	5.9660E-02
551612.94	4173004.75	23442.75279	23259.14359	7.22231	6.69459	3.42E-02	2.20E-02	3.97E-05	4.25E-05	5.6346E-02
551608.05	4172989.15	23400.08762	23280.76094	7.08838	6.54906	3.42E-02	2.21E-02	3.89E-05	4.16E-05	5.6302E-02
551604.58	4172979.84	23042.15985	22962.18036	7.15614	6.59763	3.36E-02	2.18E-02	3.93E-05	4.19E-05	5.5478E-02
551602.24	4172969.7	22994.35218	22954.42916	6.83281	6.31528	3.36E-02	2.18E-02	3.75E-05	4.01E-05	5.5398E-02
551622.73	4173035.63	22796.15063	22494.17281	7.32335	6.86701	3.33E-02	2.13E-02	4.02E-05	4.36E-05	5.4678E-02
551617.84	4173026.46	22631.23818	22371.76483	7.85653	7.31329	3.30E-02	2.12E-02	4.32E-05	4.64E-05	5.4327E-02
551627.32	4173054.59	21553.90882	21203.87087	7.75623	7.31196	3.15E-02	2.01E-02	4.26E-05	4.64E-05	5.1647E-02

CONCUNIT ug/ m^3
DEPUNIT g/m^ 2

Unmitigated DPM Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
4.6698E-01	551717.25	4172890.87

MIR		
UTM	551717.25	4172890.87
Latitude, Longitude	37°42'06.5"N 122°24'47.9"W	

Existing Phase 2 Receptors—Midway Village Project

Construction Annual Total PM2.5 Emissions (PM2.5 Total)

Unmitigated Concentrations

Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.59E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	1.44E-06
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	1.37E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	1.38E-04

X	Y	Unit Emissions Demolition Area 1A (Phase 1) AREA2	Unit Emissions Construction Area 1B (Phase 1) AREA8	Unit Emissions Road Segment 1 LINE1	Unit Emissions Road Segment 2 LINE2	Demolition Area 1A (Phase 1) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 1B (Phase 1) Annual PM2.5 w/Actual Emissions (ug/m3)	Road Segment 1 Annual PM2.5 w/Actual Emissions (ug/m3)	Road Segment 2 Annual PM2.5 w/Actual Emissions (ug/m3)	**Total PM2.5 (ug/m3)**
551717.25	4172890.87	189488.7774	200867.3043	1.18432	1.16461	3.02E-01	2.89E-01	1.62E-04	1.61E-04	5.9114E-01
551734.05	4173023.09	189586.9875	184135.9886	1.20989	1.19226	3.02E-01	2.65E-01	1.65E-04	1.65E-04	5.6720E-01
551709.45	4172893.99	177371.0694	187380.8749	1.252	1.23026	2.82E-01	2.70E-01	1.71E-04	1.70E-04	5.5245E-01
551734.96	4173037.77	161830.3745	155342.1522	1.23949	1.22111	2.58E-01	2.24E-01	1.69E-04	1.69E-04	4.8157E-01
551699.31	4172897.89	148600.3725	156482.4383	1.34993	1.32522	2.36E-01	2.25E-01	1.85E-04	1.83E-04	4.6219E-01
551736.19	4173046.34	147208.1645	140132.7696	1.25101	1.23227	2.34E-01	2.02E-01	1.71E-04	1.70E-04	4.3641E-01
551717.53	4173024.62	121058.8721	117473.1016	1.38804	1.36586	1.93E-01	1.69E-01	1.90E-04	1.89E-04	3.6220E-01
551727.97	4172863.96	107928.0841	113964.2659	1.1285	1.10987	1.72E-01	1.64E-01	1.54E-04	1.53E-04	3.3618E-01
551684.15	4172907.46	102475.8911	105700.5412	1.51938	1.48967	1.63E-01	1.52E-01	2.08E-04	2.06E-04	3.1571E-01
551708.05	4173024.01	96825.70694	94201.70612	1.50705	1.48157	1.54E-01	1.36E-01	2.06E-04	2.05E-04	2.9015E-01
551681.29	4172897.32	90820.23852	94108.22623	1.56398	1.53203	1.45E-01	1.36E-01	2.14E-04	2.12E-04	2.8048E-01
551723.55	4172849.41	78354.34262	82091.53493	1.19918	1.17769	1.25E-01	1.18E-01	1.64E-04	1.63E-04	2.4324E-01
551705.82	4172857.59	78182.99615	81767.42505	1.38939	1.35934	1.24E-01	1.18E-01	1.90E-04	1.88E-04	2.4255E-01
551676.61	4172888.22	77588.60074	80415.9829	1.64832	1.61197	1.23E-01	1.16E-01	2.25E-04	2.23E-04	2.3973E-01
551696.2	4172861.22	73990.50985	77232.13464	1.50839	1.47195	1.18E-01	1.11E-01	2.06E-04	2.03E-04	2.2938E-01
551696.13	4173024.93	74360.01898	72561.77371	1.69302	1.66198	1.18E-01	1.05E-01	2.31E-04	2.30E-04	2.2329E-01
551685.02	4172863.04	65324.89106	67910.99855	1.67578	1.63078	1.04E-01	9.78E-02	2.29E-04	2.25E-04	2.0221E-01
551667.23	4172981.92	58326.21423	57967.05867	2.01725	1.97172	9.28E-02	8.35E-02	2.76E-04	2.73E-04	1.7684E-01
551675.02	4173008.95	56547.65002	55692.9637	2.02529	1.9816	9.00E-02	8.02E-02	2.77E-04	2.74E-04	1.7074E-01
551671.39	4173000.11	56441.45747	55761.54439	2.04651	2.00119	8.98E-02	8.03E-02	2.80E-04	2.77E-04	1.7068E-01
551678.4	4173018.57	55672.09666	54647.98617	2.01643	1.97387	8.86E-02	7.87E-02	2.76E-04	2.73E-04	1.6784E-01
551655.53	4172985.04	46856.31361	46560.81857	2.35018	2.28886	7.46E-02	6.71E-02	3.21E-04	3.16E-04	1.4225E-01
551678.08	4173037.77	47031.60603	45942.55815	2.17803	2.1307	7.48E-02	6.62E-02	2.98E-04	2.95E-04	1.4160E-01
551670.13	4173040.53	40804.96278	39915.83224	2.45163	2.39124	6.49E-02	5.75E-02	3.35E-04	3.31E-04	1.2308E-01
551642.79	4172988.94	37783.53604	37537.00871	2.90684	2.80544	6.01E-02	5.41E-02	3.97E-04	3.88E-04	1.1497E-01
551638.89	4172973.08	37209.64011	37106.93371	2.87402	2.77242	5.92E-02	5.34E-02	3.93E-04	3.83E-04	1.1343E-01
551635.25	4172958.26	36756.14155	36784.02187	2.83917	2.74241	5.85E-02	5.30E-02	3.88E-04	3.79E-04	1.1223E-01
551661.57	4173042.97	35386.35307	34666.79183	2.85371	2.77112	5.63E-02	4.99E-02	3.90E-04	3.83E-04	1.0701E-01
551653.31	4173045.72	31080.25762	30484.92215	3.40582	3.29139	4.95E-02	4.39E-02	4.66E-04	4.55E-04	9.4281E-02
551638.33	4173050.92	24927.21715	24494.26971	5.15616	4.92621	3.97E-02	3.53E-02	7.05E-04	6.81E-04	7.6328E-02
551612.94	4173004.75	23442.75279	23259.14359	7.22231	6.69459	3.73E-02	3.35E-02	9.87E-04	9.26E-04	7.2714E-02
551608.05	4172989.15	23400.08762	23280.76094	7.08838	6.54906	3.72E-02	3.35E-02	9.69E-04	9.05E-04	7.2639E-02
551604.58	4172979.84	23042.15985	22962.18036	7.15614	6.59763	3.67E-02	3.31E-02	9.78E-04	9.12E-04	7.1626E-02
551602.24	4172969.7	22994.35218	22954.42916	6.83281	6.31528	3.66E-02	3.31E-02	9.34E-04	8.73E-04	7.1456E-02
551622.73	4173035.63	22796.15063	22494.17281	7.32335	6.86701	3.63E-02	3.24E-02	1.00E-03	9.49E-04	7.0621E-02
551617.84	4173026.46	22631.23818	22371.76483	7.85653	7.31329	3.60E-02	3.22E-02	1.07E-03	1.01E-03	7.0317E-02
551627.32	4173054.59	21553.90882	21203.87087	7.75623	7.31196	3.43E-02	3.05E-02	1.06E-03	1.01E-03	6.6907E-02
CONCUNIT ug/	m^3									
DEPUNIT g/m^	2									

Unmitigated PM2.5 Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
5.9114E-01	551717.25	4172890.87

Existing Phase 2 Receptors—Midway Village Project

Construction Annual DPM Emissions (PM2.5 Exhaust) **Mitigated Concentrations**

Annual Average Onsite DPM Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	6.24E-08
Annual Average Onsite DPM Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	9.83E-08
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	5.49E-06
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	6.35E-06

X	Y	Unit Emissions Demolition Area 1A (Phase 1) AREA2	Unit Emissions Construction Area 1B (Phase 1) AREA8	Unit Emissions Road Segment 1 LINE1	Unit Emissions Road Segment 2 LINE2	Demolition Area 1A (Phase 1) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 1B (Phase 1) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Road Segment 1 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Road Segment 2 Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
551717.25	4172890.87	189488.7774	200867.3043	1.18432	1.16461	1.18E-02	1.97E-02	6.51E-06	7.39E-06	3.1590E-02
551734.05	4173023.09	189586.9875	184135.9886	1.20989	1.19226	1.18E-02	1.81E-02	6.65E-06	7.57E-06	2.9952E-02
551709.45	4172893.99	177371.0694	187380.8749	1.252	1.23026	1.11E-02	1.84E-02	6.88E-06	7.81E-06	2.9508E-02
551734.96	4173037.77	161830.3745	155342.1522	1.23949	1.22111	1.01E-02	1.53E-02	6.81E-06	7.75E-06	2.5389E-02
551699.31	4172897.89	148600.3725	156482.4383	1.34993	1.32522	9.28E-03	1.54E-02	7.42E-06	8.41E-06	2.4676E-02
551736.19	4173046.34	147208.1645	140132.7696	1.25101	1.23227	9.19E-03	1.38E-02	6.87E-06	7.82E-06	2.2981E-02
551717.53	4173024.62	121058.8721	117473.1016	1.38804	1.36586	7.56E-03	1.15E-02	7.63E-06	8.67E-06	1.9122E-02
551727.97	4172863.96	107928.0841	113964.2659	1.1285	1.10987	6.74E-03	1.12E-02	6.20E-06	7.04E-06	1.7954E-02
551684.15	4172907.46	102475.8911	105700.5412	1.51938	1.48967	6.40E-03	1.04E-02	8.35E-06	9.45E-06	1.6806E-02
551708.05	4173024.01	96825.70694	94201.70612	1.50705	1.48157	6.05E-03	9.26E-03	8.28E-06	9.40E-06	1.5323E-02
551681.29	4172897.32	90820.23852	94108.22623	1.56398	1.53203	5.67E-03	9.25E-03	8.59E-06	9.72E-06	1.4940E-02
551723.55	4172849.41	78354.34262	82091.53493	1.19918	1.17769	4.89E-03	8.07E-03	6.59E-06	7.47E-06	1.2976E-02
551705.82	4172857.59	78182.99615	81767.42505	1.38939	1.35934	4.88E-03	8.04E-03	7.63E-06	8.63E-06	1.2935E-02
551676.61	4172888.22	77588.60074	80415.9829	1.64832	1.61197	4.84E-03	7.90E-03	9.06E-06	1.02E-05	1.2768E-02
551696.2	4172861.22	73990.50985	77232.13464	1.50839	1.47195	4.62E-03	7.59E-03	8.29E-06	9.34E-06	1.2229E-02
551696.13	4173024.93	74360.01898	72561.77371	1.69302	1.66198	4.64E-03	7.13E-03	9.30E-06	1.05E-05	1.1795E-02
551685.02	4172863.04	65324.89106	67910.99855	1.67578	1.63078	4.08E-03	6.68E-03	9.21E-06	1.04E-05	1.0774E-02
551667.23	4172981.92	58326.21423	57967.05867	2.01725	1.97172	3.64E-03	5.70E-03	1.11E-05	1.25E-05	9.3634E-03
551675.02	4173008.95	56547.65002	55692.9637	2.02529	1.9816	3.53E-03	5.47E-03	1.11E-05	1.26E-05	9.0289E-03
551671.39	4173000.11	56441.45747	55761.54439	2.04651	2.00119	3.52E-03	5.48E-03	1.12E-05	1.27E-05	9.0292E-03
551678.4	4173018.57	55672.09666	54647.98617	2.01643	1.97387	3.48E-03	5.37E-03	1.11E-05	1.25E-05	8.8714E-03
551655.53	4172985.04	46856.31361	46560.81857	2.35018	2.28886	2.93E-03	4.58E-03	1.29E-05	1.45E-05	7.5298E-03
551678.08	4173037.77	47031.60603	45942.55815	2.17803	2.1307	2.94E-03	4.52E-03	1.20E-05	1.35E-05	7.4781E-03
551670.13	4173040.53	40804.96278	39915.83224	2.45163	2.39124	2.55E-03	3.92E-03	1.35E-05	1.52E-05	6.5000E-03
551642.79	4172988.94	37783.53604	37537.00871	2.90684	2.80544	2.36E-03	3.69E-03	1.60E-05	1.78E-05	6.0827E-03
551638.89	4172973.08	37209.64011	37106.93371	2.87402	2.77242	2.32E-03	3.65E-03	1.58E-05	1.76E-05	6.0042E-03
551635.25	4172958.26	36756.14155	36784.02187	2.83917	2.74241	2.29E-03	3.62E-03	1.56E-05	1.74E-05	5.9437E-03
551661.57	4173042.97	35386.35307	34666.79183	2.85371	2.77112	2.21E-03	3.41E-03	1.57E-05	1.76E-05	5.6504E-03
551653.31	4173045.72	31080.25762	30484.92215	3.40582	3.29139	1.94E-03	3.00E-03	1.87E-05	2.09E-05	4.9768E-03
551638.33	4173050.92	24927.21715	24494.26971	5.15616	4.92621	1.56E-03	2.41E-03	2.83E-05	3.13E-05	4.0237E-03
551612.94	4173004.75	23442.75279	23259.14359	7.22231	6.69459	1.46E-03	2.29E-03	3.97E-05	4.25E-05	3.8322E-03
551608.05	4172989.15	23400.08762	23280.76094	7.08838	6.54906	1.46E-03	2.29E-03	3.89E-05	4.16E-05	3.8300E-03
551604.58	4172979.84	23042.15985	22962.18036	7.15614	6.59763	1.44E-03	2.26E-03	3.93E-05	4.19E-05	3.7770E-03
551602.24	4172969.7	22994.35218	22954.42916	6.83281	6.31528	1.44E-03	2.26E-03	3.75E-05	4.01E-05	3.7697E-03
551622.73	4173035.63	22796.15063	22494.17281	7.32335	6.86701	1.42E-03	2.21E-03	4.02E-05	4.36E-05	3.7183E-03
551617.84	4173026.46	22631.23818	22371.76483	7.85653	7.31329	1.41E-03	2.20E-03	4.32E-05	4.64E-05	3.7017E-03
551627.32	4173054.59	21553.90882	21203.87087	7.75623	7.31196	1.35E-03	2.08E-03	4.26E-05	4.64E-05	3.5191E-03
CONCUNIT ug/	m^3									
DEPUNIT g/m^	2									

Mitigated DPM Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
3.1590E-02	551717.25	4172890.87

Existing Phase 2 Receptors—Midway Village Project

All Off-site Receptors: Exposed to Phases 1+2+3+4 Demolition and Phases 1+2+3+4 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

Mitigated Concentrations

Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.94E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	5.90E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	1.37E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	1.38E-04

X	Y	Unit Emissions Demolition Area 1A (Phase 1) AREA2	Unit Emissions Construction Area 1B (Phase 1) AREA8	Unit Emissions Road Segment 1 LINE1	Unit Emissions Road Segment 2 LINE2	Demolition Area 1A (Phase 1) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 1B (Phase 1) Annual PM2.5 w/Actual Emissions (ug/m3)	Road Segment 1 Annual PM2.5 w/Actual Emissions (ug/m3)	Road Segment 2 Annual PM2.5 w/Actual Emissions (ug/m3)	**Total PM2.5 (ug/m3)**
551717.25	4172890.87	189488.7774	200867.3043	1.18432	1.16461	3.68E-02	1.19E-01	1.62E-04	1.61E-04	1.5567E-01
551734.05	4173023.09	189586.9875	184135.9886	1.20989	1.19226	3.68E-02	1.09E-01	1.65E-04	1.65E-04	1.4582E-01
551709.45	4172893.99	177371.0694	187380.8749	1.252	1.23026	3.44E-02	1.11E-01	1.71E-04	1.70E-04	1.4538E-01
551734.96	4173037.77	161830.3745	155342.1522	1.23949	1.22111	3.14E-02	9.17E-02	1.69E-04	1.69E-04	1.2344E-01
551699.31	4172897.89	148600.3725	156482.4383	1.34993	1.32522	2.88E-02	9.24E-02	1.85E-04	1.83E-04	1.2158E-01
551736.19	4173046.34	147208.1645	140132.7696	1.25101	1.23227	2.86E-02	8.27E-02	1.71E-04	1.70E-04	1.1163E-01
551717.53	4173024.62	121058.8721	117473.1016	1.38804	1.36586	2.35E-02	6.93E-02	1.90E-04	1.89E-04	9.3218E-02
551727.97	4172863.96	107928.0841	113964.2659	1.1285	1.10987	2.09E-02	6.73E-02	1.54E-04	1.53E-04	8.8527E-02
551684.15	4172907.46	102475.8911	105700.5412	1.51938	1.48967	1.99E-02	6.24E-02	2.08E-04	2.06E-04	8.2697E-02
551708.05	4173024.01	96825.70694	94201.70612	1.50705	1.48157	1.88E-02	5.56E-02	2.06E-04	2.05E-04	7.4810E-02
551681.29	4172897.32	90820.23852	94108.22623	1.56398	1.53203	1.76E-02	5.56E-02	2.14E-04	2.12E-04	7.3604E-02
551723.55	4172849.41	78354.34262	82091.53493	1.19918	1.17769	1.52E-02	4.85E-02	1.64E-04	1.63E-04	6.3992E-02
551705.82	4172857.59	78182.99615	81767.42505	1.38939	1.35934	1.52E-02	4.83E-02	1.90E-04	1.88E-04	6.3819E-02
551676.61	4172888.22	77588.60074	80415.9829	1.64832	1.61197	1.51E-02	4.75E-02	2.25E-04	2.23E-04	6.2976E-02
551696.2	4172861.22	73990.50985	77232.13464	1.50839	1.47195	1.44E-02	4.56E-02	2.06E-04	2.03E-04	6.0360E-02
551696.13	4173024.93	74360.01898	72561.77371	1.69302	1.66198	1.44E-02	4.28E-02	2.31E-04	2.30E-04	5.7726E-02
551685.02	4172863.04	65324.89106	67910.99855	1.67578	1.63078	1.27E-02	4.01E-02	2.29E-04	2.25E-04	5.3220E-02
551667.23	4172981.92	58326.21423	57967.05867	2.01725	1.97172	1.13E-02	3.42E-02	2.76E-04	2.73E-04	4.6086E-02
551675.02	4173008.95	56547.65002	55692.9637	2.02529	1.9816	1.10E-02	3.29E-02	2.77E-04	2.74E-04	4.4401E-02
551671.39	4173000.11	56441.45747	55761.54439	2.04651	2.00119	1.10E-02	3.29E-02	2.80E-04	2.77E-04	4.4426E-02
551678.4	4173018.57	55672.09666	54647.98617	2.01643	1.97387	1.08E-02	3.23E-02	2.76E-04	2.73E-04	4.3612E-02
551655.53	4172985.04	46856.31361	46560.81857	2.35018	2.28886	9.09E-03	2.75E-02	3.21E-04	3.16E-04	3.7216E-02
551678.08	4173037.77	47031.60603	45942.55815	2.17803	2.1307	9.13E-03	2.71E-02	2.98E-04	2.95E-04	3.6840E-02
551670.13	4173040.53	40804.96278	39915.83224	2.45163	2.39124	7.92E-03	2.36E-02	3.35E-04	3.31E-04	3.2147E-02
551642.79	4172988.94	37783.53604	37537.00871	2.90684	2.80544	7.33E-03	2.22E-02	3.97E-04	3.88E-04	3.0276E-02
551638.89	4172973.08	37209.64011	37106.93371	2.87402	2.77242	7.22E-03	2.19E-02	3.93E-04	3.83E-04	2.9902E-02
551635.25	4172958.26	36756.14155	36784.02187	2.83917	2.74241	7.13E-03	2.17E-02	3.88E-04	3.79E-04	2.9614E-02
551661.57	4173042.97	35386.35307	34666.79183	2.85371	2.77112	6.87E-03	2.05E-02	3.90E-04	3.83E-04	2.8105E-02
551653.31	4173045.72	31080.25762	30484.92215	3.40582	3.29139	6.03E-03	1.80E-02	4.66E-04	4.55E-04	2.4948E-02
551638.33	4173050.92	24927.21715	24494.26971	5.15616	4.92621	4.84E-03	1.45E-02	7.05E-04	6.81E-04	2.0683E-02
551612.94	4173004.75	23442.75279	23259.14359	7.22231	6.69459	4.55E-03	1.37E-02	9.87E-04	9.26E-04	2.0192E-02
551608.05	4172989.15	23400.08762	23280.76094	7.08838	6.54906	4.54E-03	1.37E-02	9.69E-04	9.05E-04	2.0159E-02
551604.58	4172979.84	23042.15985	22962.18036	7.15614	6.59763	4.47E-03	1.36E-02	9.78E-04	9.12E-04	1.9917E-02
551602.24	4172969.7	22994.35218	22954.42916	6.83281	6.31528	4.46E-03	1.36E-02	9.34E-04	8.73E-04	1.9820E-02
551622.73	4173035.63	22796.15063	22494.17281	7.32335	6.86701	4.42E-03	1.33E-02	1.00E-03	9.49E-04	1.9653E-02
551617.84	4173026.46	22631.23818	22371.76483	7.85653	7.31329	4.39E-03	1.32E-02	1.07E-03	1.01E-03	1.9683E-02
551627.32	4173054.59	21553.90882	21203.87087	7.75623	7.31196	4.18E-03	1.25E-02	1.06E-03	1.01E-03	1.8771E-02

CONCUNIT ug/ m^3
DEPUNIT g/m^ 2

Mitigated PM2.5 Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
1.5567E-01	551717.25	4172890.87

Scenario 3

Cancer Risk Calculations Using OEHHA/BAAQMD Cancer Risk Assumptions
Existing Phase 3 Receptors—Midway Village Project
Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant

UTM: 551661.39 4172861.8 *Highest residential receptor analyzed for infant scenario

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Age	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.340927557	10	361	0.85	0.25	3.9
0-1	0.340927557	10	1,090	0.85	0.68	32.5
1-<2	0.340927557	10	1,090	0.85	0.00	0.0
2-<3	0.340927557	3	631	0.85	0.58	4.8
3-<4	0.340927557	3	631	0.85	0.42	3.4
4-<5	0.340927557	3	631	0.85	0.73	6.1
5-<6	0.340927557	3	631	0.85	0.44	3.7
					Total	54.35

UTM: 551661.39 4172861.8 *Highest residential receptor analyzed for infant scenario

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.03218291	10	361	0.85	0.25	0.4
0-1	0.03218291	10	1,090	0.85	0.68	3.1
1-<2	0.03218291	10	1,090	0.85	0.00	0.0
2-<3	0.03218291	3	631	0.85	0.58	0.4
3-<4	0.03218291	3	631	0.85	0.42	0.3
4-<5	0.03218291	3	631	0.85	0.73	0.6
5-<6	0.03218291	3	631	0.85	0.44	0.3
					Total	5.13

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child
UTM: 551713.24 4172969.7

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Period	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.340927557	3	572	1	3.10	27.3
					Total	27.34

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.03218291	3	572	1	3.10	2.6
					Total	2.58

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult
UTM: 551713.24 4172969.7

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.340927557	1	261	0.73	3.10	3.0
					Total	3.04

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.03218291	1	261	0.73	3.10	0.3
					Total	0.287

Existing Phase 3 Receptors—Midway Village Project

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551713.24	4172969.7	0.6751	0.3409	0.06819

Unmitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551713.24	4172969.7	0.8452	0.8452

Mitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551713.24	4172969.7	0.1063	0.1063	0.02127

Mitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551713.24	4172969.7	0.2758	0.2758

Existing Phase 3 Receptors—Midway Village Project

Existing Phase 3 Receptors: Exposed to Phases 1+2 Demolition and Phases 1+2 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

	Unmitigated Concentrations
Annual Average Onsite DPM Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.46E-06
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	8.71E-07
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	8.71E-07
Annual Average Onsite DPM Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	9.48E-07
Annual Average Onsite DPM Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	8.39E-07
Annual Average Onsite DPM Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	8.39E-07
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	8.67E-06
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	1.04E-05

X	Y	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) SRCGP1	Unit Emissions Construction Area 1B (Phase 1) SRCGP2	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) SRCGP3	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) SRCGP4	Unit Emissions Demolition Area 1A (Phase 1) SRCGP5	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) SRCGP6	Unit Emissions Route 1 - From the project site towards US-101 SRCGP7	Unit Emissions Route 2 - From US-101 towards the project site SRCGP8	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
551713.24	4172969.7	12455.41732	185794.418	161586.4027	8225.8335	184782.9635	228172.6269	1.27794	1.25782	1.82E-02	1.62E-01	1.41E-01	7.80E-03	1.55E-01	1.91E-01	1.11E-05	1.31E-05	6.7505E-01
551697.38	4172970.22	13478.37965	120785.5593	198795.8823	8841.75286	120331.0055	279988.2645	1.4558	1.43043	1.97E-02	1.05E-01	1.73E-01	8.38E-03	1.01E-01	2.35E-01	1.26E-05	1.48E-05	6.4232E-01
551713.76	4172948.38	20483.24202	212109.0548	94392.19767	13905.54546	213058.1624	141615.5038	1.23403	1.2147	2.99E-02	1.85E-01	8.22E-02	1.32E-02	1.79E-01	1.19E-01	1.07E-05	1.26E-05	6.0765E-01
551701.54	4172952.02	20076.75392	151446.202	117886.8069	13541.05741	152359.8627	176428.3024	1.36343	1.34045	2.93E-02	1.32E-01	1.03E-01	1.28E-02	1.28E-01	1.48E-01	1.18E-05	1.39E-05	5.5262E-01
551708.04	4172931.49	37147.15933	196650.0986	62545.3811	25883.20323	199497.0061	98295.21285	1.26827	1.2476	5.42E-02	1.71E-01	5.45E-02	2.45E-02	1.67E-01	8.25E-02	1.10E-05	1.29E-05	5.5440E-01
551691.66	4172957.22	18502.28605	112076.3332	146220.2354	12254.5079	112412.4404	218540.1734	1.49393	1.46701	2.70E-02	9.76E-02	1.27E-01	1.16E-02	9.43E-02	1.83E-01	1.30E-05	1.52E-05	5.4131E-01
551695.04	4172935.91	33743.63194	135373.288	76330.4836	23073.52763	137299.2816	120248.7166	1.40939	1.38464	4.93E-02	1.18E-01	6.65E-02	2.19E-02	1.15E-01	1.01E-01	1.22E-05	1.44E-05	4.7164E-01
551686.72	4172942.67	27760.22843	105705.8486	95608.30163	18517.39958	106746.007	151142.8111	1.52304	1.4948	4.05E-02	9.21E-02	8.33E-02	1.76E-02	8.96E-02	1.27E-01	1.32E-05	1.55E-05	4.4982E-01
551661.39	4172861.8	111729.5714	44792.59192	17268.7058	64935.90714	46070.6876	28059.6768	2.17322	2.09977	1.63E-01	3.90E-02	1.50E-02	6.15E-02	3.87E-02	2.35E-02	1.88E-05	2.18E-05	3.4093E-01
551646.97	4172921.5	35100.46302	47159.92027	54953.65344	18951.70925	47737.1591	100771.8604	2.15377	2.1008	5.12E-02	4.11E-02	4.79E-02	1.80E-02	4.01E-02	8.46E-02	1.87E-05	2.18E-05	2.8278E-01
551625.66	4172929.04	19058.30677	32691.79671	58832.65939	10613.6017	32920.43434	126654.4689	2.86349	2.7644	2.78E-02	2.85E-02	5.12E-02	1.01E-02	2.76E-02	1.06E-01	2.48E-05	2.87E-05	2.5154E-01
551642.81	4172912.14	39053.42496	43739.05986	44878.2443	20559.70249	44366.07518	80660.25459	2.21897	2.16312	5.70E-02	3.81E-02	3.91E-02	1.95E-02	3.72E-02	6.77E-02	1.92E-05	2.24E-05	2.5862E-01
551639.95	4172903.04	43431.47437	41314.42991	37813.59426	22402.99225	41984.2382	66883.61924	2.27319	2.21463	6.34E-02	3.60E-02	3.29E-02	2.12E-02	3.52E-02	5.61E-02	1.97E-05	2.30E-05	2.4494E-01
551622.54	4172918.38	20891.77514	31119.62308	46961.77784	11505.93369	31402.62566	94721.86775	2.88173	2.78298	3.05E-02	2.71E-02	4.09E-02	1.09E-02	2.63E-02	7.95E-02	2.50E-05	2.89E-05	2.1529E-01
551656.71	4172846.73	77370.15648	37402.74424	14272.25097	44492.20044	38411.48031	23144.81258	2.75918	2.62809	1.13E-01	3.26E-02	1.24E-02	4.22E-02	3.22E-02	1.94E-02	2.39E-05	2.73E-05	2.5181E-01
551587.68	4172938.51	9194.46197	19709.0914	50376.33389	5209.18164	19768.18001	122425.8331	7.82424	7.20064	1.34E-02	1.72E-02	4.39E-02	4.94E-03	1.66E-02	1.03E-01	6.79E-05	7.47E-05	1.9885E-01
551618.9	4172908.76	22266.41291	29500.13407	39374.56773	12143.20974	29816.92678	76859.41607	2.9512	2.84996	3.25E-02	2.57E-02	3.43E-02	1.15E-02	2.50E-02	6.45E-02	2.56E-05	2.96E-05	1.9356E-01
551583.52	4172929.93	9444.14496	18928.08518	42407.85761	5332.84569	19007.36641	98427.6414	8.09814	7.46154	1.38E-02	1.65E-02	3.69E-02	5.05E-03	1.59E-02	8.26E-02	7.02E-05	7.74E-05	1.7094E-01
551579.37	4172916.41	9943.04348	17963.69123	33613.63617	5586.52349	18069.77216	72347.71266	7.9766	7.3756	1.45E-02	1.56E-02	2.93E-02	5.29E-03	1.52E-02	6.07E-02	6.92E-05	7.65E-05	1.4074E-01
551624.72	4172862.34	31589.08256	26383.96454	18632.31301	16896.81517	26843.61275	31522.64677	3.19678	3.07394	4.61E-02	2.30E-02	1.62E-02	1.60E-02	2.25E-02	2.64E-02	2.77E-05	3.19E-05	1.5036E-01
551613.18	4172880.16	22493.62799	24334.93557	23544.44587	12173.57967	24669.17549	41996.06209	3.22311	3.11461	3.28E-02	2.12E-02	2.05E-02	1.15E-02	2.07E-02	3.52E-02	2.80E-05	3.23E-05	1.4207E-01
551601.74	4172883.28	17311.58875	21401.27903	23875.60497	9471.87975	21653.9969	44306.83067	3.73049	3.58953	2.53E-02	1.86E-02	2.08E-02	8.98E-03	1.82E-02	3.72E-02	3.24E-05	3.72E-05	1.2910E-01
551620.04	4172851.95	28030.75672	24041.24778	16465.30157	15054.6249	24456.32492	27989.24884	3.79889	3.62238	4.09E-02	2.09E-02	1.43E-02	1.43E-02	2.05E-02	2.35E-02	3.29E-05	3.76E-05	1.3454E-01
551591.08	4172887.18	13800.07322	19091.63657	23981.211	7613.69856	19285.96628	46015.94215	4.54785	4.33804	2.01E-02	1.66E-02	2.09E-02	7.22E-03	1.62E-02	3.86E-02	3.94E-05	4.50E-05	1.1975E-01
551573.39	4172898.22	9834.19841	16233.14927	24693.53992	5487.36848	16356.5279	49905.98663	8.20963	7.5882	1.44E-02	1.41E-02	2.15E-02	5.20E-03	1.37E-02	4.19E-02	7.12E-05	7.87E-05	1.1095E-01
551615.88	4172842.07	24582.46466	21984.88657	14648.64759	13222.72599	22357.9197	24957.29759	4.77295	4.5005	3.59E-02	1.91E-02	1.28E-02	1.25E-02	1.88E-02	2.09E-02	4.14E-05	4.67E-05	1.2011E-01
551623.3	4172824.65	25228.79241	21632.80769	11798.65176	13616.46679	22035.76832	19689.56729	8.28903	7.54671	3.68E-02	1.88E-02	1.03E-02	1.29E-02	1.85E-02	1.65E-02	7.19E-05	7.83E-05	1.1401E-01
551568.19	4172884.7	9713.47221	15073.92947	20434.85276	5389.89886	15201.3802	40082.1775	8.47438	7.85696	1.42E-02	1.31E-02	1.78E-02	5.11E-03	1.28E-02	3.36E-02	7.35E-05	8.15E-05	9.6755E-02
551612.9	4172824.39	20575.00602	19466.942	11910.83249	11080.56732	19795.13511	20188.40693	9.07667	8.24136	3.00E-02	1.70E-02	1.04E-02	1.05E-02	1.66E-02	1.69E-02	7.87E-05	8.55E-05	1.0158E-01
551564.03	4172870.4	9430.52808	13997.00239	17044.66501	5203.12312	14123.98889	32561.59365	8.52344	7.94118	1.38E-02	1.22E-02	1.48E-02	4.93E-03	1.19E-02	2.73E-02	7.39E-05	8.24E-05	8.5062E-02
551600.16	4172823.87	16246.84125	17169.54934	11862.37201	8751.36899	17426.55521	20499.53597	9.82937	8.8415	2.37E-02	1.50E-02	1.03E-02	8.29E-03	1.46E-02	1.72E-02	8.53E-05	9.17E-05	8.9295E-02
551560.65	4172860.52	9000.70594	13181.45113	15058.73753	4947.63692	13303.72846	28340.81437	8.86349	8.27059	1.31E-02	1.15E-02	1.31E-02	4.69E-03	1.12E-02	2.38E-02	7.69E-05	8.58E-05	7.7529E-02
551557.27	4172852.21	8580.57693	12530.34873	13663.40189	4703.09471	12647.61741	25471.60909	9.38108	8.77118	1.25E-02	1.09E-02	1.19E-02	4.46E-03	1.06E-02	2.14E-02	8.14E-05	9.10E-05	7.1953E-02
551573.13	4172824.91	10181.9127	13218.19466	11222.80227	5513.39343	13371.08855	20054.36573	10.92613	9.86449	1.49E-02	1.15E-02	9.77E-03	5.23E-03	1.12E-02	1.68E-02	9.48E-05	1.02E-04	6.9618E-02
551560.91	4172829.85	8550.20814	11986.41138	11156.17761	4648.79958	12109.35625	20217.28933	10.69331	9.86431	1.25E-02	1.04E-02	9.72E-03	4.41E-03	1.02E-02	1.70E-02	9.27E-05	1.02E-04	6.4362E-02
551550.51	4172833.23	7471.82244	11077.51585	10944.62372	4075.51495	11180.93054	20005.50418	12.14725	11.27711	1.09E-02	9.65E-03	9.53E-03	3.86E-03	9.38E-03	1.68E-02	1.05E-04	1.17E-04	6.0339E-02
CONCUNIT ug/	m^3																	
DEPUNIT g/m^	2																	

Unmitigated DPM Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
6.7505E-01	551713.24	4172969.7

UTM	551713.24	4172969.70
Latitude, Longitude	37°42'09.0"N 122°24'48.1"W	

Note: 37°42'09.0"N 122°24'48.1"W is not a residence

*Highest residential receptor analyzed for infant scenario

UTM	551661.39	4172861.8
Latitude, Longitude	37°42'05.5"N 122°24'50.2"W	
Concentration	3.4093E-01	(ug/m3)

Existing Phase 3 Receptors—Midway Village Project

Existing Phase 3 Receptors: Exposed to Phases 1+2 Demolition and Phases 1+2 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

	Unmitigated Concentrations
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.59E-06
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	1.13E-06
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	1.13E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	1.44E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	1.02E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	1.02E-06
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	2.54E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	2.57E-04

X	Y	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) SRCGP1	Unit Emissions Construction Area 1B (Phase 1) SRCGP2	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) SRCGP3	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) SRCGP4	Unit Emissions Demolition Area 1A (Phase 1) SRCGP5	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) SRCGP6	Unit Emissions Route 1 - From the project site towards US-101 SRCGP7	Unit Emissions Route 2 - From US-101 towards the project site SRCGP8	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	Annual PM2.5 w/Actual Emissions (ug/m3)	**Total PM2.5 (ug/m3)**
551713.24	4172969.7	12455.41732	185794.418	161586.4027	8225.8335	184782.9635	228172.6269	1.27794	1.25782	1.98E-02	2.09E-01	1.82E-01	1.18E-02	1.89E-01	2.33E-01	3.24E-04	3.23E-04	8.4515E-01
551697.38	4172970.22	13478.37965	120785.5593	198795.8823	8841.75286	120331.0055	279988.2645	1.4558	1.43043	2.14E-02	1.36E-01	2.24E-01	1.27E-02	1.23E-01	2.86E-01	3.70E-04	3.67E-04	8.0355E-01
551713.76	4172948.38	20483.24202	212109.0548	94392.19767	13905.54546	213058.1624	141615.5038	1.23403	1.2147	3.26E-02	2.39E-01	1.06E-01	2.00E-02	2.18E-01	1.45E-01	3.13E-04	3.12E-04	7.6054E-01
551701.54	4172952.02	20076.75392	151446.202	117886.8069	13541.05741	152359.8627	176428.3024	1.36343	1.34045	3.19E-02	1.71E-01	1.33E-01	1.95E-02	1.56E-01	1.80E-01	3.46E-04	3.44E-04	6.9115E-01
551708.04	4172931.49	37147.15933	196650.0986	62545.3811	25883.20323	199497.0061	98295.21285	1.26827	1.2476	5.91E-02	2.21E-01	7.04E-02	3.73E-02	2.04E-01	1.00E-01	3.22E-04	3.20E-04	6.9298E-01
551691.66	4172957.22	18502.28605	112076.3332	146220.2354	12254.5079	112412.4404	218540.1734	1.49393	1.46701	2.94E-02	1.26E-01	1.65E-01	1.76E-02	1.15E-01	2.23E-01	3.79E-04	3.77E-04	6.7663E-01
551695.04	4172935.91	33743.63194	135373.288	76330.4836	23073.52763	137299.2816	120248.7166	1.40939	1.38464	5.37E-02	1.52E-01	8.60E-02	3.32E-02	1.40E-01	1.23E-01	3.58E-04	3.55E-04	5.8901E-01
551686.72	4172942.67	27760.22843	105705.8486	95608.30163	18517.39958	106746.007	151142.8111	1.52304	1.4948	4.42E-02	1.19E-01	1.08E-01	2.67E-02	1.09E-01	1.54E-01	3.87E-04	3.84E-04	5.6163E-01
551661.39	4172861.8	111729.5714	44792.59192	17268.7058	64935.90714	46070.6876	28059.6768	2.17322	2.09977	1.78E-01	5.04E-02	1.94E-02	9.35E-02	4.70E-02	2.86E-02	5.52E-04	5.39E-04	4.1798E-01
551646.97	4172921.5	35100.46302	47159.92027	54953.65344	18951.70925	47737.1591	100771.8604	2.15377	2.1008	5.59E-02	5.31E-02	6.19E-02	2.73E-02	4.87E-02	1.03E-01	5.47E-04	5.39E-04	3.5086E-01
551625.66	4172929.04	19058.30677	32691.79671	58832.65939	10613.6017	32920.43434	126654.4689	2.86349	2.7644	3.03E-02	3.68E-02	6.63E-02	1.53E-02	3.36E-02	1.29E-01	7.27E-04	7.10E-04	3.1304E-01
551642.81	4172912.14	39053.42496	43739.05986	44878.2443	20559.70249	44366.07518	80660.25459	2.21897	2.16312	6.21E-02	4.93E-02	5.05E-02	2.96E-02	4.53E-02	8.23E-02	5.63E-04	5.55E-04	3.2032E-01
551639.95	4172903.04	43431.47437	41314.42991	37813.59426	22402.99225	41984.2382	66883.61924	2.27319	2.21463	6.91E-02	4.65E-02	4.26E-02	3.23E-02	4.29E-02	6.83E-02	5.77E-04	5.69E-04	3.0279E-01
551622.54	4172918.38	20891.77514	31119.62308	46961.77784	11505.93369	31402.62566	94721.86775	2.88173	2.78298	3.32E-02	3.50E-02	5.29E-02	1.66E-02	3.21E-02	9.67E-02	7.32E-04	7.15E-04	2.6797E-01
551656.71	4172846.73	77370.15648	37402.74424	14272.25097	44492.20044	38411.48031	23144.81258	2.75918	2.62809	1.23E-01	4.21E-02	1.61E-02	6.41E-02	3.92E-02	2.36E-02	7.01E-04	6.75E-04	3.0961E-01
551587.68	4172938.51	9194.46197	19709.0914	50376.33389	5209.18164	19768.18001	122425.8331	7.82424	7.20064	1.46E-02	2.22E-02	5.67E-02	7.50E-03	2.02E-02	1.25E-01	1.99E-03	1.85E-03	2.5007E-01
551618.9	4172908.76	22266.41291	29500.13407	39374.56773	12143.20974	29816.92678	76859.41607	2.9512	2.84996	3.54E-02	3.32E-02	4.43E-02	1.75E-02	3.04E-02	7.85E-02	7.49E-04	7.32E-04	2.4088E-01
551583.52	4172929.93	9444.14496	18928.08518	42407.85761	5332.84569	19007.36641	98427.6414	8.09814	7.46154	1.50E-02	2.13E-02	4.78E-02	7.68E-03	1.94E-02	1.00E-01	2.06E-03	1.92E-03	2.1565E-01
551579.37	4172916.41	9943.04348	17963.69123	33613.63617	5586.52349	18069.77216	72347.71266	7.9766	7.3756	1.58E-02	2.02E-02	3.79E-02	8.05E-03	1.84E-02	7.39E-02	2.03E-03	1.89E-03	1.7819E-01
551624.72	4172862.34	31589.08256	26383.96454	18632.31301	16896.81517	26843.61275	31522.64677	3.19678	3.07394	5.03E-02	2.97E-02	2.10E-02	2.43E-02	2.74E-02	3.22E-02	8.12E-04	7.89E-04	1.8649E-01
551613.18	4172880.16	22493.62799	24334.93557	23544.44587	12173.57967	24669.17549	41996.06209	3.22311	3.11461	3.58E-02	2.74E-02	2.65E-02	1.75E-02	2.52E-02	4.29E-02	8.18E-04	8.00E-04	1.7693E-01
551601.74	4172883.28	17311.58875	21401.27903	23875.60497	9471.87975	21653.9969	44306.83067	3.73049	3.58953	2.75E-02	2.41E-02	2.69E-02	1.36E-02	2.21E-02	4.52E-02	9.47E-04	9.22E-04	1.6139E-01
551620.04	4172851.95	28030.75672	24041.24778	16465.30157	15054.6249	24456.32492	27989.24884	3.79889	3.62238	4.46E-02	2.71E-02	1.85E-02	2.17E-02	2.50E-02	2.86E-02	9.65E-04	9.30E-04	1.6734E-01
551591.08	4172887.18	13800.07322	19091.63657	23981.211	7613.69856	19285.96628	46015.94215	4.54785	4.33804	2.20E-02	2.15E-02	2.70E-02	1.10E-02	1.97E-02	4.70E-02	1.15E-03	1.11E-03	1.5037E-01
551573.39	4172898.22	9834.19841	16233.14927	24693.53992	5487.36848	16356.5279	49905.98663	8.20963	7.5882	1.56E-02	1.83E-02	2.78E-02	7.90E-03	1.67E-02	5.10E-02	2.08E-03	1.95E-03	1.4133E-01
551615.88	4172842.07	24582.46466	21984.88657	14648.64759	13222.72599	22357.9197	24957.29759	4.77295	4.5005	3.91E-02	2.48E-02	1.65E-02	1.90E-02	2.28E-02	2.55E-02	1.21E-03	1.16E-03	1.5009E-01
551623.3	4172824.65	25228.79241	21632.80769	11798.65176	13616.46679	22035.76832	19689.56729	8.28903	7.54671	4.01E-02	2.44E-02	1.33E-02	1.96E-02	2.25E-02	2.01E-02	2.10E-03	1.94E-03	1.4405E-01
551568.19	4172884.7	9713.47221	15073.92947	20434.85276	5389.89886	15201.3802	40082.1775	8.47438	7.85696	1.55E-02	1.70E-02	2.30E-02	7.76E-03	1.55E-02	4.09E-02	2.15E-03	2.02E-03	1.2382E-01
551612.9	4172824.39	20575.00602	19466.942	11910.83249	11080.56732	19795.13511	20188.40693	9.07667	8.24136	3.27E-02	2.19E-02	1.34E-02	1.60E-02	2.02E-02	2.06E-02	2.30E-03	2.12E-03	1.2928E-01
551564.03	4172870.4	9430.52808	13997.00239	17044.66501	5203.12312	14123.98889	32561.59365	8.52344	7.94118	1.50E-02	1.58E-02	1.92E-02	7.49E-03	1.44E-02	3.32E-02	2.16E-03	2.04E-03	1.0933E-01
551600.16	4172823.87	16246.84125	17169.54934	11862.37201	8751.36899	17426.55521	20499.53597	9.82937	8.8415	2.59E-02	1.93E-02	1.34E-02	1.26E-02	1.78E-02	2.09E-02	2.50E-03	2.27E-03	1.1464E-01
551560.65	4172860.52	9000.70594	13181.45113	15058.73753	4947.63692	13303.72846	28340.81437	8.86349	8.27059	1.43E-02	1.48E-02	1.70E-02	7.13E-03	1.36E-02	2.89E-02	2.25E-03	2.12E-03	1.0014E-01
551557.27	4172852.21	8580.57693	12530.34873	13663.40189	4703.09471	12647.61741	25471.60909	9.38108	8.77118	1.37E-02	1.41E-02	1.54E-02	6.77E-03	1.29E-02	2.60E-02	2.38E-03	2.25E-03	9.3479E-02
551573.13	4172824.91	10181.9127	13218.19466	11222.80227	5513.39343	13371.08855	20054.36573	10.92613	9.86449	1.62E-02	1.49E-02	1.26E-02	7.94E-03	1.37E-02	2.05E-02	2.77E-03	2.53E-03	9.1101E-02
551560.91	4172829.85	8550.20814	11986.41138	11156.17761	4648.79958	12109.35625	20217.28933	10.69331	9.86431	1.36E-02	1.35E-02	1.26E-02	6.70E-03	1.24E-02	2.06E-02	2.72E-03	2.53E-03	8.4616E-02
551550.51	4172833.23	7471.82244	11077.51585	10944.62372	4075.51495	11180.93054	20005.50418	12.14725	11.27711	1.19E-02	1.25E-02	1.23E-02	5.87E-03	1.14E-02	2.04E-02	3.08E-03	2.90E-03	8.0380E-02
CONCUNIT ug/	m^3																	
DEPUNIT g/m^	2																	

Unmitigated PM2.5 Concentrations

Maximum DPM (ug/m3)	**MIR UTM** X	Y
8.4515E-01	551713.24	4172969.7

UTM 551713.24 4172969.70
Latitude, Longitude 37°42'09.0"N 122°24'48.1"W
Note: 37°42'09.0"N 122°24'48.1"W is not a residence

Existing Phase 3 Receptors—Midway Village Project

Existing Phase 3 Receptors: Exposed to Phases 1+2 Demolition and Phases 1+2 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

Mitigated Concentrations

Annual Average Onsite DPM Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	6.24E-08
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	5.78E-08
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	5.78E-08
Annual Average Onsite DPM Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	9.83E-08
Annual Average Onsite DPM Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	2.05E-07
Annual Average Onsite DPM Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	2.05E-07
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	8.67E-06
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	1.04E-05

X	Y	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) SRCGP1	Unit Emissions Construction Area 1B (Phase 1) SRCGP2	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) SRCGP3	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) SRCGP4	Unit Emissions Demolition Area 1A (Phase 1) SRCGP5	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) SRCGP6	Unit Emissions Route 1 - From the project site towards US-101 SRCGP7	Unit Emissions Route 2 - From US-101 towards the project site SRCGP8
551713.24	4172969.7	12455.41732	185794.418	161586.4027	8225.8335	184782.9635	228172.6269	1.27794	1.25782
551697.38	4172970.22	13478.37965	120785.5593	198795.8823	8841.75286	120331.0055	279988.2645	1.4558	1.43043
551713.76	4172948.38	20483.24202	212109.0548	94392.19767	13905.54546	213058.1624	141615.5038	1.23403	1.2147
551701.54	4172952.02	20076.75392	151446.202	117886.8069	13541.05741	152359.8627	176428.3024	1.36343	1.34045
551708.04	4172931.49	37147.15933	196650.0986	62545.3811	25883.20323	199497.0061	98295.21285	1.26827	1.2476
551691.66	4172957.22	18502.28605	112076.3332	146220.2354	12254.5079	112412.4404	218540.1734	1.49393	1.46701
551695.04	4172935.91	33743.63194	135373.288	76330.4836	23073.52763	137299.2816	120248.7166	1.40939	1.38464
551686.72	4172942.67	27760.22843	105705.8486	95608.30163	18517.39958	106746.007	151142.8111	1.52304	1.4948
551661.39	4172861.8	111729.5714	44792.59192	17268.7058	64935.90714	46070.6876	28059.6768	2.17322	2.09977
551646.97	4172921.5	35100.46302	47159.92027	54953.65344	18951.70925	47737.1591	100771.8604	2.15377	2.1008
551625.66	4172929.04	19058.30677	32691.79671	58832.65939	10613.6017	32920.43434	126654.4689	2.86349	2.7644
551642.81	4172912.14	39053.42496	43739.05986	44878.2443	20559.70249	44366.07518	80660.25459	2.21897	2.16312
551639.95	4172903.04	43431.47437	41314.42991	37813.59426	22402.99225	41984.2382	66883.61924	2.27319	2.21463
551622.54	4172918.38	20891.77514	31119.62308	46961.77784	11505.93369	31402.62566	94721.86775	2.88173	2.78298
551656.71	4172846.73	77370.15648	37402.74424	14272.25097	44492.20044	38411.48031	23144.81258	2.75918	2.62809
551587.68	4172938.51	9194.46197	19709.0914	50376.33389	5209.18164	19768.18001	122425.8331	7.82424	7.20064
551618.9	4172908.76	22266.41291	29500.13407	39374.56773	12143.20974	29816.92678	76859.41607	2.9512	2.84996
551583.52	4172929.93	9444.14496	18928.08518	42407.85761	5332.84569	19007.36641	98427.6414	8.09814	7.46154
551579.37	4172916.41	9943.04348	17963.69123	33613.63617	5586.52349	18069.77216	72347.71266	7.9766	7.3756
551624.72	4172862.34	31589.08256	26383.96454	18632.31301	16896.81517	26843.61275	31522.64677	3.19678	3.07394
551613.18	4172880.16	22493.62799	24334.93557	23544.44587	12173.57967	24669.17549	41996.06209	3.22311	3.11461
551601.74	4172883.28	17311.58875	21401.27903	23875.60497	9471.87975	21653.9969	44306.83067	3.73049	3.58953
551620.04	4172851.95	28030.75672	24041.24778	16465.30157	15054.6249	24456.32492	27989.24884	3.79889	3.62238
551591.08	4172887.18	13800.07322	19091.63657	23981.211	7613.69856	19285.96628	46015.94215	4.54785	4.33804
551573.39	4172898.22	9834.19841	16233.14927	24693.53992	5487.36848	16356.5279	49905.98663	8.20963	7.5882
551615.88	4172842.07	24582.46466	21984.88657	14648.64759	13222.72599	22357.9197	24957.29759	4.77295	4.5005
551623.3	4172824.65	25228.79241	21632.80769	11798.65176	13616.46679	22035.76832	19689.56729	8.28903	7.54671
551568.19	4172884.7	9713.47221	15073.92947	20434.85276	5389.89886	15201.3802	40082.1775	8.47438	7.85696
551612.9	4172824.39	20575.00602	19466.942	11910.83249	11080.56732	19795.13511	20188.40693	9.07667	8.24136
551564.03	4172870.4	9430.52808	13997.00239	17044.66501	5203.12312	14123.98889	32561.59365	8.52344	7.94118
551600.16	4172823.87	16246.84125	17169.54934	11862.37201	8751.36899	17426.55521	20499.53597	9.82937	8.8415
551560.65	4172860.52	9000.70594	13181.45113	15058.73753	4947.63692	13303.72846	28340.81437	8.86349	8.27059
551557.27	4172852.21	8580.57693	12530.34873	13663.40189	4703.09471	12647.61741	25471.60909	9.38108	8.77118
551573.13	4172824.91	10181.9127	13218.19466	11222.80227	5513.39343	13371.08855	20054.36573	10.92613	9.86449
551560.91	4172829.85	8550.20814	11986.41138	11156.17761	4648.79958	12109.35625	20217.28933	10.69331	9.86431
551550.51	4172833.23	7471.82244	11077.51585	10944.62372	4075.51495	11180.93054	20005.50418	12.14725	11.27711
CONCUNIT ug/	m^3								
DEPUNIT g/m^	2								

X	Y	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
551713.24	4172969.7	7.78E-04	1.07E-02	9.34E-03	8.09E-04	3.79E-02	4.68E-02	1.11E-05	1.31E-05	1.0634E-01
551697.38	4172970.22	8.42E-04	6.98E-03	1.15E-02	8.69E-04	2.47E-02	5.74E-02	1.26E-05	1.48E-05	1.0227E-01
551713.76	4172948.38	1.28E-03	1.23E-02	5.46E-03	1.37E-03	4.37E-02	2.90E-02	1.07E-05	1.26E-05	9.3090E-02
551701.54	4172952.02	1.25E-03	8.76E-03	6.82E-03	1.33E-03	3.12E-02	3.62E-02	1.18E-05	1.39E-05	8.5576E-02
551708.04	4172931.49	2.32E-03	1.14E-02	3.62E-03	2.54E-03	4.09E-02	2.01E-02	1.10E-05	1.29E-05	8.0914E-02
551691.66	4172957.22	1.16E-03	6.48E-03	8.45E-03	1.20E-03	2.30E-02	4.48E-02	1.30E-05	1.52E-05	8.5159E-02
551695.04	4172935.91	2.11E-03	7.83E-03	4.41E-03	2.27E-03	2.81E-02	2.46E-02	1.22E-05	1.44E-05	6.9433E-02
551686.72	4172942.67	1.73E-03	6.11E-03	5.53E-03	1.82E-03	2.19E-02	3.10E-02	1.32E-05	1.55E-05	6.8083E-02
551661.39	4172861.8	6.98E-03	2.59E-03	9.98E-04	6.38E-03	9.44E-03	5.75E-03	1.88E-05	2.18E-05	3.2183E-02
551646.97	4172921.5	2.19E-03	2.73E-03	3.18E-03	1.86E-03	9.79E-03	2.07E-02	1.87E-05	2.18E-05	4.0440E-02
551625.66	4172929.04	1.19E-03	1.89E-03	3.40E-03	1.04E-03	6.75E-03	2.60E-02	2.48E-05	2.87E-05	4.0288E-02
551642.81	4172912.14	2.44E-03	2.53E-03	2.59E-03	2.02E-03	9.09E-03	1.65E-02	1.92E-05	2.24E-05	3.5252E-02
551639.95	4172903.04	2.71E-03	2.39E-03	2.19E-03	2.20E-03	8.61E-03	1.37E-02	1.97E-05	2.30E-05	3.1847E-02
551622.54	4172918.38	1.30E-03	1.80E-03	2.72E-03	1.13E-03	6.44E-03	1.94E-02	2.50E-05	2.89E-05	3.2856E-02
551656.71	4172846.73	4.83E-03	2.16E-03	8.25E-04	4.37E-03	7.87E-03	4.74E-03	2.39E-05	2.73E-05	2.4861E-02
551587.68	4172938.51	5.74E-04	1.14E-03	2.91E-03	5.12E-04	4.05E-03	2.51E-02	6.79E-05	7.47E-05	3.4427E-02
551618.9	4172908.76	1.39E-03	1.71E-03	2.28E-03	1.19E-03	6.11E-03	1.58E-02	2.56E-05	2.96E-05	2.8487E-02
551583.52	4172929.93	5.90E-04	1.09E-03	2.45E-03	5.24E-04	3.90E-03	2.02E-02	7.02E-05	7.74E-05	2.8879E-02
551579.37	4172916.41	6.21E-04	1.04E-03	1.94E-03	5.49E-04	3.70E-03	1.48E-02	6.92E-05	7.65E-05	2.2831E-02
551624.72	4172862.34	1.97E-03	1.53E-03	1.08E-03	1.66E-03	5.50E-03	6.46E-03	2.77E-05	3.19E-05	1.8259E-02
551613.18	4172880.16	1.40E-03	1.41E-03	1.36E-03	1.20E-03	5.06E-03	8.61E-03	2.80E-05	3.23E-05	1.9094E-02
551601.74	4172883.28	1.08E-03	1.24E-03	1.38E-03	9.31E-04	4.44E-03	9.08E-03	3.24E-05	3.72E-05	1.8220E-02
551620.04	4172851.95	1.75E-03	1.39E-03	9.52E-04	1.48E-03	5.01E-03	5.74E-03	3.29E-05	3.76E-05	1.6393E-02
551591.08	4172887.18	8.62E-04	1.10E-03	1.39E-03	7.48E-04	3.95E-03	9.43E-03	3.94E-05	4.50E-05	1.7570E-02
551573.39	4172898.22	6.14E-04	9.39E-04	1.43E-03	5.39E-04	3.35E-03	1.02E-02	7.12E-05	7.87E-05	1.7252E-02
551615.88	4172842.07	1.53E-03	1.27E-03	8.47E-04	1.30E-03	4.58E-03	5.12E-03	4.14E-05	4.67E-05	1.4739E-02
551623.3	4172824.65	1.58E-03	1.25E-03	6.82E-04	1.34E-03	4.52E-03	4.04E-03	7.19E-05	7.83E-05	1.3549E-02
551568.19	4172884.7	6.06E-04	8.71E-04	1.18E-03	5.30E-04	3.12E-03	8.22E-03	7.35E-05	8.15E-05	1.4676E-02
551612.9	4172824.39	1.28E-03	1.13E-03	6.89E-04	1.09E-03	4.06E-03	4.14E-03	7.87E-05	8.55E-05	1.2548E-02
551564.03	4172870.4	5.89E-04	8.09E-04	9.85E-04	5.11E-04	2.90E-03	6.67E-03	7.39E-05	8.24E-05	1.2621E-02
551600.16	4172823.87	1.01E-03	9.93E-04	6.86E-04	8.60E-04	3.57E-03	4.20E-03	8.53E-05	9.17E-05	1.1504E-02
551560.65	4172860.52	5.62E-04	7.62E-04	8.71E-04	4.86E-04	2.73E-03	5.81E-03	7.69E-05	8.58E-05	1.1380E-02
551557.27	4172852.21	5.36E-04	7.24E-04	7.90E-04	4.62E-04	2.59E-03	5.22E-03	8.14E-05	9.10E-05	1.0498E-02
551573.13	4172824.91	6.36E-04	7.64E-04	6.49E-04	5.42E-04	2.74E-03	4.11E-03	9.48E-05	1.02E-04	9.6393E-03
551560.91	4172829.85	5.34E-04	6.93E-04	6.45E-04	4.57E-04	2.48E-03	4.14E-03	9.27E-05	1.02E-04	9.1501E-03
551550.51	4172833.23	4.67E-04	6.40E-04	6.33E-04	4.01E-04	2.29E-03	4.10E-03	1.05E-04	1.17E-04	8.7552E-03

Maximum DPM (ug/m3)	**UTM** X	Y
1.0634E-01	551713.24	4172969.7

Mitigated DPM Concentrations

UTM	551713.24	4172969.70
Latitude, Longitude	37°42'09.0"N 122°24'48.1"W	

Note: 37°42'09.0"N 122°24'48.1"W is not a residence

*Highest residential receptor analyzed for infant scenario

UTM	551661.39	4172861.8
Latitude, Longitude	37°42'05.5"N 122°24'50.2"W	
Concentration	3.2183E-02	(ug/m3)

Existing Phase 3 Receptors—Midway Village Project

Existing Phase 3 Receptors: Exposed to Phases 1+2 Demolition and Phases 1+2 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

	Mitigated Concentrations
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.94E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	3.12E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	3.12E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	5.90E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	3.86E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	3.86E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	2.54E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	2.57E-04

X	Y	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) SRCGP1	Unit Emissions Construction Area 1B (Phase 1) SRCGP2	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) SRCGP3	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) SRCGP4	Unit Emissions Demolition Area 1A (Phase 1) SRCGP5	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) SRCGP6	Unit Emissions Route 1 - From the project site towards US-101 SRCGP7	Unit Emissions Route 2 - From US-101 towards the project site SRCGP8
551713.24	4172969.7	12455.41732	185794.418	161586.4027	8225.8335	184782.9635	228172.6269	1.27794	1.25782
551697.38	4172970.22	13478.37965	120785.5593	198795.8823	8841.75286	120331.0055	279988.2645	1.4558	1.43043
551713.76	4172948.38	20483.24202	212109.0548	94392.19767	13905.54546	213058.1624	141615.5038	1.23403	1.2147
551701.54	4172952.02	20076.75392	151446.202	117886.8069	13541.05741	152359.8627	176428.3024	1.36343	1.34045
551708.04	4172931.49	37147.15933	196650.0986	62545.3811	25883.20323	199497.0061	98295.21285	1.26827	1.2476
551691.66	4172957.22	18502.28605	112076.3332	146220.2354	12254.5079	112412.4404	218540.1734	1.49393	1.46701
551695.04	4172935.91	33743.63194	135373.288	76330.4836	23073.52763	137299.2816	120248.7166	1.40939	1.38464
551686.72	4172942.67	27760.22843	105705.8486	95608.30163	18517.39958	106746.007	151142.8111	1.52304	1.4948
551661.39	4172861.8	111729.5714	44792.59192	17268.7058	64935.90714	46070.6876	28059.6768	2.17322	2.09977
551646.97	4172921.5	35100.46302	47159.92027	54953.65344	18951.70925	47737.1591	100771.8604	2.15377	2.1008
551625.66	4172929.04	19058.30677	32691.79671	58832.65939	10613.6017	32920.43434	126654.4689	2.86349	2.7644
551642.81	4172912.14	39053.42496	43739.05986	44878.2443	20559.70249	44366.07518	80660.25459	2.21897	2.16312
551639.95	4172903.04	43431.47437	41314.42991	37813.59426	22402.99225	41984.2382	66883.61924	2.27319	2.21463
551622.54	4172918.38	20891.77514	31119.62308	46961.77784	11505.93369	31402.62566	94721.86775	2.88173	2.78298
551656.71	4172846.73	77370.15648	37402.74424	14272.25097	44492.20044	38411.48031	23144.81258	2.75918	2.62809
551587.68	4172938.51	9194.46197	19709.0914	50376.33389	5209.18164	19768.18001	122425.8331	7.82424	7.20064
551618.9	4172908.76	22266.41291	29500.13407	39374.56773	12143.20974	29816.92678	76859.41607	2.9512	2.84996
551583.52	4172929.93	9444.14496	18928.08518	42407.85761	5332.84569	19007.36641	98427.6414	8.09814	7.46154
551579.37	4172916.41	9943.04348	17963.69123	33613.63617	5586.52349	18069.77216	72347.71266	7.9766	7.3756
551624.72	4172862.34	31589.08256	26383.96454	18632.31301	16896.81517	26843.61275	31522.64677	3.19678	3.07394
551613.18	4172880.16	22493.62799	24334.93557	23544.44587	12173.57967	24669.17549	41996.06209	3.22311	3.11461
551601.74	4172883.28	17311.58875	21401.27903	23875.60497	9471.87975	21653.9969	44306.83067	3.73049	3.58953
551620.04	4172851.95	28030.75672	24041.24778	16465.30157	15054.6249	24456.32492	27989.24884	3.79889	3.62238
551591.08	4172887.18	13800.07322	19091.63657	23981.211	7613.69856	19285.96628	46015.94215	4.54785	4.33804
551573.39	4172898.22	9834.19841	16233.14927	24693.53992	5487.36848	16356.5279	49905.98663	8.20963	7.5882
551615.88	4172842.07	24582.46466	21984.88657	14648.64759	13222.72599	22357.9197	24957.29759	4.77295	4.5005
551623.3	4172824.65	25228.79241	21632.80769	11798.65176	13616.46679	22035.76832	19689.56729	8.28903	7.54671
551568.19	4172884.7	9713.47221	15073.92947	20434.85276	5389.89886	15201.3802	40082.1775	8.47438	7.85696
551612.9	4172824.39	20575.00602	19466.942	11910.83249	11080.56732	19795.13511	20188.40693	9.07667	8.24136
551564.03	4172870.4	9430.52808	13997.00239	17044.66501	5203.12312	14123.98889	32561.59365	8.52344	7.94118
551600.16	4172823.87	16246.84125	17169.54934	11862.37201	8751.36899	17426.55521	20499.53597	9.82937	8.8415
551560.65	4172860.52	9000.70594	13181.45113	15058.73753	4947.63692	13303.72846	28340.81437	8.86349	8.27059
551557.27	4172852.21	8580.57693	12530.34873	13663.40189	4703.09471	12647.61741	25471.60909	9.38108	8.77118
551573.13	4172824.91	10181.9127	13218.19466	11222.80227	5513.39343	13371.08855	20054.36573	10.92613	9.86449
551560.91	4172829.85	8550.20814	11986.41138	11156.17761	4648.79958	12109.35625	20217.28933	10.69331	9.86431
551550.51	4172833.23	7471.82244	11077.51585	10944.62372	4075.51495	11180.93054	20005.50418	12.14725	11.27711
CONCUNIT ug/	m^3								
DEPUNIT g/m^	2								

X	Demolition Area 2A (Part 2 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 1B (Phase 1) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 2B (Part 1 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 1A (Phase 1) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 1 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Route 1 - From the project site towards US-101 Annual PM2.5 w/Actual Emissions (ug/m3)	Route 2 - From US-101 towards the project site Annual PM2.5 w/Actual Emissions (ug/m3)	**Total** **PM2.5 (ug/m3)**
551713.24	2.42E-03	5.80E-02	5.05E-02	4.86E-03	7.13E-02	8.81E-02	3.24E-04	3.23E-04	2.7584E-01
551697.38	2.62E-03	3.77E-02	6.21E-02	5.22E-03	4.65E-02	1.08E-01	3.70E-04	3.67E-04	2.6293E-01
551713.76	3.97E-03	6.63E-02	2.95E-02	8.21E-03	8.22E-02	5.47E-02	3.13E-04	3.12E-04	2.4546E-01
551701.54	3.90E-03	4.73E-02	3.68E-02	7.99E-03	5.88E-02	6.81E-02	3.46E-04	3.44E-04	2.2363E-01
551708.04	7.21E-03	6.14E-02	1.95E-02	1.53E-02	7.70E-02	3.79E-02	3.22E-04	3.20E-04	2.1905E-01
551691.66	3.59E-03	3.50E-02	4.57E-02	7.23E-03	4.34E-02	8.44E-02	3.79E-04	3.77E-04	2.2002E-01
551695.04	6.55E-03	4.23E-02	2.38E-02	1.36E-02	5.30E-02	4.64E-02	3.58E-04	3.55E-04	1.8643E-01
551686.72	5.39E-03	3.30E-02	2.99E-02	1.09E-02	4.12E-02	5.83E-02	3.87E-04	3.84E-04	1.7952E-01
551661.39	2.17E-02	1.40E-02	5.39E-03	3.83E-02	1.78E-02	1.08E-02	5.52E-04	5.39E-04	1.0911E-01
551646.97	6.81E-03	1.47E-02	1.72E-02	1.12E-02	1.84E-02	3.89E-02	5.47E-04	5.39E-04	1.0831E-01
551625.66	3.70E-03	1.02E-02	1.84E-02	6.27E-03	1.27E-02	4.89E-02	7.27E-04	7.10E-04	1.0159E-01
551642.81	7.58E-03	1.37E-02	1.40E-02	1.21E-02	1.71E-02	3.11E-02	5.63E-04	5.55E-04	9.6777E-02
551639.95	8.43E-03	1.29E-02	1.18E-02	1.32E-02	1.62E-02	2.58E-02	5.77E-04	5.69E-04	8.9540E-02
551622.54	4.05E-03	9.72E-03	1.47E-02	6.79E-03	1.21E-02	3.66E-02	7.32E-04	7.15E-04	8.5369E-02
551656.71	1.50E-02	1.17E-02	4.46E-03	2.63E-02	1.48E-02	8.93E-03	7.01E-04	6.75E-04	8.2557E-02
551587.68	1.78E-03	6.16E-03	1.57E-02	3.08E-03	7.63E-03	4.73E-02	1.99E-03	1.85E-03	8.5476E-02
551618.9	4.32E-03	9.21E-03	1.23E-02	7.17E-03	1.15E-02	2.97E-02	7.49E-04	7.32E-04	7.5663E-02
551583.52	1.83E-03	5.91E-03	1.32E-02	3.15E-03	7.34E-03	3.80E-02	2.06E-03	1.92E-03	7.3444E-02
551579.37	1.93E-03	5.61E-03	1.05E-02	3.30E-03	6.98E-03	2.79E-02	2.03E-03	1.89E-03	6.0160E-02
551624.72	6.13E-03	8.24E-03	5.82E-03	9.97E-03	1.04E-02	1.22E-02	8.12E-04	7.89E-04	5.4297E-02
551613.18	4.37E-03	7.60E-03	7.35E-03	7.19E-03	9.52E-03	1.62E-02	8.18E-04	8.00E-04	5.3859E-02
551601.74	3.36E-03	6.68E-03	7.46E-03	5.59E-03	8.36E-03	1.71E-02	9.47E-04	9.22E-04	5.0424E-02
551620.04	5.44E-03	7.51E-03	5.14E-03	8.89E-03	9.44E-03	1.08E-02	9.65E-04	9.30E-04	4.9119E-02
551591.08	2.68E-03	5.96E-03	7.49E-03	4.49E-03	7.44E-03	1.78E-02	1.15E-03	1.11E-03	4.8103E-02
551573.39	1.91E-03	5.07E-03	7.71E-03	3.24E-03	6.31E-03	1.93E-02	2.08E-03	1.95E-03	4.7543E-02
551615.88	4.77E-03	6.87E-03	4.58E-03	7.81E-03	8.63E-03	9.63E-03	1.21E-03	1.16E-03	4.4651E-02
551623.3	4.90E-03	6.76E-03	3.69E-03	8.04E-03	8.51E-03	7.60E-03	2.10E-03	1.94E-03	4.3525E-02
551568.19	1.88E-03	4.71E-03	6.38E-03	3.18E-03	5.87E-03	1.55E-02	2.15E-03	2.02E-03	4.1668E-02
551612.9	3.99E-03	6.08E-03	3.72E-03	6.54E-03	7.64E-03	7.79E-03	2.30E-03	2.12E-03	4.0190E-02
551564.03	1.83E-03	4.37E-03	5.32E-03	3.07E-03	5.45E-03	1.26E-02	2.16E-03	2.04E-03	3.6822E-02
551600.16	3.15E-03	5.36E-03	3.71E-03	5.17E-03	6.73E-03	7.91E-03	2.50E-03	2.27E-03	3.6793E-02
551560.65	1.75E-03	4.12E-03	4.70E-03	2.92E-03	5.14E-03	1.09E-02	2.25E-03	2.12E-03	3.3938E-02
551557.27	1.67E-03	3.91E-03	4.27E-03	2.78E-03	4.88E-03	9.83E-03	2.38E-03	2.25E-03	3.1972E-02
551573.13	1.98E-03	4.13E-03	3.51E-03	3.25E-03	5.16E-03	7.74E-03	2.77E-03	2.53E-03	3.1075E-02
551560.91	1.66E-03	3.74E-03	3.48E-03	2.74E-03	4.67E-03	7.80E-03	2.72E-03	2.53E-03	2.9359E-02
551550.51	1.45E-03	3.46E-03	3.42E-03	2.41E-03	4.32E-03	7.72E-03	3.08E-03	2.90E-03	2.8753E-02

Mitigated PM2.5 Concentrations

Maximum DPM (ug/m3)	**MIR UTM** X	Y
2.7584E-01	551713.24	4172969.7

UTM	551713.24	4172969.70
Latitude, Longitude	37°42'09.0"N 122°24'48.1"W	

Note: 37°42'09.0"N 122°24'48.1"W is not a residence

Scenario 4

Cancer Risk Calculations Using OEHHA/BAAQMD Cancer Risk Assumptions
Existing Phase 4 Receptors—Midway Village Project
Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant

UTM: 551704.69 4173051.23

UTM: 551654.57 4172831.21

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Age	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.574443749	10	361	0.85	0.25	6.6
0-1	0.574443749	10	1,090	0.85	0.68	54.7
1-<2	0.574443749	10	1,090	0.85	0.00	0.0
2-<3	0.574443749	3	631	0.85	0.58	8.0
3-<4	0.574443749	3	631	0.85	0.42	5.8
4-<5	0.574443749	3	631	0.85	0.73	10.2
5-<6	0.574443749	3	631	0.85	0.44	6.2
					Total	91.57

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.037130462	10	361	0.85	0.25	0.4
0-1	0.037130462	10	1,090	0.85	0.68	3.5
1-<2	0.037130462	10	1,090	0.85	0.00	0.0
2-<3	0.037130462	3	631	0.85	0.58	0.5
3-<4	0.037130462	3	631	0.85	0.42	0.4
4-<5	0.037130462	3	631	0.85	0.73	0.7
5-<6	0.037130462	3	631	0.85	0.44	0.4
					Total	5.92

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child

UTM: 551704.69 4173051.23

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Period	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.574443749	3	572	1	3.10	46.1
					Total	46.07

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.037130462	3	572	1	3.10	3.0
					Total	2.98

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult

UTM: 551704.69 4173051.23

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.574443749	1	261	0.73	3.10	5.1
					Total	5.11

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.037130462	1	261	0.73	3.10	0.3
					Total	0.331

Existing Phase 4 Receptors—Midway Village Project

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551704.69	4173051.23	0.5744	0.5744	0.11489

Unmitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551654.57	4172831.21	0.4904	0.4904

Mitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551654.57	4172831.21	0.0371	0.0371	0.00743

Mitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551654.57	4172831.21	0.2138	0.2138

Existing Phase 4 Receptors—Midway Village Project

Existing Phase 4 Receptors Scenario: Exposed to Phases 1+2+3 Demolition and Phases 1+2+3 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

	Unmitigated Concentrations
Annual Average Onsite DPM Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.46E-06
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	8.71E-07
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	8.71E-07
Annual Average Onsite DPM Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	6.37E-07
Annual Average Onsite DPM Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	9.48E-07
Annual Average Onsite DPM Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	8.39E-07
Annual Average Onsite DPM Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	8.39E-07
Annual Average Onsite DPM Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	5.32E-07
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	1.14E-05
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	1.37E-05

		Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions
		Demolition Area 1A (Phase 1)	Demolition Area 2A (Part 1 of 2 Phase 2)	Demolition Area 2A (Part 2 of 2 Phase 2)	Demolition Area 3A (Phase 3)	Construction Area 1B (Phase 1)	Construction Area 2B (Part 1 of 2 Phase 2)	Construction Area 2B and 2B/3B (Part 2 of Phase 2)	Construction Area 3B (Phase 3)	Route 1 - From the project site towards US-101	Route 2 - From US-101 towards the project site
X	Y	SRCGP7	SRCGP8	SRCGP1	SRCGP2	SRCGP3	SRCGP4	SRCGP5	SRCGP6	SRCGP9	SRCGP10
551654.57	4172831.21	32822.94171	19026.38252	54296.50246	229637.7714	31998.57524	11730.78746	30042.46367	111908.6816	4.06938	3.76524
551716.76	4172828.57	54546.74792	13707.53485	88532.27527	90883.56175	52508.88826	7903.0747	30186.00969	66464.36045	1.35009	1.31986
551649.89	4172815.61	27849.11237	16320.05325	38613.48378	175673.4734	27191.43462	10022.68468	20684.37253	76635.09629	8.35339	7.34985
551704.69	4173051.23	63409.20601	138092.6518	4112.94019	20332.57578	65770.74812	60799.63065	2539.96134	24696.27124	1.68431	1.65381
551697.04	4173056.12	52343.63771	126550.7739	4010.29741	19852.76327	54172.00096	56967.92672	2466.29931	23946.90344	1.85585	1.81999
551713.64	4172818.43	46289.8794	12255.28406	59970.528	84556.65979	44689.14753	7133.79459	22004.11594	56360.31331	1.455	1.4173
551744.84	4173071.22	101494.4306	59254.54434	2832.38456	12853.32413	110330.6338	24493.01965	1734.32933	14761.22127	1.23703	1.2182
551685.73	4173062.85	40931.24975	106189.8322	3857.04563	19264.04168	42237.44357	51801.53687	2357.08584	23003.64617	2.17649	2.12961
551693.48	4172805.94	36107.54003	11781.15238	44282.55096	87618.59063	35013.89837	7093.05277	18073.12913	47643.52675	2.3883	2.2666
551748.31	4173078.63	88178.69652	46317.55488	2614.43703	11698.5965	96729.38028	20540.75887	1595.74594	13278.41128	1.22328	1.20459
551704.92	4172802.82	36248.49202	10668.83831	38129.2771	74559.29255	35138.14662	6335.79631	15189.03363	42579.41359	1.80559	1.74678
551752.29	4173085.04	76810.46911	37986.38452	2433.08959	10775.29251	84406.91341	17659.84982	1480.9863	12109.7237	1.20182	1.18349
551674.72	4173072.64	31816.88608	82613.08352	3582.18095	18036.91784	32749.16405	42688.6625	2173.23419	21200.25865	2.6848	2.61267
551715.06	4172799.44	35315.61061	9747.64894	30883.6655	65097.93181	34245.24374	5715.26888	12759.87527	38406.52465	1.4856	1.45212
551635.88	4173076.31	20035.75268	80798.81987	3451.16278	19459.20029	20439.74629	44296.18358	2056.42637	23247.10564	7.39133	7.01717
551755.16	4173091.63	64816.66346	32026.82436	2282.0251	10014.83154	70986.57396	15433.66488	1385.58976	11146.18589	1.19286	1.17455
551680.83	4173081.2	31376.29342	63998.1164	3277.68909	15985.64917	32393.1794	32925.83907	1987.50608	18463.37423	2.54513	2.47912
551737.93	4173093.18	53661.00073	35739.57931	2440.41652	10698.84234	57857.60664	17062.61616	1483.47281	11952.50232	1.38253	1.35923
551639.86	4173086.4	19400.90611	59935.79543	3178.90196	17327.97822	19820.78184	33674.75864	1895.55486	20265.32386	7.2488	6.8804
551731.74	4173096.94	46312.21873	34610.1263	2433.63768	10661.35746	49451.55373	16691.48079	1477.93239	11870.80497	1.47813	1.452
551690.01	4173093.13	30717.20819	46546.55004	2890.45092	13543.22421	31849.87693	23719.23465	1750.52297	15321.89106	2.34603	2.28856
551733.73	4173104.89	40141.46807	29104.18304	2274.73357	9881.30164	42758.0228	14399.67892	1377.89076	10878.8596	1.48542	1.4587
551643.22	4173100.77	17973.68846	42636.43984	2831.84711	14919.42018	18386.09259	24452.1717	1687.68301	17031.1355	7.7644	7.32033
551721.13	4173111.96	32033.12475	27656.2531	2266.28803	9906.92947	33689.01801	13920.23058	1369.79089	10844.3866	1.7259	1.69125
551710.23	4173112.37	29223.63076	29041.24573	2342.50818	10383.80382	30545.32139	14754.50967	1414.78254	11394.65046	1.95619	1.91343
551648.42	4173109.03	17659.66721	36074.50715	2656.53991	13626.21244	18085.81944	20652.55408	1584.13848	15348.9442	7.1449	6.73665
551703.6	4173116.57	26278.35037	27647.22876	2313.2183	10330.95139	27360.30939	14290.53548	1394.54537	11306.3757	2.16126	2.11021
551655.15	4173116.67	17673.32266	31162.24818	2498.13651	12449.61301	18125.37508	17673.80064	1490.91707	13866.20609	6.17523	5.84301
551696.53	4173120.32	23810.13295	26562.06023	2290.4002	10331.63515	24706.62618	13970.65864	1378.19469	11287.22588	2.43216	2.36567
551688.44	4173124.22	21457.89109	25533.69718	2265.59738	10356.55444	22193.52879	13691.5492	1360.28144	11299.57255	2.8555	2.76312
551677.61	4173136.04	17561.67036	21920.05735	2123.55272	9874.16501	18085.22366	12154.6255	1269.2378	10684.0619	3.94818	3.78068
551670.98	4173140.24	16176.63154	20933.41813	2080.46879	9794.80954	16627.60349	11798.42594	1240.91512	10581.98558	4.90974	4.66666
551663.91	4173144	15001.78335	20239.1534	2040.67498	9738.80739	15394.04839	11512.3979	1214.67937	10515.38879	6.41976	6.03889
551655.82	4173147.89	13778.69899	19434.95949	2000.10222	9711.06728	14113.92462	11257.08213	1187.77351	10472.03065	9.39408	8.68621
CONCUNIT ug/	m^3										
DEPUNIT g/m^	2										

Demolition Area 1A (Phase 1) Annual DPM Exhaust	Demolition Area 2A (Part 1 of 2 Phase 2) Annual DPM Exhaust	Demolition Area 2A (Part 2 of 2 Phase 2) Annual DPM Exhaust	Demolition Area 3A (Phase 3) Annual DPM Exhaust	Construction Area 1B (Phase 1) Annual DPM Exhaust	Construction Area 2B (Part 1 of 2 Phase 2) Annual DPM Exhaust	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual DPM Exhaust	Construction Area 3B (Phase 3) Annual DPM Exhaust	Route 1 - From the project site towards US-101 Annual DPM Exhaust	Route 2 - From US-101 towards the project site Annual DPM Exhaust	**Total**
w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	**DPM (ug/m3)**
4.79E-02	1.66E-02	4.73E-02	1.46E-01	3.03E-02	9.84E-03	2.52E-02	5.96E-02	4.64E-05	5.18E-05	4.9481E-01
7.96E-02	1.19E-02	7.71E-02	5.79E-02	4.98E-02	6.63E-03	2.53E-02	3.54E-02	1.54E-05	1.81E-05	5.1234E-01
4.07E-02	1.42E-02	3.36E-02	1.12E-01	2.58E-02	8.41E-03	1.74E-02	4.08E-02	9.52E-05	1.01E-04	3.8138E-01
9.26E-02	1.20E-01	3.58E-03	1.29E-02	6.23E-02	5.10E-02	2.13E-03	1.31E-02	1.92E-05	2.27E-05	5.7444E-01
7.64E-02	1.10E-01	3.49E-03	1.26E-02	5.13E-02	4.78E-02	2.07E-03	1.27E-02	2.12E-05	2.50E-05	5.0689E-01
6.76E-02	1.07E-02	5.22E-02	5.38E-02	4.24E-02	5.99E-03	1.85E-02	3.00E-02	1.66E-05	1.95E-05	4.1163E-01
1.48E-01	5.16E-02	2.47E-03	8.18E-03	1.05E-01	2.06E-02	1.46E-03	7.86E-03	1.41E-05	1.67E-05	5.4710E-01
5.97E-02	9.25E-02	3.36E-03	1.23E-02	4.00E-02	4.35E-02	1.98E-03	1.22E-02	2.48E-05	2.93E-05	4.2123E-01
5.27E-02	1.03E-02	3.86E-02	5.58E-02	3.32E-02	5.95E-03	1.52E-02	2.54E-02	2.72E-05	3.12E-05	3.3858E-01
1.29E-01	4.03E-02	2.28E-03	7.45E-03	9.17E-02	1.72E-02	1.34E-03	7.07E-03	1.39E-05	1.66E-05	4.6746E-01
5.29E-02	9.29E-03	3.32E-02	4.75E-02	3.33E-02	5.32E-03	1.27E-02	2.27E-02	2.06E-05	2.40E-05	3.1237E-01
1.12E-01	3.31E-02	2.12E-03	6.86E-03	8.00E-02	1.48E-02	1.24E-03	6.45E-03	1.37E-05	1.63E-05	4.0404E-01
4.64E-02	7.20E-02	3.12E-03	1.15E-02	3.10E-02	3.58E-02	1.82E-03	1.13E-02	3.06E-05	3.59E-05	3.3455E-01
5.15E-02	8.49E-03	2.69E-02	4.15E-02	3.25E-02	4.80E-03	1.07E-02	2.04E-02	1.69E-05	2.00E-05	2.8377E-01
2.92E-02	7.04E-02	3.01E-03	1.24E-02	1.94E-02	3.72E-02	1.73E-03	1.24E-02	8.42E-05	9.65E-05	2.8846E-01
9.46E-02	2.79E-02	1.99E-03	6.38E-03	6.73E-02	1.29E-02	1.16E-03	5.93E-03	1.36E-05	1.61E-05	3.4272E-01
4.58E-02	5.57E-02	2.85E-03	1.02E-02	3.07E-02	2.76E-02	1.67E-03	9.83E-03	2.90E-05	3.41E-05	2.8885E-01
7.83E-02	3.11E-02	2.13E-03	6.81E-03	5.48E-02	1.43E-02	1.24E-03	6.36E-03	1.58E-05	1.87E-05	3.0677E-01
2.83E-02	5.22E-02	2.77E-03	1.10E-02	1.88E-02	2.83E-02	1.59E-03	1.08E-02	8.26E-05	9.46E-05	2.3721E-01
6.76E-02	3.01E-02	2.12E-03	6.79E-03	4.69E-02	1.40E-02	1.24E-03	6.32E-03	1.68E-05	2.00E-05	2.7499E-01
4.48E-02	4.05E-02	2.52E-03	8.62E-03	3.02E-02	1.99E-02	1.47E-03	8.16E-03	2.67E-05	3.15E-05	2.4419E-01
5.86E-02	2.53E-02	1.98E-03	6.29E-03	4.05E-02	1.21E-02	1.16E-03	5.79E-03	1.69E-05	2.01E-05	2.3773E-01
2.62E-02	3.71E-02	2.47E-03	9.50E-03	1.74E-02	2.05E-02	1.42E-03	9.07E-03	8.85E-05	1.01E-04	1.8979E-01
4.68E-02	2.41E-02	1.97E-03	6.31E-03	3.19E-02	1.17E-02	1.15E-03	5.77E-03	1.97E-05	2.33E-05	2.0252E-01
4.27E-02	2.53E-02	2.04E-03	6.61E-03	2.90E-02	1.24E-02	1.19E-03	6.07E-03	2.23E-05	2.63E-05	1.9523E-01
2.58E-02	3.14E-02	2.31E-03	8.68E-03	1.71E-02	1.73E-02	1.33E-03	8.17E-03	8.14E-05	9.26E-05	1.7184E-01
3.84E-02	2.41E-02	2.01E-03	6.58E-03	2.59E-02	1.20E-02	1.17E-03	6.02E-03	2.46E-05	2.90E-05	1.8065E-01
2.58E-02	2.71E-02	2.18E-03	7.93E-03	1.72E-02	1.48E-02	1.25E-03	7.38E-03	7.04E-05	8.03E-05	1.5895E-01
3.48E-02	2.31E-02	1.99E-03	6.58E-03	2.34E-02	1.17E-02	1.16E-03	6.01E-03	2.77E-05	3.25E-05	1.6871E-01
3.13E-02	2.22E-02	1.97E-03	6.59E-03	2.10E-02	1.15E-02	1.14E-03	6.01E-03	3.25E-05	3.80E-05	1.5741E-01
2.56E-02	1.91E-02	1.85E-03	6.29E-03	1.71E-02	1.02E-02	1.06E-03	5.69E-03	4.50E-05	5.20E-05	1.3363E-01
2.36E-02	1.82E-02	1.81E-03	6.24E-03	1.58E-02	9.90E-03	1.04E-03	5.63E-03	5.60E-05	6.42E-05	1.2600E-01
2.19E-02	1.76E-02	1.78E-03	6.20E-03	1.46E-02	9.66E-03	1.02E-03	5.60E-03	7.32E-05	8.30E-05	1.1983E-01
2.01E-02	1.69E-02	1.74E-03	6.18E-03	1.34E-02	9.45E-03	9.97E-04	5.57E-03	1.07E-04	1.19E-04	1.1337E-01

Unmitigated DPM Concentrations

Maximum DPM (ug/m3)	MIR UTM X	MIR UTM Y
5.7444E-01	551704.69	4173051.23

MIR		
UTM	551704.69	4173051.23
Latitude, Longitude	37°42'11.7"N 122°24'48.4"W	

Construction Health Risk Assessment Files

Existing Phase 4 Receptors—Midway Village Project

Existing Phase 4 Receptors Scenario: Exposed to Phases 1+2+3 Demolition and Phases 1+2+3 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

	Unmitigated Concentrations
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.59E-06
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	1.13E-06
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	1.13E-06
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	8.62E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	1.44E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	1.02E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	1.02E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	1.21E-06
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	3.62E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	3.66E-04

		Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions
		Demolition Area 1A (Phase 1)	Demolition Area 2A (Part 1 of 2 Phase 2)	Demolition Area 2A (Part 2 of 2 Phase 2)	Demolition Area 3A (Phase 3)	Construction Area 1B (Phase 1)	Construction Area 2B (Part 1 of 2 Phase 2)	Construction Area 2B and 2B/3B (Part 2 of Phase 2)	Construction Area 3B (Phase 3)	Route 1 - From the project site towards US-101	Route 2 - From US-101 towards the project site
X	Y	SRCGP7	SRCGP8	SRCGP1	SRCGP2	SRCGP3	SRCGP4	SRCGP5	SRCGP6	SRCGP9	SRCGP10
551654.57	4172831.21	32822.94171	19026.38252	54296.50246	229637.7714	31998.57524	11730.78746	30042.46367	111908.6816	4.06938	3.76524
551716.76	4172828.57	54546.74792	13707.53485	88532.27527	90883.56175	52508.88826	7903.0747	30186.00969	66464.36045	1.35009	1.31986
551649.89	4172815.61	27849.11237	16320.05325	38613.48378	175673.4734	27191.43462	10022.68468	20684.37253	76635.09629	8.35339	7.34985
551704.69	4173051.23	63409.20601	138092.6518	4112.94019	20332.57578	65770.74812	60799.63065	2539.96134	24696.27124	1.68431	1.65381
551697.04	4173056.12	52343.63771	126550.7739	4010.29741	19852.76327	54172.00096	56967.92672	2466.29931	23946.90344	1.85585	1.81999
551713.64	4172818.43	46289.8794	12255.28406	59970.528	84556.65979	44689.14753	7133.79459	22004.11594	56360.31331	1.455	1.4173
551744.84	4173071.22	101494.4306	59254.54434	2832.38456	12853.32413	110330.6338	24493.01965	1734.32933	14761.22127	1.23703	1.2182
551685.73	4173062.85	40931.24975	106189.8322	3857.04563	19264.04168	42237.44357	51801.53687	2357.08584	23003.64617	2.17649	2.12961
551693.48	4172805.94	36107.54003	11781.15238	44282.55096	87618.59063	35013.89837	7093.05277	18073.12913	47643.52675	2.3883	2.2666
551748.31	4173078.63	88178.69652	46317.55488	2614.43703	11698.5965	96729.38028	20540.75887	1595.74594	13278.41128	1.22328	1.20459
551704.92	4172802.82	36248.49202	10668.83831	38129.2771	74559.29255	35138.14662	6335.79631	15189.03363	42579.41359	1.80559	1.74678
551752.29	4173085.04	76810.46911	37986.38452	2433.08959	10775.29251	84406.91341	17659.84982	1480.9863	12109.7237	1.20182	1.18349
551674.72	4173072.64	31816.88608	82613.08352	3582.18095	18036.91784	32749.16405	42688.6625	2173.23419	21200.25865	2.6848	2.61267
551715.06	4172799.44	35315.61061	9747.64894	30883.6655	65097.93181	34245.24374	5715.26888	12759.87527	38406.52465	1.4856	1.45212
551635.88	4173076.31	20035.75268	80798.81987	3451.16278	19459.20029	20439.74629	44296.18358	2056.42637	23247.10564	7.39133	7.01717
551755.16	4173091.63	64816.66346	32026.82436	2282.0251	10014.83154	70986.57396	15433.66488	1385.58976	11146.18589	1.19286	1.17455
551680.83	4173081.2	31376.29342	63998.1164	3277.68909	15985.64917	32393.1794	32925.83907	1987.50608	18463.37423	2.54513	2.47912
551737.93	4173093.18	53661.00073	35739.57931	2440.41652	10698.84234	57857.60664	17062.61616	1483.47281	11952.50232	1.38253	1.35923
551639.86	4173086.4	19400.90611	59935.79543	3178.90196	17327.97822	19820.78184	33674.75864	1895.55486	20265.32386	7.2488	6.8804
551731.74	4173096.94	46312.21873	34610.1263	2433.63768	10661.35746	49451.55373	16691.48079	1477.93239	11870.80497	1.47813	1.452
551690.01	4173093.13	30717.20819	46546.55004	2890.45092	13543.22421	31849.87693	23719.23465	1750.52297	15321.89106	2.34603	2.28856
551733.73	4173104.89	40141.46807	29104.18304	2274.73357	9881.30164	42758.0228	14399.67892	1377.89076	10878.8596	1.48542	1.4587
551643.22	4173100.77	17973.68846	42636.43984	2831.84711	14919.42018	18386.09259	24452.1717	1687.68301	17031.1355	7.7644	7.32033
551721.13	4173111.96	32033.12475	27656.2531	2266.28803	9906.92947	33689.01801	13920.23058	1369.79089	10844.3866	1.7259	1.69125
551710.23	4173112.37	29223.63076	29041.24573	2342.50818	10383.80382	30545.32139	14754.50967	1414.78254	11394.65046	1.95619	1.91343
551648.42	4173109.03	17659.66721	36074.50715	2656.53991	13626.21244	18085.81944	20652.55408	1584.13848	15348.9442	7.1449	6.73665
551703.6	4173116.57	26278.35037	27647.22876	2313.2183	10330.95139	27360.30939	14290.53548	1394.54537	11306.3757	2.16126	2.11021
551655.15	4173116.67	17673.32266	31162.24818	2498.13651	12449.61301	18125.37508	17673.80064	1490.91707	13866.20609	6.17523	5.84301
551696.53	4173120.32	23810.13295	26562.06023	2290.4002	10331.63515	24706.62618	13970.65864	1378.19469	11287.22588	2.43216	2.36567
551688.44	4173124.22	21457.89109	25533.69718	2265.59738	10356.55444	22193.52879	13691.5492	1360.28144	11299.57255	2.8555	2.76312
551677.61	4173136.04	17561.67036	21920.05735	2123.55272	9874.16501	18085.22366	12154.6255	1269.2378	10684.0619	3.94818	3.78068
551670.98	4173140.24	16176.63154	20933.41813	2080.46879	9794.80954	16627.60349	11798.42594	1240.91512	10581.98558	4.90974	4.66666
551663.91	4173144	15001.78335	20239.1534	2040.67498	9738.80739	15394.04839	11512.3979	1214.67937	10515.38879	6.41976	6.03889
551655.82	4173147.89	13778.69899	19434.95949	2000.10222	9711.06728	14113.92462	11257.08213	1187.77351	10472.03065	9.39408	8.68621
CONCUNIT ug/	m^3										
DEPUNIT g/m^	2										

Demolition Area 1A (Phase 1) Annual PM2.5	Demolition Area 2A (Part 1 of 2 Phase 2) Annual PM2.5	Demolition Area 2A (Part 2 of 2 Phase 2) Annual PM2.5	Demolition Area 3A (Phase 3) Annual PM2.5	Construction Area 1B (Phase 1) Annual PM2.5	Construction Area 2B (Part 1 of 2 Phase 2) Annual PM2.5	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual PM2.5	Construction Area 3B (Phase 3) Annual PM2.5	Route 1 - From the project site towards US-101 Annual PM2.5	Route 2 - From US-101 towards the project site Annual PM2.5	**Total**
w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	**PM2.5 (ug/m3)**
5.22E-02	2.14E-02	6.12E-02	1.98E-01	0.00E+00	0.00E+00	4.33E-02	1.14E-01	4.15E-06	4.57E-06	4.9038E-01
8.68E-02	1.54E-02	9.97E-02	7.84E-02	0.00E+00	0.00E+00	4.35E-02	6.79E-02	1.38E-06	1.60E-06	3.9166E-01
4.43E-02	1.84E-02	4.35E-02	1.52E-01	0.00E+00	0.00E+00	2.98E-02	7.82E-02	8.53E-06	8.92E-06	3.6574E-01
1.01E-01	1.56E-01	4.63E-03	1.75E-02	0.00E+00	0.00E+00	3.66E-03	2.52E-02	1.72E-06	2.01E-06	3.0747E-01
8.33E-02	1.43E-01	4.52E-03	1.71E-02	0.00E+00	0.00E+00	3.55E-03	2.44E-02	1.89E-06	2.21E-06	2.7547E-01
7.37E-02	1.38E-02	6.75E-02	7.29E-02	0.00E+00	0.00E+00	3.17E-02	5.75E-02	1.49E-06	1.72E-06	3.1716E-01
1.62E-01	6.67E-02	3.19E-03	1.11E-02	0.00E+00	0.00E+00	2.50E-03	1.51E-02	1.26E-06	1.48E-06	2.6009E-01
6.51E-02	1.20E-01	4.34E-03	1.66E-02	0.00E+00	0.00E+00	3.39E-03	2.35E-02	2.22E-06	2.59E-06	2.3257E-01
5.75E-02	1.33E-02	4.99E-02	7.56E-02	0.00E+00	0.00E+00	2.60E-02	4.86E-02	2.44E-06	2.75E-06	2.7084E-01
1.40E-01	5.22E-02	2.94E-03	1.01E-02	0.00E+00	0.00E+00	2.30E-03	1.36E-02	1.25E-06	1.46E-06	2.2137E-01
5.77E-02	1.20E-02	4.29E-02	6.43E-02	0.00E+00	0.00E+00	2.19E-02	4.35E-02	1.84E-06	2.12E-06	2.4229E-01
1.22E-01	4.28E-02	2.74E-03	9.29E-03	0.00E+00	0.00E+00	2.13E-03	1.24E-02	1.23E-06	1.44E-06	1.9154E-01
5.06E-02	9.30E-02	4.03E-03	1.56E-02	0.00E+00	0.00E+00	3.13E-03	2.16E-02	2.74E-06	3.17E-06	1.8804E-01
5.62E-02	1.10E-02	3.48E-02	5.61E-02	0.00E+00	0.00E+00	1.84E-02	3.92E-02	1.52E-06	1.76E-06	2.1569E-01
3.19E-02	9.10E-02	3.89E-03	1.68E-02	0.00E+00	0.00E+00	2.96E-03	2.37E-02	7.55E-06	8.52E-06	1.7026E-01
1.03E-01	3.61E-02	2.57E-03	8.64E-03	0.00E+00	0.00E+00	2.00E-03	1.14E-02	1.22E-06	1.43E-06	1.6380E-01
4.99E-02	7.21E-02	3.69E-03	1.38E-02	0.00E+00	0.00E+00	2.86E-03	1.88E-02	2.60E-06	3.01E-06	1.6120E-01
8.54E-02	4.03E-02	2.75E-03	9.23E-03	0.00E+00	0.00E+00	2.14E-03	1.22E-02	1.41E-06	1.65E-06	1.5196E-01
3.09E-02	6.75E-02	3.58E-03	1.49E-02	0.00E+00	0.00E+00	2.73E-03	2.07E-02	7.40E-06	8.35E-06	1.4034E-01
7.37E-02	3.90E-02	2.74E-03	9.19E-03	0.00E+00	0.00E+00	2.13E-03	1.21E-02	1.51E-06	1.76E-06	1.3886E-01
4.89E-02	5.24E-02	3.26E-03	1.17E-02	0.00E+00	0.00E+00	2.52E-03	1.56E-02	2.40E-06	2.78E-06	1.3441E-01
6.39E-02	3.28E-02	2.56E-03	8.52E-03	0.00E+00	0.00E+00	1.98E-03	1.11E-02	1.52E-06	1.77E-06	1.2083E-01
2.86E-02	4.80E-02	3.19E-03	1.29E-02	0.00E+00	0.00E+00	2.43E-03	1.74E-02	7.93E-06	8.89E-06	1.1251E-01
5.10E-02	3.11E-02	2.55E-03	8.54E-03	0.00E+00	0.00E+00	1.97E-03	1.11E-02	1.76E-06	2.05E-06	1.0627E-01
4.65E-02	3.27E-02	2.64E-03	8.96E-03	0.00E+00	0.00E+00	2.04E-03	1.16E-02	2.00E-06	2.32E-06	1.0448E-01
2.81E-02	4.06E-02	2.99E-03	1.18E-02	0.00E+00	0.00E+00	2.28E-03	1.57E-02	7.29E-06	8.18E-06	1.0144E-01
4.18E-02	3.11E-02	2.61E-03	8.91E-03	0.00E+00	0.00E+00	2.01E-03	1.15E-02	2.21E-06	2.56E-06	9.8026E-02
2.81E-02	3.51E-02	2.81E-03	1.07E-02	0.00E+00	0.00E+00	2.15E-03	1.42E-02	6.30E-06	7.09E-06	9.3088E-02
3.79E-02	2.99E-02	2.58E-03	8.91E-03	0.00E+00	0.00E+00	1.98E-03	1.15E-02	2.48E-06	2.87E-06	9.2808E-02
3.41E-02	2.88E-02	2.55E-03	8.93E-03	0.00E+00	0.00E+00	1.96E-03	1.15E-02	2.92E-06	3.35E-06	8.7888E-02
2.79E-02	2.47E-02	2.39E-03	8.52E-03	0.00E+00	0.00E+00	1.83E-03	1.09E-02	4.03E-06	4.59E-06	7.6285E-02
2.57E-02	2.36E-02	2.34E-03	8.45E-03	0.00E+00	0.00E+00	1.79E-03	1.08E-02	5.01E-06	5.67E-06	7.2710E-02
2.39E-02	2.28E-02	2.30E-03	8.40E-03	0.00E+00	0.00E+00	1.75E-03	1.07E-02	6.55E-06	7.33E-06	6.9863E-02
2.19E-02	2.19E-02	2.25E-03	8.38E-03	0.00E+00	0.00E+00	1.71E-03	1.07E-02	9.59E-06	1.05E-05	6.6864E-02

Unmitigated PM2.5 Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
4.9038E-01	551654.57	4172831.21

MIR		
UTM	551654.57	4172831.21
Latitude, Longitude	37°42'04.5"N 122°24'50.5"W	

Existing Phase 4 Receptors—Midway Village Project

Existing Phase 4 Receptors Scenario: Exposed to Phases 1+2+3 Demolition and Phases 1+2+3 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

	Mitigated Concentrations
Annual Average Onsite DPM Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	6.24E-08
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	5.78E-08
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	5.78E-08
Annual Average Onsite DPM Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	4.96E-08
Annual Average Onsite DPM Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	9.83E-08
Annual Average Onsite DPM Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	2.05E-07
Annual Average Onsite DPM Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	2.05E-07
Annual Average Onsite DPM Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	6.84E-08
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	1.14E-05
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	1.37E-05

X	Y	Unit Emissions Demolition Area 1A (Phase 1) SRCGP7	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) SRCGP8	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) SRCGP1	Unit Emissions Demolition Area 3A (Phase 3) SRCGP2	Unit Emissions Construction Area 1B (Phase 1) SRCGP3	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) SRCGP4	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) SRCGP5	Unit Emissions Construction Area 3B (Phase 3) SRCGP6	Unit Emissions Route 1 - From the project site towards US-101 SRCGP9	Unit Emissions Route 2 - From US-101 towards the project site SRCGP10
551654.57	4172831.21	32822.94171	19026.38252	54296.50246	229637.7714	31998.57524	11730.78746	30042.46367	111908.6816	4.06938	3.76524
551716.76	4172828.57	54546.74792	13707.53485	88532.27527	90883.56175	52508.88826	7903.0747	30186.00969	66464.36045	1.35009	1.31986
551649.89	4172815.61	27849.11237	16320.05325	38613.48378	175673.4734	27191.43462	10022.68468	20684.37253	76635.09629	8.35339	7.34985
551704.69	4173051.23	63409.20601	138092.6518	4112.94019	20332.57578	65770.74812	60799.63065	2539.96134	24696.27124	1.68431	1.65381
551697.04	4173056.12	52343.63771	126550.7739	4010.29741	19852.76327	54172.00096	56967.92672	2466.29931	23946.90344	1.85585	1.81999
551713.64	4172818.43	46289.8794	12255.28406	59970.528	84556.65979	44689.14753	7133.79459	22004.11594	56360.31331	1.455	1.4173
551744.84	4173071.22	101494.4306	59254.54434	2832.38456	12853.32413	110330.6338	24493.01965	1734.32933	14761.22127	1.23703	1.2182
551685.73	4173062.85	40931.24975	106189.8322	3857.04563	19264.04168	42237.44357	51801.53687	2357.08584	23003.64617	2.17649	2.12961
551693.48	4172805.94	36107.54003	11781.15238	44282.55096	87618.59063	35013.89837	7093.05277	18073.12913	47643.52675	2.3883	2.2666
551748.31	4173078.63	88178.69652	46317.55488	2614.43703	11698.5965	96729.38028	20540.75887	1595.74594	13278.41128	1.22328	1.20459
551704.92	4172802.82	36248.49202	10668.83831	38129.2771	74559.29255	35138.14662	6335.79631	15189.03363	42579.41359	1.80559	1.74678
551752.29	4173085.04	76810.46911	37986.38452	2433.08959	10775.29251	84406.91341	17659.84982	1480.9863	12109.7237	1.20182	1.18349
551674.72	4173072.64	31816.88608	82613.08352	3582.18095	18036.91784	32749.16405	42688.6625	2173.23419	21200.25865	2.6848	2.61267
551715.06	4172799.44	35315.61061	9747.64894	30883.6655	65097.93181	34245.24374	5715.26888	12759.87527	38406.52465	1.4856	1.45212
551635.88	4173076.31	20035.75268	80798.81987	3451.16278	19459.20029	20439.74629	44296.18358	2056.42637	23247.10564	7.39133	7.01717
551755.16	4173091.63	64816.66346	32026.82436	2282.0251	10014.83154	70986.57396	15433.66488	1385.58976	11146.18589	1.19286	1.17455
551680.83	4173081.2	31376.29342	63998.1164	3277.68909	15985.64917	32393.1794	32925.83907	1987.50608	18463.37423	2.54513	2.47912
551737.93	4173093.18	53661.00073	35739.57931	2440.41652	10698.84234	57857.60664	17062.61616	1483.47281	11952.50232	1.38253	1.35923
551639.86	4173086.4	19400.90611	59935.79543	3178.90196	17327.97822	19820.78184	33674.75864	1895.55486	20265.32386	7.2488	6.8804
551731.74	4173096.94	46312.21873	34610.1263	2433.63768	10661.35746	49451.55373	16691.48079	1477.93239	11870.80497	1.47813	1.452
551690.01	4173093.13	30717.20819	46546.55004	2890.45092	13543.22421	31849.87693	23719.23465	1750.52297	15321.89106	2.34603	2.28856
551733.73	4173104.89	40141.46807	29104.18304	2274.73357	9881.30164	42758.0228	14399.67892	1377.89076	10878.8596	1.48542	1.4587
551643.22	4173100.77	17973.68846	42636.43984	2831.84711	14919.42018	18386.09259	24452.1717	1687.68301	17031.1355	7.7644	7.32033
551721.13	4173111.96	32033.12475	27656.2531	2266.28803	9906.92947	33689.01801	13920.23058	1369.79089	10844.3866	1.7259	1.69125
551710.23	4173112.37	29223.63076	29041.24573	2342.50818	10383.80382	30545.32139	14754.50967	1414.78254	11394.65046	1.95619	1.91343
551648.42	4173109.03	17659.66721	36074.50715	2656.53991	13626.21244	18085.81944	20652.55408	1584.13848	15348.9442	7.1449	6.73665
551703.6	4173116.57	26278.35037	27647.22876	2313.2183	10330.95139	27360.30939	14290.53548	1394.54537	11306.3757	2.16126	2.11021
551655.15	4173116.67	17673.32266	31162.24818	2498.13651	12449.61301	18125.37508	17673.80064	1490.91707	13866.20609	6.17523	5.84301
551696.53	4173120.32	23810.13295	26562.06023	2290.4002	10331.63515	24706.62618	13970.65864	1378.19469	11287.22588	2.43216	2.36567
551688.44	4173124.22	21457.89109	25533.69718	2265.59738	10356.55444	22193.52879	13691.5492	1360.28144	11299.57255	2.8555	2.76312
551677.61	4173136.04	17561.67036	21920.05735	2123.55272	9874.16501	18085.22366	12154.6255	1269.2378	10684.0619	3.94818	3.78068
551670.98	4173140.24	16176.63154	20933.41813	2080.46879	9794.80954	16627.60349	11798.42594	1240.91512	10581.98558	4.90974	4.66666
551663.91	4173144	15001.78335	20239.1534	2040.67498	9738.80739	15394.04839	11512.3979	1214.67937	10515.38879	6.41976	6.03889
551655.82	4173147.89	13778.69899	19434.95949	2000.10222	9711.06728	14113.92462	11257.08213	1187.77351	10472.03065	9.39408	8.68621
CONCUNIT ug/	m^3										
DEPUNIT g/m^	2										

X	Y	Demolition Area 1A (Phase 1) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 1 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 2 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 3A (Phase 3) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 1B (Phase 1) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 2B (Part 1 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 3B (Phase 3) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Route 1 - From the project site towards US-101 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Route 2 - From US-101 towards the project site Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total** **DPM (ug/m3)**
551654.57	4172831.21	2.05E-03	1.10E-03	3.14E-03	1.14E-02	3.15E-03	2.40E-03	6.16E-03	7.65E-03	4.64E-05	5.18E-05	3.7130E-02
551716.76	4172828.57	3.41E-03	7.92E-04	5.12E-03	4.51E-03	5.16E-03	1.62E-03	6.19E-03	4.55E-03	1.54E-05	1.81E-05	3.1369E-02
551649.89	4172815.61	1.74E-03	9.44E-04	2.23E-03	8.71E-03	2.67E-03	2.05E-03	4.24E-03	5.24E-03	9.52E-05	1.01E-04	2.8027E-02
551704.69	4173051.23	3.96E-03	7.98E-03	2.38E-04	1.01E-03	6.47E-03	1.25E-02	5.21E-04	1.69E-03	1.92E-05	2.27E-05	3.4368E-02
551697.04	4173056.12	3.27E-03	7.32E-03	2.32E-04	9.84E-04	5.33E-03	1.17E-02	5.06E-04	1.64E-03	2.12E-05	2.50E-05	3.0992E-02
551713.64	4172818.43	2.89E-03	7.09E-04	3.47E-03	4.19E-03	4.39E-03	1.46E-03	4.51E-03	3.85E-03	1.66E-05	1.95E-05	2.5513E-02
551744.84	4173071.22	6.34E-03	3.43E-03	1.64E-04	6.37E-04	1.08E-02	5.02E-03	3.55E-04	1.01E-03	1.41E-05	1.67E-05	2.7825E-02
551685.73	4173062.85	2.56E-03	6.14E-03	2.23E-04	9.55E-04	4.15E-03	1.06E-02	4.83E-04	1.57E-03	2.48E-05	2.93E-05	2.6753E-02
551693.48	4172805.94	2.25E-03	6.81E-04	2.56E-03	4.34E-03	3.44E-03	1.45E-03	3.70E-03	3.26E-03	2.72E-05	3.12E-05	2.1756E-02
551748.31	4173078.63	5.51E-03	2.68E-03	1.51E-04	5.80E-04	9.51E-03	4.21E-03	3.27E-04	9.08E-04	1.39E-05	1.66E-05	2.3899E-02
551704.92	4172802.82	2.26E-03	6.17E-04	2.20E-03	3.70E-03	3.45E-03	1.30E-03	3.11E-03	2.91E-03	2.06E-05	2.40E-05	1.9603E-02
551752.29	4173085.04	4.80E-03	2.20E-03	1.41E-04	5.34E-04	8.30E-03	3.62E-03	3.04E-04	8.28E-04	1.37E-05	1.63E-05	2.0745E-02
551674.72	4173072.64	1.99E-03	4.78E-03	2.07E-04	8.94E-04	3.22E-03	8.75E-03	4.45E-04	1.45E-03	3.06E-05	3.59E-05	2.1795E-02
551715.06	4172799.44	2.20E-03	5.64E-04	1.79E-03	3.23E-03	3.37E-03	1.17E-03	2.62E-03	2.63E-03	1.69E-05	2.00E-05	1.7597E-02
551635.88	4173076.31	1.25E-03	4.67E-03	2.00E-04	9.65E-04	2.01E-03	9.08E-03	4.22E-04	1.59E-03	8.42E-05	9.65E-05	2.0367E-02
551755.16	4173091.63	4.05E-03	1.85E-03	1.32E-04	4.96E-04	6.98E-03	3.16E-03	2.84E-04	7.62E-04	1.36E-05	1.61E-05	1.7744E-02
551680.83	4173081.2	1.96E-03	3.70E-03	1.89E-04	7.92E-04	3.18E-03	6.75E-03	4.07E-04	1.26E-03	2.90E-05	3.41E-05	1.8307E-02
551737.93	4173093.18	3.35E-03	2.07E-03	1.41E-04	5.30E-04	5.69E-03	3.50E-03	3.04E-04	8.17E-04	1.58E-05	1.87E-05	1.6429E-02
551639.86	4173086.4	1.21E-03	3.47E-03	1.84E-04	8.59E-04	1.95E-03	6.90E-03	3.89E-04	1.39E-03	8.26E-05	9.46E-05	1.6522E-02
551731.74	4173096.94	2.89E-03	2.00E-03	1.41E-04	5.28E-04	4.86E-03	3.42E-03	3.03E-04	8.12E-04	1.68E-05	2.00E-05	1.4996E-02
551690.01	4173093.13	1.92E-03	2.69E-03	1.67E-04	6.71E-04	3.13E-03	4.86E-03	3.59E-04	1.05E-03	2.67E-05	3.15E-05	1.4905E-02
551733.73	4173104.89	2.51E-03	1.68E-03	1.32E-04	4.90E-04	4.20E-03	2.95E-03	2.82E-04	7.44E-04	1.69E-05	2.01E-05	1.3028E-02
551643.22	4173100.77	1.12E-03	2.47E-03	1.64E-04	7.40E-04	1.81E-03	5.01E-03	3.46E-04	1.16E-03	8.85E-05	1.01E-04	1.3010E-02
551721.13	4173111.96	2.00E-03	1.60E-03	1.31E-04	4.91E-04	3.31E-03	2.85E-03	2.81E-04	7.42E-04	1.97E-05	2.33E-05	1.1451E-02
551710.23	4173112.37	1.82E-03	1.68E-03	1.35E-04	5.15E-04	3.00E-03	3.02E-03	2.90E-04	7.79E-04	2.23E-05	2.63E-05	1.1299E-02
551648.42	4173109.03	1.10E-03	2.09E-03	1.54E-04	6.75E-04	1.78E-03	4.23E-03	3.25E-04	1.05E-03	8.14E-05	9.26E-05	1.1577E-02
551703.6	4173116.57	1.64E-03	1.60E-03	1.34E-04	5.12E-04	2.69E-03	2.93E-03	2.86E-04	7.73E-04	2.46E-05	2.90E-05	1.0616E-02
551655.15	4173116.67	1.10E-03	1.80E-03	1.44E-04	6.17E-04	1.78E-03	3.62E-03	3.06E-04	9.48E-04	7.04E-05	8.03E-05	1.0476E-02
551696.53	4173120.32	1.49E-03	1.54E-03	1.32E-04	5.12E-04	2.43E-03	2.86E-03	2.82E-04	7.72E-04	2.77E-05	3.25E-05	1.0074E-02
551688.44	4173124.22	1.34E-03	1.48E-03	1.31E-04	5.13E-04	2.18E-03	2.81E-03	2.79E-04	7.73E-04	3.25E-05	3.80E-05	9.5705E-03
551677.61	4173136.04	1.10E-03	1.27E-03	1.23E-04	4.89E-04	1.78E-03	2.49E-03	2.60E-04	7.31E-04	4.50E-05	5.20E-05	8.3330E-03
551670.98	4173140.24	1.01E-03	1.21E-03	1.20E-04	4.86E-04	1.63E-03	2.42E-03	2.54E-04	7.24E-04	5.60E-05	6.42E-05	7.9771E-03
551663.91	4173144	9.37E-04	1.17E-03	1.18E-04	4.83E-04	1.51E-03	2.36E-03	2.49E-04	7.19E-04	7.32E-05	8.30E-05	7.7048E-03
551655.82	4173147.89	8.60E-04	1.12E-03	1.16E-04	4.81E-04	1.39E-03	2.31E-03	2.43E-04	7.16E-04	1.07E-04	1.19E-04	7.4619E-03

Maximum DPM (ug/m3)	**Mitigated DPM Concentrations** **MIR UTM** X	Y
3.7130E-02	551654.57	4172831.21

UTM	551568.65	4173003.88
Latitude, Longitude	37°42'10.1"N 122°24'54.0"W	

Existing Phase 4 Receptors—Midway Village Project

Existing Phase 4 Receptors Scenario: Exposed to Phases 1+2+3 Demolition and Phases 1+2+3 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

	Mitigated Concentrations
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 1A (Phase 1) (grams/m2/sec):	1.94E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	3.12E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	3.12E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	2.73E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 1B (Phase 1) (grams/m2/sec):	5.90E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	3.86E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	3.86E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	7.50E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	3.62E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	3.66E-04

		Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions
		Demolition Area 1A (Phase 1)	Demolition Area 2A (Part 1 of 2 Phase 2)	Demolition Area 2A (Part 2 of 2 Phase 2)	Demolition Area 3A (Phase 3)	Construction Area 1B (Phase 1)	Construction Area 2B (Part 1 of 2 Phase 2)	Construction Area 2B and 2B/3B (Part 2 of Phase 2)	Construction Area 3B (Phase 3)	Route 1 - From the project site towards US-101	Route 2 - From US-101 towards the project site
X	Y	SRCGP7	SRCGP8	SRCGP1	SRCGP2	SRCGP3	SRCGP4	SRCGP5	SRCGP6	SRCGP9	SRCGP10
551654.57	4172831.21	32822.94171	19026.38252	54296.50246	229637.7714	31998.57524	11730.78746	30042.46367	111908.6816	4.06938	3.76524
551716.76	4172828.57	54546.74792	13707.53485	88532.27527	90883.56175	52508.88826	7903.0747	30186.00969	66464.36045	1.35009	1.31986
551649.89	4172815.61	27849.11237	16320.05325	38613.48378	175673.4734	27191.43462	10022.68468	20684.37253	76635.09629	8.35339	7.34985
551704.69	4173051.23	63409.20601	138092.6518	4112.94019	20332.57578	65770.74812	60799.63065	2539.96134	24696.27124	1.68431	1.65381
551697.04	4173056.12	52343.63771	126550.7739	4010.29741	19852.76327	54172.00096	56967.92672	2466.29931	23946.90344	1.85585	1.81999
551713.64	4172818.43	46289.8794	12255.28406	59970.528	84556.65979	44689.14753	7133.79459	22004.11594	56360.31331	1.455	1.4173
551744.84	4173071.22	101494.4306	59254.54434	2832.38456	12853.32413	110330.6338	24493.01965	1734.32933	14761.22127	1.23703	1.2182
551685.73	4173062.85	40931.24975	106189.8322	3857.04563	19264.04168	42237.44357	51801.53687	2357.08584	23003.64617	2.17649	2.12961
551693.48	4172805.94	36107.54003	11781.15238	44282.55096	87618.59063	35013.89837	7093.05277	18073.12913	47643.52675	2.3883	2.2666
551748.31	4173078.63	88178.69652	46317.55488	2614.43703	11698.5965	96729.38028	20540.75887	1595.74594	13278.41128	1.22328	1.20459
551704.92	4172802.82	36248.49202	10668.83831	38129.2771	74559.29255	35138.14662	6335.79631	15189.03363	42579.41359	1.80559	1.74678
551752.29	4173085.04	76810.46911	37986.38452	2433.08959	10775.29251	84406.91341	17659.84982	1480.9863	12109.7237	1.20182	1.18349
551674.72	4173072.64	31816.88608	82613.08352	3582.18095	18036.91784	32749.16405	42688.6625	2173.23419	21200.25865	2.6848	2.61267
551715.06	4172799.44	35315.61061	9747.64894	30883.6655	65097.93181	34245.24374	5715.26888	12759.87527	38406.52465	1.4856	1.45212
551635.88	4173076.31	20035.75268	80798.81987	3451.16278	19459.20029	20439.74629	44296.18358	2056.42637	23247.10564	7.39133	7.01717
551755.16	4173091.63	64816.66346	32026.82436	2282.0251	10014.83154	70986.57396	15433.66488	1385.58976	11146.18589	1.19286	1.17455
551680.83	4173081.2	31376.29342	63998.1164	3277.68909	15985.64917	32393.1794	32925.83907	1987.50608	18463.37423	2.54513	2.47912
551737.93	4173093.18	53661.00073	35739.57931	2440.41652	10698.84234	57857.60664	17062.61616	1483.47281	11952.50232	1.38253	1.35923
551639.86	4173086.4	19400.90611	59935.79543	3178.90196	17327.97822	19820.78184	33674.75864	1895.55486	20265.32386	7.2488	6.8804
551731.74	4173096.94	46312.21873	34610.1263	2433.63768	10661.35746	49451.55373	16691.48079	1477.93239	11870.80497	1.47813	1.452
551690.01	4173093.13	30717.20819	46546.55004	2890.45092	13543.22421	31849.87693	23719.23465	1750.52297	15321.89106	2.34603	2.28856
551733.73	4173104.89	40141.46807	29104.18304	2274.73357	9881.30164	42758.0228	14399.67892	1377.89076	10878.8596	1.48542	1.4587
551643.22	4173100.77	17973.68846	42636.43984	2831.84711	14919.42018	18386.09259	24452.1717	1687.68301	17031.1355	7.7644	7.32033
551721.13	4173111.96	32033.12475	27656.2531	2266.28803	9906.92947	33689.01801	13920.23058	1369.79089	10844.3866	1.7259	1.69125
551710.23	4173112.37	29223.63076	29041.24573	2342.50818	10383.80382	30545.32139	14754.50967	1414.78254	11394.65046	1.95619	1.91343
551648.42	4173109.03	17659.66721	36074.50715	2656.53991	13626.21244	18085.81944	20652.55408	1584.13848	15348.9442	7.1449	6.73665
551703.6	4173116.57	26278.35037	27647.22876	2313.2183	10330.95139	27360.30939	14290.53548	1394.54537	11306.3757	2.16126	2.11021
551655.15	4173116.67	17673.32266	31162.24818	2498.13651	12449.61301	18125.37508	17673.80064	1490.91707	13866.20609	6.17523	5.84301
551696.53	4173120.32	23810.13295	26562.06023	2290.4002	10331.63515	24706.62618	13970.65864	1378.19469	11287.22588	2.43216	2.36567
551688.44	4173124.22	21457.89109	25533.69718	2265.59738	10356.55444	22193.52879	13691.5492	1360.28144	11299.57255	2.8555	2.76312
551677.61	4173136.04	17561.67036	21920.05735	2123.55272	9874.16501	18085.22366	12154.6255	1269.2378	10684.0619	3.94818	3.78068
551670.98	4173140.24	16176.63154	20933.41813	2080.46879	9794.80954	16627.60349	11798.42594	1240.91512	10581.98558	4.90974	4.66666
551663.91	4173144	15001.78335	20239.1534	2040.67498	9738.80739	15394.04839	11512.3979	1214.67937	10515.38879	6.41976	6.03889
551655.82	4173147.89	13778.69899	19434.95949	2000.10222	9711.06728	14113.92462	11257.08213	1187.77351	10472.03065	9.39408	8.68621
CONCUNIT ug/	m^3										
DEPUNIT g/m^	2										

Demolition Area 1A (Phase 1) Annual PM2.5	Demolition Area 2A (Part 1 of 2 Phase 2) Annual PM2.5	Demolition Area 2A (Part 2 of 2 Phase 2) Annual PM2.5	Demolition Area 3A (Phase 3) Annual PM2.5	Construction Area 1B (Phase 1) Annual PM2.5	Construction Area 2B (Part 1 of 2 Phase 2) Annual PM2.5	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual PM2.5	Construction Area 3B (Phase 3) Annual PM2.5	Route 1 - From the project site towards US-101 Annual PM2.5	Route 2 - From US-101 towards the project site Annual PM2.5	**Total**
w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	w/Actual Emissions (ug/m3)	**PM2.5 (ug/m3)**
6.37E-03	5.94E-03	1.70E-02	6.27E-02	1.89E-02	4.53E-03	1.16E-02	8.39E-02	1.47E-03	1.38E-03	2.1378E-01
1.06E-02	4.28E-03	2.77E-02	2.48E-02	3.10E-02	3.05E-03	1.17E-02	4.98E-02	4.88E-04	4.83E-04	1.6385E-01
5.40E-03	5.10E-03	1.21E-02	4.80E-02	1.61E-02	3.87E-03	7.98E-03	5.75E-02	3.02E-03	2.69E-03	1.6163E-01
1.23E-02	4.31E-02	1.28E-03	5.56E-03	3.88E-02	2.35E-02	9.80E-04	1.85E-02	6.09E-04	6.05E-04	1.4528E-01
1.02E-02	3.95E-02	1.25E-03	5.42E-03	3.20E-02	2.20E-02	9.52E-04	1.80E-02	6.71E-04	6.65E-04	1.3057E-01
8.98E-03	3.83E-03	1.87E-02	2.31E-02	2.64E-02	2.75E-03	8.49E-03	4.23E-02	5.26E-04	5.18E-04	1.3557E-01
1.97E-02	1.85E-02	8.85E-04	3.51E-03	6.51E-02	9.45E-03	6.69E-04	1.11E-02	4.47E-04	4.45E-04	1.2981E-01
7.94E-03	3.32E-02	1.20E-03	5.26E-03	2.49E-02	2.00E-02	9.10E-04	1.72E-02	7.87E-04	7.79E-04	1.1223E-01
7.01E-03	3.68E-03	1.38E-02	2.39E-02	2.07E-02	2.74E-03	6.98E-03	3.57E-02	8.64E-04	8.29E-04	1.1625E-01
1.71E-02	1.45E-02	8.17E-04	3.20E-03	5.71E-02	7.93E-03	6.16E-04	9.95E-03	4.42E-04	4.40E-04	1.1208E-01
7.03E-03	3.33E-03	1.19E-02	2.04E-02	2.07E-02	2.45E-03	5.86E-03	3.19E-02	6.53E-04	6.39E-04	1.0491E-01
1.49E-02	1.19E-02	7.60E-04	2.94E-03	4.98E-02	6.82E-03	5.72E-04	9.08E-03	4.35E-04	4.33E-04	9.7637E-02
6.17E-03	2.58E-02	1.12E-03	4.93E-03	1.93E-02	1.65E-02	8.39E-04	1.59E-02	9.71E-04	9.55E-04	9.2496E-02
6.85E-03	3.04E-03	9.65E-03	1.78E-02	2.02E-02	2.21E-03	4.93E-03	2.88E-02	5.37E-04	5.31E-04	9.4541E-02
3.89E-03	2.52E-02	1.08E-03	5.32E-03	1.21E-02	1.71E-02	7.94E-04	1.74E-02	2.67E-03	2.57E-03	8.8146E-02
1.26E-02	1.00E-02	7.13E-04	2.74E-03	4.19E-02	5.96E-03	5.35E-04	8.36E-03	4.31E-04	4.29E-04	8.3645E-02
6.09E-03	2.00E-02	1.02E-03	4.37E-03	1.91E-02	1.27E-02	7.67E-04	1.38E-02	9.20E-04	9.06E-04	7.9739E-02
1.04E-02	1.12E-02	7.62E-04	2.92E-03	3.42E-02	6.59E-03	5.73E-04	8.96E-03	5.00E-04	4.97E-04	7.6533E-02
3.76E-03	1.87E-02	9.93E-04	4.73E-03	1.17E-02	1.30E-02	7.32E-04	1.52E-02	2.62E-03	2.52E-03	7.3975E-02
8.99E-03	1.08E-02	7.60E-04	2.91E-03	2.92E-02	6.44E-03	5.71E-04	8.90E-03	5.34E-04	5.31E-04	6.9642E-02
5.96E-03	1.45E-02	9.03E-04	3.70E-03	1.88E-02	9.16E-03	6.76E-04	1.15E-02	8.48E-04	8.37E-04	6.6908E-02
7.79E-03	9.09E-03	7.11E-04	2.70E-03	2.52E-02	5.56E-03	5.32E-04	8.16E-03	5.37E-04	5.33E-04	6.0849E-02
3.49E-03	1.33E-02	8.85E-04	4.08E-03	1.09E-02	9.44E-03	6.51E-04	1.28E-02	2.81E-03	2.68E-03	6.0963E-02
6.22E-03	8.64E-03	7.08E-04	2.71E-03	1.99E-02	5.37E-03	5.29E-04	8.13E-03	6.24E-04	6.18E-04	5.3432E-02
5.67E-03	9.07E-03	7.32E-04	2.84E-03	1.80E-02	5.70E-03	5.46E-04	8.54E-03	7.07E-04	7.00E-04	5.2534E-02
3.43E-03	1.13E-02	8.30E-04	3.72E-03	1.07E-02	7.97E-03	6.12E-04	1.15E-02	2.58E-03	2.46E-03	5.5062E-02
5.10E-03	8.64E-03	7.23E-04	2.82E-03	1.62E-02	5.52E-03	5.38E-04	8.48E-03	7.81E-04	7.72E-04	4.9516E-02
3.43E-03	9.73E-03	7.80E-04	3.40E-03	1.07E-02	6.82E-03	5.76E-04	1.04E-02	2.23E-03	2.14E-03	5.0208E-02
4.62E-03	8.30E-03	7.15E-04	2.82E-03	1.46E-02	5.39E-03	5.32E-04	8.46E-03	8.79E-04	8.65E-04	4.7172E-02
4.16E-03	7.98E-03	7.08E-04	2.83E-03	1.31E-02	5.29E-03	5.25E-04	8.47E-03	1.03E-03	1.01E-03	4.5103E-02
3.41E-03	6.85E-03	6.63E-04	2.70E-03	1.07E-02	4.69E-03	4.90E-04	8.01E-03	1.43E-03	1.38E-03	4.0294E-02
3.14E-03	6.54E-03	6.50E-04	2.68E-03	9.82E-03	4.55E-03	4.79E-04	7.93E-03	1.78E-03	1.71E-03	3.9268E-02
2.91E-03	6.32E-03	6.37E-04	2.66E-03	9.09E-03	4.44E-03	4.69E-04	7.88E-03	2.32E-03	2.21E-03	3.8944E-02
2.67E-03	6.07E-03	6.25E-04	2.65E-03	8.33E-03	4.35E-03	4.59E-04	7.85E-03	3.40E-03	3.18E-03	3.9582E-02

Mitigated PM2.5 Concentrations

Maximum DPM (ug/m3)	**MIR UTM** X	Y
2.1378E-01	551654.57	4172831.21

UTM	551558.98	4172977.03
Latitude, Longitude	37°42'09.3"N 122°24'54.4"W	

Scenario 5

Cancer Risk Calculations Using OEHHA/BAAQMD Cancer Risk Assumptions
Midway Village Project—New Phase 1 Receptors Scenario
Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant
UTM: 551738.04 4172975.17

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Age	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.476115369	10	361	1	0.21	5.5
0-1	0.476115369	10	1,090	1	0.78	61.3
1-<2	0.476115369	10	1,090	1	0.36	28.5
2-<3	0.476115369	3	631	1	0.81	11.1
					Total	106.28

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.066694665	10	361	1	0.21	0.8
0-1	0.066694665	10	1,090	1	0.78	8.6
1-<2	0.066694665	10	1,090	1	0.36	4.0
2-<3	0.066694665	3	631	1	0.81	1.5
					Total	14.89

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child
UTM: 551738.04 4172975.17

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Period	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.476115369	3	572	1	2.17	26.7
					Total	26.75

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.066694665	3	572	1	2.17	3.7
					Total	3.75

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult
UTM: 551738.04 4172975.17

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.476115369	1	261	0.73	2.17	3.0
					Total	2.97

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.066694665	1	261	0.73	2.17	0.4
					Total	0.416

Midway Village Project—New Phase 1 Receptors Scenario

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551738.04	4172975.17	0.4761	0.4761	0.09522

Unmitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551728.04	4172945.17	0.6683	0.6683

Mitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551738.04	4172975.17	0.0667	0.0667	0.01334

Mitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551728.04	4172945.17	0.2748	0.2748

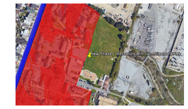
Midway Village Project—New Phase 1 Receptors

Phase 1 Receptors: Exposed to Phases 2+3+4 Demolition and Phases 2+3+4 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

	Unmitigated Concentrations
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	8.71E-07
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	8.71E-07
Annual Average Onsite DPM Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	6.37E-07
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	8.02E-07
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	8.02E-07
Annual Average Onsite DPM Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	8.39E-07
Annual Average Onsite DPM Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	8.39E-07
Annual Average Onsite DPM Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	5.32E-07
Annual Average Onsite DPM Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	3.68E-07
Annual Average Onsite DPM Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	3.68E-07
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	8.50E-06
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	1.06E-05

		Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions	Unit Emissions
		Construction Area 2B (Part 1 of 2 Phase 2)	Construction Area 2B and 2B/3B (Part 2 of Phase 2)	Construction Area 3B (Phase 3)	Construction Area 4B and Area 2B/4B (Phase 4)	Construction Area 4B (Phase 4/5)	Demolition Area 2A (Part 1 of 2 Phase 2)	Demolition Area 2A (Part 2 of 2 Phase 2)	Demolition Area 3A (Phase 3)	Demolition Area 4A (Part 1 of 2 Phase 4)	Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5)	Route 1 - From the project site towards US-101	Route 2 - From US-101 towards the project site
X	Y	AREA8	AREA9	AREA10	AREA11	AREA12	AREA13	AREA2	AREA3	AREA4	AREA5	AREA6	AREA7
551728.04	4172945.17	73779.68061	14007.31973	190768.4562	16234.98242	39869.25405	109911.1046	20397.25202	162632.0495	6403.44498	24272.24619	1.11373	1.09757
551738.04	4172975.17	133270.6636	6221.9835	99225.30638	10368.16048	69532.87926	191202.6087	9549.30107	80954.96208	4201.86211	38693.14198	1.08026	1.06536
551728.04	4172935.17	57211.11469	19574.94964	195082.951	18896.23327	33484.86147	87660.86714	27569.28724	167347.8846	7369.84343	20854.30018	1.10299	1.08692

Total
DPM (ug/m3)
4.5015E-01
4.7612E-01
4.2929E-01
4.4501E-01
4.6487E-01
4.1497E-01
4.5563E-01
4.1077E-01
4.3218E-01
4.0511E-01
4.0553E-01
3.8396E-01
4.0238E-01
3.9996E-01
3.6309E-01
3.8791E-01
3.5142E-01
3.7164E-01



Unmitigated DPM Concentrations		
Maximum DPM (ug/m3)	MIR UTM X	Y
4.7612E-01	551738.04	4172975.17

MIR		
UTM	551738.04	4172975.17
Latitude, Longitude	37°42'09.2"N 122°24'47.1"W	

CONCUNIT ug/m^3
DEPUNIT g/m^2

Construction Health Risk Assessment Files

Midway Village Project—New Phase 1 Receptors

Phase 1 Receptors: Exposed to Phases 2+3+4 Demolition and Phases 2+3+4 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

Unmitigated Concentrations

Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	1.13E-06	6
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	1.13E-06	7
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	8.62E-07	8
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	8.68E-07	9
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	8.68E-07	10
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	1.02E-06	12
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	1.02E-06	13
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	1.21E-06	14
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	8.14E-07	15
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	8.14E-07	16
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	3.32E-04	17
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	3.36E-04	18

Unmitigated PM2.5 Concentrations		
Maximum DPM (ug/m3)	MIR UTM X	Y
6.6829E-01	551728.04	4172945.17

PM2.5 MIR
UTM 551728.04 4172945.17
Latitude, Longitude 37°42'08.2"N 122°24'47.5"W

X	Y	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) AREA8	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) AREA9	Unit Emissions Construction Area 3B (Phase 3) AREA10	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA11	Unit Emissions Construction Area 4B (Phase 4/5) AREA12	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) AREA13	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) AREA2	Unit Emissions Demolition Area 3A (Phase 3) AREA3	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA4	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA5	Unit Emissions Route 1 - From the project site towards US-101 AREA6	Unit Emissions Route 2 - From US-101 towards the project site AREA7	Construction Area 2B (Part 1 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 3B (Phase 3) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 4B and Area 2B/4B (Phase 4) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 1 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 2 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 3A (Phase 3) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 1 of 2 Phase 4) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) Annual PM2.5 w/Actual Emissions (ug/m3)	Route 1 - From the project site towards US-101 Annual PM2.5 w/Actual Emissions (ug/m3)	Route 2 - From US-101 towards the project site Annual PM2.5 w/Actual Emissions (ug/m3)	Total PM2.5 (ug/m3)
551728.04	4172945.17	73779.68061	14007.31973	190768.4562	16234.98242	39869.25405	109911.1046	20397.25202	162632.0495	6403.44498	24272.24619	1.11373	1.09757	8.31E-02	1.58E-02	1.65E-01	1.41E-02	3.46E-02	1.12E-01	2.08E-02	1.97E-01	5.21E-03	1.98E-02	3.70E-04	3.68E-04	6.6829E-01
551738.04	4172975.17	133270.6636	6221.9835	99225.30638	10368.16048	69532.87926	191202.6087	9549.30107	80954.96208	4201.86211	38693.14198	1.08026	1.06536	1.50E-01	7.01E-03	8.56E-02	9.00E-03	6.04E-02	1.95E-01	9.75E-03	9.83E-02	3.42E-03	3.15E-02	3.59E-04	3.58E-04	6.5092E-01
551728.04	4172935.17	57211.11469	19574.94964	195082.951	18896.23327	33484.86147	87660.86714	27569.28724	167347.8846	7369.84343	20854.30018	1.10299	1.08692	6.44E-02	2.20E-02	1.68E-01	1.64E-02	2.91E-02	8.95E-02	2.81E-02	2.03E-01	6.00E-03	1.70E-02	3.66E-04	3.65E-04	6.4471E-01
551738.04	4172965.17	108419.4631	7658.28124	125103.0277	11686.71934	55488.74309	156966.0204	11605.97538	103907.9774	4691.96995	32230.92089	1.06532	1.05066	1.22E-01	8.63E-03	1.08E-01	1.01E-02	4.82E-02	1.60E-01	1.18E-02	1.26E-01	3.82E-03	2.62E-02	3.54E-04	3.53E-04	6.2596E-01
551748.04	4173005.17	112297.4024	3543.73846	41515.93591	7240.69308	140451.1413	203213.2735	5601.93095	34295.35344	2992.58788	66483.48418	1.05928	1.04512	1.26E-01	3.99E-03	3.58E-02	6.29E-03	1.22E-01	2.07E-01	5.72E-03	4.16E-02	2.44E-03	5.41E-02	3.52E-04	3.51E-04	6.0658E-01
551728.04	4172925.17	45310.41812	29098.63205	188645.3123	22332.28498	28512.87716	71364.89373	38930.26518	163185.5094	8607.1784	18095.36117	1.09518	1.07912	5.10E-02	3.28E-02	1.63E-01	1.94E-02	2.48E-02	7.29E-02	3.97E-02	1.98E-01	7.00E-03	1.47E-02	3.64E-04	3.62E-04	6.2382E-01
551748.04	4172995.17	126560.0827	4105.22326	51648.14959	7979.4053	106915.0344	199784.4013	6442.86821	42616.37369	3273.11386	53847.46668	1.04207	1.02825	1.43E-01	4.62E-03	4.45E-02	6.93E-03	9.28E-02	2.04E-01	6.58E-03	5.17E-02	2.66E-03	4.38E-02	3.46E-04	3.45E-04	6.0093E-01
551738.04	4172955.17	83791.18227	9721.17093	142897.1469	13283.85814	45257.74866	122687.2417	14478.73858	120832.616	5283.15684	27162.14156	1.05216	1.03768	9.44E-02	1.09E-02	1.23E-01	1.15E-02	3.93E-02	1.25E-01	1.48E-02	1.47E-01	4.30E-03	2.21E-02	3.49E-04	3.48E-04	5.9322E-01
551748.04	4172985.17	123738.7738	4825.42622	65025.63039	8839.29587	82067.20268	182707.1704	7509.4305	53907.0103	3596.98291	44112.26646	1.02589	1.01236	1.39E-01	5.43E-03	5.61E-02	7.68E-03	7.13E-02	1.87E-01	7.67E-03	6.54E-02	2.93E-03	3.59E-02	3.41E-04	3.40E-04	5.7896E-01
551758.04	4173035.17	46603.08432	2299.2049	22501.36281	5370.12386	206227.3548	144086.9695	3708.20348	19050.72021	2249.14334	118035.0786	1.04342	1.02958	5.25E-02	2.59E-03	1.94E-02	4.66E-03	1.79E-01	1.47E-01	3.79E-03	2.31E-02	1.83E-03	9.61E-02	3.46E-04	3.46E-04	5.3081E-01
551758.04	4173025.17	60315.47961	2572.51359	26430.65827	5816.36785	181035.1862	159052.7344	4128.89211	22261.88063	2422.68049	93337.80802	1.02494	1.01154	6.79E-02	2.90E-03	2.28E-02	5.05E-03	1.57E-01	1.62E-01	4.22E-03	2.70E-02	1.97E-03	7.60E-02	3.40E-04	3.40E-04	5.2810E-01
551738.04	4172945.17	65412.6626	12874.47684	151317.7593	15280.8682	37592.39512	97095.73403	18684.08919	129820.1699	6021.67248	23151.10704	1.04159	1.02724	7.37E-02	1.45E-02	1.31E-01	1.33E-02	3.26E-02	9.91E-02	1.91E-02	1.58E-01	4.90E-03	1.88E-02	3.46E-04	3.45E-04	5.6482E-01
551748.04	4172975.17	109400.5307	5783.6521	81107.50651	9860.31773	64502.54439	157703.4911	8905.69736	67667.46235	3979.36656	36559.70125	1.01119	0.99791	1.23E-01	6.51E-03	6.99E-02	8.56E-03	5.60E-02	1.61E-01	9.09E-03	8.21E-02	3.24E-03	2.98E-02	3.36E-04	3.35E-04	5.5015E-01
551758.04	4173015.17	76185.34731	2903.97443	31430.95047	6327.71947	150951.7474	165024.1689	4635.51848	26407.97102	2619.57754	74694.50328	1.00747	0.99447	8.58E-02	3.27E-03	2.71E-02	5.49E-03	1.31E-01	1.68E-01	4.73E-03	3.21E-02	2.13E-03	6.08E-02	3.34E-04	3.34E-04	5.2161E-01
551738.04	4172935.17	51700.64471	17745.0931	151107.0616	17706.17666	31653.8395	78726.10464	24833.2625	131517.6967	6916.58416	19907.06004	1.0319	1.01762	5.82E-02	2.00E-02	1.30E-01	1.54E-02	2.75E-02	8.04E-02	2.54E-02	1.60E-01	5.63E-03	1.62E-02	3.43E-04	3.42E-04	5.3930E-01
551758.04	4173005.17	88698.5757	3313.05452	37818.31735	6918.36921	120765.6883	162749.7941	5256.14804	31776.95537	2844.90858	60628.10272	0.99106	0.9784	9.99E-02	3.73E-03	3.26E-02	6.01E-03	1.05E-01	1.66E-01	5.37E-03	3.86E-02	2.32E-03	4.93E-02	3.29E-04	3.28E-04	5.0953E-01
551738.04	4172925.17	41622.09877	25703.61521	146327.194	20834.15324	27003.03479	65045.66406	34073.23444	129105.9247	8064.30904	17279.87403	1.02472	1.01045	4.69E-02	2.89E-02	1.26E-01	1.81E-02	2.34E-02	6.64E-02	3.48E-02	1.57E-01	6.56E-03	1.41E-02	3.40E-04	3.39E-04	5.2279E-01
551748.04	4172965.17	90068.66837	7094.79579	96989.98594	11073.83131	51918.44005	130102.1797	10772.85661	81919.4485	4432.67078	30616.09184	0.99778	0.9847	1.01E-01	7.99E-03	8.36E-02	9.62E-03	4.51E-02	1.33E-01	1.10E-02	9.95E-02	3.61E-03	2.49E-02	3.31E-04	3.31E-04	5.2023E-01
551738.04	4172915.17	34023.92702	38958.26503	138492.8619	25060.93823	23296.44274	54162.5306	48924.04412	124070.797	9587.05346	15131.09305	1.02066	1.00632	3.83E-02	4.39E-02	1.19E-01	2.18E-02	2.02E-02	5.53E-02	4.99E-02	1.51E-01	7.80E-03	1.23E-02	3.39E-04	3.38E-04	5.2029E-01
551758.04	4172995.17	94282.37159	3830.23129	45889.9226	7607.96844	94853.95478	153789.5079	6032.28686	38665.50716	3106.08533	49798.89577	0.97586	0.9635	1.06E-01	4.31E-03	3.96E-02	6.61E-03	8.24E-02	1.57E-01	6.16E-03	4.69E-02	2.53E-03	4.05E-02	3.24E-04	3.23E-04	4.9286E-01
551748.04	4172955.17	72120.30857	8971.00682	109045.5196	12552.23479	42626.18312	105358.9456	13357.98857	93666.61476	4985.01294	25908.70277	0.98619	0.97327	8.12E-02	1.01E-02	9.40E-02	1.09E-02	3.70E-02	1.08E-01	1.36E-02	1.14E-01	4.06E-03	2.11E-02	3.27E-04	3.27E-04	4.9400E-01
551768.04	4173055.17	26694.916	1769.95077	15976.59939	4446.37315	193421.8131	73102.79522	2886.18842	13873.75329	1870.68734	149480.0752	1.01002	0.99668	3.01E-02	1.99E-03	1.38E-02	3.86E-03	1.68E-01	7.46E-02	2.95E-03	1.68E-02	1.52E-03	1.22E-01	3.35E-04	3.35E-04	4.3591E-01
551768.04	4173065.17	22123.93066	1616.24362	14083.88226	4156.33174	199893.1776	55007.37164	2645.0605	12349.59282	1755.16615	164335.851	1.02864	1.01475	2.49E-02	1.82E-03	1.21E-02	3.61E-03	1.74E-01	5.62E-02	2.70E-03	1.50E-02	1.43E-03	1.34E-01	3.41E-04	3.41E-04	4.2577E-01
551768.04	4173045.17	32570.16686	1949.03205	18284.99207	4772.49739	179914.1721	93073.1659	3165.93486	15748.72139	1999.29656	125179.611	0.99219	0.97935	3.67E-02	2.20E-03	1.58E-02	4.14E-03	1.56E-01	9.50E-02	3.23E-03	1.91E-02	1.63E-03	1.02E-01	3.29E-04	3.29E-04	4.3654E-01
551758.04	4172985.17	92007.43136	4496.7135	55632.99792	8413.17463	74715.84493	140201.1068	7018.67489	47098.30541	3409.46856	41286.71072	0.96168	0.94957	1.04E-01	5.06E-03	4.80E-02	7.31E-03	6.49E-02	1.43E-01	7.17E-03	5.72E-02	2.77E-03	3.36E-02	3.19E-04	3.19E-04	4.7334E-01
551748.04	4172945.17	57829.20048	11750.27988	115842.9548	14375.05458	35554.78569	85793.75059	17021.69023	101175.0313	5667.38698	22135.86256	0.97643	0.96362	6.51E-02	1.32E-02	9.99E-02	1.25E-02	3.09E-02	8.76E-02	1.74E-02	1.23E-01	4.61E-03	1.80E-02	3.24E-04	3.23E-04	4.7269E-01
551768.04	4173035.17	40190.71652	2160.30166	21122.32477	5141.40698	162545.2447	108830.0958	3494.24464	18079.69854	2143.25878	101220.4694	0.97516	0.96276	4.53E-02	2.43E-03	1.82E-02	4.46E-03	1.41E-01	1.11E-01	3.57E-03	2.19E-02	1.74E-03	8.24E-02	3.24E-04	3.23E-04	4.3291E-01
551768.04	4173025.17	49432.15494	2413.12858	24634.73604	5562.27172	142877.588	118497.234	3884.92422	21005.97103	2305.8598	81912.43969	0.95903	0.94702	5.57E-02	2.72E-03	2.12E-02	4.83E-03	1.24E-01	1.21E-01	3.97E-03	2.55E-02	1.88E-03	6.67E-02	3.18E-04	3.18E-04	4.2815E-01
551758.04	4172975.17	83881.09335	5381.43055	66519.95607	9365.68699	59826.1569	123834.5367	8302.6852	56766.20314	3767.65006	34535.97847	0.94872	0.93682	9.45E-02	6.06E-03	5.74E-02	8.13E-03	5.19E-02	1.26E-01	8.48E-03	6.89E-02	3.07E-03	2.81E-02	3.15E-04	3.14E-04	4.5360E-01
551768.04	4173075.17	18501.44826	1482.78641	12516.72701	3895.74144	194210.6388	42002.96105	2434.69305	11092.8956	1650.31924	162741.921	1.04792	1.03342	2.08E-02	1.67E-03	1.08E-02	3.38E-03	1.69E-01	4.29E-02	2.49E-03	1.35E-02	1.34E-03	1.32E-01	3.48E-04	3.47E-04	3.9864E-01
551748.04	4172935.17	46818.81829	15954.47333	117767.5334	16631.81759	30044.33512	70921.94159	22272.74714	104345.9735	6513.02727	19074.41603	0.9681	0.95536	5.27E-02	1.80E-02	1.02E-01	1.44E-02	2.61E-02	7.24E-02	2.27E-02	1.27E-01	5.30E-03	1.55E-02	3.21E-04	3.21E-04	4.5608E-01
551768.04	4173015.17	58888.43505	2720.42537	28982.85518	6043.86117	121976.8145	122872.3519	4356.0123	24682.06221	2490.33784	66969.6353	0.94374	0.93207	6.63E-02	3.06E-03	2.50E-02	5.25E-03	1.06E-01	1.25E-01	4.45E-03	3.00E-02	2.03E-03	5.45E-02	3.13E-04	3.13E-04	4.2255E-01
551748.04	4172925.17	38341.61751	22441.7747	116061.1702	19506.91198	25684.30801	59440.41226	29971.08369	104191.423	7586.03716	16572.9171	0.96145	0.94874	4.32E-02	2.53E-02	1.00E-01	1.69E-02	2.23E-02	6.07E-02	3.06E-02	1.26E-01	6.17E-03	1.35E-02	3.19E-04	3.18E-04	4.4586E-01
551748.04	4172915.17	31783.9866	32797.92287	112078.9878	23410.43886	22190.64338	49899.35212	41655.43272	102169.7543	9018.08258	14521.05017	0.95787	0.9451	3.58E-02	3.69E-02	9.67E-02	2.03E-02	1.93E-02	5.09E-02	4.25E-02	1.24E-01	7.34E-03	1.18E-02	3.18E-04	3.17E-04	4.4629E-01
551758.04	4172965.17	72682.78511	6587.37764	77083.7257	10499.92583	48759.01574	106447.0373	10007.95214	66504.20176	4194.5458	29131.03373	0.93693	0.92521	8.19E-02	7.42E-03	6.65E-02	9.12E-03	4.23E-02	1.09E-01	1.02E-02	8.07E-02	3.41E-03	2.37E-02	3.11E-04	3.11E-04	4.3458E-01
551768.04	4173005.17	66357.97953	3101.39784	34329.18355	6601.48122	101488.3267	122453.2326	4934.55277	29272.84529	2702.52286	55342.51245	0.92944	0.91806	7.47E-02	3.49E-03	2.96E-02	5.73E-03	8.81E-02	1.25E-01	5.04E-03	3.55E-02	2.20E-03	4.50E-02	3.09E-04	3.08E-04	4.1514E-01
551758.04	4172955.17	61190.25839	8287.04933	85805.69745	11879.87422	40355.43212	89969.93291	12331.45805	75021.86396	4715.1595	24782.56137	0.9267	0.91512	6.89E-02	9.33E-03	7.40E-02	1.03E-02	3.50E-02	9.19E-02	1.26E-02	9.11E-02	3.84E-03	2.02E-02	3.08E-04	3.07E-04	4.1775E-01
551768.04	4172995.17	70126.99875	3583.94762	40744.73243	7251.78216	83092.17306	117781.9001	5657.96259	34875.20448	2948.76398	46131.60924	0.91615	0.90503	7.90E-02	4.04E-03	3.51E-02	6.30E-03	7.21E-02	1.20E-01	5.78E-03	4.23E-02	2.40E-03	3.75E-02	3.04E-04	3.04E-04	4.0552E-01
551758.04	4172945.17	50915.76814	10735.15259	91640.54958	13576.53464	33839.89824	75721.04342	15544.54974	81252.19547	5357.229	21251.8099	0.91796	0.90648	5.73E-02	1.21E-02	7.90E-02	1.18E-02	2.94E-02	7.73E-02	1.59E-02	9.86E-02	4.36E-03	1.73E-02	3.05E-04	3.04E-04	4.0372E-01
551768.04	4172985.17	69600.69378	4204.66698	48048.77025	8007.9446	67704.00799	109779.7516	6573.25042	41364.52149	3234.73305	38703.73557	0.90363	0.89273	7.84E-02	4.74E-03	4.14E-02	6.95E-03	5.88E-02	1.12E-01	6.71E-03	5.02E-02	2.63E-03	3.15E-02	3.00E-04	3.00E-04	3.9404E-01
551758.04	4172935.17	42344.95201	14308.91924	94423.50597	15688.00311	28701.96933	64003.65402	20034.22113	84834.4161	6158.47486	18361.40166	0.91061	0.89919	4.77E-02	1.61E-02	8.14E-02	1.36E-02	2.49E-02	6.53E-02	2.05E-02	1.03E-01	5.01E-03	1.49E-02	3.02E-04	3.02E-04	3.9313E-01
551778.04	4173055.17	23962.14231	1670.04249	15144.84081	4264.66565	148843.2249	59308.83657	2729.76127	13250.33783	1786.78979	116071.9225	0.94447	0.93248	2.70E-02	1.88E-03	1.31E-02	3.70E-03	1.29E-01	6.05E-02	2.79E-03	1.61E-02	1.45E-03	9.45E-02	3.14E-04	3.13E-04	3.5084E-01
551778.04	4173045.17	28696.5558	1836.72202	17267.85032	4574.26061	139958.5203	71704.11746	2991.03814	15004.83263	1907.9262	101198.0725	0.92897	0.91741	3.23E-02	2.07E-03	1.49E-02	3.97E-03	1.22E-01	7.32E-02	3.05E-03	1.82E-02	1.55E-03	8.24E-02	3.08E-04	3.08E-04	3.5378E-01
551768.04	4172975.17	65558.56476	5027.83868	55864.40598	8906.75959	55499.36297	99699.29559	7761.48092	48479.2919	3574.44114	32699.61257	0.8923	0.88159	7.38E-02	5.66E-03	4.82E-02	7.73E-03	4.82E-02	1.02E-01	7.92E-03	5.89E-02	2.91E-03	2.66E-02	2.96E-04	2.96E-04	3.8228E-01
551758.04	4172915.17	29714.68176	27491.63487	92639.08177	21919.30482	21276.05407	46328.95777	35544.9863	85469.13007	8496.03071	14009.17443	0.90069	0.8893	3.35E-02	3.10E-02	7.99E-02	1.90E-02	1.85E-02	4.73E-02	3.63E-02	1.04E-01	6.91E-03	1.14E-02	2.99E-04	2.99E-04	3.8809E-01
551778.04	4173065.17	20111.54453	1527.1164	13385.6158	3988.76015	153703.6377	47501.45628	2504.67483	11809.29277	1677.78483	126504.1908	0.96055	0.94809	2.27E-02	1.72E-03	1.15E-02	3.46E-03	1.33E-01	4.85E-02	2.56E-03	1.43E-02	1.37E-03	1.03E-01	3.19E-04	3.18E-04	3.4319E-01
551758.04	4172925.17	35366.35844	19555.15538	94558.1687	18376.50385	24596.71713	54353.50696	26391.85465	86049.91503	7175.07613	15980.65693	0.90473	0.89334	3.98E-02	2.20E-02	8.15E-02	1.60E-02	2.14E-02	5.55E-02	2.69E-02	1.04E-01	5.84E-03	1.30E-02	3.00E-04	3.00E-04	3.8707E-01
551778.04	4173035.17	34351.66561	2033.95431	19842.31757	4924.89031	128401.5617	82465.5781	3298.40906	17157.59248	2043.87811	85693.15374	0.91417	0.90299	3.87E-02	2.29E-03	1.71E-02	4.28E-03	1.11E-01	8.42E-02	3.37E-03	2.08E-02	1.66E-03	6.97E-02	3.03E-04	3.03E-04	3.5426E-01
551778.04	4173025.17	40596.06255	2270.64615	22964.40971	5324.36203	115041.8047	90121.02157	3664.65233	19804.39997	2197.43177	71790.28235	0.90008	0.88924	4.57E-02	2.56E-03	1.98E-02	4.62E-03	9.99E-02	9.20E-02	3.74E-03	2.40E-02	1.79E-03	5.84E-02	2.99E-04	2.98E-04	3.5320E-01
551768.04	4172965.17	59201.51889	6142.22496	63464.42539	9982.54591	45926.55445	88521.45552	9327.93348	55625.25818	3982.05172	27806.01271	0.88211	0.87156	6.67E-02	6.92E-03	5.47E-02	8.67E-03	3.99E-02	9.04E-02	9.52E-03	6.75E-02	3.24E-03	2.26E-02	2.93E-04	2.93E-04	3.7076E-01
551778.04	4173015.17	46662.91628	2559.14742	26725.35049	5781.71775	100754.2794	94338.07681	4106.95953	23040.27246	2372.12285	60177.12091	0.88672	0.87618	5.26E-02	2.88E-03	2.30E-02	5.02E-03	8.75E-02	9.63E-02	4.19E-03	2.80E-02	1.93E-03	4.90E-02	2.94E-04	2.94E-04	3.5096E-01
551778.04	4173005.17	51537.45462	2917.32751	31184.96185	6309.96798	86499.40447	95231.46405	4649.94273	26938.06356	2573.00099	50664.25987	0.87414	0.86386	5.80E-02	3.29E-03	2.69E-02	5.48E-03	7.51E-02	9.72E-02	4.75E-03	3.27E-02	2.09E-03	4.12E-02	2.90E-04	2.90E-04	3.4739E-01
551768.04	4172955.17	51873.80407	7675.4455	69968.03107	11277.56123	38377.37689	77311.37371	11415.74962	62012.25044	4474.8868	23791.36461	0.87295	0.86252	5.84E-02	8.64E-03	6.03E-02	9.79E-03	3.33E-02	7.89E-02	1.17E-02	7.53E-02	3.64E-03	1.94E-02	2.90E-04	2.90E-04	3.5998E-01
551778.04	4172995.17	54303.26432	3369.86331	36312.62812	6923.08434	73164.73749	93116.48847	5326.15119	31494.96115	2805.68862	42840.58661	0.86233	0.85228	6.12E-02	3.80E-03	3.13E-02	6.01E-03	6.35E-02	9.51E-02	5.44E-03	3.82E-02	2.28E-03	3.49E-02	2.86E-04	2.86E-04	3.4227E-01
551768.04	4172945.17	44670.89348	9817.64394	74774.93503	12864.60048	32387.58966	66943.69557	14233.69336	67061.79645	5081.85815	20487.97924	0.865	0.85467	5.03E-02	1.11E-02	6.45E-02	1.12E-02	2.81E-02	6.83E-02	1.45E-02	8.14E-02	4.14E-03	1.67E-02	2.87E-04	2.87E-04	3.5082E-01
551768.04	4172905.17	23733.5782	30571.36231	75950.56777	24752.55782	17941.82141	37416.79398	39597.57041	71748.31737	9592.27358	12000.51966	0.8458	0.8356	2.67E-02	3.44E-02	6.55E-02	2.15E-02	1.56E-02	3.82E-02	4.04E-02	8.71E-02	7.81E-03	9.77E-03	2.81E-04	2.80E-04	3.4760E-01
551768.04	4172935.17	38146.74344	12816.587	77592.7712	14825.88923	27585.75943	57825.78048	18048.0845	70408.48801	5834.56825	17753.19675	0.8581	0.84783	4.30E-02	1.44E-02	6.69E-02	1.29E-02	2.40E-02	5.90E-02	1.84E-02	8.55E-02	4.75E-03	1.44E-02	2.85E-04	2.85E-04	3.4385E-01
551778.04	4172985.17	54596.61488	3952.56512	41959.24132	7640.31993	61394.20869	88559.87095	6181.2955	36604.94352	3077.73965	36382.67845	0.85132	0.84147	6.15E-02	4.45E-03	3.62E-02	6.63E-03	5.33E-02	9.04E-02	6.31E-03	4.44E-02	2.50E-03	2.96E-02	2.83E-04	2.82E-04	3.3591E-01
551768.04	4172915.17	27762.3225	22904.06054	77979.99167	20581.82009	20544.76527	43057.47233	30384.17957	72634.92153	8026.346	13593.17662	0.84894	0.83874	3.13E-02	2.58E-02	6.73E-02	1.79E-02	1.78E-02	4.40E-02	3.10E-02	8.82E-02	6.53E-03	1.11E-02	2.82E-04	2.82E-04	3.4134E-01
551768.04	4172925.17	32535.31299	17065.64676	78622.74935	17344.98593	23710.64231	49872.09079	23286.2754	72264.2032	6797.93874	15487.52034	0.85294	0.84271	3.66E-02	1.92E-02	6.78E-02	1.51E-02	2.06E-02	5.09E-02	2.38E-02	8.77E-02	5.53E-03	1.26E-02	2.83E-04	2.83E-04	3.4044E-01
551778.04	4172975.17	52630.16958	4719.47208	47863.26523	8493.23305	51472.6432	82266.44856	7283.3494	42075.09812	3401.92666	31046.10055	0.84136	0.83168	5.93E-02	5.32E-03	4.13E-02	7.37E-03	4.47E-02	8.40E-02	7.44E-03	5.11E-02	2.77E-03	2.53E-02	2.79E-04	2.79E-04	3.2903E-01
551778.04	4172965.17	48908.30155	5739.81712	53564.51959	9507.0223	43270.1071	74852.32809	8713.10506	47503.88339	3788.81496	26605.7513	0.8322	0.82266	5.51E-02	6.46E-03	4.62E-02	8.25E-03	3.76E-02	7.64E-02	8.90E-03	5.77E-02	3.08E-03	2.17E-02	2.76E-04	2.76E-04	3.2184E-01
551788.04	4173045.17	25284.60744	1735.4589	16319.81271	4388.37595	111497.0202	57746.35353	2832.18763	14300.96247	1822.79421	82362.09968	0.87234	0.86188	2.85E-02	1.95E-03	1.41E-02	3.81E-03	9.68E-02	5.90E-02	2.89E-03	1.74E-02	1.48E-03	6.70E-02	2.90E-04	2.89E-04	2.9343E-01
551788.04	4173035.17	29501.79216	1921.00168	18641.46592	4721.79582	104025.0912	65355.44493	3121.54585	16271.94691	1951.3971	72503.12377	0.85934	0.84921	3.32E-02	2.16E-03	1.61E-02	4.10E-03	9.03E-02	6.67E-02	3.19E-03	1.98E-02	1.59E-03	5.90E-02	2.85E-04	2.85E-04	2.9672E-01
551788.04	4173025.17	33918.38882	2144.48407	21401.29743	5102.04357	95005.21775	71250.72837	3467.0147	18647.29745	2097.14918	62811.44704	0.84697	0.83715	3.82E-02	2.42E-03	1.85E-02	4.43E-03	8.25E-02	7.27E-02	3.54E-03	2.26E-02	1.71E-03	5.11E-02	2.81E-04	2.81E-04	2.9830E-01
551788.04	4173055.17	21523.25714	1578.95477	14373.81124	4093.43544	116637.5457	49288.8211	2586.39332	12667.66881	1708.09995	90912.6002	0.88586	0.87503	2.42E-02	1.78E-03	1.24E-02	3.55E-03	1.01E-01	5.03E-02	2.64E-03	1.54E-02	1.39E-03	7.40E-02	2.94E-04	2.94E-04	2.8755E-01
551778.04	4172955.17	44201.63251	7115.0528	58591.3349	10730.16526	36570.40373	67022.50393	10588.08058	52480.54379	4258.54126	22909.39886	0.82402	0.81459	4.98E-02	8.01E-03	5.05E-02	9.32E-03	3.18E-02	6.84E-02	1.08E-02	6.37E-02	3.47E-03	1.86E-02	2.74E-04	2.73E-04	3.1500E-01
551788.04	4173015.17	38090.34218	2417.37604	24641.80721	5537.42023	85053.50834	74969.40086	3884.72456	21477.12145	2263.23681	54023.16124	0.8352	0.82565	4.29E-02	2.72E-03	2.13E-02	4.81E-03	7.39E-02	7.65E-02	3.97E-03	2.61E-02	1.84E-03	4.40E-02	2.77E-04	2.77E-04	2.9847E-01
551788.04	4173005.17	41477.62824	2756.10418	28371.59228	6039.71083	74817.72567	76407.85027	4396.71218	24785.19875	2454.49141	46371.53375	0.82409	0.81477	4.67E-02	3.10E-03	2.45E-02	5.24E-03	6.50E-02	7.80E-02	4.49E-03	3.01E-02	2.00E-03	3.77E-02	2.74E-04	2.74E-04	2.9736E-01
551778.04	4172945.17	39175.65301	8975.16896	62541.38501	12222.11893	31108.6523	59382.97153	13056.17557	56618.70594	4834.96143	19824.53611	0.81681	0.80748	4.41E-02	1.01E-02	5.39E-02	1.06E-02	2.70E-02	6.06E-02	1.33E-02	6.87E-02	3.93E-03	1.61E-02	2.71E-04	2.71E-04	3.0909E-01
551778.04	4172905.17	22406.46951	23946.06338	65534.09124	22965.31054	17458.06156	35173.57896	32384.14746	62376.93687	9009.11062	11716.2511	0.79843	0.78932	2.52E-02	2.70E-02	5.65E-02	1.99E-02	1.52E-02	3.59E-02	3.31E-02	7.57E-02	7.33E-03	9.54E-03	2.65E-04	2.65E-04	3.0592E-01
551778.04	4172935.17	34307.26649	11483.96931	65208.12147	14073.16781	26649.71623	52288.91637	16308.68074	59709.72331	5552.47379	17245.55924	0.81074	0.80148	3.86E-02	1.29E-02	5.62E-02	1.22E-02	2.31E-02	5.34E-02	1.66E-02	7.25E-02	4.52E-03	1.40E-02	2.69E-04	2.69E-04	3.0478E-01
551788.04	4172995.17	43598.60308	3183.74131	32542.80084	6624.4126	64912.83222	75708.43959	5033.51189	28548.43192	2676.94449	39820.91073	0.8137	0.80458	4.91E-02	3.59E-03	2.81E-02	5.75E-03	5.64E-02	7.73E-02	5.14E-03	3.47E-02	2.18E-03	3.24E-02	2.70E-04	2.70E-04	2.9509E-01
551778.04	4172925.17	29843.739	14812.6794	66540.95414	16397.8131	22985.46817	45822.54328	20557.45967	61675.78923	6454.09184	15082.06999	0.80581	0.7966	3.36E-02	1.67E-02	5.74E-02	1.42E-02	2.00E-02	4.68E-02	2.10E-02	7.49E-02	5.25E-03	1.23E-02	2.68E-04	2.67E-04	3.0258E-01
551778.04	4172915.17	25868.08089	19034.79138	66582.59838	19306.05154	19963.75997	40126.95845	25937.32003	62499.22288	7583.52708	13257.67409	0.80165	0.7925	2.91E-02	2.14E-02	5.74E-02	1.68E-02	1.73E-02	4.10E-02	2.65E-02	7.59E-02	6.17E-03	1.08E-02	2.66E-04	2.66E-04	3.0291E-01
551788.04	4172985.17	44166.87499	3730.57294	37024.10808	7306.78673	55775.65993	73143.01184	5833.25666	32661.58358	2937.00025	34237.70878	0.80393	0.79499	4.97E-02	4.20E-03	3.19E-02	6.34E-03	4.84E-02	7.47E-02	5.96E-03	3.97E-02	2.39E-03	2.79E-02	2.67E-04	2.67E-04	2.9172E-01
551788.04	4172975.17	43224.28927	4440.9692	41628.63555	8114.12021	47696.87728	69139.96781	6851.36888	36980.57269	3245.97381	29507.12709	0.79497	0.78619	4.87E-02	5.00E-03	3.59E-02	7.05E-03	4.14E-02	7.06E-02	6.99E-03	4.49E-02	2.64E-03	2.40E-02	2.64E-04	2.64E-04	2.8771E-01
551788.04	4172965.17	41015.2578	5370.61668	46076.36013	9074.87275	40740.58213	64137.63197	8154.84797	41264.56324	3615.82121	25498.59902	0.78677	0.77811	4.62E-02	6.05E-03	3.97E-02	7.88E-03	3.54E-02	6.55E-02	8.33E-03	5.01E-02	2.94E-03	2.08E-02	2.61E-04	2.61E-04	2.8335E-01
551788.04	4172955.17	37946.13242	6592.13229	50069.82257	10231.07676	34856.6225	58569.84698	9830.73274	45252.52471	4063.85117	22106.13034	0.7794	0.77086	4.27E-02	7.42E-03	4.32E-02	8.88E-03	3.03E-02	5.98E-02	1.00E-02	5.49E-02	3.31E-03	1.80E-02	2.59E-04	2.59E-04	2.7908E-01
551788.04	4172945.17	34420.76108	8187.2509	53335.1354	11631.36584	29922.19935	52876.1398	11978.16941	48681.89505	4610.21857	19232.8459	0.77282	0.76437	3.88E-02	9.22E-03	4.60E-02	1.01E-02	2.60E-02	5.40E-02	1.22E-02	5.91E-02	3.75E-03	1.57E-02	2.57E-04	2.57E-04	2.7530E-01
551798.04	4173025.17	28809.22809	2033.95098	19947.7399	4896.95673	80088.1404	58148.31473	3291.28881	17546.28021	2005.46098	55043.98895	0.79897	0.79003	3.24E-02	2.29E-03	1.72E-02	4.25E-03	6.95E-02	5.94E-02	3.36E-03	2.13E-02	1.63E-03	4.48E-02	2.65E-04	2.65E-04	2.5672E-01
551788.04	4172935.17	30792.06841	10243.93003	55713.86476	13352.3926	25805.57823	47359.54151	14712.4073	51404.80401	5285.87249	16801.39088	0.7672	0.75883	3.47E-02	1.15E-02	4.80E-02	1.16E-02	2.24E-02	4.84E-02	1.50E-02	6.24E-02	4.30E-03	1.37E-02	2.55E-04	2.55E-04	2.7253E-01
551798.04	4173035.17	25550.99571	1821.35616	17514.10131	4533.34072	86258.72092	53584.19836	2963.21578	15423.06296	1866.30829	61789.74942	0.80985	0.80064	2.88E-02	2.05E-03	1.51E-02	3.94E-03	7.49E-02	5.47E-02	3.03E-03	1.87E-02	1.52E-03	5.03E-02	2.69E-04	2.69E-04	2.5357E-01
551798.04	4173015.17	31834.57156	2293.11086	22741.87789	5312.96754	72999.75078	61296.03142	3687.46121	20018.45323	2164.26574	48465.28537	0.78857	0.77987	3.59E-02	2.58E-03	1.96E-02	4.61E-03	6.34E-02	6.26E-02	3.76E-03	2.43E-02	1.76E-03	3.94E-02	2.62E-04	2.62E-04	2.5842E-01
551788.04	4172925.17	27289.60203	12817.51884	57128.55877	15482.74279	22364.68853	42169.83241	18127.86823	53333.53497	6126.71334	14740.51051	0.76257	0.75426	3.07E-02	1.44E-02	4.93E-02	1.34E-02	1.94E-02	4.31E-02	1.85E-02	6.47E-02	4.99E-03	1.20E-02	2.53E-04	2.53E-04	2.7110E-01
551788.04	4172915.17	24026.73484	15834.28482	57540.98838	18069.05463	19488.38879	37413.50689	22197.86333	54374.64756	7159.64601	12985.23996	0.75836	0.75011	2.71E-02	1.78E-02	4.96E-02	1.57E-02	1.69E-02	3.82E-02	2.27E-02	6.60E-02	5.83E-03	1.06E-02	2.52E-04	2.52E-04	2.7090E-01
551798.04	4173045.17	22338.62724	1645.18401	15428.6911	4215.34839	91063.60484	47984.61212	2689.11172	13628.55508	1744.02973	68123.72685	0.82133	0.81182	2.52E-02	1.85E-03	1.33E-02	3.66E-03	7.91E-02	4.90E-02	2.75E-03	1.65E-02	1.42E-03	5.54E-02	2.73E-04	2.73E-04	2.4873E-01
551798.04	4173005.17	34318.59769	2614.68189	25885.28188	5793.19298	65480.58196	62876.72529	4172.11305	22842.66996	2347.72079	42401.04826	0.77874	0.77024	3.87E-02	2.94E-03	2.23E-02	5.03E-03	5.69E-02	6.42E-02	4.26E-03	2.77E-02	1.91E-03	3.45E-02	2.59E-04	2.59E-04	2.5893E-01
551798.04	4172995.17	35963.51319	3017.89555	29320.32401	6349.2537	57947.17054	62893.69182	4770.55925	25977.06706	2560.25841	36967.24604	0.76941	0.76111	4.05E-02	3.40E-03	2.53E-02	5.51E-03	5.03E-02	6.42E-02	4.87E-03	3.15E-02	2.08E-03	3.01E-02	2.55E-04	2.55E-04	2.5832E-01
551798.04	4173055.17	19347.45918	1496.89247	13651.34763	3933.25438	93901.36361	41856.73131	2456.34468	12115.75168	1634.87443	73071.5582	0.83317	0.82334	2.18E-02	1.69E-03	1.18E-02	3.42E-03	8.15E-02	4.27E-02	2.51E-03	1.47E-02	1.33E-03	5.95E-02	2.77E-04	2.76E-04	2.4150E-01
551798.04	4172985.17	36599.08764	3529.52735	32955.5235	6999.86503	50768.64278	61508.8425	5517.31926	29353.4138	2809.53929	32191.51421	0.76071	0.75257	4.12E-02	3.98E-03	2.84E-02	6.08E-03	4.41E-02	6.28E-02	5.63E-03	3.56E-02	2.29E-03	2.62E-02	2.53E-04	2.53E-04	2.5683E-01
551798.04	4172975.17	36209.71569	4185.43553	36659.90809	7771.03419	44194.03408	58975.01087	6458.12103	32871.77135	3106.44597	28042.9152	0.75278	0.74478	4.08E-02	4.71E-03	3.16E-02	6.75E-03	3.84E-02	6.02E-02	6.59E-03	3.99E-02	2.53E-03	2.28E-02	2.50E-04	2.50E-04	2.5479E-01
551798.04	4172965.17	34867.33602	5022.53354	40215.50411	8676.83074	38310.75491	55536.28668	7637.57851	36326.63852	3458.17955	24440.36047	0.74524	0.73737	3.93E-02	5.66E-03	3.47E-02	7.53E-03	3.33E-02	5.67E-02	7.80E-03	4.41E-02	2.81E-03	1.99E-02	2.47E-04	2.48E-04	2.5221E-01
551798.04	4172955.17	32820.1143	6091.17124	43441.5826	9758.69029	33177.56944	51537.93582	9119.97167	39567.69111	3881.99967	21338.22009	0.73838	0.73062	3.70E-02	6.86E-03	3.75E-02	8.47E-03	2.88E-02	5.26E-02	9.31E-03	4.80E-02	3.16E-03	1.74E-02	2.45E-04	2.45E-04	2.4955E-01
551798.04	4172945.17	30318.08561	7436.74546	46150.31293	11055.89322	28757.09468	47258.89322	10966.34659	42417.70853	4395.20904	18671.96086	0.73215	0.72449	3.41E-02	8.38E-03	3.98E-02	9.60E-03	2.50E-02	4.82E-02	1.12E-02	5.15E-02	3.58E-03	1.52E-02	2.43E-04	2.43E-04	2.4709E-01
551808.04	4173015.17	27101.25053	2183.10864	21021.07108	5107.22518	63428.63911	51264.04893	3511.21918	18672.45986	2074.78672	43482.94359	0.74619	0.73824	3.05E-02	2.46E-03	1.81E-02	4.43E-03	5.51E-02	5.23E-02	3.58E-03	2.27E-02	1.69E-03	3.54E-02	2.48E-04	2.48E-04	2.2678E-01
551808.04	4173005.17	28993.07962	2488.16611	23690.33075	5566.42713	57805.27858	52792.13214	3969.71188	21096.96804	2250.57324	38714.15897	0.73741	0.72965	3.27E-02	2.80E-03	2.04E-02	4.83E-03	5.02E-02	5.39E-02	4.05E-03	2.56E-02	1.83E-03	3.15E-02	2.45E-04	2.45E-04	2.2830E-01
551808.04	4173025.17	24809.86488	1935.71394	18601.09404	4707.28203	68539.34551	48623.67931	3134.13533	16504.89171	1921.64199	48380.88818	0.75535	0.74718	2.79E-02	2.18E-03	1.60E-02	4.09E-03	5.95E-02	4.96E-02	3.20E-03	2.00E-02	1.56E-03	3.94E-02	2.51E-04	2.51E-04	2.2408E-01
551808.04	4172995.17	30303.22309	2867.2027	26559.60259	6096.7458	51998.65076	53174.39684	4531.54019	23742.06096	2454.06285	34258.20716	0.72902	0.72144	3.41E-02	3.23E-03	2.29E-02	5.29E-03	4.52E-02	5.43E-02	4.63E-03	2.88E-02	2.00E-03	2.79E-02	2.42E-04	2.42E-04	2.2881E-01
551808.04	4173035.17	22327.39543	1733.26946	16458.21103	4359.6122	72823.97087	45041.82596	2822.01824	14613.39933	1788.52345	53125.68359	0.76504	0.75662	2.51E-02	1.95E-03	1.42E-02	3.79E-03	6.32E-02	4.60E-02	2.88E-03	1.77E-02	1.46E-03	4.32E-02	2.54E-04	2.54E-04	2.2012E-01
551808.04	4172985.17	30913.45577	3341.78649	29555.31699	6714.49239	46295.76243	52483.61981	5224.83348	26550.85691	2692.36134	30207.28979	0.72112	0.71368	3.48E-02	3.76E-03	2.55E-02	5.83E-03	4.02E-02	5.36E-02	5.33E-03	3.22E-02	2.19E-03	2.46E-02	2.39E-04	2.40E-04	2.2850E-01
551808.04	4172975.17	30789.8781	3938.15916	32575.12109	7439.72973	40906.54724	50861.84599	6083.64772	29440.21091	2974.25459	26587.93716	0.71375	0.70645	3.47E-02	4.44E-03	2.81E-02	6.46E-03	3.55E-02	5.19E-02	6.21E-03	3.57E-02	2.42E-03	2.16E-02	2.37E-04	2.37E-04	2.2760E-01
551808.04	4173045.17	19820.55989	1565.24605	14587.21967	4054.26825	75908.69826	40766.105	2560.56226	12982.91068	1671.29213	57253.83921	0.77513	0.76644	2.23E-02	1.76E-03	1.26E-02	3.52E-03	6.59E-02	4.16E-02	2.61E-03	1.58E-02	1.36E-03	4.66E-02	2.57E-04	2.57E-04	2.1456E-01
551818.04	4173005.17	24881.64538	2370.8164	21742.72411	5352.08902	51347.46309	45035.85847	3782.24868	19520.12971	2160.0593	35293.88585	0.6994	0.69228	2.80E-02	2.67E-03	1.88E-02	4.65E-03	4.46E-02	4.60E-02	3.86E-03	2.37E-02	1.76E-03	2.87E-02	2.32E-04	2.32E-04	2.0316E-01
551818.04	4173015.17	23399.56742	2083.01402	19460.12474	4913.97975	55603.14251	43636.18477	3350.0041	17427.79567	1991.6333	39029.21543	0.70733	0.70003	2.64E-02	2.35E-03	1.68E-02	4.27E-03	4.83E-02	4.45E-02	3.42E-03	2.12E-02	1.62E-03	3.18E-02	2.35E-04	2.35E-04	2.0101E-01
551818.04	4173025.17	21619.34612	1847.79253	17361.1483	4532.19184	59354.5195	41439.12059	2992.48579	15529.77553	1845.05487	42702.84429	0.71559	0.70809	2.43E-02	2.08E-03	1.50E-02	3.94E-03	5.15E-02	4.23E-02	3.06E-03	1.89E-02	1.50E-03	3.48E-02	2.38E-04	2.38E-04	1.9782E-01
551818.04	4173035.17	19671.6512	1654.28998	15469.89043	4198.22858	62348.60513	38569.08237	2694.7566	13841.96731	1716.97646	46068.18363	0.72419	0.71647	2.22E-02	1.86E-03	1.33E-02	3.65E-03	5.41E-02	3.94E-02	2.75E-03	1.68E-02	1.40E-03	3.75E-02	2.40E-04	2.41E-04	1.9345E-01
551818.04	4173045.17	17666.14094	1492.77685	13787.89735	3901.983	64295.90332	35195.82645	2443.67898	12357.27246	1603.37951	48777.63544	0.7329	0.72493	1.99E-02	1.68E-03	1.19E-02	3.39E-03	5.58E-02	3.59E-02	2.49E-03	1.50E-02	1.30E-03	3.97E-02	2.43E-04	2.43E-04	1.8760E-01
551828.04	4173035.17	17445.03588	1581.31829	14536.91508	4042.1092	53939.18989	33477.53419	2576.57721	13096.58848	1649.0059	40225.0892	0.6864	0.67929	1.96E-02	1.78E-03	1.25E-02	3.51E-03	4.68E-02	3.42E-02	2.63E-03	1.59E-02	1.34E-03	3.27E-02	2.28E-04	2.28E-04	1.7155E-01
CONCUNIT ug/	m^3																									
DEPUNIT g/m^	2																									

Midway Village Project—New Phase 1 Receptors

Phase 1 Receptors: Exposed to Phases 2+3+4 Demolition and Phases 2+3+4 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

	Mitigated Concentrations
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	5.78E-08
Annual Average Onsite DPM Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	5.78E-08
Annual Average Onsite DPM Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	4.96E-08
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	6.25E-08
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	6.25E-08
Annual Average Onsite DPM Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	2.05E-07
Annual Average Onsite DPM Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	2.05E-07
Annual Average Onsite DPM Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	6.84E-08
Annual Average Onsite DPM Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	4.70E-08
Annual Average Onsite DPM Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	4.70E-08
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	8.50E-06
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	1.06E-05

Mitigated DPM Concentrations		
Maximum DPM (ug/m3)	MIR UTM X	MIR UTM Y
6.6695E-02	551738.04	4172975.17

UTM	551738.04	4172975.17
Latitude, Longitude	37°42'09.2"N 122°24'47.1"W	

X	Y	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) AREA8	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) AREA9	Unit Emissions Construction Area 3B (Phase 3) AREA10	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA11	Unit Emissions Construction Area 4B (Phase 4/5) AREA12	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) AREA13	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) AREA2	Unit Emissions Demolition Area 3A (Phase 3) AREA3	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA4	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA5	Unit Emissions Route 1 - From the project site towards US-101 AREA6	Unit Emissions Route 2 - From US-101 towards the project site AREA7
551728.04	4172945.17	73779.68061	14007.31973	190768.4562	16234.98242	39869.25405	109911.1046	20397.25202	162632.0495	6403.44498	24272.24619	1.11373	1.09757
551738.04	4172975.17	133270.6636	6221.9835	99225.30638	10368.16048	69532.87926	191202.6087	9549.30107	80954.96208	4201.86211	38693.14198	1.08026	1.06536
551728.04	4172935.17	57211.11469	19574.94964	195082.951	18896.23327	33484.86147	87660.86714	27569.28724	167347.8846	7369.84343	20854.30018	1.10299	1.08692
551738.04	4172965.17	108419.4631	7658.28124	125103.0277	11686.71934	55488.74309	156966.0204	11605.97538	103907.9774	4691.96995	32230.92089	1.06532	1.05066
551748.04	4173005.17	112297.4024	3543.73846	41515.93591	7240.69308	140451.1413	203213.2735	5601.93095	34295.35344	2992.58788	66483.48418	1.05928	1.04512
551728.04	4172925.17	45310.41812	29098.63205	188645.3123	22332.28498	28512.87716	71364.89373	38930.26518	163185.5094	8607.1784	18095.36117	1.09518	1.07912
551748.04	4172995.17	126560.0827	4105.22326	51648.14959	7979.4053	106915.0344	199784.4013	6442.86821	42616.37369	3273.11386	53847.46668	1.04207	1.02825
551738.04	4172955.17	83791.18227	9721.17093	142897.1469	13283.85814	45257.74866	122687.2417	14478.73858	120832.616	5283.15684	27162.14156	1.05216	1.03768
551748.04	4172985.17	123738.7738	4825.42622	65025.63039	8839.29587	82067.20268	182707.1704	7509.4305	53907.0103	3596.98291	44112.26646	1.02589	1.01236
551758.04	4173035.17	46603.08432	2299.2049	22501.36281	5370.12386	206227.3548	144086.9695	3708.20348	19050.72021	2249.14334	118035.0786	1.04342	1.02958
551758.04	4173025.17	60315.47961	2572.51359	26430.65827	5816.36785	181035.1862	159052.7344	4128.89211	22261.88063	2422.68049	93337.80802	1.02494	1.01154
551738.04	4172945.17	65412.6626	12874.47684	151317.7593	15280.8682	37592.39512	97095.73403	18684.08919	129820.1699	6021.67248	23151.10704	1.04159	1.02724
551748.04	4172975.17	109400.5307	5783.6521	81107.50651	9860.31773	64502.54439	157703.4911	8905.69736	67667.46235	3979.36656	36559.70125	1.01119	0.99791
551758.04	4173015.17	76185.34731	2903.97443	31430.95047	6327.71947	150951.7474	165024.1689	4635.51848	26407.97102	2619.57754	74694.50328	1.00747	0.99447
551738.04	4172935.17	51700.64471	17745.0931	151107.0616	17706.17666	31653.8395	78726.10464	24833.2625	131517.6967	6916.58416	19907.06004	1.0319	1.01762
551758.04	4173005.17	88698.5757	3313.05452	37818.31735	6918.36921	120765.6883	162749.7941	5256.14804	31776.95537	2844.90858	60628.10272	0.99106	0.9784
551738.04	4172925.17	41622.09877	25703.61521	146327.194	20834.15324	27003.03479	65045.66406	34073.23444	129105.9247	8064.30904	17279.87403	1.02472	1.01045
551748.04	4172965.17	90068.66837	7094.79579	96989.98594	11073.83131	51918.44005	130102.1797	10772.85661	81919.4485	4432.67078	30616.09184	0.99778	0.9847
551738.04	4172915.17	34023.92702	38958.26503	138492.8619	25060.93823	23296.44274	54162.5306	48924.04412	124070.797	9587.05346	15131.09305	1.02066	1.00632
551758.04	4172995.17	94282.37159	3830.23129	45889.9226	7607.96844	94853.95478	153789.5079	6032.28686	38665.50716	3106.08533	49798.89577	0.97586	0.9635
551748.04	4172955.17	72120.30857	8971.00682	109045.5196	12552.23479	42626.18312	105358.9456	13357.98857	93666.61476	4985.01294	25908.70277	0.98619	0.97327
551768.04	4173055.17	26694.916	1769.95077	15976.59939	4446.37315	193421.8131	73102.79522	2886.18842	13873.75329	1870.68734	149480.0752	1.01002	0.99668
551768.04	4173065.17	22123.93066	1616.24362	14083.88226	4156.33174	199893.1776	55007.37164	2645.0605	12349.59282	1755.16615	164335.851	1.02864	1.01475
551768.04	4173045.17	32570.16686	1949.03205	18284.99207	4772.49739	179914.1721	93073.1659	3165.93486	15748.72139	1999.29656	125179.611	0.99219	0.97935
551758.04	4172985.17	92007.43136	4496.7135	55632.99792	8413.17463	74715.84493	140201.1068	7018.67489	47098.30541	3409.46856	41286.71072	0.96168	0.94957
551748.04	4172945.17	57829.20048	11750.27988	115842.9548	14375.05458	35554.78569	85793.75059	17021.69023	101175.0313	5667.38698	22135.86256	0.97643	0.96362
551768.04	4173035.17	40190.71652	2160.30166	21122.32477	5141.40698	162545.2447	108830.0958	3494.24464	18079.69854	2143.25878	101220.4694	0.97516	0.96276
551768.04	4173025.17	49432.15494	2413.12858	24634.73604	5562.27172	142877.588	118497.234	3884.92422	21005.97103	2305.8598	81912.43969	0.95903	0.94702
551758.04	4172975.17	83881.09335	5381.43055	66519.95607	9365.68699	59826.1569	123834.5367	8302.6852	56766.20314	3767.65006	34535.97847	0.94872	0.93682
551768.04	4173075.17	18501.44826	1482.78641	12516.72701	3895.74144	194210.6388	42002.96105	2434.69305	11092.8956	1650.31924	162741.921	1.04792	1.03342
551748.04	4172935.17	46818.81829	15954.47333	117767.5334	16631.81759	30044.33512	70921.94159	22272.74714	104345.9735	6513.02727	19074.41603	0.9681	0.95536
551768.04	4173015.17	58888.43505	2720.42537	28982.85518	6043.86117	121976.8145	122872.3519	4356.0123	24682.06221	2490.33784	66969.6353	0.94374	0.93207
551748.04	4172925.17	38341.61751	22441.7747	116061.1702	19506.91198	25684.30801	59440.41226	29971.08369	104191.423	7586.03716	16572.9171	0.96145	0.94874
551748.04	4172915.17	31783.9866	32797.92287	112078.9878	23410.43886	22190.64338	49899.35212	41655.43272	102169.7543	9018.08258	14521.05017	0.95787	0.9451
551758.04	4172965.17	72682.78511	6587.37764	77083.7257	10499.92583	48759.01574	106447.0373	10007.95214	66504.20176	4194.5458	29131.03373	0.93693	0.92521
551768.04	4173005.17	66357.97953	3101.39784	34329.18355	6601.48122	101488.3267	122453.2326	4934.55277	29272.84529	2702.52286	55342.51245	0.92944	0.91806
551758.04	4172955.17	61190.25839	8287.04933	85805.69745	11879.87422	40355.43212	89969.93291	12331.45805	75021.86396	4715.1595	24782.56137	0.9267	0.91512
551768.04	4172995.17	70126.99875	3583.94762	40744.73243	7251.78216	83092.17306	117781.9001	5657.96259	34875.20448	2948.76398	46131.60924	0.91615	0.90503
551758.04	4172945.17	50915.76814	10735.15259	91640.54958	13576.53464	33839.89824	75721.04342	15544.54974	81252.19547	5357.229	21251.8099	0.91796	0.90648
551768.04	4172985.17	69600.69378	4204.66698	48048.77025	8007.9446	67704.00799	109779.7516	6573.25042	41364.52149	3234.73305	38703.73557	0.90363	0.89273
551758.04	4172935.17	42344.95201	14308.91924	94423.50597	15688.00311	28701.96933	64003.65402	20034.22113	84834.4161	6158.47486	18361.40166	0.91061	0.89919
551778.04	4173055.17	23962.14231	1670.04249	15144.84081	4264.66565	148843.2249	59308.83657	2729.76127	13250.33783	1786.78979	116071.9225	0.94447	0.93248
551778.04	4173045.17	28696.5558	1836.72202	17267.85032	4574.26061	139958.5203	71704.11746	2991.03814	15004.83263	1907.9262	101198.0725	0.92897	0.91741
551768.04	4172975.17	65558.56476	5027.83868	55864.40598	8906.75959	55499.36297	99699.29559	7761.48092	48479.2919	3574.44114	32699.61257	0.8923	0.88159
551758.04	4172915.17	29714.68176	27491.63487	92639.08177	21919.30482	21276.05407	46328.95777	35544.9863	85469.13007	8496.03071	14009.17443	0.90069	0.8893
551778.04	4173065.17	20111.54453	1527.1164	13385.6158	3988.76015	153703.6377	47501.45628	2504.67483	11809.29277	1677.78483	126504.1908	0.96055	0.94809
551758.04	4172925.17	35366.35844	19555.15538	94558.1687	18376.50385	24596.71713	54353.50696	26391.85465	86049.91503	7175.07613	15980.65693	0.90473	0.89334
551778.04	4173035.17	34351.66561	2033.95431	19842.31757	4924.89031	128401.5617	82465.5781	3298.40906	17157.59248	2043.87811	85693.15374	0.91417	0.90299
551778.04	4173025.17	40596.06255	2270.64615	22964.40971	5324.36203	115041.8047	90121.02157	3664.65233	19804.39997	2197.43177	71790.28235	0.90008	0.88924
551768.04	4172965.17	59201.51889	6142.22496	63464.42539	9982.54591	45926.55445	88521.45552	9327.93348	55625.25818	3982.05172	27806.01271	0.88211	0.87156
551778.04	4173015.17	46662.91628	2559.14742	26725.35049	5781.71775	100754.2794	94338.07681	4106.95953	23040.27246	2372.12285	60177.12091	0.88672	0.87618
551778.04	4173005.17	51537.45462	2917.32751	31184.96185	6309.96798	86499.40447	95231.46405	4649.94273	26938.06356	2573.00099	50664.25987	0.87414	0.86386
551768.04	4172955.17	51873.80407	7675.4455	69968.03107	11277.56123	38377.37689	77311.37371	11415.74962	62012.25044	4474.8868	23791.36461	0.87295	0.86252
551778.04	4172995.17	54303.26432	3369.86331	36312.62812	6923.08434	73164.73749	93116.48847	5326.15119	31494.96115	2805.68862	42840.58661	0.86233	0.85228
551768.04	4172945.17	44670.89348	9817.64394	74774.93503	12864.60048	32387.58966	66943.69557	14233.69336	67061.79645	5081.85815	20487.97924	0.865	0.85467
551768.04	4172905.17	23733.5782	30571.36231	75950.56777	24752.55782	17941.82141	37416.79398	39597.57041	71748.31737	9592.27358	12000.51966	0.8458	0.8356
551768.04	4172935.17	38146.74344	12816.587	77592.7712	14825.88923	27585.75943	57825.78048	18048.0845	70408.48801	5834.56825	17753.19675	0.8581	0.84783
551778.04	4172985.17	54596.61488	3952.56512	41959.24132	7640.31993	61394.20869	88559.87095	6181.2955	36604.94352	3077.73965	36382.67845	0.85132	0.84147
551768.04	4172915.17	27762.3225	22904.06054	77979.99167	20581.82009	20544.76527	43057.47233	30384.17957	72634.92153	8026.346	13593.17662	0.84894	0.83874
551768.04	4172925.17	32535.31299	17065.64676	78622.74935	17344.98593	23710.64231	49872.09079	23286.2754	72264.2032	6797.93874	15487.52034	0.85294	0.84271
551778.04	4172975.17	52630.16958	4719.47208	47863.26523	8493.23305	51472.6432	82266.44856	7283.3494	42075.09812	3401.92666	31046.10055	0.84136	0.83168
551778.04	4172965.17	48908.30155	5739.81712	53564.51959	9507.0223	43270.1071	74852.32809	8713.10506	47503.88339	3788.81496	26605.7513	0.8322	0.82266
551788.04	4173045.17	25284.60744	1735.4589	16319.81271	4388.37595	111497.0202	57746.35353	2832.18763	14300.96247	1822.79421	82362.09968	0.87234	0.86188
551788.04	4173035.17	29501.79216	1921.00168	18641.46592	4721.79582	104025.0912	65355.44493	3121.54585	16271.94691	1951.3971	72503.12377	0.85934	0.84921
551788.04	4173025.17	33918.38882	2144.48407	21401.29743	5102.04357	95005.21775	71250.72837	3467.0147	18647.29745	2097.14918	62811.44704	0.84697	0.83715
551788.04	4173055.17	21523.25714	1578.95477	14373.81124	4093.43544	116637.5457	49288.8211	2586.39332	12667.66881	1708.09995	90912.6002	0.88586	0.87503
551778.04	4172955.17	44201.63251	7115.0528	58591.3349	10730.16526	36570.40373	67022.50393	10588.08058	52480.54379	4258.54126	22909.39886	0.82402	0.81459
551788.04	4173015.17	38090.34218	2417.37604	24641.80721	5537.42023	85053.50834	74969.40086	3884.72456	21477.12145	2263.23681	54023.16124	0.8352	0.82565
551788.04	4173005.17	41477.62824	2756.10418	28371.59228	6039.71083	74817.72567	76407.85027	4396.71218	24785.19875	2454.49141	46371.53375	0.82409	0.81477
551778.04	4172945.17	39175.65301	8975.16896	62541.38501	12222.11893	31108.6523	59382.97153	13056.17557	56618.70594	4834.96143	19824.53611	0.81681	0.80748
551778.04	4172905.17	22406.46951	23946.06338	65534.09124	22965.31054	17458.06156	35173.57896	32384.14746	62376.93687	9009.11062	11716.2511	0.79843	0.78932
551778.04	4172935.17	34307.26649	11483.96931	65208.12147	14073.16781	26649.71623	52288.91637	16308.68074	59709.72331	5552.47379	17245.55924	0.81074	0.80148
551788.04	4172995.17	43598.60308	3183.74131	32542.80084	6624.4126	64912.83222	75708.43959	5033.51189	28548.43192	2676.94449	39820.91073	0.8137	0.80458
551778.04	4172925.17	29843.739	14812.6794	66540.95414	16397.8131	22985.46817	45822.54328	20557.45967	61675.78923	6454.09184	15082.06999	0.80581	0.7966
551778.04	4172915.17	25868.08089	19034.79138	66582.59838	19306.05154	19963.75997	40126.95845	25937.32003	62499.22288	7583.52708	13257.67409	0.80165	0.7925
551788.04	4172985.17	44166.87499	3730.57294	37024.10808	7306.78673	55775.65993	73143.01184	5833.25666	32661.58358	2937.00025	34237.70878	0.80393	0.79499
551788.04	4172975.17	43224.28927	4440.9692	41628.63555	8114.12021	47696.87728	69139.96781	6851.36888	36980.57269	3245.97381	29507.12709	0.79497	0.78619
551788.04	4172965.17	41015.2578	5370.61668	46076.36013	9074.87275	40740.58213	64137.63197	8154.84797	41264.56324	3615.82121	25498.59902	0.78677	0.77811
551788.04	4172955.17	37946.13242	6592.13229	50069.82257	10231.07676	34856.6225	58569.84698	9830.73274	45252.52471	4063.85117	22106.13034	0.7794	0.77086
551788.04	4172945.17	34420.76108	8187.2509	53335.1354	11631.36584	29922.19935	52876.1398	11978.16941	48681.89505	4610.21857	19232.8459	0.77282	0.76437
551798.04	4173025.17	28809.22809	2033.95098	19947.7399	4896.95673	80088.1404	58148.31473	3291.28881	17546.28021	2005.46098	55043.98895	0.79897	0.79003
551788.04	4172935.17	30792.06841	10243.93003	55713.86476	13352.3926	25805.57823	47359.54151	14712.4073	51404.80401	5285.87249	16801.39088	0.7672	0.75883
551798.04	4173035.17	25550.99571	1821.35616	17514.10131	4533.34072	86258.72092	53584.19836	2963.21578	15423.06296	1866.30829	61789.74942	0.80985	0.80064
551798.04	4173015.17	31834.57156	2293.11086	22741.87789	5312.96754	72999.75078	61296.03142	3687.46121	20018.45323	2164.26574	48465.28537	0.78857	0.77987
551788.04	4172925.17	27289.60203	12817.51884	57128.55877	15482.74279	22364.68853	42169.83241	18127.86823	53333.53497	6126.71334	14740.51051	0.76257	0.75426
551788.04	4172915.17	24026.73484	15834.28482	57540.98838	18069.05463	19488.38879	37413.50689	22197.86333	54374.64756	7159.64601	12985.23996	0.75836	0.75011
551798.04	4173045.17	22338.62724	1645.18401	15428.6911	4215.34839	91063.60484	47984.61212	2689.11172	13628.55508	1744.02973	68123.72685	0.82133	0.81182
551798.04	4173005.17	34318.59769	2614.68189	25885.28188	5793.19298	65480.58196	62876.72529	4172.11305	22842.66996	2347.72079	42401.04826	0.77874	0.77024
551798.04	4172995.17	35963.51319	3017.89555	29320.32401	6349.2537	57947.17054	62893.69182	4770.55925	25977.06706	2560.25841	36967.24604	0.76941	0.76111
551798.04	4173055.17	19347.45918	1496.89247	13651.34763	3933.25438	93901.36361	41856.73131	2456.34468	12115.75168	1634.87443	73071.5582	0.83317	0.82334
551798.04	4172985.17	36599.08764	3529.52735	32955.5235	6999.86503	50768.64278	61508.8425	5517.31926	29353.4138	2809.53929	32191.51421	0.76071	0.75257
551798.04	4172975.17	36209.71569	4185.43553	36659.90809	7771.03419	44194.03408	58975.01087	6458.12103	32871.77135	3106.44597	28042.9152	0.75278	0.74478
551798.04	4172965.17	34867.33602	5022.53354	40215.50411	8676.83074	38310.75491	55536.28668	7637.57851	36326.63852	3458.17955	24440.36047	0.74524	0.73737
551798.04	4172955.17	32820.1143	6091.17124	43441.5826	9758.69029	33177.56944	51537.93582	9119.97167	39567.69111	3881.99967	21338.22009	0.73838	0.73062
551798.04	4172945.17	30318.08561	7436.74546	46150.31293	11055.89322	28757.09468	47258.89322	10966.34659	42417.70853	4395.20904	18671.96086	0.73215	0.72449
551808.04	4173015.17	27101.25053	2183.10864	21021.07108	5107.22518	63428.63911	51264.04893	3511.21918	18672.45986	2074.78672	43482.94359	0.74619	0.73824
551808.04	4173005.17	28993.07962	2488.16611	23690.33075	5566.42713	57805.27858	52792.13214	3969.71188	21096.96804	2250.57324	38714.15897	0.73741	0.72965
551808.04	4173025.17	24809.86488	1935.71394	18601.09404	4707.28203	68539.34551	48623.67931	3134.13533	16504.89171	1921.64199	48380.88818	0.75535	0.74718
551808.04	4172995.17	30303.22309	2867.2027	26559.60259	6096.7458	51998.65076	53174.39684	4531.54019	23742.06096	2454.06285	34258.20716	0.72902	0.72144
551808.04	4173035.17	22327.39543	1733.26946	16458.21103	4359.6122	72823.97087	45041.82596	2822.01824	14613.39933	1788.52345	53125.68359	0.76504	0.75662
551808.04	4172985.17	30913.45577	3341.78649	29555.31699	6714.49239	46295.76243	52483.61981	5224.83348	26550.85691	2692.36134	30207.28979	0.72112	0.71368
551808.04	4172975.17	30789.8781	3938.15916	32575.12109	7439.72973	40906.54724	50861.84599	6083.64772	29440.21091	2974.25459	26587.93716	0.71375	0.70645
551808.04	4173045.17	19820.55989	1565.24605	14587.21967	4054.26825	75908.69826	40766.105	2560.56226	12982.91068	1671.29213	57253.83921	0.77513	0.76644
551818.04	4173005.17	24881.64538	2370.8164	21742.72411	5352.08902	51347.46309	45035.85847	3782.24868	19520.12971	2160.0593	35293.88585	0.6994	0.69228
551818.04	4173015.17	23399.56742	2083.01402	19460.12474	4913.97975	55603.14251	43636.18477	3350.0041	17427.79567	1991.6333	39029.21543	0.70733	0.70003
551818.04	4173025.17	21619.34612	1847.79253	17361.1483	4532.19184	59354.5195	41439.12059	2992.48579	15529.77553	1845.05487	42702.84429	0.71559	0.70809
551818.04	4173035.17	19671.6512	1654.28998	15469.89043	4198.22858	62348.60513	38569.08237	2694.7566	13841.96731	1716.97646	46068.18363	0.72419	0.71647
551818.04	4173045.17	17666.14094	1492.77685	13787.89735	3901.983	64295.90332	35195.82645	2443.67898	12357.27246	1603.37951	48777.63544	0.7329	0.72493
551828.04	4173035.17	17445.03588	1581.31829	14536.91508	4042.1092	53939.18989	33477.53419	2576.57721	13096.58848	1649.0059	40225.0892	0.6864	0.67929
CONCUNIT ug/	m^3												
DEPUNIT g/m^	2												

X	Y	Construction Area 2B (Part 1 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 3B (Phase 3) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 4B and Area 2B/4B (Phase 4) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 1 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 2 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 3A (Phase 3) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 1 of 2 Phase 4) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Route 1 - From the project site towards US-101 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Route 2 - From US-101 towards the project site Annual DPM Exhaust w/Actual Emissions (ug/m3)	Total DPM (ug/m3)
551728.04	4172945.17	4.27E-03	8.10E-04	9.46E-03	1.01E-03	2.49E-03	2.25E-02	4.18E-03	1.11E-02	3.01E-04	1.14E-03	9.46E-06	1.16E-05	5.7330E-02
551738.04	4172975.17	7.71E-03	3.60E-04	4.92E-03	6.48E-04	4.34E-03	3.92E-02	1.96E-03	5.54E-03	1.97E-04	1.82E-03	9.18E-06	1.13E-05	6.6695E-02
551728.04	4172935.17	3.31E-03	1.13E-03	9.67E-03	1.18E-03	2.09E-03	1.80E-02	5.65E-03	1.14E-02	3.46E-04	9.80E-04	9.37E-06	1.15E-05	5.3791E-02
551738.04	4172965.17	6.27E-03	4.43E-04	6.20E-03	7.30E-04	3.47E-03	3.22E-02	2.38E-03	7.11E-03	2.20E-04	1.51E-03	9.05E-06	1.11E-05	6.0522E-02
551748.04	4173005.17	6.49E-03	2.05E-04	2.06E-03	4.52E-04	8.77E-03	4.17E-02	1.15E-03	2.35E-03	1.41E-04	3.12E-03	9.00E-06	1.11E-05	6.6411E-02
551728.04	4172925.17	2.62E-03	1.68E-03	9.35E-03	1.39E-03	1.78E-03	1.46E-02	7.98E-03	1.12E-02	4.04E-04	8.50E-04	9.31E-06	1.14E-05	5.1871E-02
551748.04	4172995.17	7.32E-03	2.37E-04	2.56E-03	4.98E-04	6.68E-03	4.10E-02	1.32E-03	2.91E-03	1.54E-04	2.53E-03	8.86E-06	1.09E-05	6.5180E-02
551738.04	4172955.17	4.84E-03	5.62E-04	7.08E-03	8.30E-04	2.83E-03	2.51E-02	2.97E-03	8.26E-03	2.48E-04	1.28E-03	8.94E-06	1.10E-05	5.4069E-02
551748.04	4172985.17	7.15E-03	2.79E-04	3.22E-03	5.52E-04	5.13E-03	3.75E-02	1.54E-03	3.69E-03	1.69E-04	2.07E-03	8.72E-06	1.07E-05	6.1271E-02
551758.04	4173035.17	2.69E-03	1.33E-04	1.12E-03	3.35E-04	1.29E-02	2.95E-02	7.60E-04	1.30E-03	1.06E-04	5.54E-03	8.87E-06	1.09E-05	5.4425E-02
551758.04	4173025.17	3.49E-03	1.49E-04	1.31E-03	3.63E-04	1.13E-02	3.26E-02	8.46E-04	1.52E-03	1.14E-04	4.38E-03	8.71E-06	1.07E-05	5.6104E-02
551738.04	4172945.17	3.78E-03	7.44E-04	7.50E-03	9.54E-04	2.35E-03	1.99E-02	3.83E-03	8.88E-03	2.83E-04	1.09E-03	8.85E-06	1.09E-05	4.9329E-02
551748.04	4172975.17	6.32E-03	3.34E-04	4.02E-03	6.16E-04	4.03E-03	3.23E-02	1.83E-03	4.63E-03	1.87E-04	1.72E-03	8.59E-06	1.06E-05	5.6026E-02
551758.04	4173015.17	4.40E-03	1.68E-04	1.56E-03	3.95E-04	9.43E-03	3.38E-02	9.50E-04	1.81E-03	1.23E-04	3.51E-03	8.56E-06	1.05E-05	5.6187E-02
551738.04	4172935.17	2.99E-03	1.03E-03	7.49E-03	1.11E-03	1.98E-03	1.61E-02	5.09E-03	8.99E-03	3.25E-04	9.35E-04	8.77E-06	1.08E-05	4.6089E-02
551758.04	4173005.17	5.13E-03	1.92E-04	1.87E-03	4.32E-04	7.54E-03	3.34E-02	1.08E-03	2.17E-03	1.34E-04	2.85E-03	8.42E-06	1.04E-05	5.4780E-02
551738.04	4172925.17	2.41E-03	1.49E-03	7.25E-03	1.30E-03	1.69E-03	1.33E-02	6.98E-03	8.83E-03	3.79E-04	8.12E-04	8.71E-06	1.07E-05	4.4489E-02
551748.04	4172965.17	5.21E-03	4.10E-04	4.81E-03	6.92E-04	3.24E-03	2.67E-02	2.21E-03	5.60E-03	2.08E-04	1.44E-03	8.48E-06	1.04E-05	5.0503E-02
551738.04	4172915.17	1.97E-03	2.25E-03	6.87E-03	1.57E-03	1.46E-03	1.11E-02	1.00E-02	8.48E-03	4.50E-04	7.11E-04	8.67E-06	1.07E-05	4.4900E-02
551758.04	4172995.17	5.45E-03	2.21E-04	2.27E-03	4.75E-04	5.92E-03	3.15E-02	1.24E-03	2.64E-03	1.46E-04	2.34E-03	8.29E-06	1.02E-05	5.2254E-02
551748.04	4172955.17	4.17E-03	5.19E-04	5.41E-03	7.84E-04	2.66E-03	2.16E-02	2.74E-03	6.41E-03	2.34E-04	1.22E-03	8.38E-06	1.03E-05	4.5749E-02
551768.04	4173055.17	1.54E-03	1.02E-04	7.92E-04	2.78E-04	1.21E-02	1.50E-02	5.92E-04	9.49E-04	8.79E-05	7.02E-03	8.58E-06	1.06E-05	3.8449E-02
551768.04	4173065.17	1.28E-03	9.34E-05	6.98E-04	2.60E-04	1.25E-02	1.13E-02	5.42E-04	8.45E-04	8.24E-05	7.72E-03	8.74E-06	1.08E-05	3.5298E-02
551768.04	4173045.17	1.88E-03	1.13E-04	9.06E-04	2.98E-04	1.12E-02	1.91E-02	6.49E-04	1.08E-03	9.39E-05	5.88E-03	8.43E-06	1.04E-05	4.1233E-02
551758.04	4172985.17	5.32E-03	2.60E-04	2.76E-03	5.25E-04	4.67E-03	2.87E-02	1.44E-03	3.22E-03	1.60E-04	1.94E-03	8.17E-06	1.01E-05	4.9044E-02
551748.04	4172945.17	3.34E-03	6.79E-04	5.74E-03	8.98E-04	2.22E-03	1.76E-02	3.49E-03	6.92E-03	2.66E-04	1.04E-03	8.30E-06	1.02E-05	4.2202E-02
551768.04	4173035.17	2.32E-03	1.25E-04	1.05E-03	3.21E-04	1.02E-02	2.23E-02	7.16E-04	1.24E-03	1.01E-04	4.75E-03	8.29E-06	1.02E-05	4.3103E-02
551768.04	4173025.17	2.86E-03	1.40E-04	1.22E-03	3.47E-04	8.92E-03	2.43E-02	7.96E-04	1.44E-03	1.08E-04	3.85E-03	8.15E-06	1.00E-05	4.3986E-02
551758.04	4172975.17	4.85E-03	3.11E-04	3.30E-03	5.85E-04	3.74E-03	2.54E-02	1.70E-03	3.88E-03	1.77E-04	1.62E-03	8.06E-06	9.93E-06	4.5564E-02
551768.04	4173075.17	1.07E-03	8.57E-05	6.20E-04	2.43E-04	1.21E-02	8.61E-03	4.99E-04	7.59E-04	7.75E-05	7.64E-03	8.91E-06	1.10E-05	3.1757E-02
551748.04	4172935.17	2.71E-03	9.22E-04	5.84E-03	1.04E-03	1.88E-03	1.45E-02	4.57E-03	7.14E-03	3.06E-04	8.96E-04	8.23E-06	1.01E-05	3.9841E-02
551768.04	4173015.17	3.40E-03	1.57E-04	1.44E-03	3.77E-04	7.62E-03	2.52E-02	8.93E-04	1.69E-03	1.17E-04	3.15E-03	8.02E-06	9.88E-06	4.4042E-02
551748.04	4172925.17	2.22E-03	1.30E-03	5.75E-03	1.22E-03	1.60E-03	1.22E-02	6.14E-03	7.13E-03	3.56E-04	7.78E-04	8.17E-06	1.01E-05	3.8695E-02
551748.04	4172915.17	1.84E-03	1.90E-03	5.56E-03	1.46E-03	1.39E-03	1.02E-02	8.54E-03	6.99E-03	4.24E-04	6.82E-04	8.14E-06	1.00E-05	3.9015E-02
551758.04	4172965.17	4.20E-03	3.81E-04	3.82E-03	6.56E-04	3.05E-03	2.18E-02	2.05E-03	4.55E-03	1.97E-04	1.37E-03	7.96E-06	9.81E-06	4.2107E-02
551768.04	4173005.17	3.84E-03	1.79E-04	1.70E-03	4.12E-04	6.34E-03	2.51E-02	1.01E-03	2.00E-03	1.27E-04	2.60E-03	7.90E-06	9.73E-06	4.3326E-02
551758.04	4172955.17	3.54E-03	4.79E-04	4.25E-03	7.42E-04	2.52E-03	1.84E-02	2.53E-03	5.13E-03	2.21E-04	1.16E-03	7.88E-06	9.70E-06	3.9036E-02
551768.04	4172995.17	4.05E-03	2.07E-04	2.02E-03	4.53E-04	5.19E-03	2.41E-02	1.16E-03	2.38E-03	1.39E-04	2.17E-03	7.79E-06	9.59E-06	4.1934E-02
551758.04	4172945.17	2.94E-03	6.21E-04	4.54E-03	8.48E-04	2.11E-03	1.55E-02	3.19E-03	5.56E-03	2.52E-04	9.98E-04	7.80E-06	9.61E-06	3.6599E-02
551768.04	4172985.17	4.02E-03	2.43E-04	2.38E-03	5.00E-04	4.23E-03	2.25E-02	1.35E-03	2.83E-03	1.52E-04	1.82E-03	7.68E-06	9.46E-06	4.0043E-02
551758.04	4172935.17	2.45E-03	8.27E-04	4.68E-03	9.80E-04	1.79E-03	1.31E-02	4.11E-03	5.80E-03	2.89E-04	8.62E-04	7.74E-06	9.53E-06	3.4925E-02
551778.04	4173055.17	1.39E-03	9.66E-05	7.51E-04	2.66E-04	9.30E-03	1.22E-02	5.60E-04	9.06E-04	8.39E-05	5.45E-03	8.03E-06	9.88E-06	3.0972E-02
551778.04	4173045.17	1.66E-03	1.06E-04	8.56E-04	2.86E-04	8.74E-03	1.47E-02	6.13E-04	1.03E-03	8.96E-05	4.75E-03	7.89E-06	9.72E-06	3.2846E-02
551768.04	4172975.17	3.79E-03	2.91E-04	2.77E-03	5.56E-04	3.47E-03	2.04E-02	1.59E-03	3.32E-03	1.68E-04	1.54E-03	7.58E-06	9.34E-06	3.7936E-02
551758.04	4172915.17	1.72E-03	1.59E-03	4.59E-03	1.37E-03	1.33E-03	9.50E-03	7.29E-03	5.84E-03	3.99E-04	6.58E-04	7.65E-06	9.43E-06	3.4299E-02
551778.04	4173065.17	1.16E-03	8.83E-05	6.64E-04	2.49E-04	9.60E-03	9.74E-03	5.13E-04	8.08E-04	7.88E-05	5.94E-03	8.16E-06	1.00E-05	2.8860E-02
551758.04	4172925.17	2.04E-03	1.13E-03	4.69E-03	1.15E-03	1.54E-03	1.11E-02	5.41E-03	5.88E-03	3.37E-04	7.51E-04	7.69E-06	9.47E-06	3.4087E-02
551778.04	4173035.17	1.99E-03	1.18E-04	9.84E-04	3.08E-04	8.02E-03	1.69E-02	6.76E-04	1.17E-03	9.60E-05	4.02E-03	7.77E-06	9.57E-06	3.4306E-02
551778.04	4173025.17	2.35E-03	1.31E-04	1.14E-03	3.33E-04	7.19E-03	1.85E-02	7.51E-04	1.35E-03	1.03E-04	3.37E-03	7.65E-06	9.42E-06	3.5205E-02
551768.04	4172965.17	3.42E-03	3.55E-04	3.15E-03	6.23E-04	2.87E-03	1.81E-02	1.91E-03	3.80E-03	1.87E-04	1.31E-03	7.50E-06	9.24E-06	3.5786E-02
551778.04	4173015.17	2.70E-03	1.48E-04	1.32E-03	3.61E-04	6.29E-03	1.93E-02	8.42E-04	1.58E-03	1.11E-04	2.83E-03	7.54E-06	9.29E-06	3.5534E-02
551778.04	4173005.17	2.98E-03	1.69E-04	1.55E-03	3.94E-04	5.40E-03	1.95E-02	9.53E-04	1.84E-03	1.21E-04	2.38E-03	7.43E-06	9.16E-06	3.5323E-02
551768.04	4172955.17	3.00E-03	4.44E-04	3.47E-03	7.04E-04	2.40E-03	1.58E-02	2.34E-03	4.24E-03	2.10E-04	1.12E-03	7.42E-06	9.14E-06	3.3784E-02
551778.04	4172995.17	3.14E-03	1.95E-04	1.80E-03	4.32E-04	4.57E-03	1.91E-02	1.09E-03	2.15E-03	1.32E-04	2.01E-03	7.33E-06	9.03E-06	3.4629E-02
551768.04	4172945.17	2.58E-03	5.68E-04	3.71E-03	8.03E-04	2.02E-03	1.37E-02	2.92E-03	4.59E-03	2.39E-04	9.62E-04	7.35E-06	9.06E-06	3.2126E-02
551768.04	4172905.17	1.37E-03	1.77E-03	3.76E-03	1.55E-03	1.12E-03	7.67E-03	8.12E-03	4.91E-03	4.51E-04	5.64E-04	7.19E-06	8.86E-06	3.1294E-02
551768.04	4172935.17	2.21E-03	7.41E-04	3.85E-03	9.26E-04	1.72E-03	1.19E-02	3.70E-03	4.81E-03	2.74E-04	8.34E-04	7.29E-06	8.99E-06	3.0933E-02
551778.04	4172985.17	3.16E-03	2.29E-04	2.08E-03	4.77E-04	3.83E-03	1.82E-02	1.27E-03	2.50E-03	1.45E-04	1.71E-03	7.23E-06	8.92E-06	3.3569E-02
551768.04	4172915.17	1.61E-03	1.32E-03	3.87E-03	1.29E-03	1.28E-03	8.83E-03	6.23E-03	4.97E-03	3.77E-04	6.38E-04	7.21E-06	8.89E-06	3.0416E-02
551768.04	4172925.17	1.88E-03	9.87E-04	3.90E-03	1.08E-03	1.48E-03	1.02E-02	4.77E-03	4.94E-03	3.19E-04	7.27E-04	7.25E-06	8.93E-06	3.0330E-02
551778.04	4172975.17	3.04E-03	2.73E-04	2.37E-03	5.30E-04	3.21E-03	1.69E-02	1.49E-03	2.88E-03	1.60E-04	1.46E-03	7.15E-06	8.81E-06	3.2300E-02
551778.04	4172965.17	2.83E-03	3.32E-04	2.66E-03	5.94E-04	2.70E-03	1.53E-02	1.79E-03	3.25E-03	1.78E-04	1.25E-03	7.07E-06	8.72E-06	3.0932E-02
551788.04	4173045.17	1.46E-03	1.00E-04	8.09E-04	2.74E-04	6.96E-03	1.18E-02	5.81E-04	9.78E-04	8.56E-05	3.87E-03	7.41E-06	9.13E-06	2.6975E-02
551788.04	4173035.17	1.71E-03	1.11E-04	9.24E-04	2.95E-04	6.50E-03	1.34E-02	6.40E-04	1.11E-03	9.17E-05	3.41E-03	7.30E-06	9.00E-06	2.8195E-02
551788.04	4173025.17	1.96E-03	1.24E-04	1.06E-03	3.19E-04	5.93E-03	1.46E-02	7.11E-04	1.28E-03	9.85E-05	2.95E-03	7.20E-06	8.87E-06	2.9054E-02
551788.04	4173055.17	1.24E-03	9.13E-05	7.13E-04	2.56E-04	7.28E-03	1.01E-02	5.30E-04	8.66E-04	8.02E-05	4.27E-03	7.53E-06	9.27E-06	2.5455E-02
551778.04	4172955.17	2.56E-03	4.11E-04	2.90E-03	6.70E-04	2.28E-03	1.37E-02	2.17E-03	3.59E-03	2.00E-04	1.08E-03	7.00E-06	8.63E-06	2.9614E-02
551788.04	4173015.17	2.20E-03	1.40E-04	1.22E-03	3.46E-04	5.31E-03	1.54E-02	7.96E-04	1.47E-03	1.06E-04	2.54E-03	7.10E-06	8.75E-06	2.9513E-02
551788.04	4173005.17	2.40E-03	1.59E-04	1.41E-03	3.77E-04	4.67E-03	1.57E-02	9.01E-04	1.69E-03	1.15E-04	2.18E-03	7.00E-06	8.64E-06	2.9581E-02
551778.04	4172945.17	2.26E-03	5.19E-04	3.10E-03	7.63E-04	1.94E-03	1.22E-02	2.68E-03	3.87E-03	2.27E-04	9.31E-04	6.94E-06	8.56E-06	2.8484E-02
551778.04	4172905.17	1.30E-03	1.38E-03	3.25E-03	1.43E-03	1.09E-03	7.21E-03	6.64E-03	4.27E-03	4.23E-04	5.50E-04	6.79E-06	8.37E-06	2.7555E-02
551778.04	4172935.17	1.98E-03	6.64E-04	3.23E-03	8.79E-04	1.66E-03	1.07E-02	3.34E-03	4.08E-03	2.61E-04	8.10E-04	6.89E-06	8.49E-06	2.7654E-02
551788.04	4172995.17	2.52E-03	1.84E-04	1.61E-03	4.14E-04	4.05E-03	1.55E-02	1.03E-03	1.95E-03	1.26E-04	1.87E-03	6.91E-06	8.53E-06	2.9300E-02
551778.04	4172925.17	1.73E-03	8.56E-04	3.30E-03	1.02E-03	1.44E-03	9.39E-03	4.21E-03	4.22E-03	3.03E-04	7.08E-04	6.85E-06	8.44E-06	2.7191E-02
551778.04	4172915.17	1.50E-03	1.10E-03	3.30E-03	1.21E-03	1.25E-03	8.23E-03	5.32E-03	4.27E-03	3.56E-04	6.23E-04	6.81E-06	8.40E-06	2.7159E-02
551788.04	4172985.17	2.55E-03	2.16E-04	1.84E-03	4.56E-04	3.48E-03	1.50E-02	1.20E-03	2.23E-03	1.38E-04	1.61E-03	6.83E-06	8.43E-06	2.8728E-02
551788.04	4172975.17	2.50E-03	2.57E-04	2.06E-03	5.07E-04	2.98E-03	1.42E-02	1.40E-03	2.53E-03	1.52E-04	1.39E-03	6.76E-06	8.33E-06	2.7964E-02
551788.04	4172965.17	2.37E-03	3.11E-04	2.28E-03	5.67E-04	2.54E-03	1.31E-02	1.67E-03	2.82E-03	1.70E-04	1.20E-03	6.69E-06	8.25E-06	2.7100E-02
551788.04	4172955.17	2.19E-03	3.81E-04	2.48E-03	6.39E-04	2.18E-03	1.20E-02	2.02E-03	3.09E-03	1.91E-04	1.04E-03	6.62E-06	8.17E-06	2.6232E-02
551788.04	4172945.17	1.99E-03	4.73E-04	2.64E-03	7.26E-04	1.87E-03	1.08E-02	2.46E-03	3.33E-03	2.17E-04	9.03E-04	6.57E-06	8.10E-06	2.5460E-02
551798.04	4173025.17	1.67E-03	1.18E-04	9.89E-04	3.06E-04	5.00E-03	1.19E-02	6.75E-04	1.20E-03	9.42E-05	2.59E-03	6.79E-06	8.37E-06	2.4568E-02
551788.04	4172935.17	1.78E-03	5.92E-04	2.76E-03	8.34E-04	1.61E-03	9.71E-03	3.02E-03	3.52E-03	2.48E-04	7.89E-04	6.52E-06	8.04E-06	2.4871E-02
551798.04	4173035.17	1.48E-03	1.05E-04	8.68E-04	2.83E-04	5.39E-03	1.10E-02	6.07E-04	1.05E-03	8.77E-05	2.90E-03	6.88E-06	8.49E-06	2.3772E-02
551798.04	4173015.17	1.84E-03	1.33E-04	1.13E-03	3.32E-04	4.56E-03	1.26E-02	7.56E-04	1.37E-03	1.02E-04	2.28E-03	6.70E-06	8.27E-06	2.5074E-02
551788.04	4172925.17	1.58E-03	7.41E-04	2.83E-03	9.67E-04	1.40E-03	8.64E-03	3.72E-03	3.65E-03	2.88E-04	6.92E-04	6.48E-06	7.99E-06	2.4516E-02
551788.04	4172915.17	1.39E-03	9.15E-04	2.85E-03	1.13E-03	1.22E-03	7.67E-03	4.55E-03	3.72E-03	3.36E-04	6.10E-04	6.44E-06	7.95E-06	2.4401E-02
551798.04	4173045.17	1.29E-03	9.51E-05	7.65E-04	2.63E-04	5.69E-03	9.84E-03	5.51E-04	9.32E-04	8.19E-05	3.20E-03	6.98E-06	8.60E-06	2.2718E-02
551798.04	4173005.17	1.98E-03	1.51E-04	1.28E-03	3.62E-04	4.09E-03	1.29E-02	8.55E-04	1.56E-03	1.10E-04	1.99E-03	6.62E-06	8.16E-06	2.5292E-02
551798.04	4172995.17	2.08E-03	1.74E-04	1.45E-03	3.97E-04	3.62E-03	1.29E-02	9.78E-04	1.78E-03	1.20E-04	1.74E-03	6.54E-06	8.07E-06	2.5240E-02
551798.04	4173055.17	1.12E-03	8.65E-05	6.77E-04	2.46E-04	5.86E-03	8.58E-03	5.03E-04	8.29E-04	7.68E-05	3.43E-03	7.08E-06	8.73E-06	2.1429E-02
551798.04	4172985.17	2.12E-03	2.04E-04	1.63E-03	4.37E-04	3.17E-03	1.26E-02	1.13E-03	2.01E-03	1.32E-04	1.51E-03	6.46E-06	7.98E-06	2.4966E-02
551798.04	4172975.17	2.09E-03	2.42E-04	1.82E-03	4.85E-04	2.76E-03	1.21E-02	1.32E-03	2.25E-03	1.46E-04	1.32E-03	6.40E-06	7.89E-06	2.4536E-02
551798.04	4172965.17	2.02E-03	2.90E-04	1.99E-03	5.42E-04	2.39E-03	1.14E-02	1.57E-03	2.48E-03	1.62E-04	1.15E-03	6.33E-06	7.82E-06	2.3992E-02
551798.04	4172955.17	1.90E-03	3.52E-04	2.15E-03	6.09E-04	2.07E-03	1.06E-02	1.87E-03	2.71E-03	1.82E-04	1.00E-03	6.27E-06	7.74E-06	2.3423E-02
551798.04	4172945.17	1.75E-03	4.30E-04	2.29E-03	6.91E-04	1.80E-03	9.69E-03	2.25E-03	2.90E-03	2.06E-04	8.77E-04	6.22E-06	7.68E-06	2.2890E-02
551808.04	4173015.17	1.57E-03	1.26E-04	1.04E-03	3.19E-04	3.96E-03	1.05E-02	7.20E-04	1.28E-03	9.75E-05	2.04E-03	6.34E-06	7.82E-06	2.1674E-02
551808.04	4173005.17	1.68E-03	1.44E-04	1.17E-03	3.48E-04	3.61E-03	1.08E-02	8.14E-04	1.44E-03	1.06E-04	1.82E-03	6.27E-06	7.73E-06	2.1968E-02
551808.04	4173025.17	1.43E-03	1.12E-04	9.22E-04	2.94E-04	4.28E-03	9.97E-03	6.42E-04	1.13E-03	9.03E-05	2.27E-03	6.42E-06	7.92E-06	2.1158E-02
551808.04	4172995.17	1.75E-03	1.66E-04	1.32E-03	3.81E-04	3.25E-03	1.09E-02	9.29E-04	1.62E-03	1.15E-04	1.61E-03	6.20E-06	7.65E-06	2.2053E-02
551808.04	4173035.17	1.29E-03	1.00E-04	8.16E-04	2.72E-04	4.55E-03	9.23E-03	5.78E-04	9.99E-04	8.40E-05	2.50E-03	6.50E-06	8.02E-06	2.0432E-02
551808.04	4172985.17	1.79E-03	1.93E-04	1.47E-03	4.19E-04	2.89E-03	1.08E-02	1.07E-03	1.82E-03	1.26E-04	1.42E-03	6.13E-06	7.56E-06	2.1960E-02
551808.04	4172975.17	1.78E-03	2.28E-04	1.61E-03	4.65E-04	2.55E-03	1.04E-02	1.25E-03	2.01E-03	1.40E-04	1.25E-03	6.07E-06	7.49E-06	2.1730E-02
551808.04	4173045.17	1.15E-03	9.05E-05	7.23E-04	2.53E-04	4.74E-03	8.36E-03	5.25E-04	8.88E-04	7.85E-05	2.69E-03	6.59E-06	8.12E-06	1.9505E-02
551818.04	4173005.17	1.44E-03	1.37E-04	1.08E-03	3.34E-04	3.21E-03	9.23E-03	7.75E-04	1.33E-03	1.01E-04	1.66E-03	5.94E-06	7.34E-06	1.9309E-02
551818.04	4173015.17	1.35E-03	1.20E-04	9.65E-04	3.07E-04	3.47E-03	8.94E-03	6.87E-04	1.19E-03	9.35E-05	1.83E-03	6.01E-06	7.42E-06	1.8981E-02
551818.04	4173025.17	1.25E-03	1.07E-04	8.61E-04	2.83E-04	3.71E-03	8.49E-03	6.13E-04	1.06E-03	8.67E-05	2.01E-03	6.08E-06	7.50E-06	1.8483E-02
551818.04	4173035.17	1.14E-03	9.56E-05	7.67E-04	2.62E-04	3.89E-03	7.91E-03	5.52E-04	9.47E-04	8.06E-05	2.16E-03	6.15E-06	7.59E-06	1.7819E-02
551818.04	4173045.17	1.02E-03	8.63E-05	6.83E-04	2.44E-04	4.02E-03	7.21E-03	5.01E-04	8.45E-04	7.53E-05	2.29E-03	6.23E-06	7.68E-06	1.6991E-02
551828.04	4173035.17	1.01E-03	9.14E-05	7.21E-04	2.52E-04	3.37E-03	6.86E-03	5.28E-04	8.96E-04	7.75E-05	1.89E-03	5.83E-06	7.20E-06	1.5708E-02

Midway Village Project—New Phase 1 Receptors

Phase 1 Receptors: Exposed to Phases 2+3+4 Demolition and Phases 2+3+4 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

	Mitigated Concentrations
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 1 of 2 Phase 2) (grams/m2/sec):	3.12E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 2A (Part 2 of 2 Phase 2) (grams/m2/sec):	3.12E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	2.73E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	1.28E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	1.28E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B (Part 1 of 2 Phase 2) (grams/m2/sec):	3.86E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 2B and 2B/3B (Part 2 of Phase 2) (grams/m2/sec):	3.86E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	7.50E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	4.93E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	4.93E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	3.32E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	3.36E-04

X	Y	Unit Emissions Construction Area 2B (Part 1 of 2 Phase 2) AREA8	Unit Emissions Construction Area 2B and 2B/3B (Part 2 of Phase 2) AREA9	Unit Emissions Construction Area 3B (Phase 3) AREA10	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA11	Unit Emissions Construction Area 4B (Phase 4/5) AREA12	Unit Emissions Demolition Area 2A (Part 1 of 2 Phase 2) AREA13	Unit Emissions Demolition Area 2A (Part 2 of 2 Phase 2) AREA2	Unit Emissions Demolition Area 3A (Phase 3) AREA3	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA4	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA5	Unit Emissions Route 1 - From the project site towards US-101 AREA6	Unit Emissions Route 2 - From US-101 towards the project site AREA7
551728.04	4172945.17	73779.68061	14007.31973	190768.4562	16234.98242	39869.25405	109911.1046	20397.25202	162632.0495	6403.44498	24272.24619	1.11373	1.09757
551738.04	4172975.17	133270.6636	6221.9835	99225.30638	10368.16048	69532.87926	191202.6087	9549.30107	80954.96208	4201.86211	38693.14198	1.08026	1.06536
551728.04	4172935.17	57211.11469	19574.94964	195082.951	18896.23327	33484.86147	87660.86714	27569.28724	167347.8846	7369.84343	20854.30018	1.10299	1.08692
551738.04	4172965.17	108419.4631	7658.28124	125103.0277	11686.71934	55488.74309	156966.0204	11605.97538	103907.9774	4691.96995	32230.92089	1.06532	1.05066
551748.04	4173005.17	112297.4024	3543.73846	41515.93591	7240.69308	140451.1413	203213.2735	5601.93095	34295.35344	2992.58788	66483.48418	1.05928	1.04512
551728.04	4172925.17	45310.41812	29098.63205	188645.3123	22332.28498	28512.87716	71364.89373	38930.26518	163185.5094	8607.1784	18095.36117	1.09518	1.07912
551748.04	4172995.17	126560.0827	4105.22326	51648.14959	7979.4053	106915.0344	199784.4013	6442.86821	42616.37369	3273.11386	53847.46668	1.04207	1.02825
551738.04	4172955.17	83791.18227	9721.17093	142897.1469	13283.85814	45257.74866	122687.2417	14478.73858	120832.616	5283.15684	27162.14156	1.05216	1.03768
551748.04	4172985.17	123738.7738	4825.42622	65025.63039	8839.29587	82067.20268	182707.1704	7509.4305	53907.0103	3596.98291	44112.26646	1.02589	1.01236
551758.04	4173035.17	46603.08432	2299.2049	22501.36281	5370.12386	206227.3548	144086.9695	3708.20348	19050.72021	2249.14334	118035.0786	1.04342	1.02958
551758.04	4173025.17	60315.47961	2572.51359	26430.65827	5816.36785	181035.1862	159052.7344	4128.89211	22261.88063	2422.68049	93337.80802	1.02494	1.01154
551738.04	4172945.17	65412.6626	12874.47684	151317.7593	15280.8682	37592.39512	97095.73403	18684.08919	129820.1699	6021.67248	23151.10704	1.04159	1.02724
551748.04	4172975.17	109400.5307	5783.6521	81107.50651	9860.31773	64502.54439	157703.4911	8905.69736	67667.46235	3979.36656	36559.70125	1.01119	0.99791
551758.04	4173015.17	76185.34731	2903.97443	31430.95047	6327.71947	150951.7474	165024.1689	4635.51848	26407.97102	2619.57754	74694.50328	1.00747	0.99447
551738.04	4172935.17	51700.64471	17745.0931	151107.0616	17706.17666	31653.8395	78726.10464	24833.2625	131517.6967	6916.58416	19907.06004	1.0319	1.01762
551758.04	4173005.17	88698.5757	3313.05452	37818.31735	6918.36921	120765.6883	162749.7941	5256.14804	31776.95537	2844.90858	60628.10272	0.99106	0.9784
551738.04	4172925.17	41622.09877	25703.61521	146327.194	20834.15324	27003.03479	65045.66406	34073.23444	129105.9247	8064.30904	17279.87403	1.02472	1.01045
551748.04	4172965.17	90068.66837	7094.79579	96989.98594	11073.83131	51918.44005	130102.1797	10772.85661	81919.4485	4432.67078	30616.09184	0.99778	0.9847
551738.04	4172915.17	34023.92702	38958.26503	138492.8619	25060.93823	23296.44274	54162.5306	48924.04412	124070.797	9587.05346	15131.09305	1.02066	1.00632
551758.04	4172995.17	94282.37159	3830.23129	45889.9226	7607.96844	94853.95478	153789.5079	6032.28686	38665.50716	3106.08533	49798.89577	0.97586	0.9635
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CONCUNIT ug/	m^3												
DEPUNIT g/m^	2												

Construction Area 2B (Part 1 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 3B (Phase 3) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 4B and Area 2B/4B (Phase 4) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 1 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 2 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 3A (Phase 3) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 1 of 2 Phase 4) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) Annual PM2.5 w/Actual Emissions (ug/m3)	Route 1 - From the project site towards US-101 Annual PM2.5 w/Actual Emissions (ug/m3)	Route 2 - From US-101 towards the project site Annual PM2.5 w/Actual Emissions (ug/m3)	**Total PM2.5 (ug/m3)**
2.30E-02	4.38E-03	5.21E-02	2.09E-03	5.12E-03	4.24E-02	7.87E-03	1.22E-01	3.15E-03	1.20E-02	3.70E-04	3.68E-04	2.7483E-01
4.16E-02	1.94E-03	2.71E-02	1.33E-03	8.93E-03	7.38E-02	3.69E-03	6.07E-02	2.07E-03	1.91E-02	3.59E-04	3.58E-04	2.4098E-01
1.79E-02	6.11E-03	5.33E-02	2.43E-03	4.30E-03	3.38E-02	1.06E-02	1.25E-01	3.63E-03	1.03E-02	3.66E-04	3.65E-04	2.6859E-01
3.39E-02	2.39E-03	3.42E-02	1.50E-03	7.13E-03	6.06E-02	4.48E-03	7.79E-02	2.31E-03	1.59E-02	3.54E-04	3.53E-04	2.4094E-01
3.51E-02	1.11E-03	1.13E-02	9.30E-04	1.80E-02	7.84E-02	2.16E-03	2.57E-02	1.47E-03	3.27E-02	3.52E-04	3.51E-04	2.0775E-01
1.42E-02	9.09E-03	5.15E-02	2.87E-03	3.66E-03	2.75E-02	1.50E-02	1.22E-01	4.24E-03	8.91E-03	3.64E-04	3.62E-04	2.6011E-01
3.95E-02	1.28E-03	1.41E-02	1.03E-03	1.37E-02	7.71E-02	2.49E-03	3.19E-02	1.61E-03	2.65E-02	3.46E-04	3.45E-04	2.1007E-01
2.62E-02	3.04E-03	3.90E-02	1.71E-03	5.81E-03	4.74E-02	5.59E-03	9.06E-02	2.60E-03	1.34E-02	3.49E-04	3.48E-04	2.3599E-01
3.86E-02	1.51E-03	1.78E-02	1.14E-03	1.05E-02	7.05E-02	2.90E-03	4.04E-02	1.77E-03	2.17E-02	3.41E-04	3.40E-04	2.0763E-01
1.46E-02	7.18E-04	6.15E-03	6.90E-04	2.65E-02	5.56E-02	1.43E-03	1.43E-02	1.11E-03	5.81E-02	3.46E-04	3.46E-04	1.7989E-01
1.88E-02	8.04E-04	7.22E-03	7.47E-04	2.33E-02	6.14E-02	1.59E-03	1.67E-02	1.19E-03	4.60E-02	3.40E-04	3.40E-04	1.7840E-01
2.04E-02	4.02E-03	4.13E-02	1.96E-03	4.83E-03	3.75E-02	7.21E-03	9.73E-02	2.97E-03	1.14E-02	3.46E-04	3.45E-04	2.2967E-01
3.42E-02	1.81E-03	2.22E-02	1.27E-03	8.29E-03	6.09E-02	3.44E-03	5.07E-02	1.96E-03	1.80E-02	3.36E-04	3.35E-04	2.0338E-01
2.38E-02	9.07E-04	8.59E-03	8.13E-04	1.94E-02	6.37E-02	1.79E-03	1.98E-02	1.29E-03	3.68E-02	3.34E-04	3.34E-04	1.7754E-01
1.61E-02	5.54E-03	4.13E-02	2.27E-03	4.07E-03	3.04E-02	9.59E-03	9.86E-02	3.41E-03	9.81E-03	3.43E-04	3.42E-04	2.2179E-01
2.77E-02	1.03E-03	1.03E-02	8.89E-04	1.55E-02	6.28E-02	2.03E-03	2.38E-02	1.40E-03	2.99E-02	3.29E-04	3.28E-04	1.7608E-01
1.30E-02	8.03E-03	4.00E-02	2.68E-03	3.47E-03	2.51E-02	1.32E-02	9.68E-02	3.97E-03	8.51E-03	3.40E-04	3.39E-04	2.1537E-01
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.31E-04	1.9867E-01
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.38E-04	2.1251E-01
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Mitigated PM2.5 Concentrations

Maximum DPM (ug/m3)	MIR UTM X	MIR UTM Y
2.7483E-01	551728.04	4172945.17

PM2.5 MIR		
UTM	551728.04	4172945.17
Latitude, Longitude	37°42'08.2"N 122°24'47.5"W	

Scenario 6

Midway Village Project—New Phase 2 Receptors

Summary Offsite Construction Emissions (No Mitigation)

Route 1 - From the project site towards US-101
Route 2 - From US-101 towards the project site

Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)

DPM		**DPM**	
Road Segment 1 Phase 3—Demolition	7.67796E-07	Road Segment 1 Phase 3—Demolition	2.82706E-05
Road Segment 2 Phase 3—Demolition	1.38061E-06	Road Segment 2 Phase 3—Demolition	2.85866E-05
Road Segment 1 Phase 4—Demolition	3.08140E-07	Road Segment 1 Phase 4—Demolition	1.52163E-05
Road Segment 2 Phase 4—Demolition	4.51022E-07	Road Segment 2 Phase 4—Demolition	1.53864E-05
Road Segment 1 Phase 3—Construction	1.95738E-06	Road Segment 1 Phase 3—Construction	7.94052E-05
Road Segment 2 Phase 3—Construction	1.99303E-06	Road Segment 2 Phase 3—Construction	8.02927E-05
Road Segment 1 Phase 4—Construction	2.28605E-06	Road Segment 1 Phase 4—Construction	9.18916E-05
Road Segment 2 Phase 4—Construction	2.74541E-06	Road Segment 2 Phase 4—Construction	9.29187E-05

Scenario				
New Phase 2 Receptors: Exposed to Phases 3+4 Demolition and Phases 3+4 Construction	Road Segment 1	5.31937E-06	Road Segment 1	2.14784E-04
	Road Segment 2	6.57007E-06	Road Segment 2	2.17184E-04

Cancer Risk Calculations Using OEHHA/BAAQMD Cancer Risk Assumptions
Midway Village Project—New Phase 2 Receptors
Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant

UTM: 551674.71 4172865.89

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Age	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.442853003	10	361	1	0.25	6.0
0-1	0.442853003	10	1,090	1	0.93	67.5
					Total	73.53

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.04295009	10	361	1	0.25	0.6
0-1	0.04295009	10	1,090	1	0.93	6.5
					Total	7.13

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child

UTM: 551674.71 4172865.89

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Period	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.442853003	3	572	1	1.18	13.5
					Total	13.49

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.04295009	3	572	1	1.18	1.3
					Total	1.31

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult

UTM: 551674.71 4172865.89

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.442853003	1	261	0.73	1.18	1.5
					Total	1.50

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.04295009	1	261	0.73	1.18	0.1
					Total	0.145

Midway Village Project—New Phase 2 Receptors

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551674.71	4172865.89	0.4429	0.4429	0.08857

Unmitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551674.71	4172865.89	0.7229	0.7229

Mitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551674.71	4172865.89	0.0430	0.0430	0.00859

Mitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551684.15	4172895.89	0.3273	0.3273

Midway Village Project—New Phase 2 Receptors

New Phase 2 Receptors: Exposed to Phases 3+4 Demolition and Phases 3+4 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

	Unmitigated Concentrations
Annual Average Onsite DPM Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	6.37E-07
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	8.02E-07
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	8.02E-07
Annual Average Onsite DPM Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	5.32E-07
Annual Average Onsite DPM Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	3.68E-07
Annual Average Onsite DPM Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	3.68E-07
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	5.32E-06
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	6.57E-06

Unmitigated DPM Concentrations		
Maximum DPM (ug/m3)	MIR UTM X	MIR UTM Y
4.4285E-01	551674.71	4172865.89

UTM	551674.71	4172865.89
Latitude, Longitude	37°42'05.6"N 122°24'49.7"W	

X	Y	Unit Emissions Construction Area 3B (Phase 3) AREA5	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Demolition Area 3A (Phase 3) AREA11	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Route 1 - From the project site towards US-101 LINE1	Unit Emissions Route 2 - From US-101 towards the project site LINE2	Construction Area 2B (Part 1 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 3B (Phase 3) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 4B and Area 2B/4B (Phase 4) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 1 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 2 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 3A (Phase 3) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Total DPM (ug/m3)
551674.71	4172865.89	253657.362	125772.2885	16192.33273	266490.3884	58281.69809	11223.51053	1.83315	1.78152	1.62E-01	1.01E-01	1.30E-02	1.42E-01	2.14E-02	4.13E-03	9.75E-06	1.17E-05	4.4285E-01
551684.15	4172895.89	322054.3417	54273.53829	22752.43204	281345.6369	20984.5491	15295.54241	1.52951	1.49859	2.05E-01	4.35E-02	1.83E-02	1.50E-01	7.72E-03	5.63E-03	8.14E-06	9.85E-06	4.2998E-01
551677.73	4172875.61	276089.9934	93854.60735	18232.97642	270818.9251	38845.84959	12484.60218	1.69067	1.64923	1.76E-01	7.53E-02	1.46E-02	1.44E-01	1.43E-02	4.59E-03	8.99E-06	1.08E-05	4.2878E-01
551689.28	4172903.18	325769.2509	45104.71505	24432.0162	271928.284	17284.66661	16260.85001	1.45965	1.43201	2.07E-01	3.62E-02	1.96E-02	1.45E-01	6.36E-03	5.98E-03	7.76E-06	9.41E-06	4.2032E-01
551682.2	4172884.49	294782.9474	72983.34169	20043.5664	259319.4043	28428.81458	13626.15734	1.583	1.5484	1.88E-01	5.86E-02	1.61E-02	1.38E-01	1.05E-02	5.01E-03	8.42E-06	1.02E-05	4.1586E-01
551684.71	4172865.89	205437.0862	128406.7844	15539.46555	226352.8492	57911.12174	10715.65315	1.65626	1.61331	1.31E-01	1.03E-01	1.25E-02	1.20E-01	2.13E-02	3.94E-03	8.81E-06	1.06E-05	3.9205E-01
551693.32	4172895.33	287789.6418	53971.98057	21964.43078	233414.7141	19991.79458	14766.93075	1.41911	1.39191	1.83E-01	4.33E-02	1.76E-02	1.24E-01	7.36E-03	5.43E-03	7.55E-06	9.14E-06	3.8122E-01
551687.73	4172875.61	233115.2903	93979.77327	17358.25367	225912.9975	38299.50109	11816.57115	1.5454	1.51025	1.48E-01	7.54E-02	1.39E-02	1.20E-01	1.41E-02	4.35E-03	8.22E-06	9.92E-06	3.7647E-01
551692.2	4172884.49	252962.7928	71446.81269	19248.12859	215089.8241	26996.74508	13049.32259	1.45465	1.42501	1.61E-01	5.73E-02	1.54E-02	1.14E-01	9.93E-03	4.80E-03	7.74E-06	9.36E-06	3.6307E-01
551699.28	4172903.18	272950.0181	43242.10254	23627.41546	223468.7266	16091.65634	15744.88395	1.34718	1.32292	1.74E-01	3.47E-02	1.90E-02	1.19E-01	5.92E-03	5.79E-03	7.17E-06	8.69E-06	3.5812E-01
551645.71	4173039.79	39618.76117	7619.26881	265540.9303	30177.40944	3188.81573	196854.1015	3.85399	3.70803	2.52E-02	6.11E-03	2.13E-01	1.61E-02	1.17E-03	7.24E-02	2.05E-05	2.44E-05	3.3409E-01
551665.71	4173029.79	45210.50729	7927.32978	266353.7752	34014.02698	3374.53656	184754.8445	2.48616	2.42247	2.88E-02	6.36E-03	2.14E-01	1.81E-02	1.24E-03	6.80E-02	1.32E-05	1.59E-05	3.3619E-01
551702.2	4172894.49	233143.8369	53299.58789	20956.75943	195597.7525	19197.3534	14050.36743	1.3229	1.29885	1.48E-01	4.28E-02	1.68E-02	1.04E-01	7.06E-03	5.17E-03	7.04E-06	8.53E-06	3.2439E-01
551655.71	4173029.79	46768.04052	8103.4047	247977.1317	34643.07473	3426.32599	170606.5076	2.92804	2.83762	2.98E-02	6.50E-03	1.99E-01	1.84E-02	1.26E-03	6.28E-02	1.56E-05	1.86E-05	3.1774E-01
551702.2	4172884.49	202904.4076	68451.25648	18478.87693	177550.0285	25155.18116	12557.94096	1.33893	1.31354	1.29E-01	5.49E-02	1.48E-02	9.45E-02	9.26E-03	4.62E-03	7.12E-06	8.63E-06	3.0734E-01
551635.71	4173039.79	40664.45819	7764.68352	243198.6891	30547.65371	3209.01046	177074.7824	4.99028	4.76055	2.59E-02	6.23E-03	1.95E-01	1.63E-02	1.18E-03	6.52E-02	2.65E-05	3.13E-05	3.0989E-01
551685.71	4173019.79	50606.30017	8145.42035	245113.3364	37834.40424	3482.20383	146628.2845	1.86123	1.8244	3.22E-02	6.54E-03	1.97E-01	2.01E-02	1.28E-03	5.39E-02	9.90E-06	1.20E-05	3.1080E-01
551675.71	4173019.79	53876.14132	8435.84433	238042.9409	39642.95397	3602.73653	147644.0821	2.0905	2.04518	3.43E-02	6.77E-03	1.91E-01	2.11E-02	1.33E-03	5.43E-02	1.11E-05	1.34E-05	3.0883E-01
551695.71	4173019.79	47024.69081	7843.42258	247790.2063	35706.88737	3349.2656	140520.513	1.67468	1.64406	2.99E-02	6.29E-03	1.99E-01	1.90E-02	1.23E-03	5.17E-02	8.91E-06	1.08E-05	3.0700E-01
551645.71	4173029.79	48161.3942	8265.74633	228009.5779	35047.88562	3461.03097	155354.7572	3.57107	3.43857	3.07E-02	6.63E-03	1.83E-01	1.87E-02	1.27E-03	5.72E-02	1.90E-05	2.26E-05	2.9736E-01
551665.71	4173019.79	56165.91374	8644.19937	220529.1463	40545.20373	3679.14724	140806.2506	2.37143	2.31308	3.58E-02	6.94E-03	1.77E-01	2.16E-02	1.35E-03	5.18E-02	1.26E-05	1.52E-05	2.9440E-01
551712.2	4172894.49	189802.6382	50437.10071	19946.6357	166772.6655	17878.57968	13349.59794	1.22589	1.20502	1.21E-01	4.05E-02	1.60E-02	8.88E-02	6.58E-03	4.91E-03	6.52E-06	7.92E-06	2.7760E-01
551625.71	4173039.79	41583.98104	7898.24248	218527.2964	30807.11974	3213.9227	155727.9646	6.8902	6.48975	2.65E-02	6.34E-03	1.75E-01	1.64E-02	1.18E-03	5.73E-02	3.67E-05	4.26E-05	2.8309E-01
551655.71	4173019.79	58089.51158	8823.00755	201083.7482	41010.56445	3731.3755	131467.003	2.7596	2.67699	3.70E-02	7.08E-03	1.61E-01	2.18E-02	1.37E-03	4.84E-02	1.47E-05	1.76E-05	2.7700E-01
551635.71	4173029.79	49315.59318	8406.37842	205131.6277	35227.56709	3474.88635	139626.2628	4.53813	4.33374	3.14E-02	6.74E-03	1.65E-01	1.88E-02	1.28E-03	5.14E-02	2.41E-05	2.85E-05	2.7418E-01
551665.71	4172979.79	170966.6884	13092.46834	89075.14188	105189.1518	5531.15829	56359.82161	2.03785	1.99128	1.09E-01	1.05E-02	7.15E-02	5.60E-02	2.04E-03	2.07E-02	1.08E-05	1.31E-05	2.6962E-01
551618.5	4173046.65	37161.56459	7532.80778	206223.9654	28118.776	3030.21128	157838.0287	10.07359	9.358	2.37E-02	6.04E-03	1.65E-01	1.50E-02	1.11E-03	5.81E-02	5.36E-05	6.15E-05	2.6943E-01
551675.71	4172979.79	162159.8003	12768.4889	92013.40991	109801.7517	5390.99485	55738.82372	1.82854	1.79056	1.03E-01	1.02E-02	7.38E-02	5.84E-02	1.98E-03	2.05E-02	9.73E-06	1.18E-05	2.6828E-01
551712.2	4172884.49	165268.4298	68004.35221	17602.87393	149740.922	23312.73189	11949.21114	1.23715	1.21536	1.05E-01	5.46E-02	1.41E-02	7.97E-02	8.58E-03	4.40E-03	6.58E-06	7.99E-06	2.6661E-01
551685.71	4173009.79	64218.38594	8944.40588	197455.358	46726.00468	3814.25994	110079.0669	1.80169	1.7664	4.09E-02	7.18E-03	1.58E-01	2.49E-02	1.40E-03	4.05E-02	9.58E-06	1.16E-05	2.7328E-01
551675.71	4173009.79	68625.90725	9264.13272	187745.3304	48700.14869	3950.60231	111503.4525	2.01526	1.97204	4.37E-02	7.43E-03	1.51E-01	2.59E-02	1.45E-03	4.10E-02	1.07E-05	1.30E-05	2.7018E-01
551695.71	4173009.79	59466.00999	8619.92017	204636.9623	44260.2169	3667.98007	106248.9377	1.62758	1.5981	3.79E-02	6.92E-03	1.64E-01	2.36E-02	1.35E-03	3.91E-02	8.66E-06	1.05E-05	2.7298E-01
551645.71	4173019.79	60214.16702	9011.55855	183226.8921	41387.13131	3773.93878	122118.9509	3.32772	3.20695	3.83E-02	7.23E-03	1.47E-01	2.20E-02	1.39E-03	4.49E-02	1.77E-05	2.11E-05	2.6096E-01
551705.71	4173009.79	54605.56184	8289.38384	207200.9853	41490.32125	3514.35568	101508.2559	1.48262	1.45756	3.48E-02	6.65E-03	1.66E-01	2.21E-02	1.29E-03	3.73E-02	7.89E-06	9.58E-06	2.6840E-01
551665.71	4173009.79	71708.85483	9486.06004	173078.6649	49460.04291	4034.47359	108346.1555	2.27232	2.21834	4.57E-02	7.61E-03	1.39E-01	2.63E-02	1.48E-03	3.99E-02	1.21E-05	1.46E-05	2.5983E-01
551625.71	4173029.79	50578.7694	8567.80079	182853.5438	35497.4435	3483.79303	124968.4902	6.13575	5.78809	3.22E-02	6.87E-03	1.47E-01	1.89E-02	1.28E-03	4.60E-02	3.26E-05	3.80E-05	2.5201E-01
551615.71	4173039.79	42087.14385	7982.66738	187567.1425	30792.74309	3190.90016	132074.2347	10.36607	9.57798	2.68E-02	6.40E-03	1.50E-01	1.64E-02	1.17E-03	4.86E-02	5.51E-05	6.29E-05	2.4996E-01
551665.71	4172989.79	128009.2193	11675.76594	109272.4101	80797.2279	4947.84908	68738.64621	2.1082	2.05931	8.15E-02	9.37E-03	8.77E-02	4.30E-02	1.82E-03	2.53E-02	1.12E-05	1.35E-05	2.4869E-01
551655.71	4172989.79	134470.2107	11894.25496	103328.7789	79513.01244	5017.14418	67681.17318	2.38695	2.32351	8.56E-02	9.54E-03	8.29E-02	4.23E-02	1.85E-03	2.49E-02	1.27E-05	1.53E-05	2.4716E-01
551675.71	4172989.79	120464.8961	11381.97574	114522.3902	81230.41222	4826.67691	68558.52036	1.88415	1.84459	7.67E-02	9.13E-03	9.19E-02	4.32E-02	1.78E-03	2.52E-02	1.00E-05	1.21E-05	2.4798E-01
551645.71	4172989.79	141511.7891	12092.60644	97245.18085	78093.39653	5053.57353	65764.05484	2.77563	2.68422	9.01E-02	9.70E-03	7.80E-02	4.16E-02	1.86E-03	2.42E-02	1.48E-05	1.76E-05	2.4548E-01
551655.71	4173009.79	74593.26599	9667.38109	158386.5582	49645.79449	4087.26134	103108.1444	2.61466	2.53901	4.75E-02	7.76E-03	1.27E-01	2.64E-02	1.50E-03	3.79E-02	1.39E-05	1.67E-05	2.4822E-01
551675.71	4172999.79	90242.23625	10238.64276	145582.0682	61901.64228	4355.99306	86314.34882	1.94696	1.90564	5.75E-02	8.21E-03	1.17E-01	3.29E-02	1.60E-03	3.18E-02	1.04E-05	1.25E-05	2.4881E-01
551715.71	4173009.79	49798.51824	7953.58298	201990.6482	38532.15788	3356.2149	96155.65974	1.35978	1.33818	3.17E-02	6.38E-03	1.62E-01	2.05E-02	1.23E-03	3.54E-02	7.23E-06	8.79E-06	2.5729E-01
551685.71	4172999.79	83637.38129	9887.01454	152390.2136	59764.34997	4201.73475	84727.08589	1.74756	1.71363	5.33E-02	7.93E-03	1.22E-01	3.18E-02	1.55E-03	3.12E-02	9.30E-06	1.13E-05	2.4800E-01
551722.2	4172894.49	156735.2789	47001.82916	18975.56886	141662.3947	16577.69229	12688.90847	1.13941	1.12127	9.98E-02	3.77E-02	1.52E-02	7.54E-02	6.10E-03	4.67E-03	6.06E-06	7.37E-06	2.3892E-01
551665.71	4172999.79	94432.97624	10481.08124	136214.7331	62163.04664	4451.31301	85311.49208	2.1853	2.13403	6.01E-02	8.41E-03	1.09E-01	3.31E-02	1.64E-03	3.14E-02	1.16E-05	1.40E-05	2.4396E-01
551635.71	4173019.79	61813.09192	9152.43769	164084.9732	41294.40371	3782.41134	111544.7834	4.16114	3.9777	3.94E-02	7.34E-03	1.32E-01	2.20E-02	1.39E-03	4.10E-02	2.21E-05	2.61E-05	2.4281E-01
551610.46	4173044.8	38689.60186	7712.48107	180459.4816	28836.70975	3054.74292	131102.7285	14.72421	13.45634	2.46E-02	6.19E-03	1.45E-01	1.53E-02	1.12E-03	4.82E-02	7.83E-05	8.84E-05	2.4048E-01
551685.71	4172989.79	109905.0411	11018.15125	118614.4131	78495.1034	4661.16098	67107.3165	1.69906	1.66634	7.00E-02	8.84E-03	9.52E-02	4.18E-02	1.71E-03	2.47E-02	9.04E-06	1.09E-05	2.4219E-01
551695.71	4172999.79	77095.75356	9531.51998	157990.8114	56872.46025	4037.3854	81905.75945	1.58418	1.55572	4.91E-02	7.65E-03	1.27E-01	3.03E-02	1.49E-03	3.01E-02	8.43E-06	1.02E-05	2.4540E-01
551645.71	4173009.79	78212.29441	9886.36457	145897.5007	49948.33726	4139.37004	97758.90242	3.11904	3.00866	4.98E-02	7.93E-03	1.17E-01	2.66E-02	1.52E-03	3.60E-02	1.66E-05	1.98E-05	2.3890E-01
551655.71	4172999.79	98445.96215	10666.47257	126522.2917	61766.54252	4505.80055	82660.41839	2.48993	2.42071	6.27E-02	8.56E-03	1.02E-01	3.29E-02	1.66E-03	3.04E-02	1.32E-05	1.59E-05	2.3773E-01
551722.2	4172884.49	137783.8707	65150.21003	16616.0102	128391.8104	21561.2506	11355.57449	1.14794	1.12915	8.77E-02	5.23E-02	1.33E-02	6.83E-02	7.93E-03	4.18E-03	6.11E-06	7.42E-06	2.3380E-01
551645.71	4172999.79	104106.8183	10877.69381	117760.8669	61420.05456	4551.55922	79418.30007	2.93132	2.83096	6.63E-02	8.73E-03	9.45E-02	3.27E-02	1.67E-03	2.92E-02	1.56E-05	1.86E-05	2.3312E-01
551705.71	4172999.79	70495.26045	9159.60361	160863.0584	53377.28909	3861.58444	78394.84676	1.44691	1.42264	4.49E-02	7.35E-03	1.29E-01	2.84E-02	1.42E-03	2.88E-02	7.70E-06	9.35E-06	2.3999E-01
551695.71	4172989.79	99836.23491	10621.55408	121313.4271	74955.26008	4473.0236	64804.3384	1.54496	1.51739	6.36E-02	8.52E-03	9.73E-02	3.99E-02	1.65E-03	2.38E-02	8.22E-06	9.97E-06	2.3483E-01
551635.71	4172999.79	110230.8342	11077.72551	108999.5566	60731.37874	4569.8211	75358.71399	3.57762	3.42777	7.02E-02	8.89E-03	8.74E-02	3.23E-02	1.68E-03	2.77E-02	1.90E-05	2.25E-05	2.2830E-01
551725.71	4173009.79	45428.79407	7615.57704	186706.2609	35891.66421	3196.81752	89570.22159	1.25419	1.23537	2.89E-02	6.11E-03	1.50E-01	1.91E-02	1.18E-03	3.30E-02	6.67E-06	8.12E-06	2.3808E-01
551635.71	4173009.79	80838.2711	10034.60745	132471.8329	49462.47796	4144.2356	90961.59313	3.84617	3.68046	5.15E-02	8.05E-03	1.06E-01	2.63E-02	1.52E-03	3.35E-02	2.05E-05	2.42E-05	2.2717E-01
551625.71	4173019.79	63730.27612	9322.93234	146810.2696	41389.4828	3787.06642	101493.883	5.50514	5.20192	4.06E-02	7.48E-03	1.18E-01	2.20E-02	1.39E-03	3.73E-02	2.93E-05	3.42E-05	2.2667E-01
551615.71	4173029.79	51255.1163	8671.69587	157022.2559	35426.46102	3458.84966	108814.4241	8.96421	8.29976	3.26E-02	6.96E-03	1.26E-01	1.89E-02	1.27E-03	4.00E-02	4.77E-05	5.45E-05	2.2584E-01
551705.71	4172989.79	93612.1882	10202.10166	121883.331	72382.25206	4271.66411	62075.86383	1.41476	1.39118	5.96E-02	8.19E-03	9.78E-02	3.85E-02	1.57E-03	2.28E-02	7.53E-06	9.14E-06	2.2853E-01
551625.71	4172999.79	115221.7323	11249.00376	99959.22943	59791.13006	4552.29113	70492.88815	4.55457	4.31878	7.34E-02	9.02E-03	8.02E-02	3.18E-02	1.67E-03	2.59E-02	2.42E-05	2.84E-05	2.2208E-01
551715.71	4172999.79	64213.86359	8778.22331	158851.1521	49656.73246	3680.57428	74476.55516	1.32994	1.30898	4.09E-02	7.04E-03	1.27E-01	2.64E-02	1.35E-03	2.74E-02	7.07E-06	8.60E-06	2.3058E-01
551608.32	4173037.65	44145.62875	8197.05485	157942.3687	31729.1204	3225.12308	111066.8474	14.82875	13.44281	2.81E-02	6.58E-03	1.27E-01	1.69E-02	1.19E-03	4.09E-02	7.89E-05	8.83E-05	2.2051E-01
551625.71	4173009.79	83839.72653	10205.16306	119924.4921	49161.59552	4139.02705	83976.01256	4.98615	4.71941	5.34E-02	8.19E-03	9.62E-02	2.62E-02	1.52E-03	3.09E-02	2.65E-05	3.10E-05	2.1643E-01
551716.52	4172982.41	104838.9173	10563.93099	96661.75002	83798.53906	4364.82472	50183.23063	1.27632	1.25649	6.68E-02	8.48E-03	7.76E-02	4.46E-02	1.61E-03	1.85E-02	6.79E-06	8.26E-06	2.1747E-01
551615.71	4172999.79	118502.258	11430.35248	90444.34538	59170.42038	4513.84244	65028.87519	6.15861	5.75187	7.55E-02	9.17E-03	7.26E-02	3.15E-02	1.66E-03	2.39E-02	3.28E-05	3.78E-05	2.1434E-01
551729.68	4172892.53	132787.3141	46719.68208	17824.32827	122599.3444	16413.81134	11963.82411	1.08172	1.06525	8.46E-02	3.75E-02	1.43E-02	6.53E-02	6.04E-03	4.40E-03	5.75E-06	7.00E-06	2.1205E-01
551715.71	4172989.79	85989.98416	9765.70364	119206.3137	67208.35237	4063.41233	59092.08959	1.30316	1.28275	5.48E-02	7.83E-03	9.56E-02	3.58E-02	1.50E-03	2.17E-02	6.93E-06	8.43E-06	2.1725E-01
551730.52	4172878.4	111792.0564	73750.41794	14501.13837	108531.262	24038.83362	10014.12522	1.08778	1.07073	7.12E-02	5.92E-02	1.16E-02	5.78E-02	8.84E-03	3.68E-03	5.79E-06	7.03E-06	2.1230E-01
551615.71	4173019.79	64604.3152	9445.86288	128630.2081	41197.84301	3758.29403	90489.08323	7.81138	7.25333	4.11E-02	7.58E-03	1.03E-01	2.19E-02	1.38E-03	3.33E-02	4.16E-05	4.77E-05	2.0861E-01
551615.71	4173009.79	86014.5339	10366.68966	107066.0435	48887.18854	4110.70841	76354.16704	6.91008	6.43366	5.48E-02	8.32E-03	8.59E-02	2.60E-02	1.51E-03	2.81E-02	3.68E-05	4.23E-05	2.0469E-01
551725.71	4172997.1	62500.3084	8635.09324	138976.6164	49335.07612	3592.25387	65803.8558	1.22312	1.20495	3.98E-02	6.93E-03	1.11E-01	2.63E-02	1.32E-03	2.42E-02	6.51E-06	7.92E-06	2.1003E-01
551723.2	4172987.32	85178.78781	9693.0135	106713.8872	67467.98261	4005.81812	53725.81145	1.22395	1.20561	5.42E-02	7.78E-03	8.56E-02	3.59E-02	1.47E-03	1.98E-02	6.51E-06	7.92E-06	2.0480E-01
551733.88	4172886.73	115948.4827	53862.07084	16061.07317	109638.2208	18415.17056	10996.2038	1.05416	1.03832	7.38E-02	4.32E-02	1.29E-02	5.84E-02	6.78E-03	4.05E-03	5.61E-06	6.82E-06	1.9912E-01
551605.71	4173029.79	51643.8974	8761.58052	130561.9882	35305.54058	3417.79965	92720.94869	14.91173	13.42829	3.29E-02	7.03E-03	1.05E-01	1.88E-02	1.26E-03	3.41E-02	7.93E-05	8.82E-05	1.9899E-01
551605.71	4173009.79	84685.59236	10439.06952	93908.72907	48145.88018	4033.7771	68061.28804	10.47246	9.5061	5.39E-02	8.38E-03	7.53E-02	2.56E-02	1.48E-03	2.50E-02	5.57E-05	6.25E-05	1.8991E-01
551605.71	4173019.79	64522.09522	9519.8121	110156.8808	40789.37285	3698.80457	79042.25744	12.31389	11.13311	4.11E-02	7.64E-03	8.84E-02	2.17E-02	1.36E-03	2.91E-02	6.55E-05	7.31E-05	1.8939E-01
CONCUNIT ug/	m^3																	
DEPUNIT g/m^	2																	

Midway Village Project—New Phase 2 Receptors

New Phase 2 Receptors: Exposed to Phases 3+4 Demolition and Phases 3+4 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

	Unmitigated Concentrations
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	8.62E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	8.68E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	8.68E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	1.21E-06
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	8.14E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	8.14E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	2.15E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	2.17E-04

Unmitigated PM2.5 Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
7.2290E-01	551674.71	4172865.89

UTM	551674.71	4172865.89
Latitude, Longitude	37°42'05.6"N 122°24'49.7"W	

X	Y	Unit Emissions Construction Area 3B (Phase 3) AREA5	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Demolition Area 3A (Phase 3) AREA11	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Route 1 - From the project site towards US-101 LINE1	Unit Emissions Route 2 - From US-101 towards the project site LINE2	Construction Area 2B (Part 1 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 3B (Phase 3) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 4B and Area 2B/4B (Phase 4) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 1 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 2 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 3A (Phase 3) Annual PM2.5 w/Actual Emissions (ug/m3)	**Total PM2.5 (ug/m3)**
551674.71	4172865.89	253657.362	125772.2885	16192.33273	266490.3884	58281.69809	11223.51053	1.83315	1.78152	2.19E-01	1.09E-01	1.41E-02	3.24E-01	4.74E-02	9.13E-03	3.94E-04	3.87E-04	7.2290E-01
551684.15	4172895.89	322054.3417	54273.53829	22752.43204	281345.6369	20984.5491	15295.54241	1.52951	1.49859	2.78E-01	4.71E-02	1.98E-02	3.42E-01	1.71E-02	1.24E-02	3.29E-04	3.25E-04	7.1637E-01
551677.73	4172875.61	276089.9934	93854.60735	18232.97642	270818.9251	38845.84959	12484.60218	1.69067	1.64923	2.38E-01	8.15E-02	1.58E-02	3.29E-01	3.16E-02	1.02E-02	3.63E-04	3.58E-04	7.0671E-01
551689.28	4172903.18	325769.2509	45104.71505	24432.0162	271928.284	17284.66661	16260.85001	1.45965	1.43201	2.81E-01	3.92E-02	2.12E-02	3.30E-01	1.41E-02	1.32E-02	3.14E-04	3.11E-04	6.9938E-01
551682.2	4172884.49	294782.9474	72983.34169	20043.5664	259319.4043	28428.81458	13626.15734	1.583	1.5484	2.54E-01	6.34E-02	1.74E-02	3.15E-01	2.31E-02	1.11E-02	3.40E-04	3.36E-04	6.8472E-01
551684.71	4172865.89	205437.0862	128406.7844	15539.46555	226352.8492	57911.12174	10715.65315	1.65626	1.61331	1.77E-01	1.11E-01	1.35E-02	2.75E-01	4.71E-02	8.72E-03	3.56E-04	3.50E-04	6.3352E-01
551693.32	4172895.33	287789.6418	53971.98057	21964.43078	233414.7141	19991.79458	14766.93075	1.41911	1.39191	2.48E-01	4.69E-02	1.91E-02	2.83E-01	1.63E-02	1.20E-02	3.05E-04	3.02E-04	6.2640E-01
551687.73	4172875.61	233115.2903	93979.77327	17358.25367	225912.9975	38299.50109	11816.57115	1.5454	1.51025	2.01E-01	8.16E-02	1.51E-02	2.74E-01	3.12E-02	9.62E-03	3.32E-04	3.28E-04	6.1343E-01
551692.2	4172884.49	252962.7928	71446.81269	19248.12859	215089.8241	26996.74508	13049.32259	1.45465	1.42501	2.18E-01	6.20E-02	1.67E-02	2.61E-01	2.20E-02	1.06E-02	3.12E-04	3.09E-04	5.9125E-01
551699.28	4172903.18	272950.0181	43242.10254	23627.41546	223468.7266	16091.65634	15744.88395	1.34718	1.32292	2.35E-01	3.75E-02	2.05E-02	2.71E-01	1.31E-02	1.28E-02	2.89E-04	2.87E-04	5.9124E-01
551645.71	4173039.79	39618.76117	7619.26881	265540.9303	30177.40944	3188.81573	196854.1015	3.85399	3.70803	3.42E-02	6.62E-03	2.31E-01	3.66E-02	2.60E-03	1.60E-01	8.28E-04	8.05E-04	4.7243E-01
551665.71	4173029.79	45210.50729	7927.32978	266353.7752	34014.02698	3374.53656	184754.8445	2.48616	2.42247	3.90E-02	6.88E-03	2.31E-01	4.13E-02	2.75E-03	1.50E-01	5.34E-04	5.26E-04	4.7261E-01
551702.2	4172894.49	233143.8369	53299.58789	20956.75943	195597.7525	19197.3534	14050.36743	1.3229	1.29885	2.01E-01	4.63E-02	1.82E-02	2.37E-01	1.56E-02	1.14E-02	2.84E-04	2.82E-04	5.3063E-01
551655.71	4173029.79	46768.04052	8103.4047	247977.1317	34643.07473	3426.32599	170606.5076	2.92804	2.83762	4.03E-02	7.04E-03	2.15E-01	4.21E-02	2.79E-03	1.39E-01	6.29E-04	6.16E-04	4.4763E-01
551702.2	4172884.49	202904.4076	68451.25648	18478.87693	177550.0285	25155.18116	12557.94096	1.33893	1.31354	1.75E-01	5.94E-02	1.60E-02	2.16E-01	2.05E-02	1.02E-02	2.88E-04	2.85E-04	4.9729E-01
551635.71	4173039.79	40664.45819	7764.68352	243198.6891	30547.65371	3209.01046	177074.7824	4.99028	4.76055	3.51E-02	6.74E-03	2.11E-01	3.71E-02	2.61E-03	1.44E-01	1.07E-03	1.03E-03	4.3890E-01
551685.71	4173019.79	50606.30017	8145.42035	245113.3364	37834.40424	3482.20383	146628.2845	1.86123	1.8244	4.36E-02	7.07E-03	2.13E-01	4.59E-02	2.83E-03	1.19E-01	4.00E-04	3.96E-04	4.3244E-01
551675.71	4173019.79	53876.14132	8435.84433	238042.9409	39642.95397	3602.73653	147644.0821	2.0905	2.04518	4.65E-02	7.32E-03	2.07E-01	4.81E-02	2.93E-03	1.20E-01	4.49E-04	4.44E-04	4.3259E-01
551695.71	4173019.79	47024.69081	7843.42258	247790.2063	35706.88737	3349.2656	140520.513	1.67468	1.64406	4.06E-02	6.81E-03	2.15E-01	4.33E-02	2.73E-03	1.14E-01	3.60E-04	3.57E-04	4.2368E-01
551645.71	4173029.79	48161.3942	8265.74633	228009.5779	35047.88562	3461.03097	155354.7572	3.57107	3.43857	4.15E-02	7.18E-03	1.98E-01	4.25E-02	2.82E-03	1.26E-01	7.67E-04	7.47E-04	4.2001E-01
551665.71	4173019.79	56165.91374	8644.19937	220529.1463	40545.20373	3679.14724	140806.2506	2.37143	2.31308	4.84E-02	7.51E-03	1.91E-01	4.92E-02	2.99E-03	1.15E-01	5.09E-04	5.02E-04	4.1525E-01
551712.2	4172894.49	189802.6382	50437.10071	19946.6357	166772.6655	17878.57968	13349.59794	1.22589	1.20502	1.64E-01	4.38E-02	1.73E-02	2.02E-01	1.46E-02	1.09E-02	2.63E-04	2.62E-04	4.5321E-01
551625.71	4173039.79	41583.98104	7898.24248	218527.2964	30807.11974	3213.9227	155727.9646	6.8902	6.48975	3.59E-02	6.86E-03	1.90E-01	3.74E-02	2.62E-03	1.27E-01	1.48E-03	1.41E-03	4.0211E-01
551655.71	4173019.79	58089.51158	8823.00755	201083.7482	41010.56445	3731.3755	131467.003	2.7596	2.67699	5.01E-02	7.66E-03	1.75E-01	4.98E-02	3.04E-03	1.07E-01	5.93E-04	5.81E-04	3.9335E-01
551635.71	4173029.79	49315.59318	8406.37842	205131.6277	35227.56709	3474.88635	139626.2628	4.53813	4.33374	4.25E-02	7.30E-03	1.78E-01	4.28E-02	2.83E-03	1.14E-01	9.75E-04	9.41E-04	3.8909E-01
551665.71	4172979.79	170966.6884	13092.46834	89075.14188	105189.1518	5531.15829	56359.82161	2.03785	1.99128	1.47E-01	1.14E-02	7.73E-02	1.28E-01	4.50E-03	4.59E-02	4.38E-04	4.32E-04	4.1510E-01
551618.5	4173046.65	37161.56459	7532.80778	206223.9654	28118.776	3030.21128	157838.0287	10.07359	9.358	3.20E-02	6.54E-03	1.79E-01	3.41E-02	2.47E-03	1.28E-01	2.16E-03	2.03E-03	3.8691E-01
551675.71	4172979.79	162159.8003	12768.4889	92013.40991	109801.7517	5390.99485	55738.82372	1.82854	1.79056	1.40E-01	1.11E-02	7.99E-02	1.33E-01	4.39E-03	4.54E-02	3.93E-04	3.89E-04	4.1467E-01
551712.2	4172884.49	165268.4298	68004.35221	17602.87393	149740.922	23312.73189	11949.21114	1.23715	1.21536	1.43E-01	5.90E-02	1.53E-02	1.82E-01	1.90E-02	9.72E-03	2.66E-04	2.64E-04	4.2788E-01
551685.71	4173009.79	64218.38594	8944.40588	197455.358	46726.00468	3814.25994	110079.0669	1.80169	1.7664	5.54E-02	7.77E-03	1.71E-01	5.67E-02	3.10E-03	8.96E-02	3.87E-04	3.84E-04	3.8479E-01
551675.71	4173009.79	68625.90725	9264.13272	187745.3304	48700.14869	3950.60231	111503.4525	2.01526	1.97204	5.92E-02	8.04E-03	1.63E-01	5.91E-02	3.22E-03	9.07E-02	4.33E-04	4.28E-04	3.8419E-01
551695.71	4173009.79	59466.00999	8619.92017	204636.9623	44260.2169	3667.98007	106248.9377	1.62758	1.5981	5.13E-02	7.48E-03	1.78E-01	5.37E-02	2.99E-03	8.65E-02	3.50E-04	3.47E-04	3.8034E-01
551645.71	4173019.79	60214.16702	9011.55855	183226.8921	41387.13131	3773.93878	122118.9509	3.32772	3.20695	5.19E-02	7.82E-03	1.59E-01	5.02E-02	3.07E-03	9.94E-02	7.15E-04	6.96E-04	3.7296E-01
551705.71	4173009.79	54605.56184	8289.38384	207200.9853	41490.32125	3514.35568	101508.2559	1.48262	1.45756	4.71E-02	7.20E-03	1.80E-01	5.04E-02	2.86E-03	8.26E-02	3.18E-04	3.17E-04	3.7068E-01
551665.71	4173009.79	71708.85483	9486.06004	173078.6649	49460.04291	4034.47359	108346.1555	2.27232	2.21834	6.18E-02	8.24E-03	1.50E-01	6.00E-02	3.28E-03	8.82E-02	4.88E-04	4.82E-04	3.7284E-01
551625.71	4173029.79	50578.7694	8567.80079	182853.5438	35497.4435	3483.79303	124968.4902	6.13575	5.78809	4.36E-02	7.44E-03	1.59E-01	4.31E-02	2.84E-03	1.02E-01	1.32E-03	1.26E-03	3.6004E-01
551615.71	4173039.79	42087.14385	7982.66738	187567.1425	30792.74309	3190.90016	132074.2347	10.36607	9.57798	3.63E-02	6.93E-03	1.63E-01	3.74E-02	2.60E-03	1.07E-01	2.23E-03	2.08E-03	3.5787E-01
551665.71	4172989.79	128009.2193	11675.76594	109272.4101	80797.2279	4947.84908	68738.64621	2.1082	2.05931	1.10E-01	1.01E-02	9.49E-02	9.81E-02	4.03E-03	5.59E-02	4.53E-04	4.47E-04	3.7438E-01
551655.71	4172989.79	134470.2107	11894.25496	103328.7789	79513.01244	5017.14418	67681.17318	2.38695	2.32351	1.16E-01	1.03E-02	8.97E-02	9.65E-02	4.08E-03	5.51E-02	5.13E-04	5.05E-04	3.7273E-01
551675.71	4172989.79	120464.8961	11381.97574	114522.3902	81230.41222	4826.67691	68558.52036	1.88415	1.84459	1.04E-01	9.88E-03	9.94E-02	9.86E-02	3.93E-03	5.58E-02	4.05E-04	4.01E-04	3.7236E-01
551645.71	4172989.79	141511.7891	12092.60644	97245.18085	78093.39653	5053.57353	65764.05484	2.77563	2.68422	1.22E-01	1.05E-02	8.44E-02	9.48E-02	4.11E-03	5.35E-02	5.96E-04	5.83E-04	3.7060E-01
551655.71	4173009.79	74593.26599	9667.38109	158386.5582	49645.79449	4087.26134	103108.1444	2.61466	2.53901	6.43E-02	8.39E-03	1.38E-01	6.03E-02	3.33E-03	8.39E-02	5.62E-04	5.51E-04	3.5888E-01
551675.71	4172999.79	90242.23625	10238.64276	145582.0682	61901.64228	4355.99306	86314.34882	1.94696	1.90564	7.78E-02	8.89E-03	1.26E-01	7.51E-02	3.55E-03	7.02E-02	4.18E-04	4.14E-04	3.6290E-01
551715.71	4173009.79	49798.51824	7953.58298	201990.6482	38532.15788	3356.2149	96155.65974	1.35978	1.33818	4.29E-02	6.91E-03	1.75E-01	4.68E-02	2.73E-03	7.83E-02	2.92E-04	2.91E-04	3.5359E-01
551685.71	4172999.79	83637.38129	9887.01454	152390.2136	59764.34997	4201.73475	84727.08589	1.74756	1.71363	7.21E-02	8.58E-03	1.32E-01	7.26E-02	3.42E-03	6.90E-02	3.75E-04	3.72E-04	3.5871E-01
551722.2	4172894.49	156735.2789	47001.82916	18975.56886	141662.3947	16577.69229	12688.90847	1.13941	1.12127	1.35E-01	4.08E-02	1.65E-02	1.72E-01	1.35E-02	1.03E-02	2.45E-04	2.44E-04	3.8875E-01
551665.71	4172999.79	94432.97624	10481.08124	136214.7331	62163.04664	4451.31301	85311.49208	2.1853	2.13403	8.14E-02	9.10E-03	1.18E-01	7.55E-02	3.62E-03	6.94E-02	4.69E-04	4.63E-04	3.5827E-01
551635.71	4173019.79	61813.09192	9152.43769	164084.9732	41294.40371	3782.41134	111544.7834	4.16114	3.9777	5.33E-02	7.95E-03	1.42E-01	5.01E-02	3.08E-03	9.08E-02	8.94E-04	8.64E-04	3.4948E-01
551610.46	4173044.8	38689.60186	7712.48107	180459.4816	28836.70975	3054.74292	131102.7285	14.72421	13.45634	3.34E-02	6.70E-03	1.57E-01	3.50E-02	2.49E-03	1.07E-01	3.16E-03	2.92E-03	3.4703E-01
551685.71	4172989.79	109905.0411	11018.15125	118614.4131	78495.1034	4661.16098	67107.3165	1.69906	1.66634	9.48E-02	9.57E-03	1.03E-01	9.53E-02	3.79E-03	5.46E-02	3.65E-04	3.62E-04	3.6177E-01
551695.71	4172999.79	77095.75356	9531.51998	157990.8114	56872.46025	4037.3854	81905.75945	1.58418	1.55572	6.65E-02	8.28E-03	1.37E-01	6.90E-02	3.29E-03	6.67E-02	3.40E-04	3.38E-04	3.5162E-01
551645.71	4173009.79	78212.29441	9886.36457	145897.5007	49948.33726	4139.37004	97758.90242	3.11904	3.00866	6.75E-02	8.58E-03	1.27E-01	6.06E-02	3.37E-03	7.96E-02	6.70E-04	6.53E-04	3.4761E-01
551655.71	4172999.79	98445.96215	10666.47257	126522.2917	61766.54252	4505.80055	82660.41839	2.48993	2.42071	8.49E-02	9.26E-03	1.10E-01	7.50E-02	3.67E-03	6.73E-02	5.35E-04	5.26E-04	3.5101E-01
551722.2	4172884.49	137783.8707	65150.21003	16616.0102	128391.8104	21561.2506	11355.57449	1.14794	1.12915	1.19E-01	5.66E-02	1.44E-02	1.56E-01	1.75E-02	9.24E-03	2.47E-04	2.45E-04	3.7298E-01
551645.71	4172999.79	104106.8183	10877.69381	117760.8669	61420.05456	4551.55922	79418.30007	2.93132	2.83096	8.98E-02	9.45E-03	1.02E-01	7.46E-02	3.70E-03	6.46E-02	6.30E-04	6.15E-04	3.4563E-01
551705.71	4172999.79	70495.26045	9159.60361	160863.0584	53377.28909	3861.58444	78394.84676	1.44691	1.42264	6.08E-02	7.95E-03	1.40E-01	6.48E-02	3.14E-03	6.38E-02	3.11E-04	3.09E-04	3.4079E-01
551695.71	4172989.79	99836.23491	10621.55408	121313.4271	74955.26008	4473.0236	64804.3384	1.54496	1.51739	8.61E-02	9.22E-03	1.05E-01	9.10E-02	3.64E-03	5.27E-02	3.32E-04	3.30E-04	3.4870E-01
551635.71	4172999.79	110230.8342	11077.72551	108999.5566	60731.37874	4569.8211	75358.71399	3.57762	3.42777	9.51E-02	9.62E-03	9.46E-02	7.37E-02	3.72E-03	6.13E-02	7.68E-04	7.44E-04	3.3962E-01
551725.71	4173009.79	45428.79407	7615.57704	186706.2609	35891.66421	3196.81752	89570.22159	1.25419	1.23537	3.92E-02	6.61E-03	1.62E-01	4.36E-02	2.60E-03	7.29E-02	2.69E-04	2.68E-04	3.2752E-01
551635.71	4173009.79	80838.2711	10034.60745	132471.8329	49462.47796	4144.2356	90961.59313	3.84617	3.68046	6.97E-02	8.71E-03	1.15E-01	6.00E-02	3.37E-03	7.40E-02	8.26E-04	7.99E-04	3.3253E-01
551625.71	4173019.79	63730.27612	9322.93234	146810.2696	41389.4828	3787.06642	101493.883	5.50514	5.20192	5.50E-02	8.10E-03	1.27E-01	5.02E-02	3.08E-03	8.26E-02	1.18E-03	1.13E-03	3.2878E-01
551615.71	4173029.79	51255.1163	8671.69587	157022.2559	35426.46102	3458.84966	108814.4241	8.96421	8.29976	4.42E-02	7.53E-03	1.36E-01	4.30E-02	2.81E-03	8.86E-02	1.93E-03	1.80E-03	3.2619E-01
551705.71	4172989.79	93612.1882	10202.10166	121883.331	72382.25206	4271.66411	62075.86383	1.41476	1.39118	8.07E-02	8.86E-03	1.06E-01	8.79E-02	3.48E-03	5.05E-02	3.04E-04	3.02E-04	3.3790E-01
551625.71	4172999.79	115221.7323	11249.00376	99959.22943	59791.13006	4552.29113	70492.88815	4.55457	4.31878	9.94E-02	9.77E-03	8.68E-02	7.26E-02	3.70E-03	5.74E-02	9.78E-04	9.38E-04	3.3151E-01
551715.71	4172999.79	64213.86359	8778.22331	158851.1521	49656.73246	3680.57428	74476.55516	1.32994	1.30898	5.54E-02	7.62E-03	1.38E-01	6.03E-02	3.00E-03	6.06E-02	2.86E-04	2.84E-04	3.2539E-01
551608.32	4173037.65	44145.62875	8197.05485	157942.3687	31729.1204	3225.12308	111066.8474	14.82875	13.44281	3.81E-02	7.12E-03	1.37E-01	3.85E-02	2.62E-03	9.04E-02	3.18E-03	2.92E-03	3.1997E-01
551625.71	4173009.79	83839.72653	10205.16306	119924.4921	49161.59552	4139.02705	83976.01256	4.98615	4.71941	7.23E-02	8.86E-03	1.04E-01	5.97E-02	3.37E-03	6.83E-02	1.07E-03	1.02E-03	3.1879E-01
551716.52	4172982.41	104838.9173	10563.93099	96661.75002	83798.53906	4364.82472	50183.23063	1.27632	1.25649	9.04E-02	9.17E-03	8.39E-02	1.02E-01	3.55E-03	4.08E-02	2.74E-04	2.73E-04	3.3019E-01
551615.71	4172999.79	118502.258	11430.35248	90444.34538	59170.42038	4513.84244	65028.87519	6.15861	5.75187	1.02E-01	9.93E-03	7.85E-02	7.18E-02	3.67E-03	5.29E-02	1.32E-03	1.25E-03	3.2166E-01
551729.68	4172892.53	132787.3141	46719.68208	17824.32827	122599.3444	16413.81134	11963.82411	1.08172	1.06525	1.15E-01	4.06E-02	1.55E-02	1.49E-01	1.34E-02	9.74E-03	2.32E-04	2.31E-04	3.4296E-01
551715.71	4172989.79	85989.98416	9765.70364	119206.3137	67208.35237	4063.41233	59092.08959	1.30316	1.28275	7.42E-02	8.48E-03	1.04E-01	8.16E-02	3.31E-03	4.81E-02	2.80E-04	2.79E-04	3.1970E-01
551730.52	4172878.4	111792.0564	73750.41794	14501.13837	108531.262	24038.83362	10014.12522	1.08778	1.07073	9.64E-02	6.40E-02	1.26E-02	1.32E-01	1.96E-02	8.15E-03	2.34E-04	2.33E-04	3.3298E-01
551615.71	4173019.79	64604.3152	9445.86288	128630.2081	41197.84301	3758.29403	90489.08323	7.81138	7.25333	5.57E-02	8.20E-03	1.12E-01	5.00E-02	3.06E-03	7.36E-02	1.68E-03	1.58E-03	3.0558E-01
551615.71	4173009.79	86014.5339	10366.68966	107066.0435	48887.18854	4110.70841	76354.16704	6.91008	6.43366	7.42E-02	9.00E-03	9.30E-02	5.93E-02	3.35E-03	6.21E-02	1.48E-03	1.40E-03	3.0387E-01
551725.71	4172997.1	62500.3084	8635.09324	138976.6164	49335.07612	3592.25387	65803.8558	1.22312	1.20495	5.39E-02	7.50E-03	1.21E-01	5.99E-02	2.92E-03	5.36E-02	2.63E-04	2.62E-04	2.9897E-01
551723.2	4172987.32	85178.78781	9693.0135	106713.8872	67467.98261	4005.81812	53725.81145	1.22395	1.20561	7.35E-02	8.42E-03	9.27E-02	8.19E-02	3.26E-03	4.37E-02	2.63E-04	2.62E-04	3.0395E-01
551733.88	4172886.73	115948.4827	53862.07084	16061.07317	109638.2208	18415.17056	10996.2038	1.05416	1.03832	1.00E-01	4.68E-02	1.39E-02	1.33E-01	1.50E-02	8.95E-03	2.26E-04	2.26E-04	3.1820E-01
551605.71	4173029.79	51643.8974	8761.58052	130561.9882	35305.54058	3417.79965	92720.94869	14.91173	13.42829	4.45E-02	7.61E-03	1.13E-01	4.29E-02	2.78E-03	7.55E-02	3.20E-03	2.92E-03	2.9274E-01
551605.71	4173009.79	84685.59236	10439.06952	93908.72907	48145.88018	4033.7771	68061.28804	10.47246	9.5061	7.30E-02	9.06E-03	8.15E-02	5.84E-02	3.28E-03	5.54E-02	2.25E-03	2.06E-03	2.8508E-01
551605.71	4173019.79	64522.09522	9519.8121	110156.8808	40789.37285	3698.80457	79042.25744	12.31389	11.13311	5.56E-02	8.27E-03	9.56E-02	4.95E-02	3.01E-03	6.43E-02	2.64E-03	2.42E-03	2.8148E-01
CONCUNIT ug/	m^3																	
DEPUNIT g/m^	2																	

Midway Village Project—New Phase 2 Receptors

New Phase 2 Receptors: Exposed to Phases 3+4 Demolition and Phases 3+4 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

	Mitigated Concentrations
Annual Average Onsite DPM Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	4.96E-08
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	6.25E-08
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	6.25E-08
Annual Average Onsite DPM Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	6.84E-08
Annual Average Onsite DPM Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	4.70E-08
Annual Average Onsite DPM Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	4.70E-08
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	5.32E-06
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	6.57E-06

Mitigated DPM Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
4.2950E-02	551674.71	4172865.89

UTM	551674.71	4172865.89
Latitude, Longitude	37°42'05.6"N 122°24'49.7"W	

X	Y	Unit Emissions Construction Area 3B (Phase 3) AREA5	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Demolition Area 3A (Phase 3) AREA11	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Route 1 - From the project site towards US-101 LINE1	Unit Emissions Route 2 - From US-101 towards the project site LINE2	Construction Area 2B (Part 1 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 3B (Phase 3) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 4B and Area 2B/4B (Phase 4) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 1 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 2 of 2 Phase 2) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 3A (Phase 3) Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
551674.71	4172865.89	253657.362	125772.2885	16192.33273	266490.3884	58281.69809	11223.51053	1.83315	1.78152	1.26E-02	7.86E-03	1.01E-03	1.82E-02	2.74E-03	5.27E-04	9.75E-06	1.17E-05	4.2950E-02
551684.15	4172895.89	322054.3417	54273.53829	22752.43204	281345.6369	20984.5491	15295.54241	1.52951	1.49859	1.60E-02	3.39E-03	1.42E-03	1.92E-02	9.86E-04	7.18E-04	8.14E-06	9.85E-06	4.1736E-02
551677.73	4172875.61	276089.9934	93854.60735	18232.97642	270818.9251	38845.84959	12484.60218	1.69067	1.64923	1.37E-02	5.86E-03	1.14E-03	1.85E-02	1.82E-03	5.86E-04	8.99E-06	1.08E-05	4.1637E-02
551689.28	4172903.18	325769.2509	45104.71505	24432.0162	271928.284	17284.66661	16260.85001	1.45965	1.43201	1.61E-02	2.82E-03	1.53E-03	1.86E-02	8.12E-04	7.64E-04	7.76E-06	9.41E-06	4.0680E-02
551682.2	4172884.49	294782.9474	72983.34169	20043.5664	259319.4043	28428.81458	13626.15734	1.583	1.5484	1.46E-02	4.56E-03	1.25E-03	1.77E-02	1.34E-03	6.40E-04	8.42E-06	1.02E-05	4.0150E-02
551684.71	4172865.89	205437.0862	128406.7844	15539.46555	226352.8492	57911.12174	10715.65315	1.65626	1.61331	1.02E-02	8.02E-03	9.71E-04	1.55E-02	2.72E-03	5.03E-04	8.81E-06	1.06E-05	3.7896E-02
551693.32	4172895.33	287789.6418	53971.98057	21964.43078	233414.7141	19991.79458	14766.93075	1.41911	1.39191	1.43E-02	3.37E-03	1.37E-03	1.60E-02	9.39E-04	6.94E-04	7.55E-06	9.14E-06	3.6619E-02
551687.73	4172875.61	233115.2903	93979.77327	17358.25367	225912.9975	38299.50109	11816.57115	1.5454	1.51025	1.16E-02	5.87E-03	1.08E-03	1.54E-02	1.80E-03	5.55E-04	8.22E-06	9.92E-06	3.6330E-02
551692.2	4172884.49	252962.7928	71446.81269	19248.12859	215089.8241	26996.74508	13049.32259	1.45465	1.42501	1.25E-02	4.46E-03	1.20E-03	1.47E-02	1.27E-03	6.13E-04	7.74E-06	9.36E-06	3.4811E-02
551699.28	4172903.18	272950.0181	43242.10254	23627.41546	223468.7266	16091.65634	15744.88395	1.34718	1.32292	1.35E-02	2.70E-03	1.48E-03	1.53E-02	7.56E-04	7.40E-04	7.17E-06	8.69E-06	3.4499E-02
551645.71	4173039.79	39618.76117	7619.26881	265540.9303	30177.40944	3188.81573	196854.1015	3.85399	3.70803	1.96E-03	4.76E-04	1.66E-02	2.06E-03	1.50E-04	9.25E-03	2.05E-05	2.44E-05	3.0529E-02
551665.71	4173029.79	45210.50729	7927.32978	266353.7752	34014.02698	3374.53656	184754.8445	2.48616	2.42247	2.24E-03	4.95E-04	1.66E-02	2.33E-03	1.58E-04	8.68E-03	1.32E-05	1.59E-05	3.0563E-02
551702.2	4172894.49	233143.8369	53299.58789	20956.75943	195597.7525	19197.3534	14050.36743	1.3229	1.29885	1.16E-02	3.33E-03	1.31E-03	1.34E-02	9.02E-04	6.60E-04	7.04E-06	8.53E-06	3.1148E-02
551655.71	4173029.79	46768.04052	8103.4047	247977.1317	34643.07473	3426.32599	170606.5076	2.92804	2.83762	2.32E-03	5.06E-04	1.55E-02	2.37E-03	1.61E-04	8.01E-03	1.56E-05	1.86E-05	2.8890E-02
551702.2	4172884.49	202904.4076	68451.25648	18478.87693	177550.0285	25155.18116	12557.94096	1.33893	1.31354	1.01E-02	4.28E-03	1.15E-03	1.21E-02	1.18E-03	5.90E-04	7.12E-06	8.63E-06	2.9416E-02
551635.71	4173039.79	40664.45819	7764.68352	243198.6891	30547.65371	3209.01046	177074.7824	4.99028	4.76055	2.02E-03	4.85E-04	1.52E-02	2.09E-03	1.51E-04	8.32E-03	2.65E-05	3.13E-05	2.8305E-02
551685.71	4173019.79	50606.30017	8145.42035	245113.3364	37834.40424	3482.20383	146628.2845	1.86123	1.8244	2.51E-03	5.09E-04	1.53E-02	2.59E-03	1.64E-04	6.89E-03	9.90E-06	1.20E-05	2.7986E-02
551675.71	4173019.79	53876.14132	8435.84433	238042.9409	39642.95397	3602.73653	147644.0821	2.0905	2.04518	2.67E-03	5.27E-04	1.49E-02	2.71E-03	1.69E-04	6.93E-03	1.11E-05	1.34E-05	2.7904E-02
551695.71	4173019.79	47024.69081	7843.42258	247790.2063	35706.88737	3349.2656	140520.513	1.67468	1.64406	2.33E-03	4.90E-04	1.55E-02	2.44E-03	1.57E-04	6.60E-03	8.91E-06	1.08E-05	2.7516E-02
551645.71	4173029.79	48161.3942	8265.74633	228009.5779	35047.88562	3461.03097	155354.7572	3.57107	3.43857	2.39E-03	5.16E-04	1.42E-02	2.40E-03	1.63E-04	7.30E-03	1.90E-05	2.26E-05	2.7042E-02
551665.71	4173019.79	56165.91374	8644.19937	220529.1463	40545.20373	3679.14724	140806.2506	2.37143	2.31308	2.78E-03	5.40E-04	1.38E-02	2.77E-03	1.73E-04	6.61E-03	1.26E-05	1.52E-05	2.6684E-02
551712.2	4172894.49	189802.6382	50437.10071	19946.6357	166772.6655	17878.57968	13349.59794	1.22589	1.20502	9.41E-03	3.15E-03	1.25E-03	1.14E-02	8.40E-04	6.27E-04	6.52E-06	7.92E-06	2.6690E-02
551625.71	4173039.79	41583.98104	7898.24248	218527.2964	30807.11974	3213.9227	155727.9646	6.8902	6.48975	2.06E-03	4.93E-04	1.36E-02	2.11E-03	1.51E-04	7.31E-03	3.67E-05	4.26E-05	2.5854E-02
551655.71	4173019.79	58089.51158	8823.00755	201083.7482	41010.56445	3731.3755	131467.003	2.7596	2.67699	2.88E-03	5.51E-04	1.26E-02	2.80E-03	1.75E-04	6.17E-03	1.47E-05	1.76E-05	2.5176E-02
551635.71	4173029.79	49315.59318	8406.37842	205131.6277	35227.56709	3474.88635	139626.2628	4.53813	4.33374	2.44E-03	5.25E-04	1.28E-02	2.41E-03	1.63E-04	6.56E-03	2.41E-05	2.85E-05	2.4964E-02
551665.71	4172979.79	170966.6884	13092.46834	89075.14188	105189.1518	5531.15829	56359.82161	2.03785	1.99128	8.47E-03	8.18E-04	5.56E-03	7.19E-03	2.60E-04	2.65E-03	1.08E-05	1.31E-05	2.4980E-02
551618.5	4173046.65	37161.56459	7532.80778	206223.9654	28118.776	3030.21128	157838.0287	10.07359	9.358	1.84E-03	4.70E-04	1.29E-02	1.92E-03	1.42E-04	7.41E-03	5.36E-05	6.15E-05	2.4786E-02
551675.71	4172979.79	162159.8003	12768.4889	92013.40991	109801.7517	5390.99485	55738.82372	1.82854	1.79056	8.04E-03	7.97E-04	5.75E-03	7.51E-03	2.53E-04	2.62E-03	9.73E-06	1.18E-05	2.4984E-02
551712.2	4172884.49	165268.4298	68004.35221	17602.87393	149740.922	23312.73189	11949.21114	1.23715	1.21536	8.19E-03	4.25E-03	1.10E-03	1.02E-02	1.09E-03	5.61E-04	6.58E-06	7.99E-06	2.5450E-02
551685.71	4173009.79	64218.38594	8944.40588	197455.358	46726.00468	3814.25994	110079.0669	1.80169	1.7664	3.18E-03	5.59E-04	1.23E-02	3.20E-03	1.79E-04	5.17E-03	9.58E-06	1.16E-05	2.4640E-02
551675.71	4173009.79	68625.90725	9264.13272	187745.3304	48700.14869	3950.60231	111503.4525	2.01526	1.97204	3.40E-03	5.79E-04	1.17E-02	3.33E-03	1.86E-04	5.24E-03	1.07E-05	1.30E-05	2.4483E-02
551695.71	4173009.79	59466.00999	8619.92017	204636.9623	44260.2169	3667.98007	106248.9377	1.62758	1.5981	2.95E-03	5.38E-04	1.28E-02	3.03E-03	1.72E-04	4.99E-03	8.66E-06	1.05E-05	2.4476E-02
551645.71	4173019.79	60214.16702	9011.55855	183226.8921	41387.13131	3773.93878	122118.9509	3.32772	3.20695	2.98E-03	5.63E-04	1.14E-02	2.83E-03	1.77E-04	5.74E-03	1.77E-05	2.11E-05	2.3773E-02
551705.71	4173009.79	54605.56184	8289.38384	207200.9853	41490.32125	3514.35568	101508.2559	1.48262	1.45756	2.71E-03	5.18E-04	1.29E-02	2.84E-03	1.65E-04	4.77E-03	7.89E-06	9.58E-06	2.3953E-02
551665.71	4173009.79	71708.85483	9486.06004	173078.6649	49460.04291	4034.47359	108346.1555	2.27232	2.21834	3.55E-03	5.92E-04	1.08E-02	3.38E-03	1.89E-04	5.09E-03	1.21E-05	1.46E-05	2.3644E-02
551625.71	4173029.79	50578.7694	8567.80079	182853.5438	35497.4435	3483.79303	124968.4902	6.13575	5.78809	2.51E-03	5.35E-04	1.14E-02	2.43E-03	1.64E-04	5.87E-03	3.26E-05	3.80E-05	2.2994E-02
551615.71	4173039.79	42087.14385	7982.66738	187567.1425	30792.74309	3190.90016	132074.2347	10.36607	9.57798	2.09E-03	4.99E-04	1.17E-02	2.11E-03	1.50E-04	6.20E-03	5.51E-05	6.29E-05	2.2877E-02
551665.71	4172989.79	128009.2193	11675.76594	109272.4101	80797.2279	4947.84908	68738.64621	2.1082	2.05931	6.35E-03	7.29E-04	6.82E-03	5.53E-03	2.32E-04	3.23E-03	1.12E-05	1.35E-05	2.2910E-02
551655.71	4172989.79	134470.2107	11894.25496	103328.7789	79513.01244	5017.14418	67681.17318	2.38695	2.32351	6.67E-03	7.43E-04	6.45E-03	5.44E-03	2.36E-04	3.18E-03	1.27E-05	1.53E-05	2.2742E-02
551675.71	4172989.79	120464.8961	11381.97574	114522.3902	81230.41222	4826.67691	68558.52036	1.88415	1.84459	5.97E-03	7.11E-04	7.15E-03	5.55E-03	2.27E-04	3.22E-03	1.00E-05	1.21E-05	2.2859E-02
551645.71	4172989.79	141511.7891	12092.60644	97245.18085	78093.39653	5053.57353	65764.05484	2.77563	2.68422	7.01E-03	7.55E-04	6.07E-03	5.34E-03	2.37E-04	3.09E-03	1.48E-05	1.76E-05	2.2543E-02
551655.71	4173009.79	74593.26599	9667.38109	158386.5582	49645.79449	4087.26134	103108.1444	2.61466	2.53901	3.70E-03	6.04E-04	9.89E-03	3.39E-03	1.92E-04	4.84E-03	1.39E-05	1.67E-05	2.2654E-02
551675.71	4172999.79	90242.23625	10238.64276	145582.0682	61901.64228	4355.99306	86314.34882	1.94696	1.90564	4.47E-03	6.39E-04	9.09E-03	4.23E-03	2.05E-04	4.05E-03	1.04E-05	1.25E-05	2.2720E-02
551715.71	4173009.79	49798.51824	7953.58298	201990.6482	38532.15788	3356.2149	96155.65974	1.35978	1.33818	2.47E-03	4.97E-04	1.26E-02	2.63E-03	1.58E-04	4.52E-03	7.23E-06	8.79E-06	2.2906E-02
551685.71	4172999.79	83637.38129	9887.01454	152390.2136	59764.34997	4201.73475	84727.08589	1.74756	1.71363	4.15E-03	6.18E-04	9.52E-03	4.09E-03	1.97E-04	3.98E-03	9.30E-06	1.13E-05	2.2566E-02
551722.2	4172894.49	156735.2789	47001.82916	18975.56886	141662.3947	16577.69229	12688.90847	1.13941	1.12127	7.77E-03	2.94E-03	1.19E-03	9.69E-03	7.79E-04	5.96E-04	6.06E-06	7.37E-06	2.2966E-02
551665.71	4172999.79	94432.97624	10481.08124	136214.7331	62163.04664	4451.31301	85311.49208	2.1853	2.13403	4.68E-03	6.55E-04	8.51E-03	4.25E-03	2.09E-04	4.01E-03	1.16E-05	1.40E-05	2.2336E-02
551635.71	4173019.79	61813.09192	9152.43769	164084.9732	41294.40371	3782.41134	111544.7834	4.16114	3.9777	3.06E-03	5.72E-04	1.02E-02	2.82E-03	1.78E-04	5.24E-03	2.21E-05	2.61E-05	2.2173E-02
551610.46	4173044.8	38689.60186	7712.48107	180459.4816	28836.70975	3054.74292	131102.7285	14.72421	13.45634	1.92E-03	4.82E-04	1.13E-02	1.97E-03	1.43E-04	6.16E-03	7.83E-05	8.84E-05	2.2110E-02
551685.71	4172989.79	109905.0411	11018.15125	118614.4131	78495.1034	4661.16098	67107.3165	1.69906	1.66634	5.45E-03	6.88E-04	7.41E-03	5.37E-03	2.19E-04	3.15E-03	9.04E-06	1.09E-05	2.2303E-02
551695.71	4172999.79	77095.75356	9531.51998	157990.8114	56872.46025	4037.3854	81905.75945	1.58418	1.55572	3.82E-03	5.95E-04	9.87E-03	3.89E-03	1.90E-04	3.85E-03	8.43E-06	1.02E-05	2.2229E-02
551645.71	4173009.79	78212.29441	9886.36457	145897.5007	49948.33726	4139.37004	97758.90242	3.11904	3.00866	3.88E-03	6.17E-04	9.11E-03	3.42E-03	1.94E-04	4.59E-03	1.66E-05	1.98E-05	2.1845E-02
551655.71	4172999.79	98445.96215	10666.47257	126522.2917	61766.54252	4505.80055	82660.41839	2.48993	2.42071	4.88E-03	6.66E-04	7.90E-03	4.22E-03	2.12E-04	3.88E-03	1.32E-05	1.59E-05	2.1795E-02
551722.2	4172884.49	137783.8707	65150.21003	16616.0102	128391.8104	21561.2506	11355.57449	1.14794	1.12915	6.83E-03	4.07E-03	1.04E-03	8.78E-03	1.01E-03	5.33E-04	6.11E-06	7.42E-06	2.2276E-02
551645.71	4172999.79	104106.8183	10877.69381	117760.8669	61420.05456	4551.55922	79418.30007	2.93132	2.83096	5.16E-03	6.79E-04	7.35E-03	4.20E-03	2.14E-04	3.73E-03	1.56E-05	1.86E-05	2.1373E-02
551705.71	4172999.79	70495.26045	9159.60361	160863.0584	53377.28909	3861.58444	78394.84676	1.44691	1.42264	3.49E-03	5.72E-04	1.00E-02	3.65E-03	1.81E-04	3.68E-03	7.70E-06	9.35E-06	2.1644E-02
551695.71	4172989.79	99836.23491	10621.55408	121313.4271	74955.26008	4473.0236	64804.3384	1.54496	1.51739	4.95E-03	6.63E-04	7.58E-03	5.13E-03	2.10E-04	3.04E-03	8.22E-06	9.97E-06	2.1587E-02
551635.71	4172999.79	110230.8342	11077.72551	108999.5566	60731.37874	4569.8211	75358.71399	3.57762	3.42777	5.46E-03	6.92E-04	6.81E-03	4.15E-03	2.15E-04	3.54E-03	1.90E-05	2.25E-05	2.0913E-02
551725.71	4173009.79	45428.79407	7615.57704	186706.2609	35891.66421	3196.81752	89570.22159	1.25419	1.23537	2.25E-03	4.76E-04	1.17E-02	2.45E-03	1.50E-04	4.21E-03	6.67E-06	8.12E-06	2.1215E-02
551635.71	4173009.79	80838.2711	10034.60745	132471.8329	49462.47796	4144.2356	90961.59313	3.84617	3.68046	4.01E-03	6.27E-04	8.27E-03	3.38E-03	1.95E-04	4.27E-03	2.05E-05	2.42E-05	2.0802E-02
551625.71	4173019.79	63730.27612	9322.93234	146810.2696	41389.4828	3787.06642	101493.883	5.50514	5.20192	3.16E-03	5.82E-04	9.17E-03	2.83E-03	1.78E-04	4.77E-03	2.93E-05	3.42E-05	2.0749E-02
551615.71	4173029.79	51255.1163	8671.69587	157022.2559	35426.46102	3458.84966	108814.4241	8.96421	8.29976	2.54E-03	5.42E-04	9.81E-03	2.42E-03	1.62E-04	5.11E-03	4.77E-05	5.45E-05	2.0688E-02
551705.71	4172989.79	93612.1882	10202.10166	121883.331	72382.25206	4271.66411	62075.86383	1.41476	1.39118	4.64E-03	6.37E-04	7.61E-03	4.95E-03	2.01E-04	2.92E-03	7.53E-06	9.14E-06	2.0973E-02
551625.71	4172999.79	115221.7323	11249.00376	99959.22943	59791.13006	4552.29113	70492.88815	4.55457	4.31878	5.71E-03	7.03E-04	6.24E-03	4.09E-03	2.14E-04	3.31E-03	2.42E-05	2.84E-05	2.0323E-02
551715.71	4172999.79	64213.86359	8778.22331	158851.1521	49656.73246	3680.57428	74476.55516	1.32994	1.30898	3.18E-03	5.48E-04	9.92E-03	3.40E-03	1.73E-04	3.50E-03	7.07E-06	8.60E-06	2.0735E-02
551608.32	4173037.65	44145.62875	8197.05485	157942.3687	31729.1204	3225.12308	111066.8474	14.82875	13.44281	2.19E-03	5.12E-04	9.86E-03	2.17E-03	1.51E-04	5.22E-03	7.89E-05	8.83E-05	2.0270E-02
551625.71	4173009.79	83839.72653	10205.16306	119924.4921	49161.59552	4139.02705	83976.01256	4.98615	4.71941	4.16E-03	6.37E-04	7.49E-03	3.36E-03	1.94E-04	3.94E-03	2.65E-05	3.10E-05	1.9841E-02
551716.52	4172982.41	104838.9173	10563.93099	96661.75002	83798.53906	4364.82472	50183.23063	1.27632	1.25649	5.20E-03	6.60E-04	6.04E-03	5.73E-03	2.05E-04	2.36E-03	6.79E-06	8.26E-06	2.0201E-02
551615.71	4172999.79	118502.258	11430.35248	90444.34538	59170.42038	4513.84244	65028.87519	6.15861	5.75187	5.87E-03	7.14E-04	5.65E-03	4.05E-03	2.12E-04	3.05E-03	3.28E-05	3.78E-05	1.9620E-02
551729.68	4172892.53	132787.3141	46719.68208	17824.32827	122599.3444	16413.81134	11963.82411	1.08172	1.06525	6.58E-03	2.92E-03	1.11E-03	8.38E-03	7.71E-04	5.62E-04	5.75E-06	7.00E-06	2.0343E-02
551715.71	4172989.79	85989.98416	9765.70364	119206.3137	67208.35237	4063.41233	59092.08959	1.30316	1.28275	4.26E-03	6.10E-04	7.45E-03	4.60E-03	1.91E-04	2.78E-03	6.93E-06	8.43E-06	1.9895E-02
551730.52	4172878.4	111792.0564	73750.41794	14501.13837	108531.262	24038.83362	10014.12522	1.08778	1.07073	5.54E-03	4.61E-03	9.06E-04	7.42E-03	1.13E-03	4.70E-04	5.79E-06	7.03E-06	2.0087E-02
551615.71	4173019.79	64604.3152	9445.86288	128630.2081	41197.84301	3758.29403	90489.08323	7.81138	7.25333	3.20E-03	5.90E-04	8.03E-03	2.82E-03	1.77E-04	4.25E-03	4.16E-05	4.77E-05	1.9159E-02
551615.71	4173009.79	86014.5339	10366.68966	107066.0435	48887.18854	4110.70841	76354.16704	6.91008	6.43366	4.26E-03	6.47E-04	6.69E-03	3.34E-03	1.93E-04	3.59E-03	3.68E-05	4.23E-05	1.8800E-02
551725.71	4172997.1	62500.3084	8635.09324	138976.6164	49335.07612	3592.25387	65803.8558	1.22312	1.20495	3.10E-03	5.39E-04	8.68E-03	3.37E-03	1.69E-04	3.09E-03	6.51E-06	7.92E-06	1.8965E-02
551723.2	4172987.32	85178.78781	9693.0135	106713.8872	67467.98261	4005.81812	53725.81145	1.22395	1.20561	4.22E-03	6.05E-04	6.67E-03	4.61E-03	1.88E-04	2.52E-03	6.51E-06	7.92E-06	1.8832E-02
551733.88	4172886.73	115948.4827	53862.07084	16061.07317	109638.2208	18415.17056	10996.2038	1.05416	1.03832	5.75E-03	3.36E-03	1.00E-03	7.50E-03	8.65E-04	5.16E-04	5.61E-06	6.82E-06	1.9006E-02
551605.71	4173029.79	51643.8974	8761.58052	130561.9882	35305.54058	3417.79965	92720.94869	14.91173	13.42829	2.56E-03	5.47E-04	8.15E-03	2.41E-03	1.61E-04	4.36E-03	7.93E-05	8.82E-05	1.8359E-02
551605.71	4173009.79	84685.59236	10439.06952	93908.72907	48145.88018	4033.7771	68061.28804	10.47246	9.5061	4.20E-03	6.52E-04	5.87E-03	3.29E-03	1.89E-04	3.20E-03	5.57E-05	6.25E-05	1.7512E-02
551605.71	4173019.79	64522.09522	9519.8121	110156.8808	40789.37285	3698.80457	79042.25744	12.31389	11.13311	3.20E-03	5.95E-04	6.88E-03	2.79E-03	1.74E-04	3.71E-03	6.55E-05	7.31E-05	1.7487E-02
CONCUNIT ug/	m^3																	
DEPUNIT g/m^	2																	

Midway Village Project—New Phase 2 Receptors

New Phase 2 Receptors: Exposed to Phases 3+4 Demolition and Phases 3+4 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

Mitigated Concentrations

Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 3A (Phase 3) (grams/m2/sec):	2.73E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	1.28E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	1.28E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 3B (Phase 3) (grams/m2/sec):	7.50E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	4.93E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	4.93E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	2.15E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	2.17E-04

X	Y	Unit Emissions Construction Area 3B (Phase 3) AREA5	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Demolition Area 3A (Phase 3) AREA11	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Route 1 - From the project site towards US-101 LINE1	Unit Emissions Route 2 - From US-101 towards the project site LINE2	Construction Area 2B (Part 1 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 2B and 2B/3B (Part 2 of Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 3B (Phase 3) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 4B and Area 2B/4B (Phase 4) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 1 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 2A (Part 2 of 2 Phase 2) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 3A (Phase 3) Annual PM2.5 w/Actual Emissions (ug/m3)	Total PM2.5 (ug/m3)
551674.71	4172865.89	253657.362	125772.2885	16192.33273	266490.3884	58281.69809	11223.51053	1.83315	1.78152	6.93E-02	1.62E-02	2.08E-03	2.00E-01	2.87E-02	5.53E-03	3.94E-04	3.87E-04	3.2235E-01
551684.15	4172895.89	322054.3417	54273.53829	22752.43204	281345.6369	20984.5491	15295.54241	1.52951	1.49859	8.80E-02	6.97E-03	2.92E-03	2.11E-01	1.03E-02	7.53E-03	3.29E-04	3.25E-04	3.2734E-01
551677.73	4172875.61	276089.9934	93854.60735	18232.97642	270818.9251	38845.84959	12484.60218	1.69067	1.64923	7.54E-02	1.21E-02	2.34E-03	2.03E-01	1.91E-02	6.15E-03	3.63E-04	3.58E-04	3.1888E-01
551689.28	4172903.18	325769.2509	45104.71505	24432.0162	271928.284	17284.66661	16260.85001	1.45965	1.43201	8.90E-02	5.79E-03	3.14E-03	2.04E-01	8.51E-03	8.01E-03	3.14E-04	3.11E-04	3.1896E-01
551682.2	4172884.49	294782.9474	72983.34169	20043.5664	259319.4043	28428.81458	13626.15734	1.583	1.5484	8.05E-02	9.38E-03	2.57E-03	1.94E-01	1.40E-02	6.71E-03	3.40E-04	3.36E-04	3.0830E-01
551684.71	4172865.89	205437.0862	128406.7844	15539.46555	226352.8492	57911.12174	10715.65315	1.65626	1.61331	5.61E-02	1.65E-02	2.00E-03	1.70E-01	2.85E-02	5.28E-03	3.56E-04	3.50E-04	2.7883E-01
551693.32	4172895.33	287789.6418	53971.98057	21964.43078	233414.7141	19991.79458	14766.93075	1.41911	1.39191	7.86E-02	6.93E-03	2.82E-03	1.75E-01	9.85E-03	7.27E-03	3.05E-04	3.02E-04	2.8111E-01
551687.73	4172875.61	233115.2903	93979.77327	17358.25367	225912.9975	38299.50109	11816.57115	1.5454	1.51025	6.37E-02	1.21E-02	2.23E-03	1.69E-01	1.89E-02	5.82E-03	3.32E-04	3.28E-04	2.7271E-01
551692.2	4172884.49	252962.7928	71446.81269	19248.12859	215089.8241	26996.74508	13049.32259	1.45465	1.42501	6.91E-02	9.18E-03	2.47E-03	1.61E-01	1.33E-02	6.43E-03	3.12E-04	3.09E-04	2.6237E-01
551699.28	4172903.18	272950.0181	43242.10254	23627.41546	223468.7266	16091.65634	15744.88395	1.34718	1.32292	7.46E-02	5.56E-03	3.04E-03	1.68E-01	7.93E-03	7.76E-03	2.89E-04	2.87E-04	2.6696E-01
551645.71	4173039.79	39618.76117	7619.26881	265540.9303	30177.40944	3188.81573	196854.1015	3.85399	3.70803	1.08E-02	9.79E-04	3.41E-02	2.26E-02	1.57E-03	9.70E-02	8.28E-04	8.05E-04	1.6872E-01
551665.71	4173029.79	45210.50729	7927.32978	266353.7752	34014.02698	3374.53656	184754.8445	2.48616	2.42247	1.24E-02	1.02E-03	3.42E-02	2.55E-02	1.66E-03	9.10E-02	5.34E-04	5.26E-04	1.6682E-01
551702.2	4172894.49	233143.8369	53299.58789	20956.75943	195597.7525	19197.3534	14050.36743	1.3229	1.29885	6.37E-02	6.85E-03	2.69E-03	1.47E-01	9.46E-03	6.92E-03	2.84E-04	2.82E-04	2.3683E-01
551655.71	4173029.79	46768.04052	8103.4047	247977.1317	34643.07473	3426.32599	170606.5076	2.92804	2.83762	1.28E-02	1.04E-03	3.19E-02	2.60E-02	1.69E-03	8.40E-02	6.29E-04	6.16E-04	1.5862E-01
551702.2	4172884.49	202904.4076	68451.25648	18478.87693	177550.0285	25155.18116	12557.94096	1.33893	1.31354	5.54E-02	8.79E-03	2.37E-03	1.33E-01	1.24E-02	6.19E-03	2.88E-04	2.85E-04	2.1887E-01
551635.71	4173039.79	40664.45819	7764.68352	243198.6891	30547.65371	3209.01046	177074.7824	4.99028	4.76055	1.11E-02	9.98E-04	3.12E-02	2.29E-02	1.58E-03	8.72E-02	1.07E-03	1.03E-03	1.5717E-01
551685.71	4173019.79	50606.30017	8145.42035	245113.3364	37834.40424	3482.20383	146628.2845	1.86123	1.8244	1.38E-02	1.05E-03	3.15E-02	2.84E-02	1.72E-03	7.22E-02	4.00E-04	3.96E-04	1.4947E-01
551675.71	4173019.79	53876.14132	8435.84433	238042.9409	39642.95397	3602.73653	147644.0821	2.0905	2.04518	1.47E-02	1.08E-03	3.06E-02	2.97E-02	1.77E-03	7.27E-02	4.49E-04	4.44E-04	1.5150E-01
551695.71	4173019.79	47024.69081	7843.42258	247790.2063	35706.88737	3349.2656	140520.513	1.67468	1.64406	1.28E-02	1.01E-03	3.18E-02	2.68E-02	1.65E-03	6.92E-02	3.60E-04	3.57E-04	1.4405E-01
551645.71	4173029.79	48161.3942	8265.74633	228009.5779	35047.88562	3461.03097	155354.7572	3.57107	3.43857	1.32E-02	1.06E-03	2.93E-02	2.63E-02	1.70E-03	7.65E-02	7.67E-04	7.47E-04	1.4954E-01
551665.71	4173019.79	56165.91374	8644.19937	220529.1463	40545.20373	3679.14724	140806.2506	2.37143	2.31308	1.53E-02	1.11E-03	2.83E-02	3.04E-02	1.81E-03	6.94E-02	5.09E-04	5.02E-04	1.4737E-01
551712.2	4172894.49	189802.6382	50437.10071	19946.6357	166772.6655	17878.57968	13349.59794	1.22589	1.20502	5.19E-02	6.48E-03	2.56E-03	1.25E-01	8.81E-03	6.58E-03	2.63E-04	2.62E-04	2.0184E-01
551625.71	4173039.79	41583.98104	7898.24248	218527.2964	30807.11974	3213.9227	155727.9646	6.8902	6.48975	1.14E-02	1.01E-03	2.81E-02	2.31E-02	1.58E-03	7.67E-02	1.48E-03	1.41E-03	1.4473E-01
551655.71	4173019.79	58089.51158	8823.00755	201083.7482	41010.56445	3731.3755	131467.003	2.7596	2.67699	1.59E-02	1.13E-03	2.58E-02	3.07E-02	1.84E-03	6.48E-02	5.93E-04	5.81E-04	1.4136E-01
551635.71	4173029.79	49315.59318	8406.37842	205131.6277	35227.56709	3474.88635	139626.2628	4.53813	4.33374	1.35E-02	1.08E-03	2.64E-02	2.64E-02	1.71E-03	6.88E-02	9.75E-04	9.41E-04	1.3973E-01
551665.71	4172979.79	170966.6884	13092.46834	89075.14188	105189.1518	5531.15829	56359.82161	2.03785	1.99128	4.67E-02	1.68E-03	1.14E-02	7.89E-02	2.72E-03	2.78E-02	4.38E-04	4.32E-04	1.7006E-01
551618.5	4173046.65	37161.56459	7532.80778	206223.9654	28118.776	3030.21128	157838.0287	10.07359	9.358	1.02E-02	9.68E-04	2.65E-02	2.11E-02	1.49E-03	7.78E-02	2.16E-03	2.03E-03	1.4214E-01
551675.71	4172979.79	162159.8003	12768.4889	92013.40991	109801.7517	5390.99485	55738.82372	1.82854	1.79056	4.43E-02	1.64E-03	1.18E-02	8.23E-02	2.66E-03	2.75E-02	3.93E-04	3.89E-04	1.7098E-01
551712.2	4172884.49	165268.4298	68004.35221	17602.87393	149740.922	23312.73189	11949.21114	1.23715	1.21536	4.52E-02	8.74E-03	2.26E-03	1.12E-01	1.15E-02	5.89E-03	2.66E-04	2.64E-04	1.8632E-01
551685.71	4173009.79	64218.38594	8944.40588	197455.358	46726.00468	3814.25994	110079.0669	1.80169	1.7664	1.75E-02	1.15E-03	2.54E-02	3.50E-02	1.88E-03	5.42E-02	3.87E-04	3.84E-04	1.3597E-01
551675.71	4173009.79	68625.90725	9264.13272	187745.3304	48700.14869	3950.60231	111503.4525	2.01526	1.97204	1.88E-02	1.19E-03	2.41E-02	3.65E-02	1.95E-03	5.49E-02	4.33E-04	4.28E-04	1.3831E-01
551695.71	4173009.79	59466.00999	8619.92017	204636.9623	44260.2169	3667.98007	106248.9377	1.62758	1.5981	1.62E-02	1.11E-03	2.63E-02	3.32E-02	1.81E-03	5.23E-02	3.50E-04	3.47E-04	1.3167E-01
551645.71	4173019.79	60214.16702	9011.55855	183226.8921	41387.13131	3773.93878	122118.9509	3.32772	3.20695	1.65E-02	1.16E-03	2.35E-02	3.10E-02	1.86E-03	6.02E-02	7.15E-04	6.96E-04	1.3560E-01
551705.71	4173009.79	54605.56184	8289.38384	207200.9853	41490.32125	3514.35568	101508.2559	1.48262	1.45756	1.49E-02	1.06E-03	2.66E-02	3.11E-02	1.73E-03	5.00E-02	3.18E-04	3.17E-04	1.2608E-01
551665.71	4173009.79	71708.85483	9486.06004	173078.6649	49460.04291	4034.47359	108346.1555	2.27232	2.21834	1.96E-02	1.22E-03	2.22E-02	3.71E-02	1.99E-03	5.34E-02	4.88E-04	4.82E-04	1.3646E-01
551625.71	4173029.79	50578.7694	8567.80079	182853.5438	35497.4435	3483.79303	124968.4902	6.13575	5.78809	1.38E-02	1.10E-03	2.35E-02	2.66E-02	1.72E-03	6.16E-02	1.32E-03	1.26E-03	1.3087E-01
551615.71	4173039.79	42087.14385	7982.66738	187567.1425	30792.74309	3190.90016	132074.2347	10.36607	9.57798	1.15E-02	1.03E-03	2.41E-02	2.31E-02	1.57E-03	6.51E-02	2.23E-03	2.08E-03	1.3065E-01
551665.71	4172989.79	128009.2193	11675.76594	109272.4101	80797.2279	4947.84908	68738.64621	2.1082	2.05931	3.50E-02	1.50E-03	1.40E-02	6.06E-02	2.44E-03	3.39E-02	4.53E-04	4.47E-04	1.4829E-01
551655.71	4172989.79	134470.2107	11894.25496	103328.7789	79513.01244	5017.14418	67681.17318	2.38695	2.32351	3.67E-02	1.53E-03	1.33E-02	5.96E-02	2.47E-03	3.33E-02	5.13E-04	5.05E-04	1.4798E-01
551675.71	4172989.79	120464.8961	11381.97574	114522.3902	81230.41222	4826.67691	68558.52036	1.88415	1.84459	3.29E-02	1.46E-03	1.47E-02	6.09E-02	2.38E-03	3.38E-02	4.05E-04	4.01E-04	1.4694E-01
551645.71	4172989.79	141511.7891	12092.60644	97245.18085	78093.39653	5053.57353	65764.05484	2.77563	2.68422	3.87E-02	1.55E-03	1.25E-02	5.85E-02	2.49E-03	3.24E-02	5.96E-04	5.83E-04	1.4732E-01
551655.71	4173009.79	74593.26599	9667.38109	158386.5582	49645.79449	4087.26134	103108.1444	2.61466	2.53901	2.04E-02	1.24E-03	2.03E-02	3.72E-02	2.01E-03	5.08E-02	5.62E-04	5.51E-04	1.3311E-01
551675.71	4172999.79	90242.23625	10238.64276	145582.0682	61901.64228	4355.99306	86314.34882	1.94696	1.90564	2.47E-02	1.32E-03	1.87E-02	4.64E-02	2.15E-03	4.25E-02	4.18E-04	4.14E-04	1.3658E-01
551715.71	4173009.79	49798.51824	7953.58298	201990.6482	38532.15788	3356.2149	96155.65974	1.35978	1.33818	1.36E-02	1.02E-03	2.59E-02	2.89E-02	1.65E-03	4.74E-02	2.92E-04	2.91E-04	1.1907E-01
551685.71	4172999.79	83637.38129	9887.01454	152390.2136	59764.34997	4201.73475	84727.08589	1.74756	1.71363	2.29E-02	1.27E-03	1.96E-02	4.48E-02	2.07E-03	4.17E-02	3.75E-04	3.72E-04	1.3306E-01
551722.2	4172894.49	156735.2789	47001.82916	18975.56886	141662.3947	16577.69229	12688.90847	1.13941	1.12127	4.28E-02	6.04E-03	2.44E-03	1.06E-01	8.17E-03	6.25E-03	2.45E-04	2.44E-04	1.7241E-01
551665.71	4172999.79	94432.97624	10481.08124	136214.7331	62163.04664	4451.31301	85311.49208	2.1853	2.13403	2.58E-02	1.35E-03	1.75E-02	4.66E-02	2.19E-03	4.20E-02	4.69E-04	4.63E-04	1.3640E-01
551635.71	4173019.79	61813.09192	9152.43769	164084.9732	41294.40371	3782.41134	111544.7834	4.16114	3.9777	1.69E-02	1.18E-03	2.11E-02	3.10E-02	1.86E-03	5.49E-02	8.94E-04	8.64E-04	1.2867E-01
551610.46	4173044.8	38689.60186	7712.48107	180459.4816	28836.70975	3054.74292	131102.7285	14.72421	13.45634	1.06E-02	9.91E-04	2.32E-02	2.16E-02	1.50E-03	6.46E-02	3.16E-03	2.92E-03	1.2854E-01
551685.71	4172989.79	109905.0411	11018.15125	118614.4131	78495.1034	4661.16098	67107.3165	1.69906	1.66634	3.00E-02	1.42E-03	1.52E-02	5.88E-02	2.30E-03	3.31E-02	3.65E-04	3.62E-04	1.4161E-01
551695.71	4172999.79	77095.75356	9531.51998	157990.8114	56872.46025	4037.3854	81905.75945	1.58418	1.55572	2.11E-02	1.22E-03	2.03E-02	4.26E-02	1.99E-03	4.03E-02	3.40E-04	3.38E-04	1.2824E-01
551645.71	4173009.79	78212.29441	9886.36457	145897.5007	49948.33726	4139.37004	97758.90242	3.11904	3.00866	2.14E-02	1.27E-03	1.87E-02	3.74E-02	2.04E-03	4.82E-02	6.70E-04	6.53E-04	1.3035E-01
551655.71	4172999.79	98445.96215	10666.47257	126522.2917	61766.54252	4505.80055	82660.41839	2.48993	2.42071	2.69E-02	1.37E-03	1.63E-02	4.63E-02	2.22E-03	4.07E-02	5.35E-04	5.26E-04	1.3483E-01
551722.2	4172884.49	137783.8707	65150.21003	16616.0102	128391.8104	21561.2506	11355.57449	1.14794	1.12915	3.76E-02	8.37E-03	2.13E-03	9.63E-02	1.06E-02	5.59E-03	2.47E-04	2.45E-04	1.6111E-01
551645.71	4172999.79	104106.8183	10877.69381	117760.8669	61420.05456	4551.55922	79418.30007	2.93132	2.83096	2.84E-02	1.40E-03	1.51E-02	4.60E-02	2.24E-03	3.91E-02	6.30E-04	6.15E-04	1.3363E-01
551705.71	4172999.79	70495.26045	9159.60361	160863.0584	53377.28909	3861.58444	78394.84676	1.44691	1.42264	1.93E-02	1.18E-03	2.07E-02	4.00E-02	1.90E-03	3.86E-02	3.11E-04	3.09E-04	1.2226E-01
551695.71	4172989.79	99836.23491	10621.55408	121313.4271	74955.26008	4473.0236	64804.3384	1.54496	1.51739	2.73E-02	1.36E-03	1.56E-02	5.62E-02	2.20E-03	3.19E-02	3.32E-04	3.30E-04	1.3521E-01
551635.71	4172999.79	110230.8342	11077.72551	108999.5566	60731.37874	4569.8211	75358.71399	3.57762	3.42777	3.01E-02	1.42E-03	1.40E-02	4.55E-02	2.25E-03	3.71E-02	7.68E-04	7.44E-04	1.3196E-01
551725.71	4173009.79	45428.79407	7615.57704	186706.2609	35891.66421	3196.81752	89570.22159	1.25419	1.23537	1.24E-02	9.78E-04	2.40E-02	2.69E-02	1.57E-03	4.41E-02	2.69E-04	2.68E-04	1.1052E-01
551635.71	4173009.79	80838.2711	10034.60745	132471.8329	49462.47796	4144.2356	90961.59313	3.84617	3.68046	2.21E-02	1.29E-03	1.70E-02	3.71E-02	2.04E-03	4.48E-02	8.26E-04	7.99E-04	1.2595E-01
551625.71	4173019.79	63730.27612	9322.93234	146810.2696	41389.4828	3787.06642	101493.883	5.50514	5.20192	1.74E-02	1.20E-03	1.89E-02	3.10E-02	1.87E-03	5.00E-02	1.18E-03	1.13E-03	1.2268E-01
551615.71	4173029.79	51255.1163	8671.69587	157022.2559	35426.46102	3458.84966	108814.4241	8.96421	8.29976	1.40E-02	1.11E-03	2.02E-02	2.66E-02	1.70E-03	5.36E-02	1.93E-03	1.80E-03	1.2088E-01
551705.71	4172989.79	93612.1882	10202.10166	121883.331	72382.25206	4271.66411	62075.86383	1.41476	1.39118	2.56E-02	1.31E-03	1.57E-02	5.43E-02	2.10E-03	3.06E-02	3.04E-04	3.02E-04	1.3010E-01
551625.71	4172999.79	115221.7323	11249.00376	99959.22943	59791.13006	4552.29113	70492.88815	4.55457	4.31878	3.15E-02	1.45E-03	1.28E-02	4.48E-02	2.24E-03	3.47E-02	9.78E-04	9.38E-04	1.2948E-01
551715.71	4172999.79	64213.86359	8778.22331	158851.1521	49656.73246	3680.57428	74476.55516	1.32994	1.30898	1.75E-02	1.13E-03	2.04E-02	3.72E-02	1.81E-03	3.67E-02	2.86E-04	2.84E-04	1.1538E-01
551608.32	4173037.65	44145.62875	8197.05485	157942.3687	31729.1204	3225.12308	111066.8474	14.82875	13.44281	1.21E-02	1.05E-03	2.03E-02	2.38E-02	1.59E-03	5.47E-02	3.18E-03	2.92E-03	1.1960E-01
551625.71	4173009.79	83839.72653	10205.16306	119924.4921	49161.59552	4139.02705	83976.01256	4.98615	4.71941	2.29E-02	1.31E-03	1.54E-02	3.69E-02	2.04E-03	4.14E-02	1.07E-03	1.02E-03	1.2198E-01
551716.52	4172982.41	104838.9173	10563.93099	96661.75002	83798.53906	4364.82472	50183.23063	1.27632	1.25649	2.86E-02	1.36E-03	1.24E-02	6.28E-02	2.15E-03	2.47E-02	2.74E-04	2.73E-04	1.3266E-01
551615.71	4172999.79	118502.258	11430.35248	90444.34538	59170.42038	4513.84244	65028.87519	6.15861	5.75187	3.24E-02	1.47E-03	1.16E-02	4.44E-02	2.22E-03	3.20E-02	1.32E-03	1.25E-03	1.2666E-01
551729.68	4172892.53	132787.3141	46719.68208	17824.32827	122599.3444	16413.81134	11963.82411	1.08172	1.06525	3.63E-02	6.00E-03	2.29E-03	9.19E-02	8.09E-03	5.89E-03	2.32E-04	2.31E-04	1.5093E-01
551715.71	4172989.79	85989.98416	9765.70364	119206.3137	67208.35237	4063.41233	59092.08959	1.30316	1.28275	2.35E-02	1.25E-03	1.53E-02	5.04E-02	2.00E-03	2.91E-02	2.80E-04	2.79E-04	1.2212E-01
551730.52	4172878.4	111792.0564	73750.41794	14501.13837	108531.262	24038.83362	10014.12522	1.08778	1.07073	3.05E-02	9.47E-03	1.86E-03	8.14E-02	1.18E-02	4.93E-03	2.34E-04	2.33E-04	1.4049E-01
551615.71	4173019.79	64604.3152	9445.86288	128630.2081	41197.84301	3758.29403	90489.08323	7.81138	7.25333	1.77E-02	1.21E-03	1.65E-02	3.09E-02	1.85E-03	4.46E-02	1.68E-03	1.58E-03	1.1596E-01
551615.71	4173009.79	86014.5339	10366.68966	107066.0435	48887.18854	4110.70841	76354.16704	6.91008	6.43366	2.35E-02	1.33E-03	1.38E-02	3.67E-02	2.02E-03	3.76E-02	1.48E-03	1.40E-03	1.1776E-01
551725.71	4172997.1	62500.3084	8635.09324	138976.6164	49335.07612	3592.25387	65803.8558	1.22312	1.20495	1.71E-02	1.11E-03	1.79E-02	3.70E-02	1.77E-03	3.24E-02	2.63E-04	2.62E-04	1.0774E-01
551723.2	4172987.32	85178.78781	9693.0135	106713.8872	67467.98261	4005.81812	53725.81145	1.22395	1.20561	2.33E-02	1.25E-03	1.37E-02	5.06E-02	1.97E-03	2.65E-02	2.63E-04	2.62E-04	1.1777E-01
551733.88	4172886.73	115948.4827	53862.07084	16061.07317	109638.2208	18415.17056	10996.2038	1.05416	1.03832	3.17E-02	6.92E-03	2.06E-03	8.22E-02	9.07E-03	5.42E-03	2.26E-04	2.26E-04	1.3780E-01
551605.71	4173029.79	51643.8974	8761.58052	130561.9882	35305.54058	3417.79965	92720.94869	14.91173	13.42829	1.41E-02	1.13E-03	1.68E-02	2.65E-02	1.68E-03	4.57E-02	3.20E-03	2.92E-03	1.1196E-01
551605.71	4173009.79	84685.59236	10439.06952	93908.72907	48145.88018	4033.7771	68061.28804	10.47246	9.5061	2.31E-02	1.34E-03	1.21E-02	3.61E-02	1.99E-03	3.35E-02	2.25E-03	2.06E-03	1.1247E-01
551605.71	4173019.79	64522.09522	9519.8121	110156.8808	40789.37285	3698.80457	79042.25744	12.31389	11.13311	1.76E-02	1.22E-03	1.42E-02	3.06E-02	1.82E-03	3.89E-02	2.64E-03	2.42E-03	1.0941E-01
CONCUNIT ug/	m^3																	
DEPUNIT g/m^	2																	

Mitigated PM2.5 Concentrations

Maximum DPM (ug/m3)	**MIR UTM** X	Y
3.2734E-01	551684.15	4172895.89

UTM	551684.15	4172895.89
Latitude, Longitude	37°42'06.6"N 122°24'49.3"W	

Scenario 7

Midway Village Project—New Phase 3 Receptors Scenario

Route 1 - From the project site towards US-101
Route 2 - From US-101 towards the project site

Summary Offsite Construction Emissions (No Mitigation)

Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)

Route 1 DPM		Route 2 DPM	
Road Segment 1 Phase 4—Demolition	3.08140E-07	Road Segment 1 Phase 4—Demolition	1.52163E-05
Road Segment 2 Phase 4—Demolition	4.51022E-07	Road Segment 2 Phase 4—Demolition	1.53864E-05
Road Segment 1 Phase 4—Construction	2.28605E-06	Road Segment 1 Phase 4—Construction	9.18916E-05
Road Segment 2 Phase 4—Construction	2.74541E-06	Road Segment 2 Phase 4—Construction	9.29187E-05

Scenario				
New Phase 2 Receptors: Exposed to Phases 4 Demolition and Phases 4 Construction	Road Segment 1	2.59419E-06	Road Segment 1	1.07108E-04
	Road Segment 2	3.19643E-06	Road Segment 2	1.08305E-04

Cancer Risk Calculations Using OEHHA/BAAQMD Cancer Risk Assumptions
Midway Village Project—New Phase 3 Receptors Scenario
Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant
UTM: 551653.5 4172854.72

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Age	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.181410063	10	361	1	0.25	2.5
0-1	0.181410063	10	1,090	1	0.93	27.7
					Total	30.12

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.015719565	10	361	1	0.25	0.2
0-1	0.015719565	10	1,090	1	0.93	2.4
					Total	2.61

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child
UTM: 551653.5 4172854.72

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Period	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.181410063	3	572	1	1.18	5.5
					Total	5.53

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.015719565	3	572	1	1.18	0.5
					Total	0.48

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult
UTM: 551653.5 4172854.72

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.181410063	1	261	0.73	1.18	0.6
					Total	0.61

Construction Annual DPM Emissions (as PM2.5 Exhaust) Mitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
All Phases	0.015719565	1	261	0.73	1.18	0.1
					Total	0.053

Midway Village Project—New Phase 3 Receptors Scenario

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551653.5	4172854.72	0.1814	0.1814	0.03628

Unmitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551653.5	4172854.72	0.2328	0.2328

Mitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
551653.5	4172854.72	0.0157	0.0157	0.00314

Mitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X (m)	Y (m)	Average PM2.5 Total (ug/m3)	Max PM2.5 (ug/m3)
551653.5	4172854.72	0.0671	0.0671

Midway Village Project—New Phase 3 Receptors Scenario

New Phase 3 Receptors: Exposed to Phases 4 Demolition and Phases 4 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

	Unmitigated Concentrations
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	8.02E-07
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	8.02E-07
Annual Average Onsite DPM Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	3.68E-07
Annual Average Onsite DPM Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	3.68E-07
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	2.59E-06
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	3.20E-06

Unmitigated DPM Concentrations		
Maximum DPM (ug/m3)	**MIR UTM**	
	X	Y
1.8141E-01	551653.5	4172854.72

UTM	551653.50	4172854.72
Latitude, Longitude	37°42'05.3"N 122°24'50.6"W	

X	Y	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Route 1 - From the project site towards US-101 LINE1	Unit Emissions Route 2 - From US-101 towards the project site LINE2	Construction Area 4B and Area 2B/4B (Phase 4) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 1 of 2 Phase 4) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Route 1 - From the project site towards US-101 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Route 2 - From US-101 towards the project site Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total** **DPM (ug/m3)**
551653.5	4172854.72	171160.9474	15302.62024	75631.6828	10789.81499	2.55867	2.45464	1.37E-01	1.23E-02	2.78E-02	3.97E-03	6.64E-06	7.85E-06	1.8141E-01
551642.42	4172857.32	168854.3696	15857.9813	55461.88347	11280.28439	2.82339	2.70983	1.35E-01	1.27E-02	2.04E-02	4.15E-03	7.32E-06	8.66E-06	1.7277E-01
551663.5	4172864.72	127140.9131	16558.28551	60112.05977	11531.02997	2.07301	2.00768	1.02E-01	1.33E-02	2.21E-02	4.24E-03	5.38E-06	6.42E-06	1.4166E-01
551623.5	4172864.72	150752.1953	17139.0347	33499.60394	12381.26081	3.15843	3.03992	1.21E-01	1.38E-02	1.23E-02	4.56E-03	8.19E-06	9.72E-06	1.5160E-01
551653.5	4172864.72	127122.9094	17034.3902	55744.65149	11961.10186	2.29772	2.22121	1.02E-01	1.37E-02	2.05E-02	4.40E-03	5.96E-06	7.10E-06	1.4058E-01
551633.5	4172864.72	142880.1694	17141.02108	39450.07879	12270.92691	2.85825	2.7531	1.15E-01	1.38E-02	1.45E-02	4.51E-03	7.41E-06	8.80E-06	1.4743E-01
551643.5	4172864.72	132824.8506	17179.04991	47329.55784	12177.13308	2.55946	2.46879	1.07E-01	1.38E-02	1.74E-02	4.48E-03	6.64E-06	7.89E-06	1.4226E-01
551613.28	4172867.43	143262.8036	17559.14543	27064.34328	12787.57987	3.39651	3.27143	1.15E-01	1.41E-02	9.96E-03	4.70E-03	8.81E-06	1.05E-05	1.4371E-01
551593.5	4172874.72	125142.3651	18022.09582	17273.91852	13333.44573	4.27246	4.09094	1.00E-01	1.45E-02	6.36E-03	4.91E-03	1.11E-05	1.31E-05	1.2615E-01
551603.5	4172874.72	121565.8542	18431.04637	20111.71631	13532.15084	3.68645	3.54328	9.75E-02	1.48E-02	7.40E-03	4.98E-03	9.56E-06	1.13E-05	1.2472E-01
551613.5	4172874.72	115392.7258	18749.63794	23515.78421	13650.02429	3.26337	3.14928	9.26E-02	1.50E-02	8.65E-03	5.02E-03	8.47E-06	1.01E-05	1.2131E-01
551623.5	4172874.72	108964.8526	18963.2319	27424.93765	13677.96604	2.92288	2.82576	8.74E-02	1.52E-02	1.01E-02	5.03E-03	7.58E-06	9.03E-06	1.1778E-01
551633.5	4172874.72	100308.2878	19277.3485	32898.00188	13755.45217	2.61213	2.52837	8.05E-02	1.55E-02	1.21E-02	5.06E-03	6.78E-06	8.08E-06	1.1312E-01
551663.5	4172874.72	93583.82466	18793.43592	40814.11138	13003.72674	1.94441	1.89083	7.51E-02	1.51E-02	1.50E-02	4.78E-03	5.04E-06	6.04E-06	1.0997E-01
551582.9	4172876.82	119202.6705	17717.11117	14284.83729	13210.92076	5.26122	4.99668	9.56E-02	1.42E-02	5.26E-03	4.86E-03	1.36E-05	1.60E-05	1.2000E-01
551653.5	4172874.72	92342.38448	19259.41152	38620.36698	13446.05582	2.14011	2.07782	7.41E-02	1.55E-02	1.42E-02	4.95E-03	5.55E-06	6.64E-06	1.0871E-01
551643.5	4172874.72	93314.35474	19532.01088	35815.45092	13767.61535	2.35828	2.28678	7.49E-02	1.57E-02	1.32E-02	5.07E-03	6.12E-06	7.31E-06	1.0879E-01
551693.5	4172974.72	12791.52317	84215.72722	5333.92456	47761.36029	1.52151	1.49419	1.03E-02	6.76E-02	1.96E-03	1.76E-02	3.95E-06	4.78E-06	9.7372E-02
551640.9	4172976.02	14392.86669	74546.30272	5956.04897	51264.08648	2.81444	2.71804	1.15E-02	5.98E-02	2.19E-03	1.89E-02	7.30E-06	8.69E-06	9.2424E-02
551620.9	4172984.07	13371.03228	74214.48559	5315.95984	53131.58901	4.51445	4.27162	1.07E-02	5.95E-02	1.96E-03	1.95E-02	1.17E-05	1.37E-05	9.1799E-02
551666.91	4172969.1	14951.79473	73025.47575	6289.01062	46369.51717	1.94843	1.90511	1.20E-02	5.86E-02	2.31E-03	1.71E-02	5.05E-06	6.09E-06	8.9969E-02
551593.5	4172884.72	90714.14235	19597.39115	14947.06603	14512.60282	4.30405	4.11621	7.28E-02	1.57E-02	5.50E-03	5.34E-03	1.12E-05	1.32E-05	9.9366E-02
551603.5	4172884.72	87377.67556	20181.88206	17189.06893	14822.41096	3.62927	3.49578	7.01E-02	1.62E-02	6.32E-03	5.45E-03	9.42E-06	1.12E-05	9.8093E-02
551633.5	4172974.72	14820.81442	69392.6607	6046.1339	49016.81233	3.19472	3.06791	1.19E-02	5.57E-02	2.22E-03	1.80E-02	8.29E-06	9.81E-06	8.7841E-02
551613.5	4172884.72	83088.70188	20723.27148	19938.53233	15077.33554	3.15506	3.0481	6.67E-02	1.66E-02	7.34E-03	5.55E-03	8.18E-06	9.74E-06	9.6189E-02
551705.66	4172972.34	12487.18069	77956.34108	5147.82632	43155.76243	1.36359	1.34107	1.00E-02	6.25E-02	1.89E-03	1.59E-02	3.54E-06	4.29E-06	9.0342E-02
551583.5	4172884.72	91591.03884	18972.50994	13121.47061	14151.76206	5.35955	5.07764	7.35E-02	1.52E-02	4.83E-03	5.21E-03	1.39E-05	1.62E-05	9.8769E-02
551623.5	4172884.72	77577.76606	21313.56729	23538.04772	15336.11353	2.77312	2.68734	6.22E-02	1.71E-02	8.66E-03	5.64E-03	7.19E-06	8.59E-06	9.3659E-02
551611.12	4172984.72	13483.81733	68168.28343	5201.94054	49887.6405	6.06349	5.64898	1.08E-02	5.47E-02	1.91E-03	1.84E-02	1.57E-05	1.81E-05	8.5812E-02
551673.5	4172884.72	70899.73649	20804.36417	28709.66638	14223.83968	1.70663	1.66727	5.69E-02	1.67E-02	1.06E-02	5.23E-03	4.43E-06	5.33E-06	8.9380E-02
551633.5	4172884.72	71660.57156	21930.32361	25056.30713	15570.6864	2.48654	2.41491	5.75E-02	1.76E-02	9.22E-03	5.73E-03	6.45E-06	7.72E-06	9.0049E-02
551663.5	4172884.72	69203.37071	21456.24079	28462.99091	14788.79893	1.86598	1.82035	5.55E-02	1.72E-02	1.05E-02	5.44E-03	4.84E-06	5.82E-06	8.8660E-02
551623.5	4172974.72	14865.96092	65502.86521	5920.95331	46934.49359	3.92941	3.73919	1.19E-02	5.26E-02	2.18E-03	1.73E-02	1.02E-05	1.20E-05	8.3949E-02
551653.5	4172884.72	68535.83538	21881.29455	27577.54444	15218.67153	2.04488	1.99207	5.50E-02	1.76E-02	1.01E-02	5.60E-03	5.30E-06	6.37E-06	8.8299E-02
551673.5	4172964.72	15650.48767	68160.17883	6557.12775	42486.31075	1.80014	1.76262	1.26E-02	5.47E-02	2.41E-03	1.56E-02	4.67E-06	5.63E-06	8.5296E-02
551643.5	4172884.72	68813.32009	22088.90226	26225.5143	15516.39209	2.24736	2.18636	5.52E-02	1.77E-02	9.65E-03	5.71E-03	5.83E-06	6.99E-06	8.8301E-02
551573.5	4172884.72	88882.8464	18248.41243	11548.4961	13702.1315	7.0875	6.62653	7.13E-02	1.46E-02	4.25E-03	5.04E-03	1.84E-05	2.12E-05	9.5281E-02
551601.77	4172988.4	12964.18533	65568.99829	4863.37565	48512.77567	8.99045	8.17545	1.04E-02	5.26E-02	1.79E-03	1.78E-02	2.33E-05	2.61E-05	8.2695E-02
551653.5	4172964.72	16325.57042	64933.92054	6826.90991	43425.45841	2.24557	2.1886	1.31E-02	5.21E-02	2.51E-03	1.60E-02	5.83E-06	7.00E-06	8.3696E-02
551683.5	4172964.72	15151.39145	68529.8599	6311.09683	41247.33254	1.63231	1.60096	1.22E-02	5.50E-02	2.32E-03	1.52E-02	4.23E-06	5.12E-06	8.4644E-02
551593.5	4172994.72	12159.06611	64530.09193	4460.35283	48234.39227	15.18407	13.34697	9.76E-03	5.18E-02	1.64E-03	1.77E-02	3.94E-05	4.27E-05	8.0997E-02
551665.23	4172962.34	16473.51325	64458.08407	6906.37397	41437.51083	1.94919	1.90559	1.32E-02	5.17E-02	2.54E-03	1.52E-02	5.06E-06	6.09E-06	8.2729E-02
551643.5	4172964.72	16643.45822	62018.37193	6883.28505	42897.52504	2.57386	2.49546	1.34E-02	4.98E-02	2.53E-03	1.58E-02	6.68E-06	7.98E-06	8.1440E-02
551693.5	4172964.72	14544.94026	67875.26586	6009.1789	39622.98207	1.48942	1.46284	1.17E-02	5.45E-02	2.21E-03	1.46E-02	3.86E-06	4.68E-06	8.2923E-02
551613.5	4172974.72	15018.38594	60632.73588	5794.2803	44202.12131	5.07398	4.76931	1.20E-02	4.86E-02	2.13E-03	1.63E-02	1.32E-05	1.52E-05	7.9118E-02
551633.5	4172964.72	16789.72793	59360.19719	6815.51137	41913.39179	3.02181	2.90986	1.35E-02	4.76E-02	2.51E-03	1.54E-02	7.84E-06	9.30E-06	7.9041E-02
551703.5	4172964.72	13876.99464	66108.74451	5683.29983	37795.87909	1.3671	1.3443	1.11E-02	5.30E-02	2.09E-03	1.39E-02	3.55E-06	4.30E-06	8.0177E-02
551563.5	4172884.72	81331.21839	17400.98346	10148.75781	13147.58305	10.1544	9.33204	6.53E-02	1.40E-02	3.73E-03	4.84E-03	2.63E-05	2.98E-05	8.7840E-02
551623.5	4172964.72	16832.20349	56494.46077	6655.05545	40552.362	3.65653	3.49081	1.35E-02	4.53E-02	2.45E-03	1.49E-02	9.49E-06	1.12E-05	7.6219E-02
551663.5	4172954.72	18297.49108	56481.92473	7638.37494	36705.89292	1.94251	1.89896	1.47E-02	4.53E-02	2.81E-03	1.35E-02	5.04E-06	6.07E-06	7.6322E-02
551653.5	4172954.72	18614.88047	55368.97431	7748.45391	37095.26357	2.17125	2.11747	1.49E-02	4.44E-02	2.85E-03	1.36E-02	5.63E-06	6.77E-06	7.5869E-02
551673.5	4172954.72	17984.90516	56903.80219	7483.11687	35935.98543	1.75752	1.72136	1.44E-02	4.57E-02	2.75E-03	1.32E-02	4.56E-06	5.50E-06	7.6068E-02
551713.5	4172964.72	13230.82234	63495.14909	5376.89536	36012.3334	1.26362	1.24379	1.06E-02	5.09E-02	1.98E-03	1.33E-02	3.28E-06	3.98E-06	7.6792E-02
551593.5	4172984.72	13527.16667	57009.60627	4894.32626	42609.58071	12.54757	11.15318	1.09E-02	4.57E-02	1.80E-03	1.57E-02	3.26E-05	3.57E-05	7.4138E-02
551603.5	4172974.72	15068.40732	55787.50582	5599.73285	41180.41703	6.95725	6.42483	1.21E-02	4.48E-02	2.06E-03	1.52E-02	1.80E-05	2.05E-05	7.4098E-02
551643.5	4172894.72	54547.4662	24657.71066	21005.1451	17267.26105	2.20303	2.14636	4.38E-02	1.98E-02	7.73E-03	6.35E-03	5.72E-06	6.86E-06	7.7640E-02
551653.5	4172894.72	54200.33522	24532.22031	21728.06478	16988.72198	2.00346	1.95497	4.35E-02	1.97E-02	7.99E-03	6.25E-03	5.20E-06	6.25E-06	7.7423E-02
551613.5	4172894.72	59475.30112	23407.76381	17308.03817	17021.27063	3.12234	3.01302	4.77E-02	1.88E-02	6.37E-03	6.26E-03	8.10E-06	9.63E-06	7.9145E-02
551663.5	4172894.72	54394.89596	24145.24155	22092.46377	16552.35664	1.82884	1.78675	4.36E-02	1.94E-02	8.13E-03	6.09E-03	4.74E-06	5.71E-06	7.7241E-02
551643.5	4172954.72	18959.40262	53348.37735	7803.83567	36894.24374	2.46638	2.39601	1.52E-02	4.28E-02	2.87E-03	1.36E-02	6.40E-06	7.66E-06	7.4472E-02
551623.5	4172894.72	56732.85613	24189.8831	18649.86581	17335.62856	2.72576	2.64394	4.55E-02	1.94E-02	6.86E-03	6.38E-03	7.07E-06	8.45E-06	7.8179E-02
551603.5	4172894.72	62461.94375	22488.11226	15370.8409	16506.4076	3.67038	3.51946	5.01E-02	1.80E-02	5.66E-03	6.07E-03	9.52E-06	1.12E-05	7.9904E-02
551633.5	4172894.72	54918.40523	24628.39382	19775.59363	17444.85857	2.43708	2.37045	4.41E-02	1.98E-02	7.28E-03	6.42E-03	6.32E-06	7.58E-06	7.7528E-02
551673.5	4172894.72	55237.53732	23415.2654	22155.84094	15895.66359	1.67563	1.63942	4.43E-02	1.88E-02	8.15E-03	5.85E-03	4.35E-06	5.24E-06	7.7113E-02
551683.5	4172954.72	17465.01188	56722.35553	7210.8732	34800.57638	1.59959	1.56908	1.40E-02	4.55E-02	2.65E-03	1.28E-02	4.15E-06	5.02E-06	7.4986E-02
551593.5	4172894.72	64394.68878	21603.40669	13358.76226	16003.87232	4.46657	4.24991	5.17E-02	1.73E-02	4.92E-03	5.89E-03	1.16E-05	1.36E-05	7.9824E-02
551613.5	4172964.72	16918.4115	53006.94638	6460.71617	38606.33441	4.61831	4.36082	1.36E-02	4.25E-02	2.38E-03	1.42E-02	1.20E-05	1.39E-05	7.2708E-02
551633.5	4172954.72	19173.69178	51283.34111	7730.9852	36189.65017	2.86704	2.76846	1.54E-02	4.11E-02	2.84E-03	1.33E-02	7.44E-06	8.85E-06	7.2703E-02
551693.5	4172954.72	16819.44461	55796.79203	6876.77345	33419.71801	1.46478	1.43874	1.35E-02	4.48E-02	2.53E-03	1.23E-02	3.80E-06	4.60E-06	7.3094E-02
551583.5	4172894.72	63972.95969	20819.13341	11893.88581	15540.06281	5.71225	5.37862	5.13E-02	1.67E-02	4.38E-03	5.72E-03	1.48E-05	1.72E-05	7.8154E-02
551623.5	4172954.72	19246.03261	49082.84487	7533.19635	35218.58148	3.41918	3.27583	1.54E-02	3.94E-02	2.77E-03	1.30E-02	8.87E-06	1.05E-05	7.0569E-02
551557.09	4172888.91	70563.19973	17257.61542	8944.04797	13100.64537	14.86924	13.40419	5.66E-02	1.38E-02	3.29E-03	4.82E-03	3.86E-05	4.28E-05	7.8650E-02
551653.5	4172944.72	21542.6283	47379.48934	8914.88491	32002.9712	2.11047	2.05936	1.73E-02	3.80E-02	3.28E-03	1.18E-02	5.47E-06	6.58E-06	7.0363E-02
551663.5	4172944.72	21252.95541	48013.65674	8816.25869	31535.96425	1.89727	1.85537	1.71E-02	3.85E-02	3.24E-03	1.16E-02	4.92E-06	5.93E-06	7.0430E-02
551643.5	4172944.72	21748.4066	46371.53521	8893.43979	32085.21655	2.37391	2.31007	1.74E-02	3.72E-02	3.27E-03	1.18E-02	6.16E-06	7.38E-06	6.9743E-02
551593.5	4172974.72	15129.281	50630.82652	5385.14945	37814.1355	10.50454	9.44357	1.21E-02	4.06E-02	1.98E-03	1.39E-02	2.73E-05	3.02E-05	6.8711E-02
551573.5	4172894.72	63700.89773	19800.10265	10439.90412	14887.9302	7.84232	7.27694	5.11E-02	1.59E-02	3.84E-03	5.48E-03	2.03E-05	2.33E-05	7.6355E-02
551603.5	4172964.72	17029.43932	49091.0022	6232.05275	36220.26086	6.17551	5.741	1.37E-02	3.94E-02	2.29E-03	1.33E-02	1.60E-05	1.84E-05	6.8702E-02
551703.5	4172954.72	16010.31755	54042.01896	6481.05252	31866.42428	1.34684	1.32441	1.28E-02	4.34E-02	2.38E-03	1.17E-02	3.49E-06	4.23E-06	7.0319E-02
551643.5	4172904.72	44265.11817	27574.02351	17286.54718	19253.92612	2.19276	2.13775	3.55E-02	2.21E-02	6.36E-03	7.08E-03	5.69E-06	6.83E-06	7.1093E-02
551673.5	4172944.72	20864.65701	48087.44327	8611.71376	30746.38301	1.72071	1.68561	1.67E-02	3.86E-02	3.17E-03	1.13E-02	4.46E-06	5.39E-06	6.9811E-02
551653.5	4172904.72	43857.93045	27576.78927	17643.82598	19010.78276	1.99027	1.94376	3.52E-02	2.21E-02	6.49E-03	6.99E-03	5.16E-06	6.21E-06	7.0809E-02
551633.5	4172904.72	44381.83343	27442.1568	16456.16468	19407.89057	2.43616	2.37031	3.56E-02	2.20E-02	6.05E-03	7.14E-03	6.32E-06	7.58E-06	7.0833E-02
551663.5	4172904.72	43700.56827	27284.84591	17715.08576	18594.02186	1.81422	1.77409	3.51E-02	2.19E-02	6.52E-03	6.84E-03	4.71E-06	5.67E-06	7.0321E-02
551623.5	4172904.72	45109.45182	26924.50445	15568.80196	19282.28546	2.74376	2.65888	3.62E-02	2.16E-02	5.73E-03	7.09E-03	7.12E-06	8.50E-06	7.0631E-02
551613.5	4172954.72	19305.4509	46476.60903	7268.71464	33826.49705	4.23937	4.02069	1.55E-02	3.73E-02	2.67E-03	1.24E-02	1.10E-05	1.29E-05	6.7921E-02
551673.5	4172904.72	43922.37097	26555.10037	17613.30733	17893.69234	1.66243	1.62763	3.52E-02	2.13E-02	6.48E-03	6.58E-03	4.31E-06	5.20E-06	6.9617E-02
551683.5	4172944.72	20338.96979	47544.46899	8312.93783	29705.20284	1.57153	1.54176	1.63E-02	3.81E-02	3.06E-03	1.09E-02	4.08E-06	4.93E-06	6.8459E-02
551613.5	4172904.72	45375.01449	26311.63112	14360.18702	19057.22341	3.16912	3.05352	3.64E-02	2.11E-02	5.28E-03	7.01E-03	8.22E-06	9.76E-06	6.9827E-02
551563.5	4172894.72	61620.2421	18765.87239	9244.38168	14202.08298	11.82169	10.74312	4.94E-02	1.51E-02	3.40E-03	5.23E-03	3.07E-05	3.43E-05	7.3185E-02
551643.5	4172914.72	36364.18731	31050.19873	14396.55151	21622.84836	2.20982	2.15433	2.92E-02	2.49E-02	5.30E-03	7.96E-03	5.73E-06	6.89E-06	6.7351E-02
551653.5	4172914.72	36053.87038	31177.29543	14598.01891	21396.65792	1.99891	1.95281	2.89E-02	2.50E-02	5.37E-03	7.87E-03	5.19E-06	6.24E-06	6.7194E-02
551713.5	4172954.72	15171.07571	51619.95857	6091.00151	30301.04388	1.24515	1.22564	1.22E-02	4.14E-02	2.24E-03	1.11E-02	3.23E-06	3.92E-06	6.6983E-02
551603.5	4172904.72	45811.46159	25451.01396	13128.26882	18627.23408	3.77892	3.61694	3.68E-02	2.04E-02	4.83E-03	6.85E-03	9.80E-06	1.16E-05	6.8879E-02
551633.5	4172914.72	36758.71256	30611.90687	13968.83252	21629.89001	2.46664	2.39886	2.95E-02	2.46E-02	5.14E-03	7.96E-03	6.40E-06	7.67E-06	6.7163E-02
551693.5	4172944.72	19553.04413	46461.08864	7896.99101	28469.62357	1.44134	1.41579	1.57E-02	3.73E-02	2.91E-03	1.05E-02	3.74E-06	4.53E-06	6.6351E-02
551663.5	4172914.72	35753.77328	31012.38721	14542.79504	21001.90745	1.81713	1.77763	2.87E-02	2.49E-02	5.35E-03	7.73E-03	4.71E-06	5.68E-06	6.6654E-02
551643.5	4172924.72	30229.74049	35235.86818	12120.01567	24475.84443	2.24992	2.19276	2.43E-02	2.83E-02	4.46E-03	9.01E-03	5.84E-06	7.01E-06	6.6000E-02
551653.5	4172924.72	30011.30947	35523.93083	12242.44561	24275.47351	2.02517	1.97774	2.41E-02	2.85E-02	4.50E-03	8.93E-03	5.25E-06	6.32E-06	6.6026E-02
551673.5	4172934.72	24629.15947	40746.89545	10080.64495	26579.87889	1.69321	1.65887	1.98E-02	3.27E-02	3.71E-03	9.78E-03	4.39E-06	5.30E-06	6.5949E-02
551623.5	4172914.72	37027.11555	29960.19141	13279.64646	21456.99415	2.80761	2.7152	2.97E-02	2.40E-02	4.89E-03	7.89E-03	7.28E-06	8.68E-06	6.6540E-02
551593.5	4172964.72	17120.89811	44976.9681	5966.35494	33558.44552	9.00184	8.17679	1.37E-02	3.61E-02	2.20E-03	1.23E-02	2.34E-05	2.61E-05	6.4413E-02
551633.5	4172924.72	30581.27484	34513.93429	11866.16581	24364.46127	2.52659	2.45374	2.45E-02	2.77E-02	4.37E-03	8.96E-03	6.55E-06	7.84E-06	6.5570E-02
551593.5	4172904.72	46589.74581	24242.24192	11949.64997	17978.14302	4.70052	4.46125	3.74E-02	1.94E-02	4.40E-03	6.61E-03	1.22E-05	1.43E-05	6.7866E-02
551673.5	4172914.72	35533.56535	30427.99527	14310.09488	20356.25525	1.66143	1.62746	2.85E-02	2.44E-02	5.27E-03	7.49E-03	4.31E-06	5.20E-06	6.5685E-02
551622.9	4172933.22	26500.07496	37205.44848	9995.03912	26673.33152	3.05177	2.93795	2.13E-02	2.98E-02	3.68E-03	9.81E-03	7.92E-06	9.39E-06	6.4619E-02

551583.5	4172974.72	15215.70527	45306.02414	5161.27058	34202.41097	10.2383	15.92042	1.22E-02	3.63E-02	1.90E-03	1.26E-02	2.66E-05	5.09E-05	6.3117E-02
551623.5	4172924.72	30814.1729	33560.63982	11400.41201	24041.08228	2.90963	2.80798	2.47E-02	2.69E-02	4.19E-03	8.85E-03	7.55E-06	8.98E-06	6.4704E-02
551613.5	4172914.72	36918.90984	29190.86961	12350.36289	21154.94398	3.28656	3.15856	2.96E-02	2.34E-02	4.54E-03	7.78E-03	8.53E-06	1.01E-05	6.5386E-02
551683.5	4172934.72	24118.24193	39912.92799	9752.63749	25626.18436	1.5507	1.52132	1.93E-02	3.20E-02	3.59E-03	9.43E-03	4.02E-06	4.86E-06	6.4398E-02
551613.5	4172934.72	25733.54833	36602.89242	9296.2328	26563.41842	3.65913	3.49648	2.06E-02	2.94E-02	3.42E-03	9.77E-03	9.49E-06	1.12E-05	6.3227E-02
551703.5	4172944.72	18666.23014	44848.45259	7457.40954	27158.52808	1.32947	1.30733	1.50E-02	3.60E-02	2.74E-03	9.99E-03	3.45E-06	4.18E-06	6.3701E-02
551583.5	4172904.72	47114.80666	22981.7269	10776.85433	17161.31528	6.16387	5.78073	3.78E-02	1.84E-02	3.97E-03	6.31E-03	1.60E-05	1.85E-05	6.6552E-02
551613.5	4172924.72	30562.37752	32592.47464	10679.91077	23635.55231	3.4494	3.30659	2.45E-02	2.61E-02	3.93E-03	8.70E-03	8.95E-06	1.06E-05	6.3314E-02
551603.5	4172914.72	36974.9867	28118.70974	11406.8094	20600.21837	3.98333	3.80014	2.97E-02	2.26E-02	4.20E-03	7.58E-03	1.03E-05	1.21E-05	6.4023E-02
551693.5	4172934.72	23199.01526	39227.21351	9247.46214	24540.81947	1.42572	1.4004	1.86E-02	3.15E-02	3.40E-03	9.03E-03	3.70E-06	4.48E-06	6.2524E-02
551573.5	4172904.72	47514.05616	21603.54351	9559.63921	16264.66762	8.81095	8.10682	3.81E-02	1.73E-02	3.52E-03	5.98E-03	2.29E-05	2.59E-05	6.5003E-02
551603.5	4172934.72	25781.70884	34791.80277	8770.88289	25550.11677	4.58612	4.33962	2.07E-02	2.79E-02	3.23E-03	9.40E-03	1.19E-05	1.39E-05	6.1251E-02
551603.5	4172924.72	30489.79715	31249.90199	9953.78026	22917.51904	4.24686	4.03636	2.45E-02	2.51E-02	3.66E-03	8.43E-03	1.10E-05	1.29E-05	6.1652E-02
551583.5	4172964.72	17219.35975	40724.16157	5682.65732	30691.18499	14.94659	13.17522	1.38E-02	3.27E-02	2.09E-03	1.13E-02	3.88E-05	4.21E-05	5.9952E-02
551593.5	4172914.72	37184.95109	26790.78566	10476.66281	19823.98708	5.04947	4.77032	2.98E-02	2.15E-02	3.85E-03	7.29E-03	1.31E-05	1.52E-05	6.2504E-02
551713.5	4172944.72	17693.67076	42816.79625	7012.80148	25849.673	1.23208	1.21274	1.42E-02	3.44E-02	2.58E-03	9.51E-03	3.20E-06	3.88E-06	6.0645E-02
551593.5	4172944.72	22380.40935	36158.95567	7373.58993	26889.84933	6.85142	6.34261	1.80E-02	2.90E-02	2.71E-03	9.89E-03	1.78E-05	2.03E-05	5.9610E-02
551703.5	4172934.72	22064.98625	37750.81716	8688.12201	23387.92505	1.3162	1.29421	1.77E-02	3.03E-02	3.20E-03	8.61E-03	3.41E-06	4.14E-06	5.9799E-02
551593.5	4172924.72	30683.09016	29560.61432	9254.31147	21903.90247	5.50529	5.17249	2.46E-02	2.37E-02	3.40E-03	8.06E-03	1.43E-05	1.65E-05	5.9828E-02
551563.5	4172904.72	47213.67567	20250.6411	8439.47155	15353.86378	14.13547	12.68789	3.79E-02	1.62E-02	3.11E-03	5.65E-03	3.67E-05	4.06E-05	6.2958E-02
551593.5	4172934.72	25932.42313	32687.15312	8228.36231	24260.79135	6.08874	5.68335	2.08E-02	2.62E-02	3.03E-03	8.93E-03	1.58E-05	1.82E-05	5.9018E-02
551583.5	4172914.72	37228.88631	25247.46802	9544.74597	18926.91392	6.78479	6.32414	2.99E-02	2.03E-02	3.51E-03	6.96E-03	1.76E-05	2.02E-05	6.0638E-02
551703.5	4172924.72	26569.91277	31913.26201	10298.2154	20330.94362	1.30773	1.28576	2.13E-02	2.56E-02	3.79E-03	7.48E-03	3.39E-06	4.11E-06	5.8198E-02
551583.5	4172944.72	22376.63884	33523.64705	6901.26665	25161.92293	10.22682	9.2578	1.80E-02	2.69E-02	2.54E-03	9.26E-03	2.65E-05	2.96E-05	5.6702E-02
551583.5	4172924.72	30627.32017	27833.59692	8509.917	20810.2497	7.60079	7.03138	2.46E-02	2.23E-02	3.13E-03	7.66E-03	1.97E-05	2.25E-05	5.7733E-02
551573.5	4172914.72	36865.08723	23792.06947	8637.78544	17984.5722	9.78939	8.97003	2.96E-02	1.91E-02	3.18E-03	6.62E-03	2.54E-05	2.87E-05	5.8514E-02
551713.5	4172934.72	20830.02222	35986.11449	8140.19837	22247.55837	1.22074	1.20149	1.67E-02	2.89E-02	3.00E-03	8.19E-03	3.17E-06	3.84E-06	5.6771E-02
551583.5	4172934.72	25842.91603	30598.59931	7628.25228	22916.45438	8.66241	7.94539	2.07E-02	2.45E-02	2.81E-03	8.43E-03	2.25E-05	2.54E-05	5.6569E-02
551565.79	4172915.74	36727.91684	22488.93824	7910.71388	17057.6278	15.15319	13.56103	2.95E-02	1.80E-02	2.91E-03	6.28E-03	3.93E-05	4.33E-05	5.6779E-02
551575.79	4172944.97	22369.73737	31215.64745	6535.70194	23736.23156	15.42568	13.66235	1.79E-02	2.50E-02	2.40E-03	8.73E-03	4.00E-05	4.37E-05	5.4213E-02
551573.5	4172924.72	30480.87814	25895.37057	7791.24632	19614.12612	11.45782	10.39103	2.45E-02	2.08E-02	2.87E-03	7.22E-03	2.97E-05	3.32E-05	5.5376E-02
551573.5	4172934.72	26107.371	27980.47894	7091.11248	21271.47599	14.24764	12.71839	2.09E-02	2.24E-02	2.61E-03	7.83E-03	3.70E-05	4.07E-05	5.3907E-02
CONCUNIT ug/	m^3													
DEPUNIT g/m^	2													

Midway Village Project—New Phase 3 Receptors Scenario

New Phase 3 Receptors: Exposed to Phases 4 Demolition and Phases 4 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total)

	Unmitigated Concentrations
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	8.68E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	8.68E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	8.14E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	8.14E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	1.07E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	1.08E-04

Unmitigated PM2.5 Concentrations		
Maximum	MIR	
DPM	UTM	
(ug/m3)	X	Y
2.3278E-01	551653.5	4172854.72

UTM 551653.50 4172854.72
Latitude, Longitude 37°42'05.3"N 122°24'50.6"W

X	Y	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Route 1 - From the project site towards US-101 LINE1	Unit Emissions Route 2 - From US-101 towards the project site LINE2	Construction Area 4B and Area 2B/4B (Phase 4) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 1 of 2 Phase 4) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) Annual PM2.5 w/Actual Emissions (ug/m3)	Route 1 - From the project site towards US-101 Annual PM2.5 w/Actual Emissions (ug/m3)	Route 2 - From US-101 towards the project site Annual PM2.5 w/Actual Emissions (ug/m3)	**Total PM2.5 (ug/m3)**
551653.5	4172854.72	171160.9474	15302.62024	75631.6828	10789.81499	2.55867	2.45464	1.49E-01	1.33E-02	6.16E-02	8.78E-03	2.74E-04	2.66E-04	2.3278E-01
551642.42	4172857.32	168854.3696	15857.9813	55461.88347	11280.28439	2.82339	2.70983	1.47E-01	1.38E-02	4.51E-02	9.18E-03	3.02E-04	2.93E-04	2.1530E-01
551663.5	4172864.72	127140.9131	16558.28551	60112.05977	11531.02997	2.07301	2.00768	1.10E-01	1.44E-02	4.89E-02	9.38E-03	2.22E-04	2.17E-04	1.8352E-01
551623.5	4172864.72	150752.1953	17139.0347	33499.60394	12381.26081	3.15843	3.03992	1.31E-01	1.49E-02	2.73E-02	1.01E-02	3.38E-04	3.29E-04	1.8379E-01
551653.5	4172864.72	127122.9094	17034.3902	55744.65149	11961.10186	2.29772	2.22121	1.10E-01	1.48E-02	4.54E-02	9.73E-03	2.46E-04	2.41E-04	1.8076E-01
551633.5	4172864.72	142880.1694	17141.02108	39450.07879	12270.92691	2.85825	2.7531	1.24E-01	1.49E-02	3.21E-02	9.99E-03	3.06E-04	2.98E-04	1.8164E-01
551643.5	4172864.72	132824.8506	17179.04991	47329.55784	12177.13308	2.55946	2.46879	1.15E-01	1.49E-02	3.85E-02	9.91E-03	2.74E-04	2.67E-04	1.7922E-01
551613.28	4172867.43	143262.8036	17559.14543	27064.34328	12787.57987	3.39651	3.27143	1.24E-01	1.52E-02	2.20E-02	1.04E-02	3.64E-04	3.54E-04	1.7279E-01
551593.5	4172874.72	125142.3651	18022.09582	17273.91852	13333.44573	4.27246	4.09094	1.09E-01	1.56E-02	1.41E-02	1.09E-02	4.58E-04	4.43E-04	1.5012E-01
551603.5	4172874.72	121565.8542	18431.04637	20111.71631	13532.15084	3.68645	3.54328	1.06E-01	1.60E-02	1.64E-02	1.10E-02	3.95E-04	3.84E-04	1.4972E-01
551613.5	4172874.72	115392.7258	18749.63794	23515.78421	13650.02429	3.26337	3.14928	1.00E-01	1.63E-02	1.91E-02	1.11E-02	3.50E-04	3.41E-04	1.4741E-01
551623.5	4172874.72	108964.8526	18963.2319	27424.93765	13677.96604	2.92288	2.82576	9.46E-02	1.65E-02	2.23E-02	1.11E-02	3.13E-04	3.06E-04	1.4515E-01
551633.5	4172874.72	100308.2878	19277.3485	32898.00188	13755.45217	2.61213	2.52837	8.71E-02	1.67E-02	2.68E-02	1.12E-02	2.80E-04	2.74E-04	1.4236E-01
551663.5	4172874.72	93583.82466	18793.43592	40814.11138	13003.72674	1.94441	1.89083	8.13E-02	1.63E-02	3.32E-02	1.06E-02	2.08E-04	2.05E-04	1.4179E-01
551582.9	4172876.82	119202.6705	17717.11117	14284.83729	13210.92076	5.26122	4.99668	1.04E-01	1.54E-02	1.16E-02	1.08E-02	5.64E-04	5.41E-04	1.4237E-01
551653.5	4172874.72	92342.38448	19259.41152	38620.36698	13446.05582	2.14011	2.07782	8.02E-02	1.67E-02	3.14E-02	1.09E-02	2.29E-04	2.25E-04	1.3973E-01
551643.5	4172874.72	93314.35474	19532.01088	35815.45092	13767.61535	2.35828	2.28678	8.10E-02	1.70E-02	2.91E-02	1.12E-02	2.53E-04	2.48E-04	1.3884E-01
551693.5	4172974.72	12791.52317	84215.72722	5333.92456	47761.36029	1.52151	1.49419	1.11E-02	7.31E-02	4.34E-03	3.89E-02	1.63E-04	1.62E-04	1.2777E-01
551640.9	4172976.02	14392.86669	74546.30272	5956.04897	51264.08648	2.81444	2.71804	1.25E-02	6.47E-02	4.85E-03	4.17E-02	3.01E-04	2.94E-04	1.2439E-01
551620.9	4172984.07	13371.03228	74214.48559	5315.95984	53131.58901	4.51445	4.27162	1.16E-02	6.44E-02	4.33E-03	4.32E-02	4.84E-04	4.63E-04	1.2456E-01
551666.91	4172969.1	14951.79473	73025.47575	6289.01062	46369.51717	1.94843	1.90511	1.30E-02	6.34E-02	5.12E-03	3.77E-02	2.09E-04	2.06E-04	1.1966E-01
551593.5	4172884.72	90714.14235	19597.39115	14947.06603	14512.60282	4.30405	4.11621	7.88E-02	1.70E-02	1.22E-02	1.18E-02	4.61E-04	4.46E-04	1.2067E-01
551603.5	4172884.72	87377.67556	20181.88206	17189.06893	14822.41096	3.62927	3.49578	7.59E-02	1.75E-02	1.40E-02	1.21E-02	3.89E-04	3.79E-04	1.2021E-01
551633.5	4172974.72	14820.81442	69392.6607	6046.1339	49016.81233	3.19472	3.06791	1.29E-02	6.03E-02	4.92E-03	3.99E-02	3.42E-04	3.32E-04	1.1861E-01
551613.5	4172884.72	83088.70188	20723.27148	19938.53233	15077.33554	3.15506	3.0481	7.21E-02	1.80E-02	1.62E-02	1.23E-02	3.38E-04	3.30E-04	1.1931E-01
551705.66	4172972.34	12487.18069	77956.34108	5147.82632	43155.76243	1.36359	1.34107	1.08E-02	6.77E-02	4.19E-03	3.51E-02	1.46E-04	1.45E-04	1.1814E-01
551583.5	4172884.72	91591.03884	18972.50994	13121.47061	14151.76206	5.35955	5.07764	7.95E-02	1.65E-02	1.07E-02	1.15E-02	5.74E-04	5.50E-04	1.1932E-01
551623.5	4172884.72	77577.76606	21313.56729	23538.04772	15336.11353	2.77312	2.68734	6.74E-02	1.85E-02	1.92E-02	1.25E-02	2.97E-04	2.91E-04	1.1809E-01
551611.12	4172984.72	13483.81733	68168.28343	5201.94054	49887.6405	6.06349	5.64898	1.17E-02	5.92E-02	4.23E-03	4.06E-02	6.49E-04	6.12E-04	1.1699E-01
551673.5	4172884.72	70899.73649	20804.36417	28709.66638	14223.83968	1.70663	1.66727	6.16E-02	1.81E-02	2.34E-02	1.16E-02	1.83E-04	1.81E-04	1.1493E-01
551633.5	4172884.72	71660.57156	21930.32361	25056.30713	15570.6864	2.48654	2.41491	6.22E-02	1.90E-02	2.04E-02	1.27E-02	2.66E-04	2.62E-04	1.1486E-01
551663.5	4172884.72	69203.37071	21456.24079	28462.99091	14788.79893	1.86598	1.82035	6.01E-02	1.86E-02	2.32E-02	1.20E-02	2.00E-04	1.97E-04	1.1432E-01
551623.5	4172974.72	14865.96092	65502.86521	5920.95331	46934.49359	3.92941	3.73919	1.29E-02	5.69E-02	4.82E-03	3.82E-02	4.21E-04	4.05E-04	1.1363E-01
551653.5	4172884.72	68535.83538	21881.29455	27577.54444	15218.67153	2.04488	1.99207	5.95E-02	1.90E-02	2.24E-02	1.24E-02	2.19E-04	2.16E-04	1.1377E-01
551673.5	4172964.72	15650.48767	68160.17883	6557.12775	42486.31075	1.80014	1.76262	1.36E-02	5.92E-02	5.34E-03	3.46E-02	1.93E-04	1.91E-04	1.1307E-01
551643.5	4172884.72	68813.32009	22088.90226	26225.5143	15516.39209	2.24736	2.18636	5.98E-02	1.92E-02	2.13E-02	1.26E-02	2.41E-04	2.37E-04	1.1338E-01
551573.5	4172884.72	88882.8464	18248.41243	11548.4961	13702.1315	7.0875	6.62653	7.72E-02	1.58E-02	9.40E-03	1.12E-02	7.59E-04	7.18E-04	1.1505E-01
551601.77	4172988.4	12964.18533	65568.99829	4863.37565	48512.77567	8.99045	8.17545	1.13E-02	5.69E-02	3.96E-03	3.95E-02	9.63E-04	8.85E-04	1.1348E-01
551653.5	4172964.72	16325.57042	64933.92054	6826.90991	43425.45841	2.24557	2.1886	1.42E-02	5.64E-02	5.56E-03	3.53E-02	2.41E-04	2.37E-04	1.1193E-01
551683.5	4172964.72	15151.39145	68529.8599	6311.09683	41247.33254	1.63231	1.60096	1.32E-02	5.95E-02	5.14E-03	3.36E-02	1.75E-04	1.73E-04	1.1171E-01
551593.5	4172994.72	12159.06611	64530.09193	4460.35283	48234.39227	15.18407	13.34697	1.06E-02	5.60E-02	3.63E-03	3.93E-02	1.63E-03	1.45E-03	1.1255E-01
551665.23	4172962.34	16473.51325	64458.08407	6906.37397	41437.51083	1.94919	1.90559	1.43E-02	5.60E-02	5.62E-03	3.37E-02	2.09E-04	2.06E-04	1.1003E-01
551643.5	4172964.72	16643.45822	62018.37193	6883.28505	42897.52504	2.57386	2.49546	1.45E-02	5.39E-02	5.60E-03	3.49E-02	2.76E-04	2.70E-04	1.0936E-01
551693.5	4172964.72	14544.94026	67875.26586	6009.1789	39622.98207	1.48942	1.46284	1.26E-02	5.89E-02	4.89E-03	3.22E-02	1.60E-04	1.58E-04	1.0902E-01
551613.5	4172974.72	15018.38594	60632.73588	5794.2803	44202.12131	5.07398	4.76931	1.30E-02	5.26E-02	4.72E-03	3.60E-02	5.43E-04	5.17E-04	1.0744E-01
551633.5	4172964.72	16789.72793	59360.19719	6815.51137	41913.39179	3.02181	2.90986	1.46E-02	5.15E-02	5.55E-03	3.41E-02	3.24E-04	3.15E-04	1.0642E-01
551703.5	4172964.72	13876.99464	66108.74451	5683.29983	37795.87909	1.3671	1.3443	1.20E-02	5.74E-02	4.63E-03	3.08E-02	1.46E-04	1.46E-04	1.0513E-01
551563.5	4172884.72	81331.21839	17400.98346	10148.75781	13147.58305	10.1544	9.33204	7.06E-02	1.51E-02	8.26E-03	1.07E-02	1.09E-03	1.01E-03	1.0679E-01
551623.5	4172964.72	16832.20349	56494.46077	6655.05545	40552.362	3.65653	3.49081	1.46E-02	4.91E-02	5.42E-03	3.30E-02	3.92E-04	3.78E-04	1.0286E-01
551663.5	4172954.72	18297.49108	56481.92473	7638.37494	36705.89292	1.94251	1.89896	1.59E-02	4.90E-02	6.22E-03	2.99E-02	2.08E-04	2.06E-04	1.0143E-01
551653.5	4172954.72	18614.88047	55368.97431	7748.45391	37095.26357	2.17125	2.11747	1.62E-02	4.81E-02	6.31E-03	3.02E-02	2.33E-04	2.29E-04	1.0120E-01
551673.5	4172954.72	17984.90516	56903.80219	7483.11687	35935.98543	1.75752	1.72136	1.56E-02	4.94E-02	6.09E-03	2.92E-02	1.88E-04	1.86E-04	1.0074E-01
551713.5	4172964.72	13230.82234	63495.14909	5376.89536	36012.3334	1.26362	1.24379	1.15E-02	5.51E-02	4.38E-03	2.93E-02	1.35E-04	1.35E-04	1.0058E-01
551593.5	4172984.72	13527.16667	57009.60627	4894.32626	42609.58071	12.54757	11.15318	1.17E-02	4.95E-02	3.98E-03	3.47E-02	1.34E-03	1.21E-03	1.0246E-01
551603.5	4172974.72	15068.40732	55787.50582	5599.73285	41180.41703	6.95725	6.42483	1.31E-02	4.84E-02	4.56E-03	3.35E-02	7.45E-04	6.96E-04	1.0104E-01
551643.5	4172894.72	54547.4662	24657.71066	21005.1451	17267.26105	2.20303	2.14636	4.74E-02	2.14E-02	1.71E-02	1.41E-02	2.36E-04	2.32E-04	1.0039E-01
551653.5	4172894.72	54200.33522	24532.22031	21728.06478	16988.72198	2.00346	1.95497	4.71E-02	2.13E-02	1.77E-02	1.38E-02	2.15E-04	2.12E-04	1.0030E-01
551613.5	4172894.72	59475.30112	23407.76381	17308.03817	17021.27063	3.12234	3.01302	5.16E-02	2.03E-02	1.41E-02	1.39E-02	3.34E-04	3.26E-04	1.0057E-01
551663.5	4172894.72	54394.89596	24145.24155	22092.46377	16552.35664	1.82884	1.78675	4.72E-02	2.10E-02	1.80E-02	1.35E-02	1.96E-04	1.94E-04	1.0004E-01
551643.5	4172954.72	18959.40262	53348.37735	7803.83567	36894.24374	2.46638	2.39601	1.65E-02	4.63E-02	6.35E-03	3.00E-02	2.64E-04	2.60E-04	9.9686E-02
551623.5	4172894.72	56732.85613	24189.8831	18649.86581	17335.62856	2.72576	2.64394	4.93E-02	2.10E-02	1.52E-02	1.41E-02	2.92E-04	2.86E-04	1.0013E-01
551603.5	4172894.72	62461.94375	22488.11226	15370.8409	16506.4076	3.67038	3.51946	5.42E-02	1.95E-02	1.25E-02	1.34E-02	3.93E-04	3.81E-04	1.0048E-01
551633.5	4172894.72	54918.40523	24628.39382	19775.59363	17444.85857	2.43708	2.37045	4.77E-02	2.14E-02	1.61E-02	1.42E-02	2.61E-04	2.57E-04	9.9880E-02
551673.5	4172894.72	55237.53732	23415.2654	22155.84094	15895.66359	1.67563	1.63942	4.80E-02	2.03E-02	1.80E-02	1.29E-02	1.79E-04	1.78E-04	9.9619E-02
551683.5	4172954.72	17465.01188	56722.35553	7210.8732	34800.57638	1.59959	1.56908	1.52E-02	4.93E-02	5.87E-03	2.83E-02	1.71E-04	1.70E-04	9.8949E-02
551593.5	4172894.72	64394.68878	21603.40669	13358.76226	16003.87232	4.46657	4.24991	5.59E-02	1.88E-02	1.09E-02	1.30E-02	4.78E-04	4.60E-04	9.9508E-02
551613.5	4172964.72	16918.4115	53006.94638	6460.71617	38606.33441	4.61831	4.36082	1.47E-02	4.60E-02	5.26E-03	3.14E-02	4.95E-04	4.72E-04	9.8361E-02
551633.5	4172954.72	19173.69178	51283.34111	7730.9852	36189.65017	2.86704	2.76846	1.66E-02	4.45E-02	6.29E-03	2.95E-02	3.07E-04	3.00E-04	9.7529E-02
551693.5	4172954.72	16819.44461	55796.79203	6876.77345	33419.71801	1.46478	1.43874	1.46E-02	4.84E-02	5.60E-03	2.72E-02	1.57E-04	1.56E-04	9.6161E-02
551583.5	4172894.72	63972.95969	20819.13341	11893.88581	15540.06281	5.71225	5.37862	5.55E-02	1.81E-02	9.68E-03	1.26E-02	6.12E-04	5.83E-04	9.7147E-02
551623.5	4172954.72	19246.03261	49082.84487	7533.19635	35218.58148	3.41918	3.27583	1.67E-02	4.26E-02	6.13E-03	2.87E-02	3.66E-04	3.55E-04	9.4844E-02
551557.09	4172888.91	70563.19973	17257.61542	8944.04797	13100.64537	14.86924	13.40419	6.13E-02	1.50E-02	7.28E-03	1.07E-02	1.59E-03	1.45E-03	9.7240E-02
551653.5	4172944.72	21542.6283	47379.48934	8914.88491	32002.9712	2.11047	2.05936	1.87E-02	4.11E-02	7.26E-03	2.60E-02	2.26E-04	2.23E-04	9.3595E-02
551663.5	4172944.72	21252.95541	48013.65674	8816.25869	31535.96425	1.89727	1.85537	1.85E-02	4.17E-02	7.18E-03	2.57E-02	2.03E-04	2.01E-04	9.3389E-02
551643.5	4172944.72	21748.4066	46371.53521	8893.43979	32085.21655	2.37391	2.31007	1.89E-02	4.03E-02	7.24E-03	2.61E-02	2.54E-04	2.50E-04	9.3003E-02
551593.5	4172974.72	15129.281	50630.82652	5385.14945	37814.1355	10.50454	9.44357	1.31E-02	4.40E-02	4.38E-03	3.08E-02	1.13E-03	1.02E-03	9.4405E-02
551573.5	4172894.72	63700.89773	19800.10265	10439.90412	14887.9302	7.84232	7.27694	5.53E-02	1.72E-02	8.50E-03	1.21E-02	8.40E-04	7.88E-04	9.4745E-02
551603.5	4172964.72	17029.43932	49091.0022	6232.05275	36220.26086	6.17551	5.741	1.48E-02	4.26E-02	5.07E-03	2.95E-02	6.61E-04	6.22E-04	9.3245E-02
551703.5	4172954.72	16010.31755	54042.01896	6481.05252	31866.42428	1.34684	1.32441	1.39E-02	4.69E-02	5.27E-03	2.59E-02	1.44E-04	1.43E-04	9.2323E-02
551643.5	4172904.72	44265.11817	27574.02351	17286.54718	19253.92612	2.19276	2.13775	3.84E-02	2.39E-02	1.41E-02	1.57E-02	2.35E-04	2.32E-04	9.2583E-02
551673.5	4172944.72	20864.65701	48087.44327	8611.71376	30746.38301	1.72071	1.68561	1.81E-02	4.18E-02	7.01E-03	2.50E-02	1.84E-04	1.83E-04	9.2269E-02
551653.5	4172904.72	43857.93045	27576.78927	17643.82598	19010.78276	1.99027	1.94376	3.81E-02	2.39E-02	1.44E-02	1.55E-02	2.13E-04	2.11E-04	9.2282E-02
551633.5	4172904.72	44381.83343	27442.1568	16456.16468	19407.89057	2.43616	2.37031	3.85E-02	2.38E-02	1.34E-02	1.58E-02	2.61E-04	2.57E-04	9.2070E-02
551663.5	4172904.72	43700.56827	27284.84591	17715.08576	18594.02186	1.81422	1.77409	3.79E-02	2.37E-02	1.44E-02	1.51E-02	1.94E-04	1.92E-04	9.1573E-02
551623.5	4172904.72	45109.45182	26924.50445	15568.80196	19282.28546	2.74376	2.65888	3.92E-02	2.34E-02	1.27E-02	1.57E-02	2.94E-04	2.88E-04	9.1492E-02
551613.5	4172954.72	19305.4509	46476.60903	7268.71464	33826.49705	4.23937	4.02069	1.68E-02	4.04E-02	5.92E-03	2.75E-02	4.54E-04	4.35E-04	9.1453E-02
551673.5	4172904.72	43922.37097	26555.10037	17613.30733	17893.69234	1.66243	1.62763	3.81E-02	2.31E-02	1.43E-02	1.46E-02	1.78E-04	1.76E-04	9.0447E-02
551683.5	4172944.72	20338.96979	47544.46899	8312.93783	29705.20284	1.57153	1.54176	1.77E-02	4.13E-02	6.77E-03	2.42E-02	1.68E-04	1.67E-04	9.0219E-02
551613.5	4172904.72	45375.01449	26311.63112	14360.18702	19057.22341	3.16912	3.05352	3.94E-02	2.28E-02	1.17E-02	1.55E-02	3.39E-04	3.31E-04	9.0112E-02
551563.5	4172894.72	61620.2421	18765.87239	9244.38168	14202.08298	11.82169	10.74312	5.35E-02	1.63E-02	7.52E-03	1.16E-02	1.27E-03	1.16E-03	9.1311E-02

551643.5	4172914.72	36364.18731	31050.19873	14396.55151	21622.84836	2.20982	2.15433	3.16E-02	2.70E-02	1.17E-02	1.76E-02	2.37E-04	2.33E-04	8.8320E-02
551653.5	4172914.72	36053.87038	31177.29543	14598.01891	21396.65792	1.99891	1.95281	3.13E-02	2.71E-02	1.19E-02	1.74E-02	2.14E-04	2.11E-04	8.8097E-02
551713.5	4172954.72	15171.07571	51619.95857	6091.00151	30301.04388	1.24515	1.22564	1.32E-02	4.48E-02	4.96E-03	2.47E-02	1.33E-04	1.33E-04	8.7878E-02
551603.5	4172904.72	45811.46159	25451.01396	13128.26882	18627.23408	3.77892	3.61694	3.98E-02	2.21E-02	1.07E-02	1.52E-02	4.05E-04	3.92E-04	8.8518E-02
551633.5	4172914.72	36758.71256	30611.90687	13968.83252	21629.89001	2.46664	2.39886	3.19E-02	2.66E-02	1.14E-02	1.76E-02	2.64E-04	2.60E-04	8.7994E-02
551693.5	4172944.72	19553.04413	46461.08864	7896.99101	28469.62357	1.44134	1.41579	1.70E-02	4.03E-02	6.43E-03	2.32E-02	1.54E-04	1.53E-04	8.7225E-02
551663.5	4172914.72	35753.77328	31012.38721	14542.79504	21001.90745	1.81713	1.77763	3.10E-02	2.69E-02	1.18E-02	1.71E-02	1.95E-04	1.93E-04	8.7288E-02
551643.5	4172924.72	30229.74049	35235.86818	12120.01567	24475.84443	2.24992	2.19276	2.62E-02	3.06E-02	9.86E-03	1.99E-02	2.41E-04	2.37E-04	8.7106E-02
551653.5	4172924.72	30011.30947	35523.93083	12242.44561	24275.47351	2.02517	1.97774	2.61E-02	3.08E-02	9.96E-03	1.98E-02	2.17E-04	2.14E-04	8.7055E-02
551673.5	4172934.72	24629.15947	40746.89545	10080.64495	26579.87889	1.69321	1.65887	2.14E-02	3.54E-02	8.20E-03	2.16E-02	1.81E-04	1.80E-04	8.6963E-02
551623.5	4172914.72	37027.11555	29960.19141	13279.64646	21456.99415	2.80761	2.7152	3.22E-02	2.60E-02	1.08E-02	1.75E-02	3.01E-04	2.94E-04	8.7030E-02
551593.5	4172964.72	17120.89811	44976.9681	5966.35494	33558.44552	9.00184	8.17679	1.49E-02	3.91E-02	4.86E-03	2.73E-02	9.64E-04	8.86E-04	8.7936E-02
551633.5	4172924.72	30581.27484	34513.93429	11866.16581	24364.46127	2.52659	2.45374	2.66E-02	3.00E-02	9.66E-03	1.98E-02	2.71E-04	2.66E-04	8.6545E-02
551593.5	4172904.72	46589.74581	24242.24192	11949.64997	17978.14302	4.70052	4.46125	4.05E-02	2.10E-02	9.73E-03	1.46E-02	5.03E-04	4.83E-04	8.6847E-02
551673.5	4172914.72	35533.56535	30427.99527	14310.09488	20356.25525	1.66143	1.62746	3.09E-02	2.64E-02	1.16E-02	1.66E-02	1.78E-04	1.76E-04	8.5842E-02
551622.9	4172933.22	26500.07496	37205.44848	9995.03912	26673.33152	3.05177	2.93795	2.30E-02	3.23E-02	8.13E-03	2.17E-02	3.27E-04	3.18E-04	8.5803E-02
551583.5	4172974.72	15215.70527	45306.02414	5161.27058	34202.41097	10.2383	15.92042	1.32E-02	3.93E-02	4.20E-03	2.78E-02	1.10E-03	1.72E-03	8.7408E-02
551623.5	4172924.72	30814.1729	33560.63982	11400.41201	24041.08228	2.90963	2.80798	2.68E-02	2.91E-02	9.28E-03	1.96E-02	3.12E-04	3.04E-04	8.5356E-02
551613.5	4172914.72	36918.90984	29190.86961	12350.36289	21154.94398	3.28656	3.15856	3.21E-02	2.53E-02	1.01E-02	1.72E-02	3.52E-04	3.42E-04	8.5365E-02
551683.5	4172934.72	24118.24193	39912.92799	9752.63749	25626.18436	1.5507	1.52132	2.09E-02	3.47E-02	7.94E-03	2.09E-02	1.66E-04	1.65E-04	8.4722E-02
551613.5	4172934.72	25733.54833	36602.89242	9296.2328	26563.41842	3.65913	3.49648	2.23E-02	3.18E-02	7.57E-03	2.16E-02	3.92E-04	3.79E-04	8.4082E-02
551703.5	4172944.72	18666.23014	44848.45259	7457.40954	27158.52808	1.32947	1.30733	1.62E-02	3.89E-02	6.07E-03	2.21E-02	1.42E-04	1.42E-04	8.3606E-02
551583.5	4172904.72	47114.80666	22981.7269	10776.85433	17161.31528	6.16387	5.78073	4.09E-02	2.00E-02	8.77E-03	1.40E-02	6.60E-04	6.26E-04	8.4889E-02
551613.5	4172924.72	30562.37752	32592.47464	10679.91077	23635.55231	3.4494	3.30659	2.65E-02	2.83E-02	8.69E-03	1.92E-02	3.69E-04	3.58E-04	8.3492E-02
551603.5	4172914.72	36974.9867	28118.70974	11406.8094	20600.21837	3.98333	3.80014	3.21E-02	2.44E-02	9.28E-03	1.68E-02	4.27E-04	4.12E-04	8.3408E-02
551693.5	4172934.72	23199.01526	39227.21351	9247.46214	24540.81947	1.42572	1.4004	2.01E-02	3.41E-02	7.53E-03	2.00E-02	1.53E-04	1.52E-04	8.2008E-02
551573.5	4172904.72	47514.05616	21603.54351	9559.63921	16264.66762	8.81095	8.10682	4.13E-02	1.88E-02	7.78E-03	1.32E-02	9.44E-04	8.78E-04	8.2854E-02
551603.5	4172934.72	25781.70884	34791.80277	8770.88289	25550.11677	4.58612	4.33962	2.24E-02	3.02E-02	7.14E-03	2.08E-02	4.91E-04	4.70E-04	8.1489E-02
551603.5	4172924.72	30489.79715	31249.90199	9953.78026	22917.51904	4.24686	4.03636	2.65E-02	2.71E-02	8.10E-03	1.87E-02	4.55E-04	4.37E-04	8.1253E-02
551583.5	4172964.72	17219.35975	40724.16157	5682.65732	30691.18499	14.94659	13.17522	1.50E-02	3.54E-02	4.62E-03	2.50E-02	1.60E-03	1.43E-03	8.2943E-02
551593.5	4172914.72	37184.95109	26790.78566	10476.66281	19823.98708	5.04947	4.77032	3.23E-02	2.33E-02	8.53E-03	1.61E-02	5.41E-04	5.17E-04	8.1268E-02
551713.5	4172944.72	17693.67076	42816.79625	7012.80148	25849.673	1.23208	1.21274	1.54E-02	3.72E-02	5.71E-03	2.10E-02	1.32E-04	1.31E-04	7.9550E-02
551593.5	4172944.72	22380.40935	36158.95567	7373.58993	26889.84933	6.85142	6.34261	1.94E-02	3.14E-02	6.00E-03	2.19E-02	7.34E-04	6.87E-04	8.0136E-02
551703.5	4172934.72	22064.98625	37750.81716	8688.12201	23387.92505	1.3162	1.29421	1.92E-02	3.28E-02	7.07E-03	1.90E-02	1.41E-04	1.40E-04	7.8324E-02
551593.5	4172924.72	30683.09016	29560.61432	9254.31147	21903.90247	5.50529	5.17249	2.66E-02	2.57E-02	7.53E-03	1.78E-02	5.90E-04	5.60E-04	7.8818E-02
551563.5	4172904.72	47213.67567	20250.6411	8439.47155	15353.86378	14.13547	12.68789	4.10E-02	1.76E-02	6.87E-03	1.25E-02	1.51E-03	1.37E-03	8.0832E-02
551593.5	4172934.72	25932.42313	32687.15312	8228.36231	24260.79135	6.08874	5.68335	2.25E-02	2.84E-02	6.70E-03	1.97E-02	6.52E-04	6.16E-04	7.8608E-02
551583.5	4172914.72	37228.88631	25247.46802	9544.74597	18926.91392	6.78479	6.32414	3.23E-02	2.19E-02	7.77E-03	1.54E-02	7.27E-04	6.85E-04	7.8831E-02
551703.5	4172924.72	26569.91277	31913.26201	10298.2154	20330.94362	1.30773	1.28576	2.31E-02	2.77E-02	8.38E-03	1.65E-02	1.40E-04	1.39E-04	7.5988E-02
551583.5	4172944.72	22376.63884	33523.64705	6901.26665	25161.92293	10.22682	9.2578	1.94E-02	2.91E-02	5.62E-03	2.05E-02	1.10E-03	1.00E-03	7.6731E-02
551583.5	4172924.72	30627.32017	27833.59692	8509.917	20810.2497	7.60079	7.03138	2.66E-02	2.42E-02	6.93E-03	1.69E-02	8.14E-04	7.62E-04	7.6199E-02
551573.5	4172914.72	36865.08723	23792.06947	8637.78544	17984.5722	9.78939	8.97003	3.20E-02	2.07E-02	7.03E-03	1.46E-02	1.05E-03	9.71E-04	7.6355E-02
551713.5	4172934.72	20830.02222	35986.11449	8140.19837	22247.55837	1.22074	1.20149	1.81E-02	3.12E-02	6.62E-03	1.81E-02	1.31E-04	1.30E-04	7.4325E-02
551583.5	4172934.72	25842.91603	30598.59931	7628.25228	22916.45438	8.66241	7.94539	2.24E-02	2.66E-02	6.21E-03	1.87E-02	9.28E-04	8.61E-04	7.5655E-02
551565.79	4172915.74	36727.91684	22488.93824	7910.71388	17057.6278	15.15319	13.56103	3.19E-02	1.95E-02	6.44E-03	1.39E-02	1.62E-03	1.47E-03	7.4830E-02
551575.79	4172944.97	22369.73737	31215.64745	6535.70194	23736.23156	15.42568	13.66235	1.94E-02	2.71E-02	5.32E-03	1.93E-02	1.65E-03	1.48E-03	7.4297E-02
551573.5	4172924.72	30480.87814	25895.37057	7791.24632	19614.12612	11.45782	10.39103	2.65E-02	2.25E-02	6.34E-03	1.60E-02	1.23E-03	1.13E-03	7.3608E-02
551573.5	4172934.72	26107.371	27980.47894	7091.11248	21271.47599	14.24764	12.71839	2.27E-02	2.43E-02	5.77E-03	1.73E-02	1.53E-03	1.38E-03	7.2951E-02
CONCUNIT ug/	m^3													
DEPUNIT g/m^	2													

Midway Village Project—New Phase 3 Receptors Scenario

New Phase 3 Receptors: Exposed to Phases 4 Demolition and Phases 4 Construction
Construction Annual DPM Emissions (PM2.5 Exhaust)

	Mitigated Concentrations
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	6.25E-08
Annual Average Onsite DPM Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	6.25E-08
Annual Average Onsite DPM Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	4.70E-08
Annual Average Onsite DPM Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	4.70E-08
Annual Average Offsite DPM Emission Rate - Road Segment 1 (grams/sec):	2.59E-06
Annual Average Offsite DPM Emission Rate - Road Segment 2 (grams/sec):	3.20E-06

X	Y	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Route 1 - From the project site towards US-101 LINE1	Unit Emissions Route 2 - From US-101 towards the project site LINE2	Construction Area 4B and Area 2B/4B (Phase 4) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 1 of 2 Phase 4) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) Annual DPM Exhaust w/Actual Emissions (ug/m3)	Route 1 - From the project site towards US-101 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Route 2 - From US-101 towards the project site Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
551653.5	4172854.72	171160.9474	15302.62024	75631.6828	10789.81499	2.55867	2.45464	1.07E-02	9.56E-04	3.55E-03	5.07E-04	6.64E-06	7.85E-06	1.5720E-02
551642.42	4172857.32	168854.3696	15857.9813	55461.88347	11280.28439	2.82339	2.70983	1.05E-02	9.90E-04	2.60E-03	5.30E-04	7.32E-06	8.66E-06	1.4687E-02
551663.5	4172864.72	127140.9131	16558.28551	60112.05977	11531.02997	2.07301	2.00768	7.94E-03	1.03E-03	2.82E-03	5.42E-04	5.38E-06	6.42E-06	1.2352E-02
551623.5	4172864.72	150752.1953	17139.0347	33499.60394	12381.26081	3.15843	3.03992	9.42E-03	1.07E-03	1.57E-03	5.82E-04	8.19E-06	9.72E-06	1.2659E-02
551653.5	4172864.72	127122.9094	17034.3902	55744.65149	11961.10186	2.29772	2.22121	7.94E-03	1.06E-03	2.62E-03	5.62E-04	5.96E-06	7.10E-06	1.2197E-02
551633.5	4172864.72	142880.1694	17141.02108	39450.07879	12270.92691	2.85825	2.7531	8.92E-03	1.07E-03	1.85E-03	5.76E-04	7.41E-06	8.80E-06	1.2440E-02
551643.5	4172864.72	132824.8506	17179.04991	47329.55784	12177.13308	2.55946	2.46879	8.30E-03	1.07E-03	2.22E-03	5.72E-04	6.64E-06	7.89E-06	1.2178E-02
551613.28	4172867.43	143262.8036	17559.14543	27064.34328	12787.57987	3.39651	3.27143	8.95E-03	1.10E-03	1.27E-03	6.01E-04	8.81E-06	1.05E-05	1.1936E-02
551593.5	4172874.72	125142.3651	18022.09582	17273.91852	13333.44573	4.27246	4.09094	7.82E-03	1.13E-03	8.11E-04	6.26E-04	1.11E-05	1.31E-05	1.0403E-02
551603.5	4172874.72	121565.8542	18431.04637	20111.71631	13532.15084	3.68645	3.54328	7.59E-03	1.15E-03	9.45E-04	6.36E-04	9.56E-06	1.13E-05	1.0345E-02
551613.5	4172874.72	115392.7258	18749.63794	23515.78421	13650.02429	3.26337	3.14928	7.21E-03	1.17E-03	1.10E-03	6.41E-04	8.47E-06	1.01E-05	1.0142E-02
551623.5	4172874.72	108964.8526	18963.2319	27424.93765	13677.96604	2.92288	2.82576	6.81E-03	1.18E-03	1.29E-03	6.42E-04	7.58E-06	9.03E-06	9.9372E-03
551633.5	4172874.72	100308.2878	19277.3485	32898.00188	13755.45217	2.61213	2.52837	6.26E-03	1.20E-03	1.55E-03	6.46E-04	6.78E-06	8.08E-06	9.6751E-03
551663.5	4172874.72	93583.82466	18793.43592	40814.11138	13003.72674	1.94441	1.89083	5.84E-03	1.17E-03	1.92E-03	6.11E-04	5.04E-06	6.04E-06	9.5576E-03
551582.9	4172876.82	119202.6705	17717.11117	14284.83729	13210.92076	5.26122	4.99668	7.45E-03	1.11E-03	6.71E-04	6.21E-04	1.36E-05	1.60E-05	9.8727E-03
551653.5	4172874.72	92342.38448	19259.41152	38620.36698	13446.05582	2.14011	2.07782	5.77E-03	1.20E-03	1.81E-03	6.32E-04	5.55E-06	6.64E-06	9.4280E-03
551643.5	4172874.72	93314.35474	19532.01088	35815.45092	13767.61535	2.35828	2.28678	5.83E-03	1.22E-03	1.68E-03	6.47E-04	6.12E-06	7.31E-06	9.3903E-03
551693.5	4172974.72	12791.52317	84215.72722	5333.92456	47761.36029	1.52151	1.49419	7.99E-04	5.26E-03	2.51E-04	2.24E-03	3.95E-06	4.78E-06	8.5613E-03
551640.9	4172976.02	14392.86669	74546.30272	5956.04897	51264.08648	2.81444	2.71804	8.99E-04	4.66E-03	2.80E-04	2.41E-03	7.30E-06	8.69E-06	8.2584E-03
551620.9	4172984.07	13371.03228	74214.48559	5315.95984	53131.58901	4.51445	4.27162	8.35E-04	4.64E-03	2.50E-04	2.50E-03	1.17E-05	1.37E-05	8.2409E-03
551666.91	4172969.1	14951.79473	73025.47575	6289.01062	46369.51717	1.94843	1.90511	9.34E-04	4.56E-03	2.95E-04	2.18E-03	5.05E-06	6.09E-06	7.9793E-03
551593.5	4172884.72	90714.14235	19597.39115	14947.06603	14512.60282	4.30405	4.11621	5.67E-03	1.22E-03	7.02E-04	6.82E-04	1.12E-05	1.32E-05	8.2977E-03
551603.5	4172884.72	87377.67556	20181.88206	17189.06893	14822.41096	3.62927	3.49578	5.46E-03	1.26E-03	8.07E-04	6.96E-04	9.42E-06	1.12E-05	8.2420E-03
551633.5	4172974.72	14820.81442	69392.6607	6046.1339	49016.81233	3.19472	3.06791	9.26E-04	4.33E-03	2.84E-04	2.30E-03	8.29E-06	9.81E-06	7.8641E-03
551613.5	4172884.72	83088.70188	20723.27148	19938.53233	15077.33554	3.15506	3.0481	5.19E-03	1.29E-03	9.36E-04	7.08E-04	8.18E-06	9.74E-06	8.1464E-03
551705.66	4172972.34	12487.18069	77956.34108	5147.82632	43155.76243	1.36359	1.34107	7.80E-04	4.87E-03	2.42E-04	2.03E-03	3.54E-06	4.29E-06	7.9254E-03
551583.5	4172884.72	91591.03884	18972.50994	13121.47061	14151.76206	5.35955	5.07764	5.72E-03	1.18E-03	6.16E-04	6.65E-04	1.39E-05	1.62E-05	8.2166E-03
551623.5	4172884.72	77577.76606	21313.56729	23538.04772	15336.11353	2.77312	2.68734	4.85E-03	1.33E-03	1.11E-03	7.20E-04	7.19E-06	8.59E-06	8.0181E-03
551611.12	4172984.72	13483.81733	68168.28343	5201.94054	49887.6405	6.06349	5.64898	8.42E-04	4.26E-03	2.44E-04	2.34E-03	1.57E-05	1.81E-05	7.7210E-03
551673.5	4172884.72	70899.73649	20804.36417	28709.66638	14223.83968	1.70663	1.66727	4.43E-03	1.30E-03	1.35E-03	6.68E-04	4.43E-06	5.33E-06	7.7539E-03
551633.5	4172884.72	71660.57156	21930.32361	25056.30713	15570.6864	2.48654	2.41491	4.48E-03	1.37E-03	1.18E-03	7.31E-04	6.45E-06	7.72E-06	7.7678E-03
551663.5	4172884.72	69203.37071	21456.24079	28462.99091	14788.79893	1.86598	1.82035	4.32E-03	1.34E-03	1.34E-03	6.95E-04	4.84E-06	5.82E-06	7.7045E-03
551623.5	4172974.72	14865.96092	65502.86521	5920.95331	46934.49359	3.92941	3.73919	9.28E-04	4.09E-03	2.78E-04	2.20E-03	1.02E-05	1.20E-05	7.5243E-03
551653.5	4172884.72	68535.83538	21881.29455	27577.54444	15218.67153	2.04488	1.99207	4.28E-03	1.37E-03	1.30E-03	7.15E-04	5.30E-06	6.37E-06	7.6689E-03
551673.5	4172964.72	15650.48767	68160.17883	6557.12775	42486.31075	1.80014	1.76262	9.77E-04	4.26E-03	3.08E-04	2.00E-03	4.67E-06	5.63E-06	7.5484E-03
551643.5	4172884.72	68813.32009	22088.90226	26225.5143	15516.39209	2.24736	2.18636	4.30E-03	1.38E-03	1.23E-03	7.29E-04	5.83E-06	6.99E-06	7.6509E-03
551573.5	4172884.72	88882.8464	18248.41243	11548.4961	13702.1315	7.0875	6.62653	5.55E-03	1.14E-03	5.42E-04	6.44E-04	1.84E-05	2.12E-05	7.9167E-03
551601.77	4172988.4	12964.18533	65568.99829	4863.37565	48512.77567	8.99045	8.17545	8.10E-04	4.10E-03	2.28E-04	2.28E-03	2.33E-05	2.61E-05	7.4614E-03
551653.5	4172964.72	16325.57042	64933.92054	6826.90991	43425.45841	2.24557	2.1886	1.02E-03	4.06E-03	3.21E-04	2.04E-03	5.83E-06	7.00E-06	7.4483E-03
551683.5	4172964.72	15151.39145	68529.8599	6311.09683	41247.33254	1.63231	1.60096	9.46E-04	4.28E-03	2.96E-04	1.94E-03	4.23E-06	5.12E-06	7.4696E-03
551593.5	4172994.72	12159.06611	64530.09193	4460.35283	48234.39227	15.18407	13.34697	7.59E-04	4.03E-03	2.09E-04	2.27E-03	3.94E-05	4.27E-05	7.3468E-03
551665.23	4172962.34	16473.51325	64458.08407	6906.37397	41437.51083	1.94919	1.90559	1.03E-03	4.03E-03	3.24E-04	1.95E-03	5.06E-06	6.09E-06	7.3366E-03
551643.5	4172964.72	16643.45822	62018.37193	6883.28505	42897.52504	2.57386	2.49546	1.04E-03	3.87E-03	3.23E-04	2.01E-03	6.68E-06	7.98E-06	7.2658E-03
551693.5	4172964.72	14544.94026	67875.26586	6009.1789	39622.98207	1.48942	1.46284	9.08E-04	4.24E-03	2.82E-04	1.86E-03	3.86E-06	4.68E-06	7.2996E-03
551613.5	4172974.72	15018.38594	60632.73588	5794.2803	44202.12131	5.07398	4.76931	9.38E-04	3.79E-03	2.72E-04	2.08E-03	1.32E-05	1.52E-05	7.1016E-03
551633.5	4172964.72	16789.72793	59360.19719	6815.51137	41913.39179	3.02181	2.90986	1.05E-03	3.71E-03	3.20E-04	1.97E-03	7.84E-06	9.30E-06	7.0620E-03
551703.5	4172964.72	13876.99464	66108.74451	5683.29983	37795.87909	1.3671	1.3443	8.67E-04	4.13E-03	2.67E-04	1.78E-03	3.55E-06	4.30E-06	7.0457E-03
551563.5	4172884.72	81331.21839	17400.98346	10148.75781	13147.58305	10.1544	9.33204	5.08E-03	1.09E-03	4.77E-04	6.18E-04	2.63E-05	2.98E-05	7.3169E-03
551623.5	4172964.72	16832.20349	56494.46077	6655.05545	40552.362	3.65653	3.49081	1.05E-03	3.53E-03	3.13E-04	1.90E-03	9.49E-06	1.12E-05	6.8177E-03
551663.5	4172954.72	18297.49108	56481.92473	7638.37494	36705.89292	1.94251	1.89896	1.14E-03	3.53E-03	3.59E-04	1.72E-03	5.04E-06	6.07E-06	6.7644E-03
551653.5	4172954.72	18614.88047	55368.97431	7748.45391	37095.26357	2.17125	2.11747	1.16E-03	3.46E-03	3.64E-04	1.74E-03	5.63E-06	6.77E-06	6.7395E-03
551673.5	4172954.72	17984.90516	56903.80219	7483.11687	35935.98543	1.75752	1.72136	1.12E-03	3.55E-03	3.51E-04	1.69E-03	4.56E-06	5.50E-06	6.7267E-03
551713.5	4172964.72	13230.82234	63495.14909	5376.89536	36012.3334	1.26362	1.24379	8.26E-04	3.97E-03	2.53E-04	1.69E-03	3.28E-06	3.98E-06	6.7433E-03
551593.5	4172984.72	13527.16667	57009.60627	4894.32626	42609.58071	12.54757	11.15318	8.45E-04	3.56E-03	2.30E-04	2.00E-03	3.26E-05	3.57E-05	6.7049E-03
551603.5	4172974.72	15068.40732	55787.50582	5599.73285	41180.41703	6.95725	6.42483	9.41E-04	3.48E-03	2.63E-04	1.93E-03	1.80E-05	2.05E-05	6.6612E-03
551643.5	4172894.72	54547.4662	24657.71066	21005.1451	17267.26105	2.20303	2.14636	3.41E-03	1.54E-03	9.87E-04	8.11E-04	5.72E-06	6.86E-06	6.7571E-03
551653.5	4172894.72	54200.33522	24532.22031	21728.06478	16988.72198	2.00346	1.95497	3.39E-03	1.53E-03	1.02E-03	7.98E-04	5.20E-06	6.25E-06	6.7473E-03
551613.5	4172894.72	59475.30112	23407.76381	17308.03817	17021.27063	3.12234	3.01302	3.71E-03	1.46E-03	8.13E-04	7.99E-04	8.10E-06	9.63E-06	6.8068E-03
551663.5	4172894.72	54394.89596	24145.24155	22092.46377	16552.35664	1.82884	1.78675	3.40E-03	1.51E-03	1.04E-03	7.77E-04	4.74E-06	5.71E-06	6.7309E-03
551643.5	4172954.72	18959.40262	53348.37735	7803.83567	36894.24374	2.46638	2.39601	1.18E-03	3.33E-03	3.67E-04	1.73E-03	6.40E-06	7.66E-06	6.6296E-03
551623.5	4172894.72	56732.85613	24189.8831	18649.86581	17335.62856	2.72576	2.64394	3.54E-03	1.51E-03	8.76E-04	8.14E-04	7.07E-06	8.45E-06	6.7599E-03
551603.5	4172894.72	62461.94375	22488.11226	15370.8409	16506.4076	3.67038	3.51946	3.90E-03	1.40E-03	7.22E-04	7.75E-04	9.52E-06	1.12E-05	6.8237E-03
551633.5	4172894.72	54918.40523	24628.39382	19775.59363	17444.85857	2.43708	2.37045	3.43E-03	1.54E-03	9.29E-04	8.19E-04	6.32E-06	7.58E-06	6.7304E-03
551673.5	4172894.72	55237.53732	23415.2654	22155.84094	15895.66359	1.67563	1.63942	3.45E-03	1.46E-03	1.04E-03	7.47E-04	4.35E-06	5.24E-06	6.7092E-03
551683.5	4172954.72	17465.01188	56722.35553	7210.8732	34800.57638	1.59959	1.56908	1.09E-03	3.54E-03	3.39E-04	1.63E-03	4.15E-06	5.02E-06	6.6159E-03
551593.5	4172894.72	64394.68878	21603.40669	13358.76226	16003.87232	4.46657	4.24991	4.02E-03	1.35E-03	6.27E-04	7.52E-04	1.16E-05	1.36E-05	6.7755E-03
551613.5	4172964.72	16918.4115	53006.94638	6460.71617	38606.33441	4.61831	4.36082	1.06E-03	3.31E-03	3.03E-04	1.81E-03	1.20E-05	1.39E-05	6.5100E-03
551633.5	4172954.72	19173.69178	51283.34111	7730.9852	36189.65017	2.86704	2.76846	1.20E-03	3.20E-03	3.63E-04	1.70E-03	7.44E-06	8.85E-06	6.4797E-03
551693.5	4172954.72	16819.44461	55796.79203	6876.77345	33419.71801	1.46478	1.43874	1.05E-03	3.48E-03	3.23E-04	1.57E-03	3.80E-06	4.60E-06	6.4365E-03
551583.5	4172894.72	63972.95969	20819.13341	11893.88581	15540.06281	5.71225	5.37862	4.00E-03	1.30E-03	5.59E-04	7.30E-04	1.48E-05	1.72E-05	6.6164E-03
551623.5	4172954.72	19246.03261	49082.84487	7533.19635	35218.58148	3.41918	3.27583	1.20E-03	3.07E-03	3.54E-04	1.65E-03	8.87E-06	1.05E-05	6.2950E-03
551557.09	4172888.91	70563.19973	17257.61542	8944.04797	13100.64537	14.86924	13.40419	4.41E-03	1.08E-03	4.20E-04	6.15E-04	3.86E-05	4.28E-05	6.6019E-03
551653.5	4172944.72	21542.6283	47379.48934	8914.88491	32002.9712	2.11047	2.05936	1.35E-03	2.96E-03	4.19E-04	1.50E-03	5.47E-06	6.58E-06	6.2386E-03
551663.5	4172944.72	21252.95541	48013.65674	8816.25869	31535.96425	1.89727	1.85537	1.33E-03	3.00E-03	4.14E-04	1.48E-03	4.92E-06	5.93E-06	6.2323E-03
551643.5	4172944.72	21748.4066	46371.53521	8893.43979	32085.21655	2.37391	2.31007	1.36E-03	2.90E-03	4.18E-04	1.51E-03	6.16E-06	7.38E-06	6.1928E-03
551593.5	4172974.72	15129.281	50630.82652	5385.14945	37814.1355	10.50454	9.44357	9.45E-04	3.16E-03	2.53E-04	1.78E-03	2.73E-05	3.02E-05	6.1936E-03
551573.5	4172894.72	63700.89773	19800.10265	10439.90412	14887.9302	7.84232	7.27694	3.98E-03	1.24E-03	4.90E-04	6.99E-04	2.03E-05	2.33E-05	6.4484E-03
551603.5	4172964.72	17029.43932	49091.0022	6232.05275	36220.26086	6.17551	5.741	1.06E-03	3.07E-03	2.93E-04	1.70E-03	1.60E-05	1.84E-05	6.1580E-03
551703.5	4172954.72	16010.31755	54042.01896	6481.05252	31866.42428	1.34684	1.32441	1.00E-03	3.38E-03	3.04E-04	1.50E-03	3.49E-06	4.23E-06	6.1841E-03
551643.5	4172904.72	44265.11817	27574.02351	17286.54718	19253.92612	2.19276	2.13775	2.76E-03	1.72E-03	8.12E-04	9.04E-04	5.69E-06	6.83E-06	6.2156E-03
551673.5	4172944.72	20864.65701	48087.44327	8611.71376	30746.38301	1.72071	1.68561	1.30E-03	3.00E-03	4.04E-04	1.44E-03	4.46E-06	5.39E-06	6.1650E-03
551653.5	4172904.72	43857.93045	27576.78927	17643.82598	19010.78276	1.99027	1.94376	2.74E-03	1.72E-03	8.29E-04	8.93E-04	5.16E-06	6.21E-06	6.1946E-03
551633.5	4172904.72	44381.83343	27442.1568	16456.16468	19407.89057	2.43616	2.37031	2.77E-03	1.71E-03	7.73E-04	9.12E-04	6.32E-06	7.58E-06	6.1843E-03
551663.5	4172904.72	43700.56827	27284.84591	17715.08576	18594.02186	1.81422	1.77409	2.73E-03	1.70E-03	8.32E-04	8.73E-04	4.71E-06	5.67E-06	6.1493E-03
551623.5	4172904.72	45109.45182	26924.50445	15568.80196	19282.28546	2.74376	2.65888	2.82E-03	1.68E-03	7.31E-04	9.06E-04	7.12E-06	8.50E-06	6.1516E-03
551613.5	4172954.72	19305.4509	46476.60903	7268.71464	33826.49705	4.23937	4.02069	1.21E-03	2.90E-03	3.41E-04	1.59E-03	1.10E-05	1.29E-05	6.0626E-03
551673.5	4172904.72	43922.37097	26555.10037	17613.30733	17893.69234	1.66243	1.62763	2.74E-03	1.66E-03	8.27E-04	8.40E-04	4.31E-06	5.20E-06	6.0791E-03
551683.5	4172944.72	20338.96979	47544.46899	8312.93783	29705.20284	1.57153	1.54176	1.27E-03	2.97E-03	3.90E-04	1.40E-03	4.08E-06	4.93E-06	6.0345E-03
551613.5	4172904.72	45375.01449	26311.63112	14360.18702	19057.22341	3.16912	3.05352	2.83E-03	1.64E-03	6.74E-04	8.95E-04	8.22E-06	9.76E-06	6.0649E-03
551563.5	4172894.72	61620.2421	18765.87239	9244.38168	14202.08298	11.82169	10.74312	3.85E-03	1.17E-03	4.34E-04	6.67E-04	3.07E-05	3.43E-05	6.1869E-03
551643.5	4172914.72	36364.18731	31050.19873	14396.55151	21622.84836	2.20982	2.15433	2.27E-03	1.94E-03	6.76E-04	1.02E-03	5.73E-06	6.89E-06	5.9149E-03
551653.5	4172914.72	36053.87038	31177.29543	14598.01891	21396.65792	1.99891	1.95281	2.25E-03	1.95E-03	6.86E-04	1.00E-03	5.19E-06	6.24E-06	5.9011E-03
551713.5	4172954.72	15171.07571	51619.95857	6091.00151	30301.04388	1.24515	1.22564	9.48E-04	3.22E-03	2.86E-04	1.42E-03	3.23E-06	3.92E-06	5.8880E-03
551603.5	4172904.72	45811.46159	25451.01396	13128.26882	18627.23408	3.77892	3.61694	2.86E-03	1.59E-03	6.17E-04	8.75E-04	9.80E-06	1.16E-05	5.9637E-03
551633.5	4172914.72	36758.71256	30611.90687	13968.83252	21629.89001	2.46664	2.39886	2.30E-03	1.91E-03	6.56E-04	1.02E-03	6.40E-06	7.67E-06	5.8939E-03

Mitigated DPM Concentrations		
Maximum DPM (ug/m3)	**MIR UTM** X	Y
1.5720E-02	551653.5	4172854.72

UTM	551653.50	4172854.72
Latitude, Longitude	37°42'05.3"N 122°24'50.6"W	

551693.5	4172944.72	19553.04413	46461.08864	7896.99101	28469.62357	1.44134	1.41579	1.22E-03	2.90E-03	3.71E-04	1.34E-03	3.74E-06	4.53E-06	5.8394E-03
551663.5	4172914.72	35753.77328	31012.38721	14542.79504	21001.90745	1.81713	1.77763	2.23E-03	1.94E-03	6.83E-04	9.86E-04	4.71E-06	5.68E-06	5.8499E-03
551643.5	4172924.72	30229.74049	35235.86818	12120.01567	24475.84443	2.24992	2.19276	1.89E-03	2.20E-03	5.69E-04	1.15E-03	5.84E-06	7.01E-06	5.8205E-03
551653.5	4172924.72	30011.30947	35523.93083	12242.44561	24275.47351	2.02517	1.97774	1.87E-03	2.22E-03	5.75E-04	1.14E-03	5.25E-06	6.32E-06	5.8199E-03
551673.5	4172934.72	24629.15947	40746.89545	10080.64495	26579.87889	1.69321	1.65887	1.54E-03	2.54E-03	4.73E-04	1.25E-03	4.39E-06	5.30E-06	5.8148E-03
551623.5	4172914.72	37027.11555	29960.19141	13279.64646	21456.99415	2.80761	2.7152	2.31E-03	1.87E-03	6.24E-04	1.01E-03	7.28E-06	8.68E-06	5.8313E-03
551593.5	4172964.72	17120.89811	44976.9681	5966.35494	33558.44552	9.00184	8.17679	1.07E-03	2.81E-03	2.80E-04	1.58E-03	2.34E-05	2.61E-05	5.7844E-03
551633.5	4172924.72	30581.27484	34513.93429	11866.16581	24364.46127	2.52659	2.45374	1.91E-03	2.16E-03	5.57E-04	1.14E-03	6.55E-06	7.84E-06	5.7818E-03
551593.5	4172904.72	46589.74581	24242.24192	11949.64997	17978.14302	4.70052	4.46125	2.91E-03	1.51E-03	5.61E-04	8.44E-04	1.22E-05	1.43E-05	5.8561E-03
551673.5	4172914.72	35533.56535	30427.99527	14310.09488	20356.25525	1.66143	1.62746	2.22E-03	1.90E-03	6.72E-04	9.56E-04	4.31E-06	5.20E-06	5.7575E-03
551622.9	4172933.22	26500.07496	37205.44848	9995.03912	26673.33152	3.05177	2.93795	1.66E-03	2.32E-03	4.69E-04	1.25E-03	7.92E-06	9.39E-06	5.7184E-03
551583.5	4172974.72	15215.70527	45306.02414	5161.27058	34202.41097	10.2383	15.92042	9.50E-04	2.83E-03	2.42E-04	1.61E-03	2.66E-05	5.09E-05	5.7063E-03
551623.5	4172924.72	30814.1729	33560.63982	11400.41201	24041.08228	2.90963	2.80798	1.92E-03	2.10E-03	5.35E-04	1.13E-03	7.55E-06	8.98E-06	5.7018E-03
551613.5	4172914.72	36918.90984	29190.86961	12350.36289	21154.94398	3.28656	3.15856	2.31E-03	1.82E-03	5.80E-04	9.94E-04	8.53E-06	1.01E-05	5.7213E-03
551683.5	4172934.72	24118.24193	39912.92799	9752.63749	25626.18436	1.5507	1.52132	1.51E-03	2.49E-03	4.58E-04	1.20E-03	4.02E-06	4.86E-06	5.6698E-03
551613.5	4172934.72	25733.54833	36602.89242	9296.2328	26563.41842	3.65913	3.49648	1.61E-03	2.29E-03	4.37E-04	1.25E-03	9.49E-06	1.12E-05	5.5983E-03
551703.5	4172944.72	18666.23014	44848.45259	7457.40954	27158.52808	1.32947	1.30733	1.17E-03	2.80E-03	3.50E-04	1.28E-03	3.45E-06	4.18E-06	5.6004E-03
551583.5	4172904.72	47114.80666	22981.7269	10776.85433	17161.31528	6.16387	5.78073	2.94E-03	1.44E-03	5.06E-04	8.06E-04	1.60E-05	1.85E-05	5.7247E-03
551613.5	4172924.72	30562.37752	32592.47464	10679.91077	23635.55231	3.4494	3.30659	1.91E-03	2.04E-03	5.02E-04	1.11E-03	8.95E-06	1.06E-05	5.5757E-03
551603.5	4172914.72	36974.9867	28118.70974	11406.8094	20600.21837	3.98333	3.80014	2.31E-03	1.76E-03	5.36E-04	9.68E-04	1.03E-05	1.21E-05	5.5914E-03
551693.5	4172934.72	23199.01526	39227.21351	9247.46214	24540.81947	1.42572	1.4004	1.45E-03	2.45E-03	4.34E-04	1.15E-03	3.70E-06	4.48E-06	5.4941E-03
551573.5	4172904.72	47514.05616	21603.54351	9559.63921	16264.66762	8.81095	8.10682	2.97E-03	1.35E-03	4.49E-04	7.64E-04	2.29E-05	2.59E-05	5.5786E-03
551603.5	4172934.72	25781.70884	34791.80277	8770.88289	25550.11677	4.58612	4.33962	1.61E-03	2.17E-03	4.12E-04	1.20E-03	1.19E-05	1.39E-05	5.4210E-03
551603.5	4172924.72	30489.79715	31249.90199	9953.78026	22917.51904	4.24686	4.03636	1.90E-03	1.95E-03	4.68E-04	1.08E-03	1.10E-05	1.29E-05	5.4239E-03
551583.5	4172964.72	17219.35975	40724.16157	5682.65732	30691.18499	14.94659	13.17522	1.08E-03	2.54E-03	2.67E-04	1.44E-03	3.88E-05	4.21E-05	5.4083E-03
551593.5	4172914.72	37184.95109	26790.78566	10476.66281	19823.98708	5.04947	4.77032	2.32E-03	1.67E-03	4.92E-04	9.31E-04	1.31E-05	1.52E-05	5.4473E-03
551713.5	4172944.72	17693.67076	42816.79625	7012.80148	25849.673	1.23208	1.21274	1.11E-03	2.67E-03	3.29E-04	1.21E-03	3.20E-06	3.88E-06	5.3299E-03
551593.5	4172944.72	22380.40935	36158.95567	7373.58993	26889.84933	6.85142	6.34261	1.40E-03	2.26E-03	3.46E-04	1.26E-03	1.78E-05	2.03E-05	5.3036E-03
551703.5	4172934.72	22064.98625	37750.81716	8688.12201	23387.92505	1.3162	1.29421	1.38E-03	2.36E-03	4.08E-04	1.10E-03	3.41E-06	4.14E-06	5.2500E-03
551593.5	4172924.72	30683.09016	29560.61432	9254.31147	21903.90247	5.50529	5.17249	1.92E-03	1.85E-03	4.35E-04	1.03E-03	1.43E-05	1.65E-05	5.2569E-03
551563.5	4172904.72	47213.67567	20250.6411	8439.47155	15353.86378	14.13547	12.68789	2.95E-03	1.26E-03	3.96E-04	7.21E-04	3.67E-05	4.06E-05	5.4084E-03
551593.5	4172934.72	25932.42313	32687.15312	8228.36231	24260.79135	6.08874	5.68335	1.62E-03	2.04E-03	3.86E-04	1.14E-03	1.58E-05	1.82E-05	5.2211E-03
551583.5	4172914.72	37228.88631	25247.46802	9544.74597	18926.91392	6.78479	6.32414	2.33E-03	1.58E-03	4.48E-04	8.89E-04	1.76E-05	2.02E-05	5.2772E-03
551703.5	4172924.72	26569.91277	31913.26201	10298.2154	20330.94362	1.30773	1.28576	1.66E-03	1.99E-03	4.84E-04	9.55E-04	3.39E-06	4.11E-06	5.0988E-03
551583.5	4172944.72	22376.63884	33523.64705	6901.26665	25161.92293	10.22682	9.2578	1.40E-03	2.09E-03	3.24E-04	1.18E-03	2.65E-05	2.96E-05	5.0535E-03
551583.5	4172924.72	30627.32017	27833.59692	8509.917	20810.2497	7.60079	7.03138	1.91E-03	1.74E-03	4.00E-04	9.77E-04	1.97E-05	2.25E-05	5.0706E-03
551573.5	4172914.72	36865.08723	23792.06947	8637.78544	17984.5722	9.78939	8.97003	2.30E-03	1.49E-03	4.06E-04	8.45E-04	2.54E-05	2.87E-05	5.0930E-03
551713.5	4172934.72	20830.02222	35986.11449	8140.19837	22247.55837	1.22074	1.20149	1.30E-03	2.25E-03	3.82E-04	1.04E-03	3.17E-06	3.84E-06	4.9829E-03
551583.5	4172934.72	25842.91603	30598.59931	7628.25228	22916.45438	8.66241	7.94539	1.61E-03	1.91E-03	3.58E-04	1.08E-03	2.25E-05	2.54E-05	5.0077E-03
551565.79	4172915.74	36727.91684	22488.93824	7910.71388	17057.6278	15.15319	13.56103	2.29E-03	1.40E-03	3.72E-04	8.01E-04	3.93E-05	4.33E-05	4.9539E-03
551575.79	4172944.97	22369.73737	31215.64745	6535.70194	23736.23156	15.42568	13.66235	1.40E-03	1.95E-03	3.07E-04	1.11E-03	4.00E-05	4.37E-05	4.8523E-03
551573.5	4172924.72	30480.87814	25895.37057	7791.24632	19614.12612	11.45782	10.39103	1.90E-03	1.62E-03	3.66E-04	9.21E-04	2.97E-05	3.32E-05	4.8712E-03
551573.5	4172934.72	26107.371	27980.47894	7091.11248	21271.47599	14.24764	12.71839	1.63E-03	1.75E-03	3.33E-04	9.99E-04	3.70E-05	4.07E-05	4.7879E-03
CONCUNIT ug/	m^3													
DEPUNIT g/m^	2													

Midway Village Project—New Phase 3 Receptors Scenario

New Phase 3 Receptors: Exposed to Phases 4 Demolition and Phases 4 Construction
Construction Annual Total PM2.5 Emissions (PM2.5 Total) — **Mitigated Concentrations**

Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 1 of 2 Phase 4) (grams/m2/sec):	1.28E-07
Annual Average Onsite Total PM2.5 Emission Rate—Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) (grams/m2/sec):	1.28E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B and Area 2B/4B (Phase 4) (grams/m2/sec):	4.93E-07
Annual Average Onsite Total PM2.5 Emission Rate—Construction Area 4B (Phase 4/5) (grams/m2/sec):	4.93E-07
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec):	1.07E-04
Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 2 (grams/sec):	1.08E-04

Mitigated PM2.5 Concentrations		
Maximum DPM (ug/m3)	**MIR UTM**	
	X	Y
6.7066E-02	551653.5	4172854.72

UTM	551653.50	4172854.72
Latitude, Longitude	37°42'05.3"N 122°24'50.6"W	

X	Y	Unit Emissions Construction Area 4B and Area 2B/4B (Phase 4) AREA6	Unit Emissions Construction Area 4B (Phase 4/5) AREA7	Unit Emissions Demolition Area 4A (Part 1 of 2 Phase 4) AREA12	Unit Emissions Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) AREA13	Unit Emissions Route 1 - From the project site towards US-101 LINE1	Unit Emissions Route 2 - From US-101 towards the project site LINE2	Construction Area 4B and Area 2B/4B (Phase 4) Annual PM2.5 w/Actual Emissions (ug/m3)	Construction Area 4B (Phase 4/5) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 1 of 2 Phase 4) Annual PM2.5 w/Actual Emissions (ug/m3)	Demolition Area 4A (Part 2 of 2 Phase 4 – Phase 4/5) Annual PM2.5 w/Actual Emissions (ug/m3)	Route 1 - From the project site towards US-101 Annual PM2.5 w/Actual Emissions (ug/m3)	Route 2 - From US-101 towards the project site Annual PM2.5 w/Actual Emissions (ug/m3)	**Total PM2.5 (ug/m3)**
551653.5	4172854.72	171160.9474	15302.62024	75631.6828	10789.81499	2.55867	2.45464	2.20E-02	1.97E-03	3.73E-02	5.32E-03	2.74E-04	2.66E-04	6.7066E-02
551642.42	4172857.32	168854.3696	15857.9813	55461.88347	11280.28439	2.82339	2.70983	2.17E-02	2.04E-03	2.73E-02	5.56E-03	3.02E-04	2.93E-04	5.7203E-02
551663.5	4172864.72	127140.9131	16558.28551	60112.05977	11531.02997	2.07301	2.00768	1.63E-02	2.13E-03	2.96E-02	5.68E-03	2.22E-04	2.17E-04	5.4192E-02
551623.5	4172864.72	150752.1953	17139.0347	33499.60394	12381.26081	3.15843	3.03992	1.94E-02	2.20E-03	1.65E-02	6.10E-03	3.38E-04	3.29E-04	4.4837E-02
551653.5	4172864.72	127122.9094	17034.3902	55744.65149	11961.10186	2.29772	2.22121	1.63E-02	2.19E-03	2.75E-02	5.89E-03	2.46E-04	2.41E-04	5.2358E-02
551633.5	4172864.72	142880.1694	17141.02108	39450.07879	12270.92691	2.85825	2.7531	1.84E-02	2.20E-03	1.94E-02	6.04E-03	3.06E-04	2.98E-04	4.6640E-02
551643.5	4172864.72	132824.8506	17179.04991	47329.55784	12177.13308	2.55946	2.46879	1.71E-02	2.21E-03	2.33E-02	6.00E-03	2.74E-04	2.67E-04	4.9125E-02
551613.28	4172867.43	143262.8036	17559.14543	27064.34328	12787.57987	3.39651	3.27143	1.84E-02	2.26E-03	1.33E-02	6.30E-03	3.64E-04	3.54E-04	4.1010E-02
551593.5	4172874.72	125142.3651	18022.09582	17273.91852	13333.44573	4.27246	4.09094	1.61E-02	2.32E-03	8.51E-03	6.57E-03	4.58E-04	4.43E-04	3.4370E-02
551603.5	4172874.72	121565.8542	18431.04637	20111.71631	13532.15084	3.68645	3.54328	1.56E-02	2.37E-03	9.91E-03	6.67E-03	3.95E-04	3.84E-04	3.5337E-02
551613.5	4172874.72	115392.7258	18749.63794	23515.78421	13650.02429	3.26337	3.14928	1.48E-02	2.41E-03	1.16E-02	6.72E-03	3.50E-04	3.41E-04	3.6232E-02
551623.5	4172874.72	108964.8526	18963.2319	27424.93765	13677.96604	2.92288	2.82576	1.40E-02	2.44E-03	1.35E-02	6.74E-03	3.13E-04	3.06E-04	3.7301E-02
551633.5	4172874.72	100308.2878	19277.3485	32898.00188	13755.45217	2.61213	2.52837	1.29E-02	2.48E-03	1.62E-02	6.78E-03	2.80E-04	2.74E-04	3.8898E-02
551663.5	4172874.72	93583.82466	18793.43592	40814.11138	13003.72674	1.94441	1.89083	1.20E-02	2.41E-03	2.01E-02	6.41E-03	2.08E-04	2.05E-04	4.1361E-02
551582.9	4172876.82	119202.6705	17717.11117	14284.83729	13210.92076	5.26122	4.99668	1.53E-02	2.28E-03	7.04E-03	6.51E-03	5.64E-04	5.41E-04	3.2239E-02
551653.5	4172874.72	92342.38448	19259.41152	38620.36698	13446.05582	2.14011	2.07782	1.19E-02	2.47E-03	1.90E-02	6.62E-03	2.29E-04	2.25E-04	4.0440E-02
551643.5	4172874.72	93314.35474	19532.01088	35815.45092	13767.61535	2.35828	2.28678	1.20E-02	2.51E-03	1.76E-02	6.78E-03	2.53E-04	2.48E-04	3.9422E-02
551693.5	4172974.72	12791.52317	84215.72722	5333.92456	47761.36029	1.52151	1.49419	1.64E-03	1.08E-02	2.63E-03	2.35E-02	1.63E-04	1.62E-04	3.8942E-02
551640.9	4172976.02	14392.86669	74546.30272	5956.04897	51264.08648	2.81444	2.71804	1.85E-03	9.58E-03	2.93E-03	2.53E-02	3.01E-04	2.94E-04	4.0208E-02
551620.9	4172984.07	13371.03228	74214.48559	5315.95984	53131.58901	4.51445	4.27162	1.72E-03	9.53E-03	2.62E-03	2.62E-02	4.84E-04	4.63E-04	4.0990E-02
551666.91	4172969.1	14951.79473	73025.47575	6289.01062	46369.51717	1.94843	1.90511	1.92E-03	9.38E-03	3.10E-03	2.28E-02	2.09E-04	2.06E-04	3.7657E-02
551593.5	4172884.72	90714.14235	19597.39115	14947.06603	14512.60282	4.30405	4.11621	1.17E-02	2.52E-03	7.36E-03	7.15E-03	4.61E-04	4.46E-04	2.9590E-02
551603.5	4172884.72	87377.67556	20181.88206	17189.06893	14822.41096	3.62927	3.49578	1.12E-02	2.59E-03	8.47E-03	7.30E-03	3.89E-04	3.79E-04	3.0354E-02
551633.5	4172974.72	14820.81442	69392.6607	6046.1339	49016.81233	3.19472	3.06791	1.90E-03	8.91E-03	2.98E-03	2.41E-02	3.42E-04	3.32E-04	3.8617E-02
551613.5	4172884.72	83088.70188	20723.27148	19938.53233	15077.33554	3.15506	3.0481	1.07E-02	2.66E-03	9.82E-03	7.43E-03	3.38E-04	3.30E-04	3.1254E-02
551705.66	4172972.34	12487.18069	77956.34108	5147.82632	43155.76243	1.36359	1.34107	1.60E-03	1.00E-02	2.54E-03	2.13E-02	1.46E-04	1.45E-04	3.5705E-02
551583.5	4172884.72	91591.03884	18972.50994	13121.47061	14151.76206	5.35955	5.07764	1.18E-02	2.44E-03	6.46E-03	6.97E-03	5.74E-04	5.50E-04	2.8763E-02
551623.5	4172884.72	77577.76606	21313.56729	23538.04772	15336.11353	2.77312	2.68734	9.97E-03	2.74E-03	1.16E-02	7.55E-03	2.97E-04	2.91E-04	3.2442E-02
551611.12	4172984.72	13483.81733	68168.28343	5201.94054	49887.6405	6.06349	5.64898	1.73E-03	8.76E-03	2.56E-03	2.46E-02	6.49E-04	6.12E-04	3.8888E-02
551673.5	4172884.72	70899.73649	20804.36417	28709.66638	14223.83968	1.70663	1.66727	9.11E-03	2.67E-03	1.41E-02	7.01E-03	1.83E-04	1.81E-04	3.3294E-02
551633.5	4172884.72	71660.57156	21930.32361	25056.30713	15570.6864	2.48654	2.41491	9.21E-03	2.82E-03	1.23E-02	7.67E-03	2.66E-04	2.62E-04	3.2564E-02
551663.5	4172884.72	69203.37071	21456.24079	28462.99091	14788.79893	1.86598	1.82035	8.89E-03	2.76E-03	1.40E-02	7.28E-03	2.00E-04	1.97E-04	3.3350E-02
551623.5	4172974.72	14865.96092	65502.86521	5920.95331	46934.49359	3.92941	3.73919	1.91E-03	8.42E-03	2.92E-03	2.31E-02	4.21E-04	4.05E-04	3.7187E-02
551653.5	4172884.72	68535.83538	21881.29455	27577.54444	15218.67153	2.04488	1.99207	8.80E-03	2.81E-03	1.36E-02	7.50E-03	2.19E-04	2.16E-04	3.3132E-02
551673.5	4172964.72	15650.48767	68160.17883	6557.12775	42486.31075	1.80014	1.76262	2.01E-03	8.76E-03	3.23E-03	2.09E-02	1.93E-04	1.91E-04	3.5310E-02
551643.5	4172884.72	68813.32009	22088.90226	26225.5143	15516.39209	2.24736	2.18636	8.84E-03	2.84E-03	1.29E-02	7.64E-03	2.41E-04	2.37E-04	3.2718E-02
551573.5	4172884.72	88882.8464	18248.41243	11548.4961	13702.1315	7.0875	6.62653	1.14E-02	2.34E-03	5.69E-03	6.75E-03	7.59E-04	7.18E-04	2.7678E-02
551601.77	4172988.4	12964.18533	65568.99829	4863.37565	48512.77567	8.99045	8.17545	1.67E-03	8.42E-03	2.40E-03	2.39E-02	9.63E-04	8.85E-04	3.8231E-02
551653.5	4172964.72	16325.57042	64933.92054	6826.90991	43425.45841	2.24557	2.1886	2.10E-03	8.34E-03	3.36E-03	2.14E-02	2.41E-04	2.37E-04	3.5671E-02
551683.5	4172964.72	15151.39145	68529.8599	6311.09683	41247.33254	1.63231	1.60096	1.95E-03	8.80E-03	3.11E-03	2.03E-02	1.75E-04	1.73E-04	3.4526E-02
551593.5	4172994.72	12159.06611	64530.09193	4460.35283	48234.39227	15.18407	13.34697	1.56E-03	8.29E-03	2.20E-03	2.38E-02	1.63E-03	1.45E-03	3.8882E-02
551665.23	4172962.34	16473.51325	64458.08407	6906.37397	41437.51083	1.94919	1.90559	2.12E-03	8.28E-03	3.40E-03	2.04E-02	2.09E-04	2.06E-04	3.4627E-02
551643.5	4172964.72	16643.45822	62018.37193	6883.28505	42897.52504	2.57386	2.49546	2.14E-03	7.97E-03	3.39E-03	2.11E-02	2.76E-04	2.70E-04	3.5174E-02
551693.5	4172964.72	14544.94026	67875.26586	6009.1789	39622.98207	1.48942	1.46284	1.87E-03	8.72E-03	2.96E-03	1.95E-02	1.60E-04	1.58E-04	3.3385E-02
551613.5	4172974.72	15018.38594	60632.73588	5794.2803	44202.12131	5.07398	4.76931	1.93E-03	7.79E-03	2.85E-03	2.18E-02	5.43E-04	5.17E-04	3.5407E-02
551633.5	4172964.72	16789.72793	59360.19719	6815.51137	41913.39179	3.02181	2.90986	2.16E-03	7.63E-03	3.36E-03	2.06E-02	3.24E-04	3.15E-04	3.4426E-02
551703.5	4172964.72	13876.99464	66108.74451	5683.29983	37795.87909	1.3671	1.3443	1.78E-03	8.49E-03	2.80E-03	1.86E-02	1.46E-04	1.46E-04	3.1986E-02
551563.5	4172884.72	81331.21839	17400.98346	10148.75781	13147.58305	10.1544	9.33204	1.04E-02	2.24E-03	5.00E-03	6.48E-03	1.09E-03	1.01E-03	2.6258E-02
551623.5	4172964.72	16832.20349	56494.46077	6655.05545	40552.362	3.65653	3.49081	2.16E-03	7.26E-03	3.28E-03	2.00E-02	3.92E-04	3.78E-04	3.3444E-02
551663.5	4172954.72	18297.49108	56481.92473	7638.37494	36705.89292	1.94251	1.89896	2.35E-03	7.26E-03	3.76E-03	1.81E-02	2.08E-04	2.06E-04	3.1865E-02
551653.5	4172954.72	18614.88047	55368.97431	7748.45391	37095.26357	2.17125	2.11747	2.39E-03	7.11E-03	3.82E-03	1.83E-02	2.33E-04	2.29E-04	3.2057E-02
551673.5	4172954.72	17984.90516	56903.80219	7483.11687	35935.98543	1.75752	1.72136	2.31E-03	7.31E-03	3.69E-03	1.77E-02	1.88E-04	1.86E-04	3.1384E-02
551713.5	4172964.72	13230.82234	63495.14909	5376.89536	36012.3334	1.26362	1.24379	1.70E-03	8.16E-03	2.65E-03	1.77E-02	1.35E-04	1.35E-04	3.0515E-02
551593.5	4172984.72	13527.16667	57009.60627	4894.32626	42609.58071	12.54757	11.15318	1.74E-03	7.32E-03	2.41E-03	2.10E-02	1.34E-03	1.21E-03	3.5014E-02
551603.5	4172974.72	15068.40732	55787.50582	5599.73285	41180.41703	6.95725	6.42483	1.94E-03	7.17E-03	2.76E-03	2.03E-02	7.45E-04	6.96E-04	3.3588E-02
551643.5	4172894.72	54547.4662	24657.71066	21005.1451	17267.26105	2.20303	2.14636	7.01E-03	3.17E-03	1.03E-02	8.51E-03	2.36E-04	2.32E-04	2.9497E-02
551653.5	4172894.72	54200.33522	24532.22031	21728.06478	16988.72198	2.00346	1.95497	6.96E-03	3.15E-03	1.07E-02	8.37E-03	2.15E-04	2.12E-04	2.9613E-02
551613.5	4172894.72	59475.30112	23407.76381	17308.03817	17021.27063	3.12234	3.01302	7.64E-03	3.01E-03	8.53E-03	8.38E-03	3.34E-04	3.26E-04	2.8219E-02
551663.5	4172894.72	54394.89596	24145.24155	22092.46377	16552.35664	1.82884	1.78675	6.99E-03	3.10E-03	1.09E-02	8.15E-03	1.96E-04	1.94E-04	2.9516E-02
551643.5	4172954.72	18959.40262	53348.37735	7803.83567	36894.24374	2.46638	2.39601	2.44E-03	6.85E-03	3.84E-03	1.82E-02	2.64E-04	2.60E-04	3.1831E-02
551623.5	4172894.72	56732.85613	24189.8831	18649.86581	17335.62856	2.72576	2.64394	7.29E-03	3.11E-03	9.19E-03	8.54E-03	2.92E-04	2.86E-04	2.8701E-02
551603.5	4172894.72	62461.94375	22488.11226	15370.8409	16506.4076	3.67038	3.51946	8.02E-03	2.89E-03	7.57E-03	8.13E-03	3.93E-04	3.81E-04	2.7391E-02
551633.5	4172894.72	54918.40523	24628.39382	19775.59363	17444.85857	2.43708	2.37045	7.06E-03	3.16E-03	9.74E-03	8.59E-03	2.61E-04	2.57E-04	2.9072E-02
551673.5	4172894.72	55237.53732	23415.2654	22155.84094	15895.66359	1.67563	1.63942	7.10E-03	3.01E-03	1.09E-02	7.83E-03	1.79E-04	1.78E-04	2.9206E-02
551683.5	4172954.72	17465.01188	56722.35553	7210.8732	34800.57638	1.59959	1.56908	2.24E-03	7.29E-03	3.55E-03	1.71E-02	1.71E-04	1.70E-04	3.0567E-02
551593.5	4172894.72	64394.68878	21603.40669	13358.76226	16003.87232	4.46657	4.24991	8.27E-03	2.78E-03	6.58E-03	7.88E-03	4.78E-04	4.60E-04	2.6451E-02
551613.5	4172964.72	16918.4115	53006.94638	6460.71617	38606.33441	4.61831	4.36082	2.17E-03	6.81E-03	3.18E-03	1.90E-02	4.95E-04	4.72E-04	3.2150E-02
551633.5	4172954.72	19173.69178	51283.34111	7730.9852	36189.65017	2.86704	2.76846	2.46E-03	6.59E-03	3.81E-03	1.78E-02	3.07E-04	3.00E-04	3.1294E-02
551693.5	4172954.72	16819.44461	55796.79203	6876.77345	33419.71801	1.46478	1.43874	2.16E-03	7.17E-03	3.39E-03	1.65E-02	1.57E-04	1.56E-04	2.9492E-02
551583.5	4172894.72	63972.95969	20819.13341	11893.88581	15540.06281	5.71225	5.37862	8.22E-03	2.67E-03	5.86E-03	7.66E-03	6.12E-04	5.83E-04	2.5601E-02
551623.5	4172954.72	19246.03261	49082.84487	7533.19635	35218.58148	3.41918	3.27583	2.47E-03	6.31E-03	3.71E-03	1.73E-02	3.66E-04	3.55E-04	3.0559E-02
551557.09	4172888.91	70563.19973	17257.61542	8944.04797	13100.64537	14.86924	13.40419	9.07E-03	2.22E-03	4.41E-03	6.45E-03	1.59E-03	1.45E-03	2.5186E-02
551653.5	4172944.72	21542.6283	47379.48934	8914.88491	32002.9712	2.11047	2.05936	2.77E-03	6.09E-03	4.39E-03	1.58E-02	2.26E-04	2.23E-04	2.9460E-02
551663.5	4172944.72	21252.95541	48013.65674	8816.25869	31535.96425	1.89727	1.85537	2.73E-03	6.17E-03	4.34E-03	1.55E-02	2.03E-04	2.01E-04	2.9180E-02
551643.5	4172944.72	21748.4066	46371.53521	8893.43979	32085.21655	2.37391	2.31007	2.79E-03	5.96E-03	4.38E-03	1.58E-02	2.54E-04	2.50E-04	2.9442E-02
551593.5	4172974.72	15129.281	50630.82652	5385.14945	37814.1355	10.50454	9.44357	1.94E-03	6.50E-03	2.65E-03	1.86E-02	1.13E-03	1.02E-03	3.1876E-02
551573.5	4172894.72	63700.89773	19800.10265	10439.90412	14887.9302	7.84232	7.27694	8.18E-03	2.54E-03	5.14E-03	7.33E-03	8.40E-04	7.88E-04	2.4832E-02
551603.5	4172964.72	17029.43932	49091.0022	6232.05275	36220.26086	6.17551	5.741	2.19E-03	6.31E-03	3.07E-03	1.78E-02	6.61E-04	6.22E-04	3.0690E-02
551703.5	4172954.72	16010.31755	54042.01896	6481.05252	31866.42428	1.34684	1.32441	2.06E-03	6.94E-03	3.19E-03	1.57E-02	1.44E-04	1.43E-04	2.8177E-02
551643.5	4172904.72	44265.11817	27574.02351	17286.54718	19253.92612	2.19276	2.13775	5.69E-03	3.54E-03	8.52E-03	9.48E-03	2.35E-04	2.32E-04	2.7695E-02
551673.5	4172944.72	20864.65701	48087.44327	8611.71376	30746.38301	1.72071	1.68561	2.68E-03	6.18E-03	4.24E-03	1.51E-02	1.84E-04	1.83E-04	2.8613E-02
551653.5	4172904.72	43857.93045	27576.78927	17643.82598	19010.78276	1.99027	1.94376	5.63E-03	3.54E-03	8.69E-03	9.36E-03	2.13E-04	2.11E-04	2.7657E-02
551633.5	4172904.72	44381.83343	27442.1568	16456.16468	19407.89057	2.43616	2.37031	5.70E-03	3.53E-03	8.11E-03	9.56E-03	2.61E-04	2.57E-04	2.7411E-02
551663.5	4172904.72	43700.56827	27284.84591	17715.08576	18594.02186	1.81422	1.77409	5.61E-03	3.51E-03	8.73E-03	9.16E-03	1.94E-04	1.92E-04	2.7392E-02
551623.5	4172904.72	45109.45182	26924.50445	15568.80196	19282.28546	2.74376	2.65888	5.80E-03	3.46E-03	7.67E-03	9.50E-03	2.94E-04	2.88E-04	2.7004E-02
551613.5	4172954.72	19305.4509	46476.60903	7268.71464	33826.49705	4.23937	4.02069	2.48E-03	5.97E-03	3.58E-03	1.67E-02	4.54E-04	4.35E-04	2.9584E-02
551673.5	4172904.72	43922.37097	26555.10037	17613.30733	17893.69234	1.66243	1.62763	5.64E-03	3.41E-03	8.68E-03	8.81E-03	1.78E-04	1.76E-04	2.6899E-02
551683.5	4172944.72	20338.96979	47544.46899	8312.93783	29705.20284	1.57153	1.54176	2.61E-03	6.11E-03	4.09E-03	1.46E-02	1.68E-04	1.67E-04	2.7784E-02
551613.5	4172904.72	45375.01449	26311.63112	14360.18702	19057.22341	3.16912	3.05352	5.83E-03	3.38E-03	7.07E-03	9.39E-03	3.39E-04	3.31E-04	2.6341E-02
551563.5	4172894.72	61620.2421	18765.87239	9244.38168	14202.08298	11.82169	10.74312	7.92E-03	2.41E-03	4.55E-03	7.00E-03	1.27E-03	1.16E-03	2.4307E-02
551643.5	4172914.72	36364.18731	31050.19873	14396.55151	21622.84836	2.20982	2.15433	4.67E-03	3.99E-03	7.09E-03	1.07E-02	2.37E-04	2.33E-04	2.6874E-02
551653.5	4172914.72	36053.87038	31177.29543	14598.01891	21396.65792	1.99891	1.95281	4.63E-03	4.01E-03	7.19E-03	1.05E-02	2.14E-04	2.11E-04	2.6794E-02
551713.5	4172954.72	15171.07571	51619.95857	6091.00151	30301.04388	1.24515	1.22564	1.95E-03	6.63E-03	3.00E-03	1.49E-02	1.33E-04	1.33E-04	2.6773E-02
551603.5	4172904.72	45811.46159	25451.01396	13128.26882	18627.23408	3.77892	3.61694	5.89E-03	3.27E-03	6.47E-03	9.18E-03	4.05E-04	3.92E-04	2.5594E-02
551633.5	4172914.72	36758.71256	30611.90687	13968.83252	21629.89001	2.46664	2.39886	4.72E-03	3.93E-03	6.88E-03	1.07E-02	2.64E-04	2.60E-04	2.6715E-02
551693.5	4172944.72	19553.04413	46461.08864	7896.99101	28469.62357	1.44134	1.41579	2.51E-03	5.97E-03	3.89E-03	1.40E-02	1.54E-04	1.53E-04	2.6703E-02

551663.5	4172914.72	35753.77328	31012.38721	14542.79504	21001.90745	1.81713	1.77763	4.59E-03	3.98E-03	7.16E-03	1.03E-02	1.95E-04	1.93E-04	2.6474E-02
551643.5	4172924.72	30229.74049	35235.86818	12120.01567	24475.84443	2.24992	2.19276	3.88E-03	4.53E-03	5.97E-03	1.21E-02	2.41E-04	2.37E-04	2.6916E-02
551653.5	4172924.72	30011.30947	35523.93083	12242.44561	24275.47351	2.02517	1.97774	3.86E-03	4.56E-03	6.03E-03	1.20E-02	2.17E-04	2.14E-04	2.6839E-02
551673.5	4172934.72	24629.15947	40746.89545	10080.64495	26579.87889	1.69321	1.65887	3.16E-03	5.23E-03	4.97E-03	1.31E-02	1.81E-04	1.80E-04	2.6819E-02
551623.5	4172914.72	37027.11555	29960.19141	13279.64646	21456.99415	2.80761	2.7152	4.76E-03	3.85E-03	6.54E-03	1.06E-02	3.01E-04	2.94E-04	2.6312E-02
551593.5	4172964.72	17120.89811	44976.9681	5966.35494	33558.44552	9.00184	8.17679	2.20E-03	5.78E-03	2.94E-03	1.65E-02	9.64E-04	8.86E-04	2.9297E-02
551633.5	4172924.72	30581.27484	34513.93429	11866.16581	24364.46127	2.52659	2.45374	3.93E-03	4.43E-03	5.85E-03	1.20E-02	2.71E-04	2.66E-04	2.6746E-02
551593.5	4172904.72	46589.74581	24242.24192	11949.64997	17978.14302	4.70052	4.46125	5.99E-03	3.11E-03	5.89E-03	8.86E-03	5.03E-04	4.83E-04	2.4829E-02
551673.5	4172914.72	35533.56535	30427.99527	14310.09488	20356.25525	1.66143	1.62746	4.56E-03	3.91E-03	7.05E-03	1.00E-02	1.78E-04	1.76E-04	2.5905E-02
551622.9	4172933.22	26500.07496	37205.44848	9995.03912	26673.33152	3.05177	2.93795	3.40E-03	4.78E-03	4.92E-03	1.31E-02	3.27E-04	3.18E-04	2.6892E-02
551583.5	4172974.72	15215.70527	45306.02414	5161.27058	34202.41097	10.2383	15.92042	1.95E-03	5.82E-03	2.54E-03	1.68E-02	1.10E-03	1.72E-03	2.9987E-02
551623.5	4172924.72	30814.1729	33560.63982	11400.41201	24041.08228	2.90963	2.80798	3.96E-03	4.31E-03	5.62E-03	1.18E-02	3.12E-04	3.04E-04	2.6344E-02
551613.5	4172914.72	36918.90984	29190.86961	12350.36289	21154.94398	3.28656	3.15856	4.74E-03	3.75E-03	6.08E-03	1.04E-02	3.52E-04	3.42E-04	2.5692E-02
551683.5	4172934.72	24118.24193	39912.92799	9752.63749	25626.18436	1.5507	1.52132	3.10E-03	5.13E-03	4.80E-03	1.26E-02	1.66E-04	1.65E-04	2.5985E-02
551613.5	4172934.72	25733.54833	36602.89242	9296.2328	26563.41842	3.65913	3.49648	3.31E-03	4.70E-03	4.58E-03	1.31E-02	3.92E-04	3.79E-04	2.6443E-02
551703.5	4172944.72	18666.23014	44848.45259	7457.40954	27158.52808	1.32947	1.30733	2.40E-03	5.76E-03	3.67E-03	1.34E-02	1.42E-04	1.42E-04	2.5496E-02
551583.5	4172904.72	47114.80666	22981.7269	10776.85433	17161.31528	6.16387	5.78073	6.05E-03	2.95E-03	5.31E-03	8.45E-03	6.60E-04	6.26E-04	2.4054E-02
551613.5	4172924.72	30562.37752	32592.47464	10679.91077	23635.55231	3.4494	3.30659	3.93E-03	4.19E-03	5.26E-03	1.16E-02	3.69E-04	3.58E-04	2.5745E-02
551603.5	4172914.72	36974.9867	28118.70974	11406.8094	20600.21837	3.98333	3.80014	4.75E-03	3.61E-03	5.62E-03	1.01E-02	4.27E-04	4.12E-04	2.4967E-02
551693.5	4172934.72	23199.01526	39227.21351	9247.46214	24540.81947	1.42572	1.4004	2.98E-03	5.04E-03	4.56E-03	1.21E-02	1.53E-04	1.52E-04	2.4968E-02
551573.5	4172904.72	47514.05616	21603.54351	9559.63921	16264.66762	8.81095	8.10682	6.10E-03	2.78E-03	4.71E-03	8.01E-03	9.44E-04	8.78E-04	2.3422E-02
551603.5	4172934.72	25781.70884	34791.80277	8770.88289	25550.11677	4.58612	4.33962	3.31E-03	4.47E-03	4.32E-03	1.26E-02	4.91E-04	4.70E-04	2.5650E-02
551603.5	4172924.72	30489.79715	31249.90199	9953.78026	22917.51904	4.24686	4.03636	3.92E-03	4.01E-03	4.90E-03	1.13E-02	4.55E-04	4.37E-04	2.5016E-02
551583.5	4172964.72	17219.35975	40724.16157	5682.65732	30691.18499	14.94659	13.17522	2.21E-03	5.23E-03	2.80E-03	1.51E-02	1.60E-03	1.43E-03	2.8390E-02
551593.5	4172914.72	37184.95109	26790.78566	10476.66281	19823.98708	5.04947	4.77032	4.78E-03	3.44E-03	5.16E-03	9.77E-03	5.41E-04	5.17E-04	2.4203E-02
551713.5	4172944.72	17693.67076	42816.79625	7012.80148	25849.673	1.23208	1.21274	2.27E-03	5.50E-03	3.45E-03	1.27E-02	1.32E-04	1.31E-04	2.4225E-02
551593.5	4172944.72	22380.40935	36158.95567	7373.58993	26889.84933	6.85142	6.34261	2.88E-03	4.65E-03	3.63E-03	1.32E-02	7.34E-04	6.87E-04	2.5819E-02
551703.5	4172934.72	22064.98625	37750.81716	8688.12201	23387.92505	1.3162	1.29421	2.83E-03	4.85E-03	4.28E-03	1.15E-02	1.41E-04	1.40E-04	2.3766E-02
551593.5	4172924.72	30683.09016	29560.61432	9254.31147	21903.90247	5.50529	5.17249	3.94E-03	3.80E-03	4.56E-03	1.08E-02	5.90E-04	5.60E-04	2.4238E-02
551563.5	4172904.72	47213.67567	20250.6411	8439.47155	15353.86378	14.13547	12.68789	6.07E-03	2.60E-03	4.16E-03	7.56E-03	1.51E-03	1.37E-03	2.3276E-02
551593.5	4172934.72	25932.42313	32687.15312	8228.36231	24260.79135	6.08874	5.68335	3.33E-03	4.20E-03	4.05E-03	1.20E-02	6.52E-04	6.16E-04	2.4803E-02
551583.5	4172914.72	37228.88631	25247.46802	9544.74597	18926.91392	6.78479	6.32414	4.78E-03	3.24E-03	4.70E-03	9.32E-03	7.27E-04	6.85E-04	2.3463E-02
551703.5	4172924.72	26569.91277	31913.26201	10298.2154	20330.94362	1.30773	1.28576	3.41E-03	4.10E-03	5.07E-03	1.00E-02	1.40E-04	1.39E-04	2.2881E-02
551583.5	4172944.72	22376.63884	33523.64705	6901.26665	25161.92293	10.22682	9.2578	2.87E-03	4.31E-03	3.40E-03	1.24E-02	1.10E-03	1.00E-03	2.5074E-02
551583.5	4172924.72	30627.32017	27833.59692	8509.917	20810.2497	7.60079	7.03138	3.93E-03	3.58E-03	4.19E-03	1.03E-02	8.14E-04	7.62E-04	2.3529E-02
551573.5	4172914.72	36865.08723	23792.06947	8637.78544	17984.5722	9.78939	8.97003	4.74E-03	3.06E-03	4.25E-03	8.86E-03	1.05E-03	9.71E-04	2.2927E-02
551713.5	4172934.72	20830.02222	35986.11449	8140.19837	22247.55837	1.22074	1.20149	2.68E-03	4.62E-03	4.01E-03	1.10E-02	1.31E-04	1.30E-04	2.2529E-02
551583.5	4172934.72	25842.91603	30598.59931	7628.25228	22916.45438	8.66241	7.94539	3.32E-03	3.93E-03	3.76E-03	1.13E-02	9.28E-04	8.61E-04	2.4086E-02
551565.79	4172915.74	36727.91684	22488.93824	7910.71388	17057.6278	15.15319	13.56103	4.72E-03	2.89E-03	3.90E-03	8.40E-03	1.62E-03	1.47E-03	2.2999E-02
551575.79	4172944.97	22369.73737	31215.64745	6535.70194	23736.23156	15.42568	13.66235	2.87E-03	4.01E-03	3.22E-03	1.17E-02	1.65E-03	1.48E-03	2.4928E-02
551573.5	4172924.72	30480.87814	25895.37057	7791.24632	19614.12612	11.45782	10.39103	3.92E-03	3.33E-03	3.84E-03	9.66E-03	1.23E-03	1.13E-03	2.3095E-02
551573.5	4172934.72	26107.371	27980.47894	7091.11248	21271.47599	14.24764	12.71839	3.35E-03	3.59E-03	3.49E-03	1.05E-02	1.53E-03	1.38E-03	2.3824E-02
CONCUNIT ug/	m^3													
DEPUNIT g/m^	2													

APPENDIX E

Biological Resources Methods Memorandum

1.0 INTRODUCTION

This memorandum (memo) was prepared to support Section 4.4 Biological Resources of the SCEA for the Midway Village Redevelopment Project (Project). Specifically, this memo describes the methods and results for determining the potential for special-status species to occur onsite.

2.0 METHODS

A Stantec biologist conducted a desktop analysis based on a review of existing information about sensitive biological resources known to occur near the project site to determine whether biological resources are absent, present, and/or are likely to be present. For the purpose of this evaluation, special-status plant species include plants that are as follows: 1) listed as threatened or endangered under the California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA); 2) proposed for federal listing as threatened or endangered; 3) state or federal candidate species; 4) designated as rare by the California Department of Fish and Wildlife (CDFW); or 5) California Rare Plant Rank 1A, 1B, 2A or 2B species. Special-status animal species include species that are as follows: 1) listed as threatened or endangered under CESA or FESA; 2) proposed for federal listing as threatened or endangered; 3) state or federal candidate species; or 4) identified by the CDFW as species of special concern or fully protected species.

Sensitive natural communities are those communities that are highly limited in distribution and may or may not contain rare, threatened, or endangered species. The California Natural Diversity Database (CNDDB) ranks natural communities according to their rarity and endangerment in California. Habitats are considered sensitive if they are identified on the CDFW List of Vegetation Alliances and Associations as being highly imperiled or classified by CDFW in the CNDDB as natural communities of special concern – Ranks S1 to S3.

A CNDDB and California Native Plant Society (CNPS) database search for special-status species typically includes nine U.S. Geological Survey 7.5-minute quadrangle maps for a small project located within a single quadrangle—the quadrangle that covers the study area—and the eight quadrangles that surround the project quadrangle. In this case, the *San Francisco South, San Francisco North, Oakland West,* and *Hunter's Point* topographic quadrangles within a 5-mile radius of the project site were queried.

Other information sources consulted to determine which special-status species could potentially occur in the project site included the following:

- USGS California 7.5-minute topographic quadrangles for San Francisco South, San Francisco North, Oakland West, and Hunter's Point;
- Aerial photographs of the project site and surrounding vicinity (Google Earth 2019);
- United States Fish and Wildlife Service (USFWS) list of endangered and threatened species that may occur in the project site (USFWS 2019a);
- USFWS Designated Critical Habitat (USFWS 2019a)
- USFWS National Wetlands Inventory (USFWS 2019b)
- The CDFW CNDDB plant and animal records within 5 miles of the project site (CDFW 2019a);

- Special Animals List (CDFW 2019b);
- The CNPS online Inventory of Rare and Endangered Plants (CNPS 2019)
- California Wildlife Habitat Relationships System (WHRS) (CDFW 2014).

Based on this review of existing information, a list of special-status species that have the potential to occur or are known to occur in the project site and vicinity was developed. The list was refined based on the habitat within and adjacent to the project site to determine the potential for those species to occur.

2.1 HABITAT COMMUNITIES

Habitat types within the project site were classified based on descriptions provided in *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988), as well as the California Natural Community List (CDFW 2019c), which is adapted from the technical approach and vegetation alliance classification system described in *A Manual of California Vegetation* (Sawyer et al. 2009). The habitat community present in the project site includes Urban. No aquatic resources were identified in the project site. A description of the habitat within the project site is provided below.

2.1.1 Urban

The project site consists of residential and commercial structures, parking areas, landscaped areas, and an existing park. The existing park includes an open grass area, play structures, and basketball courts. Landscaped areas throughout the project site include ornamental trees and shrubs planted adjacent to roadways and walkways. Additionally, there are trees planted adjacent to the northern and eastern boundary of the project site.

2.1.2 Aquatic Habitats

No aquatic habitats occur within the project site; however, a small unnamed creek flows underneath the project site through a box culvert system that outlets approximately 50 feet east of the project limits into an open earthen channel. The project would not impact the existing culvert that flows underneath the project. Based on aerial imagery, vegetation along the unnamed creek includes unknown shrubs and herbaceous species. Approximately 650 feet downstream of the project site, there is an existing marsh adjacent to the channel. The unnamed creek continues flowing through another box culvert until it reaches an open channel and into the San Francisco Bay. The creek appears to receive runoff from the surrounding developments and roadsides.

3.0 DATABASE RESULTS

3.1 SPECIAL-STATUS SPECIES

3.1.1 Plants

A total of 65 special-status plant species were identified based on a review of pertinent literature, the USFWS species list and CNDDB and CNPS database records (Appendix A). CNNDB special-status plant species occurrences were reviewed within 5 miles of the project site. For each species, habitat requirements were assessed and compared to the habitats in the project site and immediate vicinity to determine if potential habitat occurs in the project site. The project site does not provide suitable habitat for special-status plants due to the existing development. The unnamed creek, once it outlets adjacent to the project site in an open earthen channel, has limited suitable habitat; therefore, there is low potential to support the following special-status plants within the unnamed creek channel:

- bristly sedge (*Carex comosa*) – CNPS 2B.1
- California seablite (*Suaeda californica*) – Federal Endangered (FE), CNPS 1B.1
- johnny-nip (*Castilleja ambigua* var. *ambigua*) – CNPS 4.2
- marsh sandwort (*Arenaria paludicola*) – FE, State Endangered (SE), CNPS 1B.1
- water star-grass (*Heteranthera dubia*) – CNPS 2B.2

3.1.2 Wildlife

A total of 58 special-status animal species were identified based on a review of pertinent literature, the USFWS species list, CNDDB database records (Appendix A), and a query of the California WHRS (CDFW 2014). CNNDB special-status animal species occurrences were reviewed within 5 miles of the project site. For each species, habitat requirements were assessed and compared to the habitats in the project site and the immediate vicinity to determine the species' potential to occur in or near the project site. The project site does not provide suitable habitat for special-status species due to the existing development. The unnamed creek, once it outlets adjacent to the project site in an open earthen channel, has limited suitable habitat; therefore, there is low potential to support the following special-status animals within the unnamed creek channel:

- California red-legged frog (*Rana draytonii*) – Federal Threatened (FT), Species of Special Concern (SSC)
- San Francisco gartersnake (*Thamnophis sirtalis tetrataenia*) – FE, SE, Federal Protected (FP)
- western bumble bee (*Bombus occidentalis*) – Critically Endangered (CE)
- western pond turtle (*Emys marmorata*) – SSC

3.2 CRITICAL HABITAT

The project site is not within USFWS designated critical habitat (Appendix A). There is critical habitat within the vicinity of the project site, including Franciscan manzanita (*Arctostaphylos franciscana*) critical habitat located 0.77 mile northwest and Bay checkerspot butterfly critical habitat located 1.25 miles south of the project site.

Appendix A: Database Table Results

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (San Francisco South (3712264) OR San Francisco North (3712274) OR Oakland West (3712273) OR Hunters Point (3712263))
 AND Taxonomic Group IS (Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Allium peninsulare var. franciscanum Franciscan onion	PMLIL021R1	None	None	G5T2	S2	1B.2
Amsinckia lunaris bent-flowered fiddleneck	PDBOR01070	None	None	G3	S3	1B.2
Arctostaphylos franciscana Franciscan manzanita	PDERI040J3	Endangered	None	G1	S1	1B.1
Arctostaphylos imbricata San Bruno Mountain manzanita	PDERI040L0	None	Endangered	G1	S1	1B.1
Arctostaphylos montana ssp. ravenii Presidio manzanita	PDERI040J2	Endangered	Endangered	G3T1	S1	1B.1
Arctostaphylos montaraensis Montara manzanita	PDERI042W0	None	None	G1	S1	1B.2
Arctostaphylos pacifica Pacific manzanita	PDERI040Z0	None	Endangered	G1	S1	1B.1
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Carex comosa bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
Carex praticola northern meadow sedge	PMCYP03B20	None	None	G5	S2	2B.2
Centromadia parryi ssp. parryi pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
Chloropyron maritimum ssp. palustre Point Reyes salty bird's-beak	PDSCR0J0C3	None	None	G4?T2	S2	1B.2
Chorizanthe cuspidata var. cuspidata San Francisco Bay spineflower	PDPGN04081	None	None	G2T1	S1	1B.2
Chorizanthe robusta var. robusta robust spineflower	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
Cirsium andrewsii Franciscan thistle	PDAST2E050	None	None	G3	S3	1B.2
Cirsium hydrophilum var. vaseyi Mt. Tamalpais thistle	PDAST2E1G2	None	None	G2T1	S1	1B.2
Cirsium occidentale var. compactum compact cobwebby thistle	PDAST2E1Z1	None	None	G3G4T2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Clarkia franciscana Presidio clarkia	PDONA050H0	Endangered	Endangered	G1	S1	1B.1
Collinsia corymbosa round-headed Chinese-houses	PDSCR0H060	None	None	G1	S1	1B.2
Collinsia multicolor San Francisco collinsia	PDSCR0H0B0	None	None	G2	S2	1B.2
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Gilia capitata ssp. chamissonis blue coast gilia	PDPLM040B3	None	None	G5T2	S2	1B.1
Gilia millefoliata dark-eyed gilia	PDPLM04130	None	None	G2	S2	1B.2
Grindelia hirsutula var. maritima San Francisco gumplant	PDAST470D3	None	None	G5T1Q	S1	3.2
Helianthella castanea Diablo helianthella	PDAST4M020	None	None	G2	S2	1B.2
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	PDAST4R065	None	None	G5T2	S2	1B.2
Hesperevax sparsiflora var. brevifolia short-leaved evax	PDASTE5011	None	None	G4T3	S2	1B.2
Hesperolinon congestum Marin western flax	PDLIN01060	Threatened	Threatened	G1	S1	1B.1
Heteranthera dubia water star-grass	PMPON03010	None	None	G5	S2	2B.2
Holocarpha macradenia Santa Cruz tarplant	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
Horkelia cuneata var. sericea Kellogg's horkelia	PDROS0W043	None	None	G4T1?	S1?	1B.1
Horkelia marinensis Point Reyes horkelia	PDROS0W0B0	None	None	G2	S2	1B.2
Hypogymnia schizidiata island tube lichen	NLT0032640	None	None	G2	S1	1B.3
Layia carnosa beach layia	PDAST5N010	Endangered	Endangered	G2	S2	1B.1
Leptosiphon rosaceus rose leptosiphon	PDPLM09180	None	None	G1	S1	1B.1
Lessingia germanorum San Francisco lessingia	PDAST5S010	Endangered	Endangered	G1	S1	1B.1
Malacothamnus arcuatus arcuate bush-mallow	PDMAL0Q0E0	None	None	G2Q	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Microseris paludosa marsh microseris	PDAST6E0D0	None	None	G2	S2	1B.2
Monardella sinuata ssp. nigrescens northern curly-leaved monardella	PDLAM18162	None	None	G3T2	S2	1B.2
Pentachaeta bellidiflora white-rayed pentachaeta	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
Plagiobothrys chorisianus var. chorisianus Choris' popcornflower	PDBOR0V061	None	None	G3T1Q	S1	1B.2
Plagiobothrys diffusus San Francisco popcornflower	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
Plagiobothrys glaber hairless popcornflower	PDBOR0V0B0	None	None	GH	SH	1A
Polemonium carneum Oregon polemonium	PDPLM0E050	None	None	G3G4	S2	2B.2
Polygonum marinense Marin knotweed	PDPGN0L1C0	None	None	G2Q	S2	3.1
Sanicula maritima adobe sanicle	PDAPI1Z0D0	None	Rare	G2	S2	1B.1
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Silene scouleri ssp. scouleri Scouler's catchfly	PDCAR0U1MC	None	None	G5T4T5	S2S3	2B.2
Silene verecunda ssp. verecunda San Francisco campion	PDCAR0U213	None	None	G5T1	S1	1B.2
Stebbinsoseris decipiens Santa Cruz microseris	PDAST6E050	None	None	G2	S2	1B.2
Suaeda californica California seablite	PDCHE0P020	Endangered	None	G1	S1	1B.1
Trifolium amoenum two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Triphysaria floribunda San Francisco owl's-clover	PDSCR2T010	None	None	G2?	S2?	1B.2
Triquetrella californica coastal triquetrella	NBMUS7S010	None	None	G2	S2	1B.2
Viburnum ellipticum oval-leaved viburnum	PDCPR07080	None	None	G4G5	S3?	2B.3

Record Count: 58

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (San Francisco South (3712264) OR San Francisco North (3712274) OR Oakland West (3712273) OR Hunters Point (3712263))
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Adela oplerella Opler's longhorn moth	IILEE0G040	None	None	G2	S2	
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Banksula incredula incredible harvestman	ILARA14100	None	None	G1	S1	
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
Caecidotea tomalensis Tomales isopod	ICMAL01220	None	None	G2	S2S3	
Callophrys mossii bayensis San Bruno elfin butterfly	IILEPE2202	Endangered	None	G4T1	S1	
Charadrius alexandrinus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Circus hudsonius northern harrier	ABNKC11011	None	None	G5	S3	SSC
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Danaus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
Dicamptodon ensatus California giant salamander	AAAAH01020	None	None	G3	S2S3	SSC
Dufourea stagei Stage's dufourine bee	IIHYM22010	None	None	G1G2	S1	
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Enhydra lutris nereis southern sea otter	AMAJF09012	Threatened	None	G4T2	S2	FP
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered	None	G3	S3	SSC
Euphydryas editha bayensis Bay checkerspot butterfly	IILEPK4055	Threatened	None	G5T1	S1	
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Geothlypis trichas sinuosa saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T3	S3	SSC
Hydroporus leechi Leech's skyline diving beetle	IICOL55040	None	None	G1?	S1?	
Ischnura gemina San Francisco forktail damselfly	IIODO72010	None	None	G2	S2	
Lasiurus blossevillii western red bat	AMACC05060	None	None	G5	S3	SSC
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
Lichnanthe ursina bumblebee scarab beetle	IICOL67020	None	None	G2	S2	
Melospiza melodia pusillula Alameda song sparrow	ABPBXA301S	None	None	G5T2?	S2S3	SSC
Melospiza melodia samuelis San Pablo song sparrow	ABPBXA301W	None	None	G5T2	S2	SSC
Mylopharodon conocephalus hardhead	AFCJB25010	None	None	G3	S3	SSC
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Phalacrocorax auritus double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
Plebejus icarioides missionensis Mission blue butterfly	IILEPG801A	Endangered	None	G5T1	S1	
Rallus obsoletus obsoletus California Ridgway's rail	ABNME05011	Endangered	Endangered	G5T1	S1	FP
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Reithrodontomys raviventris salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	G1G2	S1S2	FP
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Scapanus latimanus insularis Angel Island mole	AMABB02032	None	None	G5THQ	SH	
Scapanus latimanus parvus Alameda Island mole	AMABB02031	None	None	G5THQ	SH	SSC
Speyeria callippe callippe callippe silverspot butterfly	IILEPJ6091	Endangered	None	G5T1	S1	
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis sirtalis tetrataenia San Francisco gartersnake	ARADB3613B	Endangered	Endangered	G5T2Q	S2	FP
Trachusa gummifera San Francisco Bay Area leaf-cutter bee	IIHYM80010	None	None	G1	S1	
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
Vespericola marinensis Marin hesperian	IMGASA4140	None	None	G2	S2	
Zapus trinotatus orarius Point Reyes jumping mouse	AMAFH01031	None	None	G5T1T3Q	S1S3	SSC

Record Count: 52

CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

65 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3712274, 3712264 3712273 and 3712263;

Modify Search Criteria Export to Excel Modify Columns Modify Sort Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	1B.2	S3	G3
Arabis blepharophylla	coast rockcress	Brassicaceae	perennial herb	Feb-May	4.3	S4	G4
Arctostaphylos franciscana	Franciscan manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	1B.1	S1	G1
Arctostaphylos imbricata	San Bruno Mountain manzanita	Ericaceae	perennial evergreen shrub	Feb-May	1B.1	S1	G1
Arctostaphylos montana ssp. ravenii	Presidio manzanita	Ericaceae	perennial evergreen shrub	Feb-Mar	1B.1	S1	G3T1
Arctostaphylos montaraensis	Montara manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	1B.2	S1	G1
Arctostaphylos pacifica	Pacific manzanita	Ericaceae	evergreen shrub	Feb-Apr	1B.1	S1	G1
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	1B.1	S1	G1
Aspidotis carlotta-halliae	Carlotta Hall's lace fern	Pteridaceae	perennial rhizomatous herb	Jan-Dec	4.2	S3	G3
Astragalus nuttallii var. nuttallii	ocean bluff milk-vetch	Fabaceae	perennial herb	Jan-Nov	4.2	S4	G4T4
Astragalus tener var. tener	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	1B.2	S1	G2T1
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	2B.1	S2	G5
Carex praticola	northern meadow sedge	Cyperaceae	perennial herb	May-Jul	2B.2	S2	G5
Castilleja ambigua var. ambigua	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	4.2	S3S4	G4T4
Centromadia parryi ssp. parryi	pappose tarplant	Asteraceae	annual herb	May-Nov	1B.2	S2	G3T2
Chloropyron maritimum ssp. palustre	Point Reyes bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Oct	1B.2	S2	G4?T2

Chorizanthe cuspidata var. cuspidata	San Francisco Bay spineflower	Polygonaceae	annual herb	Apr-Jul(Aug)	1B.2	S1	G2T1
Chorizanthe robusta var. robusta	robust spineflower	Polygonaceae	annual herb	Apr-Sep	1B.1	S1	G2T1
Cirsium andrewsii	Franciscan thistle	Asteraceae	perennial herb	Mar-Jul	1B.2	S3	G3
Cirsium hydrophilum var. vaseyi	Mt. Tamalpais thistle	Asteraceae	perennial herb	May-Aug	1B.2	S1	G2T1
Cirsium occidentale var. compactum	compact cobwebby thistle	Asteraceae	perennial herb	Apr-Jun	1B.2	S2	G3G4T2
Clarkia franciscana	Presidio clarkia	Onagraceae	annual herb	May-Jul	1B.1	S1	G1
Collinsia corymbosa	round-headed Chinese-houses	Plantaginaceae	annual herb	Apr-Jun	1B.2	S1	G1
Collinsia multicolor	San Francisco collinsia	Plantaginaceae	annual herb	(Feb)Mar-May	1B.2	S2	G2
Equisetum palustre	marsh horsetail	Equisetaceae	perennial rhizomatous herb	unk	3	S1S3	G5
Eriophorum gracile	slender cottongrass	Cyperaceae	perennial rhizomatous herb (emergent)	May-Sep	4.3	S4	G5
Erysimum franciscanum	San Francisco wallflower	Brassicaceae	perennial herb	Mar-Jun	4.2	S3	G3
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2	G2
Gilia capitata ssp. chamissonis	blue coast gilia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G5T2
Gilia millefoliata	dark-eyed gilia	Polemoniaceae	annual herb	Apr-Jul	1B.2	S2	G2
Grindelia hirsutula var. maritima	San Francisco gumplant	Asteraceae	perennial herb	Jun-Sep	3.2	S1	G5T1Q
Helianthella castanea	Diablo helianthella	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	1B.2	S2	G5T2
Hesperevax sparsiflora var. brevifolia	short-leaved evax	Asteraceae	annual herb	Mar-Jun	1B.2	S2	G4T3
Hesperolinon congestum	Marin western flax	Linaceae	annual herb	Apr-Jul	1B.1	S1	G1
Heteranthera dubia	water star-grass	Pontederiaceae	perennial herb (aquatic)	Jul-Oct	2B.2	S2	G5
Holocarpha macradenia	Santa Cruz tarplant	Asteraceae	annual herb	Jun-Oct	1B.1	S1	G1
Horkelia cuneata var. sericea	Kellogg's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.1	S1?	G4T1?
Horkelia marinensis	Point Reyes horkelia	Rosaceae	perennial herb	May-Sep	1B.2	S2	G2
Hypogymnia schizidiata	island rock lichen	Parmeliaceae	foliose lichen (null)		1B.3	S1	G2
Iris longipetala	coast iris	Iridaceae	perennial rhizomatous herb	Mar-May	4.2	S3	G3
Layia carnosa	beach layia	Asteraceae	annual herb	Mar-Jul	1B.1	S2	G2
Leptosiphon rosaceus	rose leptosiphon	Polemoniaceae	annual herb	Apr-Jul	1B.1	S1	G1
Lessingia germanorum	San Francisco lessingia	Asteraceae	annual herb	(Jun)Jul-Nov	1B.1	S1	G1

Malacothamnus arcuatus	arcuate bush-mallow	Malvaceae	perennial evergreen shrub	Apr-Sep	1B.2	S2	G2Q
Micropus amphibolus	Mt. Diablo cottonweed	Asteraceae	annual herb	Mar-May	3.2	S3S4	G3G4
Microseris paludosa	marsh microseris	Asteraceae	perennial herb	Apr-Jun(Jul)	1B.2	S2	G2
Monardella sinuata ssp. nigrescens	northern curly-leaved monardella	Lamiaceae	annual herb	(Apr)May-Jul(Aug-Sep)	1B.2	S2	G3T2
Pentachaeta bellidiflora	white-rayed pentachaeta	Asteraceae	annual herb	Mar-May	1B.1	S1	G1
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower	Boraginaceae	annual herb	Mar-Jun	1B.2	S1	G3T1Q
Plagiobothrys diffusus	San Francisco popcornflower	Boraginaceae	annual herb	Mar-Jun	1B.1	S1	G1Q
Polemonium carneum	Oregon polemonium	Polemoniaceae	perennial herb	Apr-Sep	2B.2	S2	G3G4
Sanicula maritima	adobe sanicle	Apiaceae	perennial herb	Feb-May	1B.1	S2	G2
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	2B.2	S2	G3
Silene scouleri ssp. scouleri	Scouler's catchfly	Caryophyllaceae	perennial herb	(Mar-May)Jun-Aug(Sep)	2B.2	S2S3	G5T4T5
Silene verecunda ssp. verecunda	San Francisco campion	Caryophyllaceae	perennial herb	(Feb)Mar-Jun(Aug)	1B.2	S1	G5T1
Spergularia macrotheca var. longistyla	long-styled sand-spurrey	Caryophyllaceae	perennial herb	Feb-May(Jun)	1B.2	S2	G5T2
Stebbinsoseris decipiens	Santa Cruz microseris	Asteraceae	annual herb	Apr-May	1B.2	S2	G2
Suaeda californica	California seablite	Chenopodiaceae	perennial evergreen shrub	Jul-Oct	1B.1	S1	G1
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	1B.1	S1	G1
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	G2
Triphysaria floribunda	San Francisco owl's-clover	Orobanchaceae	annual herb	Apr-Jun	1B.2	S2?	G2?
Triquetrella californica	coastal triquetrella	Pottiaceae	moss		1B.2	S2	G2
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5

Suggested Citation

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Questions and Comments

rareplants@cnps.org

IPaC **U.S. Fish & Wildlife Service**

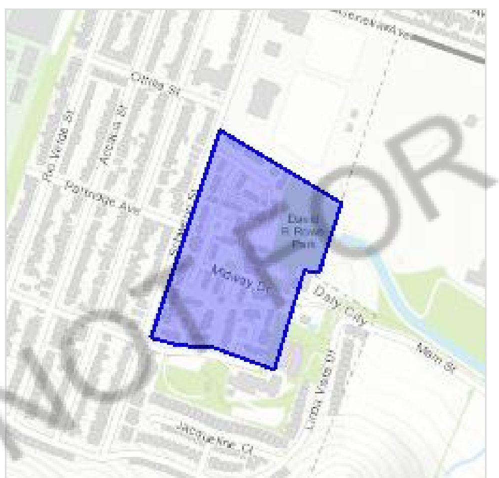
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Mateo County, California



Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Salt Marsh Harvest Mouse Reithrodontomys raviventris — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/613

Southern Sea Otter Enhydra lutris nereis — Threatened, Marine mammal
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8560

Birds

NAME	STATUS
California Clapper Rail Rallus longirostris obsoletus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4240	Endangered
California Least Tern Sterna antillarum browni No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Marbled Murrelet Brachyramphus marmoratus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/4467	Threatened
Short-tailed Albatross Phoebastria (=Diomedea) albatrus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/433	Endangered
Western Snowy Plover Charadrius nivosus nivosus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle Chelonia mydas No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6199	Threatened
San Francisco Garter Snake Thamnophis sirtalis tetrataenia No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5956	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened
Tidewater Goby Eucyclogobius newberryi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Bay Checkerspot Butterfly Euphydryas editha bayensis There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2320	Threatened
Callippe Silverspot Butterfly Speyeria callippe callippe There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3779	Endangered
Mission Blue Butterfly Icaricia icarioides missionensis There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/6928	Endangered
Myrtle's Silverspot Butterfly Speyeria zerene myrtleae No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6929	Endangered
San Bruno Elfin Butterfly Callophrys mossii bayensis There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3394	Endangered

Flowering Plants

NAME	STATUS
Franciscan Manzanita Arctostaphylos franciscana There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/5350	Endangered
Presidio Manzanita Arctostaphylos hookeri var. ravenii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7216	Endangered
Robust Spineflower Chorizanthe robusta var. robusta There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/9287	Endangered
San Francisco Lessingia Lessingia germanorum (=L.g. var. germanorum) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8174	Endangered
Showy Indian Clover Trifolium amoenum No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6459	Endangered
White-rayed Pentachaeta Pentachaeta bellidiflora No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7782	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Allen's Hummingbird Selasphorus sasin — Breeds Feb 1 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9637

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

Black Oystercatcher Haematopus bachmani — Breeds Apr 15 to Oct 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9591

Black Skimmer Rynchops niger — Breeds May 20 to Sep 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5234

Black Turnstone Arenaria melanocephala — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Burrowing Owl Athene cunicularia — Breeds Mar 15 to Aug 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9737

Clark's Grebe Aechmophorus clarkii — Breeds Jan 1 to Dec 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Long-billed Curlew Numenius americanus — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — Breeds Apr 15 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Whimbrel Numenius phaeopus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9483

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

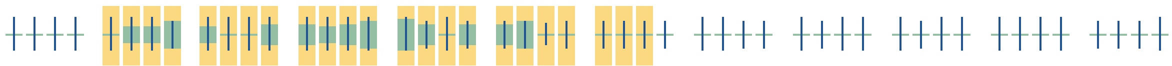
No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

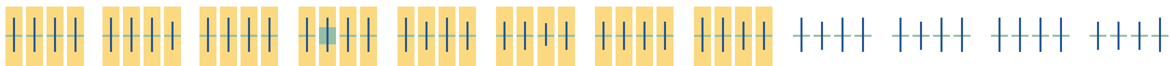
probability of presence breeding season survey effort no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

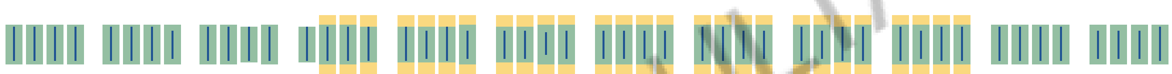
Allen's Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



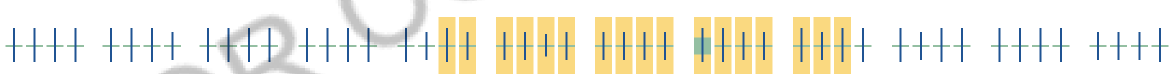
Bald Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Black Oystercatcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

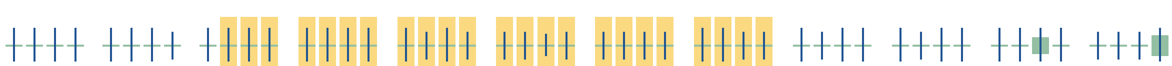


Black Skimmer
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

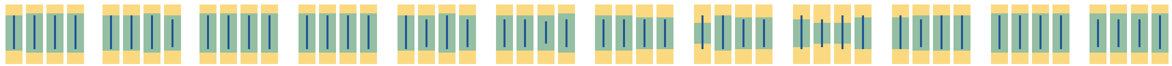


Black Turnstone
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

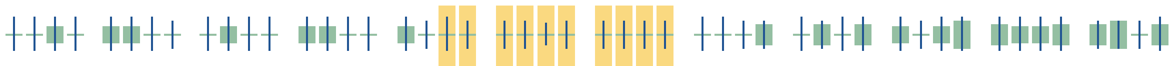
Burrowing Owl
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



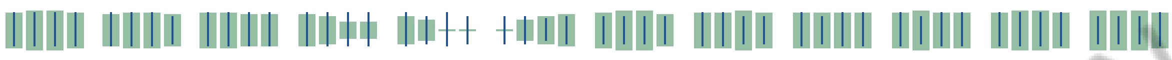
Clark's Grebe
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



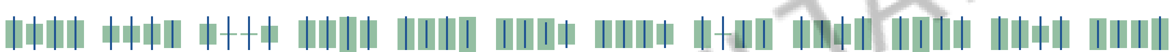
Common Yellowthroat
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



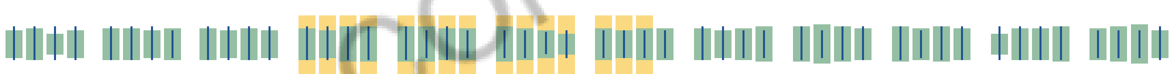
Long-billed Curlew
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Marbled Godwit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



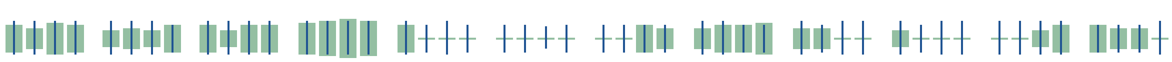
Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



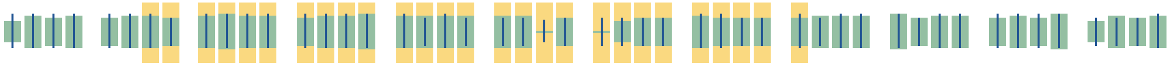
Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

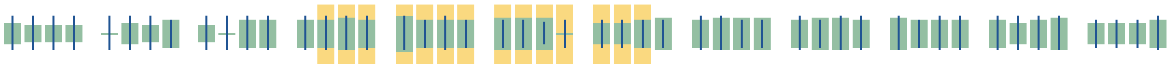
Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



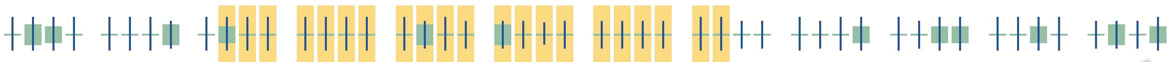
Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



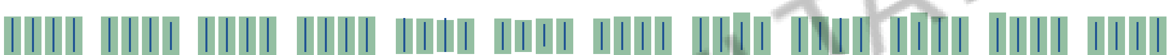
Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Tricolored Blackbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

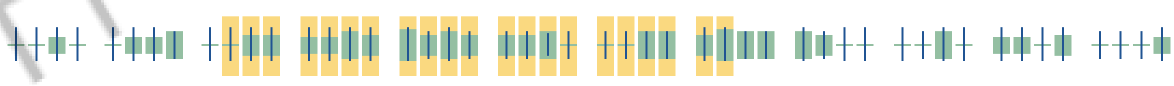


Whimbrel
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review.

Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Marine mammals

Marine mammals are protected under the Marine Mammal Protection Act. Some are also protected under the Endangered Species Act[1] and the Convention on International Trade in Endangered Species of Wild Fauna and Flora[2].

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries[3] [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the Marine Mammals page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The Endangered Species Act (ESA) of 1973.
2. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME
Southern Sea Otter *Enhydra lutris nereis* https://ecos.fws.gov/ecp/species/8560

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX F

Preliminary Arborist Report

Preliminary Arborist Report

Midway Village
Daly City, CA

PREPARED FOR
MidPen Housing Corporation
303 Vintage Park Drive, Suite 250
Foster City, CA 94404

PREPARED BY:
HortScience | Bartlett Consulting
325 Ray St.
Pleasanton, CA 94566

September 24, 2019

Preliminary Arborist Report
Midway Village
Daly City, CA

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Introduction and Overview

MidPen Housing Corporation is planning redevelopment of the sites at Midway Village in Daly City, CA. The sites currently consist of a public affordable housing development with parks, interior streets, and landscaping. HortScience | Bartlett Consulting was asked to prepare a **Preliminary Arborist Report** for the sites as part of the project submittal. This report is preliminary because plans are in the conceptual phase and surveyed tree locations were not on plans

This report provides the following information:

1. An evaluation of the health and structural condition of the trees within the proposed project area based on a visual inspection from the ground.
2. A preliminary assessment of trees that will be preserved and removed based on plans provided by the client.
3. Guidelines for tree preservation during the design, construction, and maintenance phases of development.

Tree Assessment Methods

Trees were assessed on September 3, 2019. The survey included all trees (as defined by the Daly City ordinance) located within the proposed project area. The assessment procedure consisted of the following steps:

1. Identifying the tree species;
2. Tagging each tree with an identifying number and recording its location on a map;
3. Measuring the trunk diameter at a point 4.5' above grade;
4. Evaluating the health and structural condition using a scale of 1 – 5:

   5 - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
   4 - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
   3 - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
   2 - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
   1 - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.

5. Rating the suitability for preservation as "high", "moderate" or "low". Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.

   High: Tree with good health and structural stability that have the potential for longevity at the site.

   Moderate: Tree with somewhat declining health and/or structural defects that can be abated with treatment. The tree will require more intense management and monitoring and may have shorter life span than those in 'high' category.

Low: Tree in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes and generally are unsuited for use areas.

Description of Trees

Two-hundred nineteen (219) trees were evaluated, including 38 different species (Table 1, next page). Overall, the trees at the site were in good condition (49%), with 34% in fair condition, and 17% in poor condition. Descriptions of each tree are found in the ***Tree Assessment*** and approximate locations are plotted on the ***Tree Inventory Map*** (see Exhibits).

The largest trees on the site were Italian stone pines and Monterey pines. Five Monterey pines were evaluated. Trunk diameters of the three largest trees ranged from 26-43 inches. Three trees were in fair (#107 & 209) and good (#148) condition. One Monterey pine in poor condition (#60) had codominant trunks of 22 and 15 inches, with the leader having been previously removed. The smallest Monterey pine #15 had a 2-inch diameter trunk.

Three Italian stone pines had trunks that ranged from 27 to 43 inches in diameter. Tree #114 had fair form and structure, while trees #115 and 116 were rated in good condition, both with dense spreading crowns (Photo 1).

Photo 1: Italian stone pines #115 and 116, both in good condition, were the largest trees evaluated.

The most common species evaluated was Chinese elm, with 39 trees (18% of the population). Most trees were located along Schwerin Street. Trees were young to semi-mature, with an average trunk diameter of 5 inches. More than half the trees (22 total) were in good condition with dense foliage and typical structure. Trees in fair condition had thinning crowns and/or some structural defects. Two trees (#68 & 70) were nearly dead.

Thirty-five (35) Australian willows were evaluated (16%). Trees were young, with an average trunk diameter of 2 inches. About half the trees (18 total) were in good condition with good structure and dense foliage. Ten (10) trees in fair condition had slightly thin crowns. Seven trees were in decline or nearly dead.

Thirteen (13) bottlebrush trees were scattered about the site (6%). They were semi-mature with trunk diameters from 5 to 12 inches and an average diameter of 9 inches. Trees had been pruned to form compact crowns. Most trees were in good condition with dense foliage. Only one tree (#203) had poor form and a thin crown.

Marina madrone was the next most common species with 12 trees (5%). Trees were young, with trunk diameters from 1 to 3 inches. Two trees were in poor condition, with thin crowns and dying leaves. Two trees in fair condition had minor twig dieback. The remaining trees were in fair and good condition.

Table 1. Condition ratings and frequency of occurrence of trees
Midway Village, Daly City, CA

Common Name	**Scientific Name**	**Condition**			**Total**
		Poor (1-2)	Fair (3)	Good (4-5)	
Sydney golden wattle	*Acacia longifolia*	1	1	-	**2**
Blackwood acacia	*Acacia melanoxylon*	-	-	5	**5**
Peppermint tree	*Agonis flexuosa*	-	3	8	**11**
Marina madrone	*Arbutus* 'Marina'	2	2	8	**12**
Strawberry tree	*Arbutus unedo*	-	1	-	**1**
Incense cedar	*Calocedrus decurrens*	-	-	1	**1**
European hornbeam	*Carpinus betulus* 'Fastigata'	3	1	-	**4**
Carob	*Ceratonia siliqua*	1	8	1	**10**
Lemon	*Citrus limon*	-	1	-	**1**
Red flowering gum	*Corymbia ficifolia*	-	-	1	**1**
Carrotwood	*Cupaniopsis anacardioides*	1	4	-	**5**
Bronze loquat	*Eriobotrya deflexa*	-	2	-	**2**
River red gum	*Eucalyptus camaldulensis*	-	1	-	**1**
Fig	*Ficus carica*	-	1	-	**1**
Australian willow	*Geijera parviflora*	7	10	18	**35**
Monterey cypress	*Hesperocyparis macrocarpa*	-	1	-	**1**
Crape myrtle	*Lagerstroemia indica*	-	2	-	**2**
Glossy privet	*Ligustrum lucidum*	-	1	-	**1**
Tulip tree	*Liriodendron tulipifera*	-	3	2	**5**
Brisbane box	*Lophostemon confertus*	-	-	11	**11**
Southern magnolia	*Magnolia grandiflora*	5	5	-	**10**
Bottlebrush	*Melaleuca citrina*	1	1	11	**13**
Pink melaleuca	*Melaleuca nesophylla*	1	-	-	**1**
New Zealand Christmas tree	*Metrosideros excelsa*	-	4	7	**11**
Italian stone pine	*Pinus pinea*	-	1	2	**3**
Monterey pine	*Pinus radiata*	1	2	2	**5**
Plum	*Prunus domestica*	-	1	-	**1**
Peach	*Prunus persica*	-	1	-	**1**
Callery pear	*Pyrus calleryana*	-	1	1	**2**
Evergreen pear	*Pyrus kawakamii*	1	2	-	**3**
Weeping willow	*Salix babylonica*	1	-	-	**1**
Brazilian pepper	*Schinus terebinthifolius*	-	1	-	**1**
Queen palm	*Syagrus romanzoffianum*	-	1	2	**3**
Water gum	*Tristaniopsis laurina*	5	3	4	**12**
Chinese elm	*Ulmus parvifolia*	7	10	22	**39**
Mexican fan palm	*Washingtonia robusta*	-	-	1	**1**
Total		**37**	**75**	**107**	**219**

Eleven (11) Brisbane box trees were performing very well at the site. All 11 trees were in good condition with dense, healthy foliage. Ten (10) trees were young, ranging from 3-5 inches in trunk diameter. One mature tree (27" trunk) was in good condition with minor twig dieback in portions of the crown (Photo 2).

Photo 2: Brisbane box #81, located on Martin Street., was in good condition.

Ten southern magnolias evaluated were in fair to poor condition. Crowns were small and windblown.

The remaining species were represented by five or fewer trees and included the following.

- Five each of blackwood acacia, carrotwood, and tulip tree
- Four European hornbeam
- Three each of evergreen pear and queen palm
- Two each of bronze loquat, crape myrtle, Callery pear, and Sydney golden wattle
- And one each of strawberry tree, incense cedar, lemon, red flowering gum, river red gum, fig, glossy privet, pink melaleuca, plum, peach, weeping willow, Brazilian pepper, and Mexican fan palm.

Off-site trees

Numerous trees were located off site to the north and east of Midway Village. Trees to the north were primarily comprised of mature Italian stone pines growing on a paved berm. The base elevations of trees were higher than the existing landscape elevation on the project site. Portions of tree crowns extended over the site.

Photo 3: A dense stand of trees was growing within the SFPUC easement.

The SFPUC easement on the eastern edge of the site was inaccessible. It was densely planted with mostly blackwood acacias, as well as a few southern magnolias, willows, and toyon. There were approximately 60 trees within the easement. Trees were young to semi-mature: 47 trees had smaller than 8-inch trunk diameters; 14 trees had trunk diameters from 8 to 16 inches; only one tree had a trunk diameter of 18 inches. Some trees were growing against the fence with portions of the canopies extending over the fence (Photo 3). According to plans, the boundary of 20'-wide easement appeared to be located inside the fence line.

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**
  Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees. For example, the magnolias likely would not tolerate root loss from construction impacts as well as healthier trees would.

- **Structural integrity**
  Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely.

- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. For instance, Brisbane box and Chinese elm are relatively tolerant of construction impacts compared to Monterey pine, which is sensitive to root damage.

- **Tree age and longevity**
  Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.

- **Species invasiveness**
  Species that spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (http://www.cal-ipc.org/paf/) lists species identified as being invasive. South San Francisco is part of the Central West Floristic Province. **River red gum**, **Brazilian pepper** are listed as “limited” invasive, and **Mexican fan palm** and **fig** are listed as moderately invasive.

Table 2. Tree suitability for preservation
Midway Village, Daly City, CA

High	Trees in this category are in good health and structural stability and have the potential for longevity at the site. Forty three (43) trees were in this category.
Moderate	Trees in this category have fair health and/or structural defects that may be abated with treatment. These trees require more intense management and monitoring, and may have shorter life-spans than those in the "high" category. One hundred twenty-five (125) trees had moderate suitability for preservation.
Low	Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Fifty-one (51) trees were in this category.

We consider trees with good suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with poor suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Evaluation of Impacts and Recommendations for Action

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The ***Tree Assessment*** was the reference points for tree condition and quality. Impacts from the proposed project were assessed using the Civil, Architectural, and Landscape plans (dated 6/21/19). Plans were in the conceptual phase and surveyed tree locations were not included.

The plans show reconfiguration of buildings and streets across the entire site. Apartment buildings will be located on the interior of the site with smaller townhomes along Martin and Schwerin Streets. Wider sidewalks will be constructed along Martin and Schwerin (15' wide) and new interior streets (12' wide). Community amenities such as childcare center, community center, and a large public park will be constructed.

Because of the intensity of demolition, grading, and construction activity across the sites, there is very little opportunity to preserve trees. Nearly all 219 trees will be directly impacted by the above developments.

There may be an opportunity to preserve the two largest trees – Italian stone pines #115 and 116 – which appear to be located within the proposed resident park near the future community services center.

Similarly, four mature blackwood acacias (#216-219) may be preserved if surrounding bioretention basins can be relocated and grading and other impacts around trees are minimized.

In order to provide detailed preservation guidelines for these trees, H|BC requires detailed civil plans with surveyed tree locations.

Off-site trees along the north (adjacent to proposed public park) will be minimally impacted. Plans show a jogging path and landscape adjacent to off-site trees. Minor pruning may be needed for clearance. Impacts to tree health and stability are expected to be minor.

Some trees within the SFPUC easement may need to be removed if chain link fencing is relocated to actual easement boundary (closer to property line), and if adjacent improvements (e.g. EVA construction) disrupt a significant number of roots. Further evaluation of plans is necessary to determine number of trees impacted and extent of impacts.

In summary, 213 trees will be directly impacted by redevelopment and require removal. Two Italian stone pines (#215 & 216) as well as four blackwood acacias (#216-219) could potentially be preserved, if minor plan adjustments are made. Additional trees within the easement may be located within the development area and may need to be removed.

Disposition of individual trees can be found in the Tree Disposition form (see Exhibits). Preservation of trees is predicated on following the ***Tree Preservation Guidelines*** below.

Preliminary Tree Preservation Guidelines

The key to tree preservation is to establish a **TREE PROTECTION ZONE** that excludes construction activity near the tree. The following are recommendations for design and construction phases that will assist in successful tree preservation. As project plans are refined, tree protection specifications will be modified and finalized, and a tree preservation and protection plan will be prepared.

Tree Protection Zone

1. A **TREE PROTECTION ZONE** shall be identified for each tree to be preserved on the Tree Protection Plan prepared by the Project Arborist. For the proposes of this report, the **TREE PROTECTION ZONE** shall be defined as the unpaved area beneath each tree's dripline.
    a. Fence all trees to be retained to completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing or grading. Fences shall be 6 ft. chain link with posts sunk into the ground or equivalent as approved by the City.
    b. Fences must be installed prior to beginning demolition and must remain until construction is complete.
    c. No grading, excavation, construction or storage or dumping of materials shall occur within the **TREE PROTECTION ZONE**.
    d. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**.

Design recommendations

1. Plot accurate locations of all trees to be preserved on all project plans. Identify the **TREE PROTECTION ZONE** for each tree. Focus on preserving trees that have high suitability for preservation.
2. Any changes to the plans affecting the trees should be reviewed by the consulting arborist regarding tree impacts. These include, but are not limited to, site plans, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans, and demolition plans.
3. Plan for tree preservation by designing adequate space around trees to be preserved. This is the **TREE PROTECTION ZONE**: No grading, excavation, construction or storage of materials should occur within that zone. Route underground services including utilities, sub-drains, water or sewer around the **TREE PROTECTION ZONE**. For design purposes, the **TREE PROTECTION ZONE** trees shall be defined as the tree dripline.

5. Consider the vertical clearance requirements near trees during design. Avoid designs that would require pruning more than 20% of a tree's canopy.
6. Irrigation systems must be designed so that no trenching severs roots larger than 1" in diameter will occur within the **TREE PROTECTION ZONE**.
7. **Tree Preservation Guidelines** prepared by the Consulting Arborist, which include specifications for tree protection during demolition and construction, should be included on all plans.
8. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.
9. Do not lime the subsoil within 50' of any tree. Lime is toxic to tree roots.
10. As trees withdraw water from the soil, expansive soils may shrink within the root area. Therefore, foundations, footings and pavements on expansive soils near trees should be designed to withstand differential displacement.
11. Ensure adequate but not excessive water is supplied to trees; in most cases occasional irrigation will be required. Avoid directing runoff toward trees.

Pre-demolition and pre-construction treatments and recommendations

1. The demolition and construction contractors should meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.
2. Trees may require pruning to provide construction clearance. All pruning shall be completed by a Certified Arborist or Tree Worker and adhere to the latest edition of the ANSI Z133 and A300 standards as well as the Best Management Practices -- Tree Pruning published by the International Society of Arboriculture.
3. Where demolition must occur close to trees, such as removing curb and pavement, install temporary trunk protection devices such as winding silt sock wattle or wood planks around trunks or stacking hay bales around tree trunks to a height of approximately 5'. Any low branches that are within the work zone should also be protected. Remove trunk protection after demolition is completed and install protective fence at the limits of the tree protection zone. Do not retain wattle around tree trunks for more than 2-3 weeks to avoid damaging trunks from excess moisture.
4. Apply and maintain 4-6" wood chip mulch within the **TREE PROTECTION ZONE**. Keep the mulch 2' from the base of tree trunks.
5. Trees to be removed shall be felled to fall away from **TREE PROTECTION ZONE** and avoid pulling and breaking of roots of trees to remain. If roots are entwined, the Project Arborist may require first severing the major woody root mass before extracting the trees or grinding the stump below ground.
6. All down brush and trees shall be removed from the **TREE PROTECTION ZONE** either by hand, or with equipment sitting outside the **TREE PROTECTION ZONE**. Extraction shall occur by lifting the material out, not by skidding across the ground. Brush shall be chipped and spread beneath the trees within the **TREE PROTECTION ZONE**
7. Structures and underground features to be removed within the **TREE PROTECTION ZONE** shall use equipment that will minimize damage to trees above and below ground and operate from outside the **TREE PROTECTION ZONE.** Tie back branches and wrap trunks with protective materials to protect from injury as directed by the Project arborist. The Project arborist shall be on-site during all operations within the **TREE PROTECTION ZONE** to monitor demolition activity.

8. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent feasible tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.

9. Any grading, construction, demolition or other work that is expected to encounter tree roots should be monitored by the Project Arborist.

10. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Project Arborist so that appropriate treatments can be applied.

11. No materials, equipment, spoil, waste or wash-out water may be deposited, stored, or parked within the **TPZ** (fenced area).

12. Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.

Recommendations for tree protection during construction

1. Any approved grading, construction, demolition or other work within the **TREE PROTECTION ZONE** should be monitored by the Consulting Arborist.

2. All contractors shall conduct operations in a manner that will prevent damage to trees to be preserved.

3. Tree protection devices are to remain until all site work has been completed within the work area. Fences or other protection devices may not be relocated or removed without permission of the Consulting Arborist.

4. Construction trailers, traffic and storage areas must always remain outside TREE PROTECTION ZONE.

5. Any root pruning required for construction purposes shall receive the prior approval of and be supervised by the Consulting Arborist. Roots should be cut with a saw to provide a flat and smooth cut. Removal of roots larger than 2” in diameter should be avoided.

6. If roots 2” and greater in diameter are encountered during site work and must be cut to complete the construction, the Consulting Arborist must be consulted to evaluate effects on the health and stability of the tree and recommend treatment.

7. Any brush clearing required within the **TREE PROTECTION ZONE** shall be accomplished with hand-operated equipment.

8. Prior to grading or trenching, trees may require root pruning outside the **TREE PROTECTION ZONE.** Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the Consulting Arborist.

9. Spoil from trench, footing, utility or other excavation shall not be placed within the **TREE PROTECTION ZONE**, neither temporarily nor permanently.

10. All grading within the dripline of trees shall be done using the smallest equipment possible. The equipment shall operate perpendicular to the tree and operate from outside the **TREE PROTECTION ZONE**. Any modifications must be approved and monitored by the Consulting Arborist.

11. All trees shall be irrigated on a schedule to be determined by the Consulting Arborist (every 3 to 6 weeks is typical). Each irrigation shall wet the soil within the **TREE PROTECTION ZONE** to a depth of 30”.

12. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.

13. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the **TREE PROTECTION ZONE**.
14. Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel.
15. Trees that accumulate a sufficient quantity of dust on their leaves, limbs and trunk as judged by the Consulting Arborist shall be spray-washed at the direction of the Project Arborist.

Maintenance of impacted trees

Preserved trees will experience a physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. Inspect trees annually and following major storms to identify conditions requiring treatment to manage risk associated with tree failure.

Our procedures included assessing trees for observable defects in structure. This is not to say that trees without significant defects will not fail. Failure of apparently defect-free trees does occur, especially during storm events. Wind forces, for example, can exceed the strength of defect-free wood causing branches and trunks to break. Wind forces coupled with rain can saturate soils, reducing their ability to hold roots, and blow over defect-free trees. Although we cannot predict all failures, identifying those trees with observable defects is a critical component of enhancing public safety.

Furthermore, trees change over time. Our inspections represent the condition of the tree at the time of inspection. As trees age, the likelihood of failure of branches or entire trees increases. Annual tree inspections are recommended to identify changes to tree health and structure. In addition, trees should be inspected after storms of unusual severity to evaluate damage and structural changes. Initiating these inspections is the responsibility of the client and/or tree owner.

If you have any questions about my observations or recommendations, please contact me.

HortScience | Bartlett Consulting

Deanne Ecklund

Deanne Ecklund
Registered Consulting Arborist #647

Exhibits

Tree Inventory Map

Tree Assessment

Tree Disposition

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Divisions of The F.A. Bartlett Tree Expert Company

Tree Inventory Map

Midway Village
Northern Section
Daly City, CA

Prepared for:
MidPen Housing Corporation
Foster City, CA

September 2019

No Scale

Notes:

Base map provided by:
Google Earth

Numbered tree locations are approximate

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Tree Inventory Map

Midway Village
Southern Section
Daly City, CA

Prepared for:
MidPen Housing Corporation
Foster City, CA

September 2019

No Scale

Notes:

Base map provided by:
Google Earth

Numbered tree locations are approximate

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Tree Assessment

Midway Village
Daly City, CA

September 2019

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Divisions of The F.A. Bartlett Tree Expert Company

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
1	Brisbane box	5	5	High	Good form and structure; dense crown.
2	Australian willow	3	4	High	Codominant trunks at 5'; compact crown.
3	Australian willow	2	4	Moderate	Good form and structure; slightly thin crown.
4	Australian willow	1	2	Low	Dead top; thin crown.
5	Australian willow	2	3	Moderate	Fair form and structure; slightly thin crown; twig dieback.
6	Australian willow	1	2	Low	Crown half dead.
7	Australian willow	3	4	High	Good form and structure; compact crown.
8	Australian willow	2	4	Moderate	Good form and structure; slightly thin crown.
9	Australian willow	2	4	Moderate	Good form and structure; slightly thin crown.
10	Australian willow	2	4	High	Good form and structure; compact crown.
11	Sydney golden wattle	6,5	2	Low	Codominant trunks at 3'; decay at attachment; asymmetrical form.
12	Sydney golden wattle	10	3	Low	Root failure with decay in roots; trunk leans 45 degrees; dense crown.
13	Australian willow	2	3	Moderate	Asymmetrical form; slightly thin crown.
14	Australian willow	2	4	High	Round, dense crown; slightly thin top.
15	Monterey pine	2	5	High	Good young tree; dense crown.
16	Australian willow	2	2	Low	Crown half dead.
17	Australian willow	1,1	3	Moderate	Codominant trunks at 4'; windblown, asymmetrical form.
18	Australian willow	3,2	4	Moderate	Codominant trunks at 3'; good form; slightly thin crown.
19	Australian willow	1	1	Low	Mostly dead.
20	Australian willow	1	1	Low	Mostly dead.
21	Australian willow	2	2	Low	Very thin crown.
22	Australian willow	3	4	High	Compact, dense crown.
23	Australian willow	2,2,1	4	High	Compact, dense crown.
24	Bottlebrush	5	4	Moderate	Compact crown; fair structure.
25	European hornbeam	1	2	Low	Compact form; basal wound; dead top; twig dieback.
26	European hornbeam	1	2	Low	Compact form; basal wound; dead top; twig dieback.
27	European hornbeam	1	2	Low	Compact form; basal wound; dead top; twig dieback.
28	Marina madrone	2	4	High	Good form, fair structure; dense crown.

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
29	Marina madrone	2	2	Low	Multiple attachments at 4'; girdled by nursery straps; dying, drooping leaves.
30	Brisbane box	4	4	Moderate	Multiple attachments at 6'; dense crown.
31	Brisbane box	4	5	High	Good form and structure; dense crown.
32	Fig	2,2,2	3	Low	In yard, tag on fence; multiple attachments at base; against fence and crowded by adjacent tree.
33	Plum	4,4,1,1,1	3	Moderate	In yard, tag on fence; multiple attachments at base; twig dieback in upper crown.
34	Brisbane box	5	5	High	Good form and structure; dense crown.
35	New Zealand Christmas Tree	18	4	High	Multiple attachments at 5; raised crown; dense foliage.
36	Marina madrone	3	3	Moderate	Multiple attachments at 4'; girdled by nursery straps; minor twig dieback.
37	Bottlebrush	10	4	Moderate	Compact crown; fair structure.
38	Bottlebrush	10	4	Moderate	Compact crown; fair structure.
39	Brisbane box	5	5	High	Good form and structure; dense crown.
40	Brisbane box	3	4	Moderate	Good form; slightly thin crown.
41	Australian willow	1	3	Moderate	Good form and structure; thin crown.
42	Pear	1	4	Moderate	In yard; good young tree.
43	Lemon	2,1,1,1	3	Moderate	Multiple attachments at 1'; against building.
44	Australian willow	1	2	Low	Windblown, asymmetrical crown; thin crown.
45	Chinese elm	4	2	Low	Thin crown; chlorotic.
46	Chinese elm	5	4	Moderate	Good form, fair structure; dense crown.
47	Chinese elm	4	3	Moderate	Good form; slightly thin crown.
48	Chinese elm	3	2	Low	Trunk wound from stake; small, yellow leaves.
49	Marina madrone	2	4	Moderate	Multiple attachments at 4'; dense crown.
50	Marina madrone	3	2	Low	Multiple attachments at 4'; dry, dying foliage.
51	Bottlebrush	10	4	Moderate	Compact crown; fair structure.
52	Marina madrone	2	4	Moderate	Multiple attachments at 4'; dense crown.
53	Marina madrone	3	4	Moderate	Multiple attachments at 4'; dense crown.
54	Marina madrone	2	4	Moderate	Multiple attachments at 4'; dense crown.

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Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
55	Australian willow	3	4	Moderate	Good form and structure; slightly thin crown.
56	Australian willow	2,1,1	4	High	Multiple attachments at 4'; compact, dense crown.
57	Australian willow	2	3	Moderate	Compact, slightly thin crown..
58	Australian willow	2	3	Low	Thin crown; slightly chlorotic.
59	Marina madrone	3	5	High	Codominant trunks at 4'; dense crown.
60	Monterey pine	22,15	1	Low	Mostly dead; leader removed.
61	Chinese elm	5	4	High	Good form, fair structure; dense crown.
62	Bottlebrush	10	4	Moderate	Compact crown; fair structure.
63	New Zealand Christmas Tree	18,15	4	High	Codominant trunks at 4'; raised crown; dense foliage.
64	Bottlebrush	9	4	Moderate	Compact crown; fair structure.
65	New Zealand Christmas Tree	18	4	High	Multiple attachments at 5'; good form; dense crown.
66	Australian willow	2	3	Moderate	Slightly thin crown.
67	Bottlebrush	12	4	Moderate	Compact crown; fair structure.
68	Chinese elm	2	1	Low	Mostly dead
69	Chinese elm	2	2	Low	Twig dieback; chlorotic.
70	Chinese elm	2	1	Low	Mostly dead.
71	Marina madrone	2	4	Moderate	Multiple attachments at 4'; dense crown.
72	Loquat	3,1	3	Moderate	In yard; codominant trunks at 3'; dense crown.
73	Australian willow	3	4	Moderate	Good form and structure; slightly thin crown.
74	Bottlebrush	12	4	Moderate	Compact crown; fair structure.
75	New Zealand Christmas Tree	22	3	Moderate	Girdling root; codominant trunks at 8'; poor structure; previously topped at 12'.
76	Australian willow	2	4	Moderate	Good form and structure; slightly thin crown.
77	Bottlebrush	6	4	Moderate	Compact crown; fair structure.
78	Bottlebrush	6	3	Moderate	Compact crown; fair structure; trunk wound.
79	Carob	15,12	2	Low	Codominant trunks at 3'; asymmetrical crown; thin upper crown.
80	Chinese elm	6	4	High	Good form, typical structure; dense crown.
81	Brisbane box	27	4	Moderate	Good form, fair structure; thin parts in crown.

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
82	Water gum	2	5	High	Good form; dense crown.
83	Water gum	1	1	Low	Mostly dead.
84	Chinese elm	7	4	High	Good form, typical structure; dense crown.
85	Chinese elm	6	3	Moderate	Large limb failure; trunk wound; fair structure.
86	Chinese elm	4	2	Low	Very thin crown.
87	River red gum	2,2,1	3	Moderate	Multiple attachments at base; volunteer; dense foliage.
88	Chinese elm	5	4	High	Good form, typical structure; dense crown.
89	Chinese elm	4	3	Moderate	Fair form; slightly thin crown.
90	Chinese elm	4	3	Low	Topped at 5'; dense crown.
91	Chinese elm	5	4	High	Good form; typical structure.
92	New Zealand Christmas Tree	10	3	Moderate	Trunk bows slightly north; long trunk tear out wound; small, high crown.
93	Chinese elm	6	3	Moderate	Nursery stake embedded in trunk; thin upper crown; good form.
94	Chinese elm	6	3	Moderate	Fair form and structure; asymmetrical crown.
95	Chinese elm	5	4	Moderate	Fair form and structure; spreading crown.
96	Chinese elm	6	4	High	Good form, typical structure; dense crown.
97	Chinese elm	4	2	Low	Very thin crown.
98	Water gum	2	4	High	Multiple attachments at 5'; good form; dense crown.
99	Water gum	2	5	High	Good form and structure; dense crown.
100	New Zealand Christmas Tree	4,3,3	3	Moderate	Codominant trunks at base; hedged.
101	Carob	8,5	3	Moderate	Codominant trunks at 4'; compact crown.
102	Carob	8	3	Moderate	Codominant trunks at 5'; slightly thin crown.
103	Carob	9,5	3	Low	Codominant trunks at 2'; bleeding trunk wounds with decay; small thin crown.
104	Carob	6,5	3	Moderate	Codominant trunks at 3'; small crown.
105	Carob	11,9,8,4	4	Moderate	Multiple attachments at 4'; trunk wound; dense crown.
106	Water gum	4	3	Moderate	Trunk wounds; compact crown.
107	Monterey pine	28	3	Moderate	Codominant trunks at 6'; round, compact form; slightly thin crown on south.

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
108	Southern magnolia	5	3	Moderate	Crown raised to 9'; small crown.
109	Southern magnolia	6	3	Moderate	Crown raised to 8'; small crown.
110	Southern magnolia	4	3	Low	Crown raised to 8'; small, thinning crown.
111	Southern magnolia	4	3	Low	Crown raised to 8'; small, thinning crown.
112	Southern magnolia	5	3	Moderate	Crown raised to 8'; asymmetrical crown.
113	Incense cedar	7	5	High	Good form and structure; good young tree.
114	Italian stone pine	27	3	Moderate	Multiple attachments at 5'; dense crown; pruned on north for building.
115	Italian stone pine	43	4	Moderate	Codominant trunks at 6'; dense, spreading crown.
116	Italian stone pine	32	4	Moderate	Codominant trunks at 7' and 9'; dense, spreading crown.
117	New Zealand Christmas Tree	12	4	Moderate	Multiple attachments at 6'; fair form; slightly thin crown.
118	Red flowering gum	19	4	Moderate	Codominant trunks at 6'; asymmetrical crown.
119	Brisbane box	4	4	Moderate	Good form; slightly thin crown.
120	Australian willow	2	3	Moderate	Good form and structure; slightly thin crown.
121	Australian willow	4	4	High	Good form and structure; dense crown.
122	Brisbane box	4	5	High	Good form and structure; dense crown.
123	Brazilian pepper	11,9,8,7	3	Moderate	Multiple attachments at 1' with narrow attachment; twisted form; dense crown.
124	Peppermint tree	14	4	Moderate	Multiple attachments at 6'; thin interior crown.
125	Peppermint tree	21	4	Moderate	Multiple attachments at 6'; thin interior crown.
126	Blackwood acacia	15	4	Moderate	Codominant trunks at 14'; good form; dense crown.
127	Tulip tree	10	3	Moderate	Fair form and structure; twig dieback in upper crown.
128	Tulip tree	7	4	Moderate	Codominant trunks at 5'; good form.
129	Tulip tree	11	3	Moderate	Good form, fair structure; twig dieback in upper crown.
130	Crape myrtle	3	3	Moderate	In schoolyard, no tag; small, slightly thin crown.
131	Crape myrtle	3	3	Moderate	In schoolyard, no tag; small, slightly thin crown.
132	Carrotwood	14	3	Moderate	Good form, fair structure; tear out wound on trunk.
133	Pink melaleuca	8,6	2	Low	Partial failure at base; poor structure.
134	Carrotwood	15	3	Moderate	Multiple attachments at 6'; slightly thin crown.

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
135	Monterey cypress	21	3	Low	Asymmetrical crown; limb failure on south; dead limbs.
136	Chinese elm	6	3	Moderate	Fair form and structure; chlorotic.
137	Queen palm	4	3	Moderate	4' brown trunk height; chlorotic.
138	Tulip tree	10	3	Low	Asymmetrical crown; windblown; trunk wound.
139	Queen palm	16	4	Moderate	10' brown trunk height; dry frond tips.
140	Weeping willow	11	2	Low	Codominant trunks at 7'; very thin crown.
141	Callery pear	6	3	Moderate	Narrow form; 4' from building; twig dieback.
142	Peppermint tree	15	3	Moderate	Codominant trunks at 6'; high, small crown.
143	Carrotwood	5	3	Moderate	Multiple attachments at 7'; small crown; trunk wound.
144	Evergreen pear	5	1	Low	Mostly dead.
145	Tulip tree	8	4	Moderate	Good form and structure; slightly thin on windward side.
146	Carrotwood	18	2	Low	Poor form and structure; thin crown; cable girdling trunk.
147	Mexican fan palm	18	4	High	In yard, no tag; 28' brown trunk height; dry frond tips.
148	Monterey pine	29	4	Moderate	Good form; dense crown; trunk wound near base.
149	Peach	3	3	Moderate	In yard; typical form and structure.
150	Carob	16	3	Low	Large trunk wound with decay; dense, spreading crown.
151	Carob	11,9	3	Low	Codominant trunks at 4'; tear out wound thinning crown.
152	Bottlebrush	12	4	Moderate	Dense, compact crown; fair structure.
153	New Zealand Christmas Tree	15	4	Moderate	Multiple attachments at 7'; dense crown; pruned for building clearance.
154	Water gum	1	2	Low	Dead top; thin crown.
155	Water gum	1	2	Low	Dead and dying foliage throughout crown.
156	Water gum	1	3	Moderate	Fair form and structure; thinning crown.
157	Water gum	1	4	Moderate	Good form, fair structure; dense crown.
158	Carrotwood	8	3	Moderate	Multiple attachments at 6'; slightly thin crown.
159	New Zealand Christmas Tree	12	3	Moderate	Multiple attachments at 6'; asymmetrical crown; pruned for building clearance.
160	New Zealand Christmas Tree	12	4	Moderate	Multiple attachments at 6'; dense crown; pruned for building clearance.

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
161	Chinese elm	5	4	High	Good form; typical structure.
162	Chinese elm	4	4	High	Good form; typical structure; slightly thin crown.
163	Chinese elm	5	4	High	Good form; typical structure.
164	Chinese elm	4	3	Moderate	Fair form and structure; chlorotic.
165	Chinese elm	4	3	Moderate	Fair form and structure; chlorotic.
166	Chinese elm	5	4	High	Good form; typical structure; dense crown.
167	Chinese elm	6	4	Moderate	Typical form and structure; slightly thin crown.
168	Chinese elm	5	3	Moderate	Fair form and structure; slightly thin crown.
169	Chinese elm	6	4	High	Good form; typical structure; dense crown.
170	Chinese elm	5	4	High	Good form; typical structure; dense crown.
171	Carob	18	3	Moderate	Codominant trunks at 6'; limb failure on north; poor structure; asymmetrical crown.
172	Chinese elm	5	4	High	Good form; typical structure; dense crown.
173	Chinese elm	6	4	High	Good form; typical structure; dense crown.
174	Australian willow	2	4	High	Dense crown; good form.
175	Chinese elm	5	4	Moderate	Typical form and structure; slightly thin crown.
176	Chinese elm	6	4	High	Good form; typical structure; dense crown.
177	Water gum	1	2	Low	Dead top; thin crown.
178	Water gum	1	2	Low	Dead top; thin crown.
179	Water gum	2	3	Moderate	Good form; twig dieback in upper crown.
180	European hornbeam	2	3	Low	Twig dieback; dead top; compact form.
181	Brisbane box	5	5	High	Good form and structure; dense crown.
182	Brisbane box	3	4	Moderate	Good form and structure; slightly thin crown.
183	New Zealand Christmas Tree	18	4	Moderate	Multiple attachments at 9'; pruned for building clearance.
184	Australian willow	2	3	Moderate	Good form and structure; thinning crown
185	Australian willow	2	3	Moderate	Good form and structure; thinning crown
186	Australian willow	3	4	Moderate	Good form and structure; slightly thin crown.
187	Glossy privet	12	3	Moderate	In yard; dense crown; fair structure.

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
188	Bronze loquat	7	3	Moderate	In yard; dense crown; fair structure.
189	Chinese elm	6	4	High	Good form; typical structure; dense crown.
190	Chinese elm	6	4	Moderate	Typical form and structure; slightly thin crown.
191	Chinese elm	4	4	Moderate	Typical form and structure; slightly thin crown.
192	Marina madrone	3	4	Moderate	Multiple attachments at 4'; dense crown.
193	Bottlebrush	8	4	Moderate	Dense, compact crown; fair structure.
194	Australian willow	2	4	High	Dense crown; good form; fair structure.
195	Carob	15	3	Low	Large trunk wound; asymmetrical crown.
196	Peppermint tree	13	3	Low	Codominant trunks at 6' with narrow attachment; thinning crown.
197	Peppermint tree	16	4	Moderate	Good form; fair structure; multiple attachments at 6'.
198	Peppermint tree	18	4	Moderate	Good form; fair structure; multiple attachments at 6'.
199	Peppermint tree	12	4	Moderate	Good form; fair structure; multiple attachments at 6'.
200	Peppermint tree	13	4	Moderate	Good form; fair structure; multiple attachments at 6'.
201	Peppermint tree	10	4	Moderate	Good form; fair structure; multiple attachments at 6'.
202	Peppermint tree	16	3	Moderate	Good form; fair structure; multiple attachments at 6'; asymmetrical crown.
203	Bottlebrush	7	2	Low	Poor form; thin crown.
204	Marina madrone	1	3	Moderate	Fair form and structure; twig dieback.
205	Peppermint tree	13	4	Moderate	Good form; fair structure; multiple attachments at 6'.
206	Evergreen pear	10	3	Moderate	Codominant trunks at 6'; spreading crown; typical structure.
207	Strawberry tree	15	3	Moderate	Large trunk wound; good form; thinning crown.
208	Evergreen pear	8	3	Moderate	Codominant trunks at 6'; crowded by #209; fair form and structure.
209	Monterey pine	26	3	Moderate	Typical form and structure; slightly thin crown; surface roots filling planter.
210	Queen palm	7	4	Moderate	6' brown trunk height; dry frond tips.
211	Southern magnolia	2	2	Low	Small, stunted crown.
212	Southern magnolia	2	2	Low	Small, stunted crown; major trunk sunburn.
213	Southern magnolia	2	1	Low	Small, asymmetrical crown; major trunk sunburn.
214	Southern magnolia	2	2	Low	Small, stunted crown; major trunk sunburn.
215	Southern magnolia	2	2	Low	Small, stunted crown; major trunk sunburn.

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
216	Blackwood acacia	14	4	Moderate	Codominant trunks at 10'; crowded form; dense crown.
217	Blackwood acacia	21	4	Moderate	Good form; fair structure; dense crown.
218	Blackwood acacia	20	4	Moderate	One of two trees comprising a single crown; typical form and structure.
219	Blackwood acacia	23	4	Moderate	One of two trees comprising a single crown; typical form and structure.

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Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Disposition	Reason for removal
1	Brisbane box	5	5	High	Remove	Sidewalk
2	Australian willow	3	4	High	Remove	Grading
3	Australian willow	2	4	Moderate	Remove	Grading
4	Australian willow	1	2	Low	Remove	Grading; low suit.
5	Australian willow	2	3	Moderate	Remove	Grading
6	Australian willow	1	2	Low	Remove	Grading; low suit.
7	Australian willow	3	4	High	Remove	Street B
8	Australian willow	2	4	Moderate	Remove	Street B
9	Australian willow	2	4	Moderate	Remove	Building D
10	Australian willow	2	4	High	Remove	Building D
11	Sydney golden wattle	6,5	2	Low	Remove	Building D; low suit.
12	Sydney golden wattle	10	3	Low	Remove	Building D; low suit.
13	Australian willow	2	3	Moderate	Remove	Building D
14	Australian willow	2	4	High	Remove	Building D
15	Monterey pine	2	5	High	Remove	Building D
16	Australian willow	2	2	Low	Remove	Building D; low suit.
17	Australian willow	1,1	3	Moderate	Remove	Building D
18	Australian willow	3,2	4	Moderate	Remove	Building D
19	Australian willow	1	1	Low	Remove	Building D; low suit.
20	Australian willow	1	1	Low	Remove	Building D; low suit.
21	Australian willow	2	2	Low	Remove	Parcel 5 townhomes; low suit.
22	Australian willow	3	4	High	Remove	Sidewalk/Street A
23	Australian willow	2,2,1	4	High	Remove	Parcel 5 townhomes
24	Bottlebrush	5	4	Moderate	Remove	Parcel 5 townhomes
25	European hornbeam	1	2	Low	Remove	EVA; low suit.
26	European hornbeam	1	2	Low	Remove	EVA; low suit.
27	European hornbeam	1	2	Low	Remove	EVA; low suit.
28	Marina madrone	2	4	High	Remove	EVA

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Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Disposition	Reason for removal
29	Marina madrone	2	2	Low	Remove	EVA; low suit.
30	Brisbane box	4	4	Moderate	Remove	EVA
31	Brisbane box	4	5	High	Remove	EVA
32	Fig	2,2,2	3	Low	Remove	EVA; low suit.
33	Plum	4,4,1,1,1	3	Moderate	Remove	EVA
34	Brisbane box	5	5	High	Remove	EVA
35	New Zealand Christmas Tree	18	4	High	Remove	EVA
36	Marina madrone	3	3	Moderate	Remove	EVA
37	Bottlebrush	10	4	Moderate	Remove	Sidewalk
38	Bottlebrush	10	4	Moderate	Remove	Sidewalk
39	Brisbane box	5	5	High	Remove	Sidewalk
40	Brisbane box	3	4	Moderate	Remove	Sidewalk
41	Australian willow	1	3	Moderate	Remove	Building C
42	Pear	1	4	Moderate	Remove	Building C
43	Lemon	2,1,1,1	3	Moderate	Remove	Building C
44	Australian willow	1	2	Low	Remove	Building F; low suit.
45	Chinese elm	4	2	Low	Remove	Building F; low suit.
46	Chinese elm	5	4	Moderate	Remove	Building F
47	Chinese elm	4	3	Moderate	Remove	Building F
48	Chinese elm	3	2	Low	Remove	Building F; low suit.
49	Marina madrone	2	4	Moderate	Remove	Building F
50	Marina madrone	3	2	Low	Remove	Building F; low suit.
51	Bottlebrush	10	4	Moderate	Remove	Parcel 21/22 townhomes
52	Marina madrone	2	4	Moderate	Remove	Parcel 21/22 townhomes
53	Marina madrone	3	4	Moderate	Remove	Street B
54	Marina madrone	2	4	Moderate	Remove	Sidewalk
55	Australian willow	3	4	Moderate	Remove	Parcel 16/17 townhomes
56	Australian willow	2,1,1	4	High	Remove	Parcel 16/17 townhomes

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Disposition	Reason for removal
57	Australian willow	2	3	Moderate	Remove	Building E
58	Australian willow	2	3	Low	Remove	Sidewalk/Street A; low suit.
59	Marina madrone	3	5	High	Remove	Sidewalk
60	Monterey pine	22,15	1	Low	Remove	Sidewalk; low suit.
61	Chinese elm	5	4	High	Remove	Sidewalk
62	Bottlebrush	10	4	Moderate	Remove	Building E
63	New Zealand Christmas Tree	18,15	4	High	Remove	Building E
64	Bottlebrush	9	4	Moderate	Remove	Building E
65	New Zealand Christmas Tree	18	4	High	Remove	Sidewalk/Street A
66	Australian willow	2	3	Moderate	Remove	Building E
67	Bottlebrush	12	4	Moderate	Remove	Building E
68	Chinese elm	2	1	Low	Remove	Building E; low suit.
69	Chinese elm	2	2	Low	Remove	Building E; low suit.
70	Chinese elm	2	1	Low	Remove	Building E; low suit.
71	Marina madrone	2	4	Moderate	Remove	Sidewalk/Street A
72	Loquat	3,1	3	Moderate	Remove	Sidewalk/Street A
73	Australian willow	3	4	Moderate	Remove	Building E
74	Bottlebrush	12	4	Moderate	Remove	Building E
75	New Zealand Christmas Tree	22	3	Moderate	Remove	Building E
76	Australian willow	2	4	Moderate	Remove	Parcel 8
77	Bottlebrush	6	4	Moderate	Remove	Parcel 8
78	Bottlebrush	6	3	Moderate	Remove	Parcel 9/10 townhomes
79	Carob	15,12	2	Low	Remove	Parcel 9/10 townhomes/ low suit.
80	Chinese elm	6	4	High	Remove	Sidewalk
81	Brisbane box	27	4	Moderate	Remove	Sidewalk
82	Water gum	2	5	High	Remove	Sidewalk
83	Water gum	1	1	Low	Remove	Sidewalk; low suit.
84	Chinese elm	7	4	High	Remove	Sidewalk

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Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Disposition	Reason for removal
85	Chinese elm	6	3	Moderate	Remove	Sidewalk
86	Chinese elm	4	2	Low	Remove	Sidewalk; low suit.
87	River red gum	2,2,1	3	Moderate	Remove	Sidewalk
88	Chinese elm	5	4	High	Remove	Sidewalk
89	Chinese elm	4	3	Moderate	Remove	Sidewalk
90	Chinese elm	4	3	Low	Remove	Sidewalk; low suit.
91	Chinese elm	5	4	High	Remove	Sidewalk
92	New Zealand Christmas Tree	10	3	Moderate	Remove	Sidewalk
93	Chinese elm	6	3	Moderate	Remove	Sidewalk
94	Chinese elm	6	3	Moderate	Remove	Sidewalk
95	Chinese elm	5	4	Moderate	Remove	Sidewalk
96	Chinese elm	6	4	High	Remove	Sidewalk
97	Chinese elm	4	2	Low	Remove	Sidewalk; low suit.
98	Water gum	2	4	High	Remove	Sidewalk
99	Water gum	2	5	High	Remove	Sidewalk
100	New Zealand Christmas Tree	4,3,3	3	Moderate	Remove	Building A
101	Carob	8,5	3	Moderate	Remove	Building A
102	Carob	8	3	Moderate	Remove	Building A
103	Carob	9,5	3	Low	Remove	Building A; low suit.
104	Carob	6,5	3	Moderate	Remove	Building A
105	Carob	11,9,8,4	4	Moderate	Remove	Building A
106	Water gum	4	3	Moderate	Remove	Building A
107	Monterey pine	28	3	Moderate	Remove	Building A
108	Southern magnolia	5	3	Moderate	Remove	EVA
109	Southern magnolia	6	3	Moderate	Remove	EVA
110	Southern magnolia	4	3	Low	Remove	EVA; low suit.
111	Southern magnolia	4	3	Low	Remove	EVA; low suit.
112	Southern magnolia	5	3	Moderate	Remove	EVA

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Disposition	Reason for removal
113	Incense cedar	7	5	High	Remove	EVA
114	Italian stone pine	27	3	Moderate	Remove	Sidewalk
115	Italian stone pine	43	4	Moderate	Preserve	Resident Park
116	Italian stone pine	32	4	Moderate	Preserve	Resident Park
117	New Zealand Christmas Tree	12	4	Moderate	Remove	Parcel 3 townhomes
118	Red flowering gum	19	4	Moderate	Remove	Parcel 3 townhomes
119	Brisbane box	4	4	Moderate	Remove	Community Center
120	Australian willow	2	3	Moderate	Remove	Community Center
121	Australian willow	4	4	High	Remove	Community Center
122	Brisbane box	4	5	High	Remove	Community Center
123	Brazilian pepper	11,9,8,7	3	Moderate	Remove	Community Center
124	Peppermint tree	14	4	Moderate	Remove	Partridge Street
125	Peppermint tree	21	4	Moderate	Remove	Partridge Street
126	Blackwood acacia	15	4	Moderate	Remove	Partridge Street
127	Tulip tree	10	3	Moderate	Remove	Partridge Street
128	Tulip tree	7	4	Moderate	Remove	Partridge Street
129	Tulip tree	11	3	Moderate	Remove	Partridge Street
130	Crape myrtle	3	3	Moderate	Remove	Partridge Street
131	Crape myrtle	3	3	Moderate	Remove	Partridge Street
132	Carrotwood	14	3	Moderate	Remove	Building B
133	Pink melaleuca	8,6	2	Low	Remove	Poor cond./low suit.
134	Carrotwood	15	3	Moderate	Remove	Bayshore Park/demo
135	Monterey cypress	21	3	Low	Remove	Low suitability
136	Chinese elm	6	3	Moderate	Remove	Bayshore Park/demo
137	Queen palm	4	3	Moderate	Remove	Bayshore Park/demo
138	Tulip tree	10	3	Low	Remove	Low suitability
139	Queen palm	16	4	Moderate	Remove	Bayshore Park/demo
140	Weeping willow	11	2	Low	Remove	Poor cond.; low suit.

Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Disposition	Reason for removal
141	Callery pear	6	3	Moderate	Remove	Bayshore Park/demo
142	Peppermint tree	15	3	Moderate	Remove	Bayshore Park/demo
143	Carrotwood	5	3	Moderate	Remove	Bayshore Park/demo
144	Evergreen pear	5	1	Low	Remove	Poor cond.; low suit.
145	Tulip tree	8	4	Moderate	Remove	Bayshore Park/demo
146	Carrotwood	18	2	Low	Remove	Poor cond.; low suit.
147	Mexican fan palm	18	4	High	Remove	Bayshore Park/demo
148	Monterey pine	29	4	Moderate	Remove	Bayshore Park/demo
149	Peach	3	3	Moderate	Remove	Bayshore Park/demo
150	Carob	16	3	Low	Remove	Low suitability
151	Carob	11,9	3	Low	Remove	Low suitability
152	Bottlebrush	12	4	Moderate	Remove	Bayshore Park/demo
153	New Zealand Christmas Tree	15	4	Moderate	Remove	Bayshore Park/demo
154	Water gum	1	2	Low	Remove	Poor cond./low suit.
155	Water gum	1	2	Low	Remove	Poor cond./low suit.
156	Water gum	1	3	Moderate	Remove	Sidewalk
157	Water gum	1	4	Moderate	Remove	Sidewalk
158	Carrotwood	8	3	Moderate	Remove	Bayshore Park/demo
159	New Zealand Christmas Tree	12	3	Moderate	Remove	Bayshore Park/demo
160	New Zealand Christmas Tree	12	4	Moderate	Remove	Bayshore Park/demo
161	Chinese elm	5	4	High	Remove	Sidewalk
162	Chinese elm	4	4	High	Remove	Sidewalk
163	Chinese elm	5	4	High	Remove	Sidewalk
164	Chinese elm	4	3	Moderate	Remove	Sidewalk
165	Chinese elm	4	3	Moderate	Remove	Sidewalk
166	Chinese elm	5	4	High	Remove	Sidewalk
167	Chinese elm	6	4	Moderate	Remove	Sidewalk
168	Chinese elm	5	3	Moderate	Remove	Sidewalk

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Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Disposition	Reason for removal
169	Chinese elm	6	4	High	Remove	Sidewalk
170	Chinese elm	5	4	High	Remove	Sidewalk
171	Carob	18	3	Moderate	Remove	Partridge Street
172	Chinese elm	5	4	High	Remove	Partridge Street
173	Chinese elm	6	4	High	Remove	Partridge Street
174	Australian willow	2	4	High	Remove	Partridge Street
175	Chinese elm	5	4	Moderate	Remove	Partridge Street
176	Chinese elm	6	4	High	Remove	Sidewalk
177	Water gum	1	2	Low	Remove	Parcel 3 townhomes; low suit.
178	Water gum	1	2	Low	Remove	Parcel 3 townhomes; low suit.
179	Water gum	2	3	Moderate	Remove	Parcel 3 townhomes
180	European hornbeam	2	3	Low	Remove	Parcel 3 townhomes; low suit.
181	Brisbane box	5	5	High	Remove	Parcel 3 townhomes
182	Brisbane box	3	4	Moderate	Remove	Parcel 3 townhomes
183	New Zealand Christmas Tree	18	4	Moderate	Remove	Parcel 3 townhomes
184	Australian willow	2	3	Moderate	Remove	Parcel 3 townhomes
185	Australian willow	2	3	Moderate	Remove	Parcel 3 townhomes
186	Australian willow	3	4	Moderate	Remove	Partridge Street
187	Glossy privet	12	3	Moderate	Remove	Partridge Street
188	Bronze loquat	7	3	Moderate	Remove	Partridge Street
189	Chinese elm	6	4	High	Remove	Building B2 mixed use
190	Chinese elm	6	4	Moderate	Remove	Building B2 mixed use
191	Chinese elm	4	4	Moderate	Remove	Building B2 mixed use
192	Marina madrone	3	4	Moderate	Remove	Building B2 mixed use
193	Bottlebrush	8	4	Moderate	Remove	Building B2 mixed use
194	Australian willow	2	4	High	Remove	Building B2 mixed use
195	Carob	15	3	Low	Remove	Low suitability
196	Peppermint tree	13	3	Low	Remove	Low suitability

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Tree No.	Species	Trunk Diameter (in.)	Condition 1=poor 5=excellent	Suitability for Preservation	Disposition	Reason for removal
197	Peppermint tree	16	4	Moderate	Remove	Bayshore Park/demo
198	Peppermint tree	18	4	Moderate	Remove	Bayshore Park/demo
199	Peppermint tree	12	4	Moderate	Remove	Building B
200	Peppermint tree	13	4	Moderate	Remove	Building B
201	Peppermint tree	10	4	Moderate	Remove	Building B
202	Peppermint tree	16	3	Moderate	Remove	Bioretention basin
203	Bottlebrush	7	2	Low	Remove	Poor cond.; low suit.
204	Marina madrone	1	3	Moderate	Remove	Bioretention basin
205	Peppermint tree	13	4	Moderate	Remove	Building B
206	Evergreen pear	10	3	Moderate	Remove	Bayshore Park/demo
207	Strawberry tree	15	3	Moderate	Remove	Bayshore Park/demo
208	Evergreen pear	8	3	Moderate	Remove	Bayshore Park/demo
209	Monterey pine	26	3	Moderate	Remove	Bayshore Park/demo
210	Queen palm	7	4	Moderate	Remove	Bayshore Park/demo
211	Southern magnolia	2	2	Low	Remove	Building A2; low suit.
212	Southern magnolia	2	2	Low	Remove	Building A2; low suit.
213	Southern magnolia	2	1	Low	Remove	Building A2; low suit.
214	Southern magnolia	2	2	Low	Remove	Building A2; low suit.
215	Southern magnolia	2	2	Low	Remove	Building A2; low suit.
216	Blackwood acacia	14	4	Moderate	Poss. Preserve	Bioretention basin (relocate?)
217	Blackwood acacia	21	4	Moderate	Poss. Preserve	Bioretention basin (relocate?)
218	Blackwood acacia	20	4	Moderate	Poss. Preserve	Bioretention basin (relocate?)
219	Blackwood acacia	23	4	Moderate	Poss. Preserve	Bioretention basin (relocate?)

APPENDIX G

Geotechnical Investigation

ROCKRIDGE GEOTECHNICAL

Prepared for **Mid Pen Housing Corporation**

PRELIMINARY GEOTECHNICAL INVESTIGATION
PROPOSED RESIDENTIAL REDEVELOPMENT
MIDWAY VILLAGE
DALY CITY, CALIFORNIA

February 5, 2020
Project No. 18-1569

February 5, 2020
Project No. 18-1569

Mr. Matthew Lewis
MidPen Housing Corporation
303 Vintage Park Drive, Suite 250
Foster City, California 94404

Subject: Final Report
Preliminary Geotechnical Investigation
Proposed Midway Village Redevelopment Project
47 Midway Drive
Daly City, California 94014

Dear Mr. Lewis:

We are pleased to present the results of our preliminary geotechnical investigation for the for the proposed Midway Village Redevelopment project in Daly City, California. Our preliminary geotechnical investigation was performed in accordance with our amended proposal dated November 14, 2019.

Midway Village is an existing residential development located on the eastern side of Schwerin Avenue and north of its intersection with Martin Street. The site consists of 33 parcels that encompass a total area of about 15.55 acres. It is bordered by a PG&E property to the north, vacant land and a single-family home subdivision under construction to the east, Schwerin Street to the west, and Martin Street to the south. The site is currently occupied by 35 multi-unit two-story residential buildings, asphalt-paved parking lots and interior streets and drive aisles, concrete flatwork and landscaping. The northeastern corner of the site is currently occupied by Bayshore Park. The ground surface across the site slopes gently down to the north and east with ground surface elevations (National Geodetic Vertical Datum) ranging from approximately 80 feet in the southwestern corner of the site (at the intersection of Schwerin and Martin streets) to 15 feet in the northeastern corner of Bayshore Park.

Current redevelopment plans for the Midway Village Redevelopment project call for demolishing the existing structures and other improvements on the site and constructing a combination of 2- to 3-story townhomes, 2- to 3-story walk-up flats, 3- and 4-story apartment buildings, a 1- to 2-story community center, and a 4-story parking structure. The redevelopment will be constructed in five phases. Except for Buildings A and A2, Parking Garage A, and Building D/Parking Garage D, the buildings will be entirely framed in wood. Building A, which will wrap around three sides of Parking Garage A, will consist of three stories of wood-framed construction above a one-story concrete podium. Parking Garage A will be four stories high. A portion of Building A2 will consist of a partial one-story podium with three stories of wood-framed residential units above the podium; the remainder of the building will consist of four stories of wood framing. Building D will consist of a two-story concrete podium with 2 to 3 stories of wood-framed residential units above the podium.

Redevelopment plans also include constructing interior roadways, new infrastructure, landscaping and courtyards, and a 3.3-acre park in the northwestern portion of the site.

Based on the results of our engineering analyses using the data from our cone penetration tests (CPTs), we conclude the primary geotechnical issues affecting the proposed redevelopment include: (1) the presence of up to about 10 feet of fill underlain by up to approximately 11 feet of a highly compressible marsh deposit in the northern portion of the site, and (2) providing uniform support for the proposed buildings.

Our investigation indicates the soils underlying the portion of the site south of Midway Drive have moderate to high strength and low to moderate compressibility. Therefore, we preliminarily conclude new buildings south of Midway Drive can be supported on conventional spread footings bottomed on well-compacted fill and/or native soil. The subsurface conditions north of Midway Drive vary significantly in both thickness of fill and the thickness of the marsh deposit. Based on our settlement analyses, we preliminarily conclude Building A, Garage A, and Building A2 should be supported on spread footings or a mat foundation bearing on improved soil to reduce differential settlements resulting from the consolidation of the marsh deposit, which varies from about 0 to 11 feet thick beneath Building A2 and 0 to 8 feet beneath Building A and Garage A. We preliminarily conclude Buildings B and B2 can be supported on mat foundations bottomed on two feet of recompacted fill.

This report presents our preliminary recommendations regarding foundation design, seismic design, and other geotechnical aspects of the project. The recommendations contained in our report are based on limited subsurface exploration and review of available data for the site, and are not intended for final design. Final geotechnical design values should be confirmed by a detailed geotechnical investigation. In addition, variations between expected and actual soil conditions may be found in localized areas during construction. Therefore, we should be engaged to observe ground improvement, foundation installation, and fill placement, during which time we may make changes in our recommendations, if deemed necessary.

We appreciate the opportunity to provide our services to you on this project. If you have any questions, please call.

Sincerely,
ROCKRIDGE GEOTECHNICAL, INC.

REGISTERED PROFESSIONAL ENGINEER
CRAIG S. SHIELDS
GE2116
3/31/21
GEOTECHNICAL
STATE OF CALIFORNIA

Craig S. Shields, P.E., G.E.
Principal Geotechnical Engineer

Enclosure

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APPENDIX A

ROCKRIDGE GEOTECHNICAL

PRELIMINARY GEOTECHNICAL INVESTIGATION
PROPOSED RESIDENTIAL REDEVELOPMENT
MIDWAY VILLAGE
Daly City, California

1.0 INTRODUCTION

This report presents the results of the preliminary geotechnical investigation performed by Rockridge Geotechnical, Inc. for the proposed Midway Village Redevelopment project in Daly City, California. Midway Village is an existing residential development located on the eastern side of Schwerin Avenue and north of its intersection with Martin Street, as shown on the Site Location Map (Figure 1).

The site consists of 33 parcels that encompass a total area of about 15.55 acres. It is bordered by a PG&E property to the north, vacant land and a single-family home subdivision under construction to the east, Schwerin Street to the west, and Martin Street to the south. The site is currently occupied by 35 multi-unit two-story residential buildings, asphalt-paved parking lots and interior streets and drive aisles, concrete flatwork and landscaping. The northeastern corner of the site is currently occupied by Bayshore Park. The ground surface across the site slopes gently down to the north and east with ground surface elevations (National Geodetic Vertical Datum) ranging from approximately 80 feet in the southwestern corner of the site (at the intersection of Schwerin and Martin streets) to 15 feet in the northeastern corner of Bayshore Park.

Current redevelopment plans for the Midway Village Redevelopment project call for demolishing the existing structures and other improvements on the site and constructing a combination of 2- to 3-story townhomes, 2- to 3-story walk-up flats, 3- and 4-story apartment buildings, a 1- to 2-story community center, and a 4-story parking structure. The redevelopment will be constructed in five phases. Except for Buildings A and A2, Parking Garage A, and Building D/Parking Garage D, the buildings will be entirely framed in wood. Building A, which will wrap around three sides of Parking Garage A, will consist of three stories of wood-framed construction above a one-story concrete podium. Parking Garage A will be four stories high. A portion of Building A2 will consist of a partial one-story podium with three stories of wood-framed residential units above the podium; the remainder of the building will consist of four stories of wood framing. Building D will consist of a two-story concrete podium with 2 to 3 stories of wood-framed residential units above the podium.

Redevelopment plans also include constructing interior roadways, new infrastructure, landscaping and courtyards, and a 3.3-acre park in the northwestern portion of the site.

2.0 SCOPE OF SERVICES

Our preliminary geotechnical investigation was performed in accordance with our amended proposal dated November 14, 2019. Our scope of services consisted of reviewing available geotechnical and geologic data for the site and vicinity, exploring subsurface conditions for the proposed redevelopment by advancing 12 cone penetration tests (CPTs), and performing engineering analyses to develop preliminary conclusions and recommendations regarding:

- the most appropriate foundations type(s) for the proposed buildings
- design criteria for the recommended foundation type(s), including vertical and lateral capacities
- estimates of foundation settlement
- lateral earth pressures for design of retaining walls
- subgrade preparation for slab-on-grade floors and concrete flatwork
- site grading and excavation, including criteria for fill quality and compaction
- pavement sections for asphalt concrete and Portland cement concrete
- site seismicity and seismic hazards, including the potential for liquefaction and liquefaction-induced ground failure
- 2019 California Building Code (CBC) site class and design spectral response acceleration parameters
- construction considerations.

3.0 FIELD INVESTIGATION

Our subsurface investigation consisted of performing 12 CPTs, designated as CPT-1 through CPT-12, at the approximate locations shown on the attached Site Plan (Figure 2). Prior to performing the CPTs, we obtained a drilling permit from the City of Daly City and contacted Underground Service Alert (USA) to notify them of our work, as required by law. We also retained Precision Locating, LLC, a private utility locator, to check that the CPT locations were clear of buried utilities.

The CPTs were performed by Middle Earth Geo Testing, Inc. of Orange, California on January 15 and 16, 2020. The CPTs were advanced to depths of 50 to 51 feet below ground surface (bgs), except for CPT-10 which met refusal in very dense soil at a depth of 39 feet bgs. The CPTs were performed by hydraulically pushing a 1.7-inch-diameter cone-tipped probe with a projected area of 15 square centimeters into the ground. The cone-tipped probe measured tip resistance and the friction sleeve behind the cone tip measured frictional resistance. Electrical strain gauges within the cone continuously measured soil parameters for the entire depth advanced. Soil data, including tip resistance and frictional resistance, were recorded by a computer while the test was conducted. Accumulated data were processed by computer to provide engineering information such as the types and approximate strength characteristics of the soil encountered.

The CPT logs showing tip resistance, friction ratio, and pore pressure, as well as correlated soil behavior type, are presented in Appendix A on Figures A-1 through A-12. Upon completion, the CPTs were backfilled with cement grout.

4.0 SUBSURFACE CONDITIONS

A regional geologic map prepared by Graymer (2000), a portion of which is presented on Figure 3, indicates the northern portion of the site is underlain by artificial fill (af) and the southern portion of the site is underlain by Quaternary-age hillslope deposits (Qsl). Pleistocene-age alluvium is mapped along the northern edge of the site.

The area mapped as artificial fill in the northern portion of the site was formerly a marsh that extended inland from San Francisco Bay, as shown on Figure 3. The marsh was reportedly filled by the U.S. Federal Public Housing Authority after it took possession of the land in 1944. The report titled *Remedial Investigation Report for the Remedial Investigation/Feasibility Study and the Remedial Action Plan for Midway-Bayshore Site* prepared by Ecology and Environment, Inc., dated May 14, 1993, indicates the fill placed in the former marsh is up to about 10 feet thick, with the thickest fill occurring beneath the park in the northeastern portion of the site. Contours of the fill, which were shown on Figure 5-2 (Estimated Fill Thickness and Cross Section Locations) of the above-referenced report, are plotted on Figure 4. The data from CPT-1 through CPT-8, which were performed in the northern portion of the site, indicate the fill thickness is consistent with these contours. Where explored, the fill in the northern portion of the site consists predominantly of medium dense to dense sand, silty sand and clayey sand and stiff to very stiff clay. The Ecology and Environmental, Inc. report indicates the fill contains construction debris such as brick, metal, wood, glass and concrete.

The fill in the northern portion of the site is underlain by a marsh deposit consisting of soft to medium stiff clay with varying amounts of organics. We estimate the thickness of the marsh ranges from about 2 to 4 feet at the locations of CPT-1, CPT-4 and CPT-7. At the locations of CPT-2 and CPT-3, we estimate the marsh deposit is 7-1/2 and 11 feet thick, respectively. The marsh deposit was not encountered at the CPT-6 location. At the CPT-5 location, the four feet of fill is underlain by about five feet of stiff to very stiff clay. At a depth of nine feet bgs is about two feet of medium stiff clay, which may be interpreted to be the marsh deposit.

Beneath the marsh deposit at the locations of CPT-1 through CPT-5, CPT-7 and CPT-8, and below the ground surface at the CPT-6 location is heterogeneous alluvium consisting of interbedded medium dense to very dense sand with varying silt and clay content and stiff to hard clay that extends to the maximum depth explored of 50.5 feet bgs. The thickness of the sand, silty sand and clayey sand layers ranges from less than one foot up to about eight feet.

In the southern portion of the site (i.e., south of Midway Drive), there appears to be less than two feet of existing fill at the locations of the four CPTs (CPT-9 through CPT-12) performed in this area. Below depths of 0 to 2 feet bgs, the CPTs encountered alluvium consisting primarily of interbedded layers of very stiff to hard clay and medium dense to very dense clayey sand that extends to the maximum depth explored. As discussed above, CPT-10 met refusal in very dense soil (possibly bedrock) at a depth of about 39 feet bgs.

4.1 Groundwater

The depth to groundwater at the site is complex and varies both with location on the site and the depth of the water-bearing zone in which the measurements are taken. The geologic cross section (Figure 5-2) presented in the May 14, 1993 Ecology and Environmental, Inc. report referenced above shows the depth to groundwater on October 1, 1992 ranging from about one foot bgs at about the middle of the northern edge of the site to about 12-1/2 feet bgs along the western edge of the site just north of Midway Drive. The groundwater in the northeastern corner where the existing fill is thickest was about seven feet bgs. The reason for the shallow groundwater along the northern edge of the site is stated in the report as due to "groundwater mounding" due to frequent irrigation in the vicinity of the well.

We also reviewed groundwater levels measured in nearby off-site wells presented in the report prepared by Haley & Aldrich titled *Fourth Five-Year Review for Pacific Gas and Electric Company's Martin Service Center, 731 Schwerin Street, Daly City, California,* dated October 2015. The report includes groundwater-level measurements between April 24, 1987 and August 22, 2014 for wells both north and east of Midway Village. The report identifies three water-bearing zones referred to as fill, shallow and deep zones. The shallow zone refers to a 5- to 10-foot-thick layer of silty sand underlying about 10 to 15 feet of low-permeability alluvium and the deep zone refers to a sand layer below the marsh and alluvium at depths of 30 to 40 feet bgs. Based on measurements taken on August 22, 2014, the report states "the unconfined groundwater within the artificial fill is encountered at approximately 7 feet bgs, from a range of ground surface elevations". The report also states the groundwater flows from northwest to southeast in all three of the water-bearing zones. In one cluster of wells near the northeastern corner of the Midway Village site, the groundwater elevations in the shallow and deep zones were about 3 and 5 feet higher, respectively, than the groundwater elevation in the fill on August 22, 2014.

During our field investigation, Middle Earth Geo Testing attempted to obtain groundwater-level measurements at several of the CPT locations using pore pressure dissipation tests performed with the CPT probe; however, with the exception of tests performed at CPT-2 and CPT-9, the pore pressure did not equilibrate during the test due to the low permeability of the soil in which the test was performed. At the CPT-2 location, the pore pressure dissipation test was performed at a depth of 19.36 feet bgs and indicated an estimated groundwater depth of 13.9 feet bgs. At the CPT-9 location, the pore pressure dissipation test was performed at a depth of 32.81 feet bgs and resulted in an estimated groundwater depth of 2.1 feet bgs. The measurements at the CPT-2 and CPT-9 locations appear to be taken in the "shallow" and "deep" water-bearing zones, as described in the Haley & Aldrich report and, therefore, are probably not representative of the groundwater levels in the fill.

Based on our review of the groundwater data discussed above, the depth to groundwater in the existing fill blanketing the area north of Midway Drive fluctuated about 3-1/2 to 4-1/2 feet between 1987 and 2014 in the two monitoring wells closest to Midway Village. The shallowest depth to groundwater measured in the fill zone in the monitoring well closest to Midway Village was about four feet bgs in February 2000. For preliminary design, we recommend using a design groundwater depth of four feet bgs. It should be noted the monitoring well in which groundwater was measured at one foot bgs, as described above in the Ecology and Environment, Inc. report was screened in the "deep" water-bearing zone below the marsh deposit and, therefore, was not representative of the groundwater level in the fill.

5.0 SEISMIC CONSIDERATIONS

5.1 Regional Seismicity

The site is located in the Coast Ranges geomorphic province of California that is characterized by northwest-trending valleys and ridges. These topographic features are controlled by folds and faults that resulted from the collision of the Farallon plate and North American plate and subsequent strike-slip faulting along the San Andreas Fault system. The San Andreas Fault is more than 600 miles long from Point Arena in the north to the Gulf of California in the south. The Coast Ranges province is bounded on the east by the Great Valley and on the west by the Pacific Ocean.

The major active faults in the area are the San Andreas, San Gregorio, and Hayward faults. These and other faults in the region are shown on Figure 4. For these and other active faults within a 50-kilometer radius of the site, the distance from the site and estimated mean characteristic Moment magnitude[1] [2007 Working Group on California Earthquake Probabilities (WGCEP) (USGS 2008) and Cao et al. (2003)] are summarized in Table 1.

[1] Moment magnitude is an energy-based scale and provides a physically meaningful measure of the size of a faulting event. Moment magnitude is directly related to average slip and fault rupture area.

TABLE 1
Regional Faults and Seismicity

Fault Segment	Approximate Distance from Site (km)	Direction from Site	Mean Characteristic Moment Magnitude
N. San Andreas - Peninsula	6.6	West	7.23
N. San Andreas (1906 event)	6.6	West	8.05
San Gregorio Connected	14	West	7.50
N. San Andreas - North Coast	17	West	7.51
Total Hayward	22	Northeast	7.00
Total Hayward-Rodgers Creek	22	Northeast	7.33
Monte Vista-Shannon	33	Southeast	6.50
Total Calaveras	38	East	7.03
Mount Diablo Thrust	38	East	6.70
Rodgers Creek	43	North	7.07
Green Valley Connected	43	East	6.80

Since 1800, four major earthquakes have been recorded on the San Andreas Fault. In 1836, an earthquake with an estimated maximum intensity of VII on the Modified Mercalli (MM) scale occurred east of Monterey Bay on the San Andreas Fault (Toppozada and Borchardt 1998). The estimated Moment magnitude, M_w, for this earthquake is about 6.25. In 1838, an earthquake occurred with an estimated intensity of about VIII-IX (MM), corresponding to an M_w of about 7.5. The San Francisco Earthquake of 1906 caused the most significant damage in the history of the Bay Area in terms of loss of lives and property damage. This earthquake created a surface rupture along the San Andreas Fault from Shelter Cove to San Juan Bautista approximately 470 kilometers in length. It had a maximum intensity of XI (MM), an M_w of about 7.9, and was felt 560 kilometers away in Oregon, Nevada, and Los Angeles. The most recent earthquake to affect the Bay Area was the Loma Prieta Earthquake of 17 October 1989 with an M_w of 6.9. This earthquake occurred in the Santa Cruz Mountains about 88 kilometers southwest of the site.

In 1868, an earthquake with an estimated maximum intensity of X on the MM scale occurred on the southern segment (between San Leandro and Fremont) of the Hayward Fault. The estimated M_w for the earthquake is 7.0. In 1861, an earthquake of unknown magnitude (probably an M_w of about 6.5) was reported on the Calaveras Fault. The most recent significant earthquake on this fault was the 1984 Morgan Hill earthquake ($M_w = 6.2$).

The U.S. Geological Survey's 2014 Working Group on California Earthquake Probabilities has compiled the earthquake fault research for the San Francisco Bay area in order to estimate the probability of fault segment rupture. They have determined that the overall probability of moment magnitude 6.7 or greater earthquake occurring in the San Francisco Region during the next 30 years (starting from 2014) is 72 percent. The highest probabilities are assigned to the Hayward Fault, Calaveras Fault, and the northern segment of the San Andreas Fault. These probabilities are 14.3, 7.4, and 6.4 percent, respectively.

5.2 Seismic Hazards

Because the project site is in a seismically active region, we evaluated the potential for earthquake-induced geologic hazards including ground shaking, ground surface rupture, liquefaction,[2] lateral spreading,[3] and cyclic densification[4]. We used the results of our field investigation to evaluate the potential of these phenomena occurring at the project site.

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2 Liquefaction is a phenomenon where loose, saturated, cohesionless soil experiences temporary reduction in strength during cyclic loading such as that produced by earthquakes.

3 Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

4 Cyclic densification is a phenomenon in which non-saturated, cohesionless soil is compacted by earthquake vibrations, causing ground-surface settlement.

5.2.1 Ground Shaking

The seismicity of the site is governed by the activity of the San Andreas and San Gregorio faults, although ground shaking from future earthquakes on other faults, including the Hayward Fault, will also be felt at the site. The intensity of earthquake ground motion at the site will depend upon the characteristics of the generating fault, distance to the earthquake epicenter, and magnitude and duration of the earthquake. We judge that strong to very strong ground shaking could occur at the site during a large earthquake on one of the nearby faults.

5.2.2 Ground Surface Rupture

Historically, ground surface displacements closely follow the trace of geologically young faults. The site is located 7 km from the San Andreas Fault; however, the site is not within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults exist on the site. We therefore conclude the risk of fault offset at the site from a known active fault is very low. In a seismically active area, the remote possibility exists for future faulting in areas where no faults previously existed; however, we conclude the risk of surface faulting and consequent secondary ground failure from previously unknown faults is also very low.

5.2.3 Cyclic Densification

Seismically induced compaction or cyclic densification of non-saturated sand (sand above the groundwater table) caused by earthquake vibrations may result in differential settlement. The results of our preliminary field investigation indicate the granular soil above the groundwater table is generally not susceptible to cyclic densification due to its relative density and/or fines content. A zone of loose to medium dense sand to silty sand was encountered between depths of approximately 1-1/2 and 3-3/4 feet bgs at the CPT-6 location. We estimate ground surface settlement due to cyclic densification of this thin layer during a major earthquake would be less than 1/4 inch. The potential for settlement from cyclic densification at this location will be mitigated by overexcavating and recompacting two feet of soil below the foundation.

5.2.4 Liquefaction and Associated Hazards

Liquefaction is a phenomenon in which saturated soil temporarily loses strength from the build-up of excess pore water pressure, especially during earthquake-induced cyclic loading. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Flow failure, lateral spreading, differential settlement, loss of bearing strength, ground fissures and sand boils are evidence of excess pore pressure generation and liquefaction.

A portion of the map titled *Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region,* prepared by the USGS in cooperation with the California Geological Survey (CGS), dated 2006, is shown on Figure 6. The map indicates the area mapped as artificial fill in the northern portion of the site is highly susceptible to liquefaction while the liquefaction potential of the native alluvium in the southern portion of the site is very low.

We evaluated the liquefaction potential at the site using data collected from our CPTs. Liquefaction susceptibility was assessed using the software CLiq v3.0 (GeoLogismiki, 2019). CLiq uses measured field CPT data and assesses liquefaction potential, including post-earthquake vertical settlement, given a user-defined earthquake magnitude and peak ground acceleration (PGA). Our liquefaction analyses were performed using the methodology proposed by Boulanger and Idriss (2014). We also used the relationship proposed by Zhang, et al (2002) to estimate post-liquefaction volumetric strains and corresponding ground surface settlement; a relationship that is an extension of the work by Ishihara and Yoshimine (1992).

Our analyses were performed using an in-situ groundwater depth of four feet bgs and a “during earthquake” groundwater depth of four feet bgs. In accordance with the 2019 CBC, we used a peak ground acceleration of 0.79 gravity (g) in our liquefaction evaluation; this peak ground acceleration is consistent with the Maximum Considered Earthquake Geometric Mean (MCE_G) peak ground acceleration adjusted for site effects (PGA_M). We also used a Moment magnitude

8.05 earthquake, which is consistent with the mean characteristic Moment magnitude for the San Andreas Fault, as presented in Table 1.

Our liquefaction analyses indicate there are isolated thin layers of potentially liquefiable silty sand and sandy silt at random depths in the native alluvium underlying the site. The layers are less than about one foot thick except for a two-foot-thick layer encountered between depths of 16 and 18 feet bgs at the CPT-10 location. Based on the results of our analyses, we estimate total and differential settlements associated with liquefaction after an MCE event generating a PGA_M of 0.79g will be up to about 1/2 inch and 1/4 inch over horizontal distance of 30 feet, respectively.

Based on the depth and thickness of the potentially liquefiable soil layers, we conclude the site is not susceptible to surface manifestations from liquefaction, such as sand boils. Considering the potentially liquefiable soil layers are not continuous, we conclude the risk of lateral spreading is very low.

6.0 PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our preliminary field investigation, we conclude the site may be redeveloped as proposed. The primary geotechnical concerns for the proposed redevelopment are: (1) the presence of up to about 10 feet of fill underlain by up to approximately 11 feet of a highly compressible marsh deposit in the northern portion of the site, and (2) providing uniform support for the proposed buildings. These and other geotechnical issues as they pertain to the proposed development are discussed in the remainder of this section.

6.1 Foundation and Settlement

Based on the data from our CPTs and review of existing subsurface data from the previous investigation, we have divided the site into “south of Midway Drive” and “north of Midway Drive” for the purposes of discussing foundation alternatives and providing preliminary foundations recommendations for the appropriate foundation types. Our preliminary conclusions and recommendations regarding foundations are presented in the following sections.

6.1.1 South of Midway Drive

Our investigation indicates the soil underlying the portion of the site south of Midway Drive has moderate to high strength and low to moderate compressibility. Therefore, we preliminarily conclude new buildings south of Midway Drive can be supported on conventional spread footings bottomed on well-compacted fill and/or native soil.

We preliminarily recommend that spread footings be designed using an allowable bearing pressure of 4,000 pounds per square foot (psf) for dead-plus-live loads; this pressure may be increased by one-third for total design loads, which include wind or seismic forces. Estimated total settlements will be on the order of 1/2 to 3/4 inch for wood-framed structures and 3/4 to 1 inch for Building D. We estimate differential settlements will be on the order of 1/2 to 3/4 inch over a 30-foot horizontal distance. Most of the settlement will occur during construction of the buildings. Continuous footings should be at least 18 inches wide and isolated spread footings should be at least 24 inches wide. Footings should extend at least 18 inches below the lowest adjacent soil subgrade.

Lateral loads may be resisted by a combination of friction along the base of the footing and passive resistance against the vertical faces of the footing. To compute lateral resistance, we recommend using an equivalent fluid weight of 300 pounds per cubic foot (pcf); the upper foot of soil should be ignored unless confined by a slab or pavement. Frictional resistance should be computed using a base friction coefficient of 0.30 where the footing is in direct contact with soil. The passive pressure and frictional resistance values include a factor of safety of at least 1.5 and may be used in combination without reduction.

6.1.2 North of Midway Drive

The subsurface conditions north of Midway Drive vary significantly in both thickness of fill and the thickness of the marsh deposit. Based on our settlement analyses using our CPT data, we preliminarily conclude Building A, Garage A, and Building A2 should be supported on spread footings or a mat foundation bearing on improved soil to reduce differential settlements resulting from the consolidation of the marsh deposit, which varies from about 0 to 11 feet thick beneath Building A2 and 0 to 8 feet beneath Building A and Garage A. We preliminarily conclude Buildings B and B2 can be supported on mat foundations bottomed on two feet of recompacted fill. Recommendations for both spread footings on improved soil and mat foundations are presented below.

6.1.2.1 Spread Footings on Improved Soil

We preliminarily conclude proposed Buildings A and A2 and Garage A may be supported on shallow foundations, such as spread footings or mat, bearing on soil strengthened using ground improvement techniques. Continuous footings should be at least 18 inches wide and isolated spread footings should be at least 24 inches wide. Footings should extend at least 18 inches below the lowest adjacent soil subgrade. The edge of mat foundations should extend at least 12 inches below the lowest adjacent exterior finished grade.

Ground improvement can serve to stiffen the overall soil matrix by transferring foundation loads to more competent material below the existing fill and marsh deposit, thus reducing static and seismically induced settlements and providing increased bearing capacity for shallow foundations. Based on our experience, we believe the most appropriate ground improvement method for the site conditions consists of drilled displacement columns (DDCs). Drilled displacement columns are installed by advancing a continuous flight, hollow-stem auger that mostly displaces the soil and then pumping a sand-cement mixture into the hole under pressure as the auger is withdrawn. This system results in low vibration during installation and generate relatively few drilling spoils for off-haul. DDCs are installed under design-build contracts by specialty contractors. The required size, spacing, length, and strength of columns should be determined by the contractor, based on the desired level of improvement.

For preliminary design of spread footings or a mat foundation bearing on improved ground, we recommend assuming ground improvement elements will extend a minimum of 20 feet into the alluvium below the marsh deposit, resulting in DDSC columns ranging from about 20 to 40 feet across the building footprints. We anticipate the ground improvement should be capable of increasing the allowable bearing pressure for spread footings or a mat foundation to approximately 4,000 psf for dead-plus-live-loads and limiting combined static and seismic differential total settlement to less than one inch and differential settlement to less than 3/4 inch over a horizontal distance of 30 feet. The actual design allowable bearing pressures and estimated settlements should be determined by the design-build ground improvement contractor, as they will be based on the diameter, depth, and spacing of the ground improvement elements

Lateral loads may be resisted by a combination of passive pressure on the vertical faces of the shallow foundations and friction between the bottoms of the foundations and the supporting soil and ground improvement elements. To compute lateral resistance, we preliminarily recommend using an equivalent fluid weight (triangular distribution) of 300 pcf. Passive pressure in the upper one foot of soil should be neglected unless confined by a slab or pavement. The allowable base friction coefficient between the foundation and ground improvement elements should be determined by the ground improvement contractor, as it may be higher than that recommended for foundations on native (unimproved) soil, depending on the size and spacing of the ground improvement elements. Alternatively, the frictional resistance for footings may be computed using an allowable base friction coefficient of 0.35, which is conservative. For a mat foundation, an allowable base friction value of 0.20, which assumes a vapor retarder is placed between the bottom of the mat and tops of the ground improvement elements, should be used. The passive pressure and frictional resistance values include a factor of safety of at least 1.5 and may be used in combination without reduction.

6.1.2.2 Mat Foundation

We preliminarily conclude Buildings B and B2 may be supported on mat foundations underlain by at least two feet of engineered fill. For mat design, we preliminarily recommend using a modulus of subgrade reaction of 15 pounds per cubic inch (pci) for dead-plus-live loads: this value has already been scaled to take into account the plan dimensions of the foundation and may be increased by one-third percent for total load conditions.

Considering the large area of the mat, we expect the average bearing stress under the mat to be low; however, concentrated stresses will occur at column locations and at the edges of the mat. For preliminary design, an allowable dead-plus-live bearing pressure of 2,500 psf may be used; this pressure may be increased by one-third for total load conditions.

We estimate the total settlement of a mat-supported building with an average bearing pressure of 500 psf for dead-plus-live-load conditions will be approximately 1 to 1-1/2 inches and differential settlement would be approximately 3/4 inch over a horizontal distance of 30 feet.

To compute lateral resistance, we recommend using an equivalent fluid weight of 300 pcf; the upper foot of soil should be ignored unless confined by a slab or pavement. Assuming the mat is supported on a vapor retarder, a friction factor of 0.20 may be used to compute base friction. Where the mat foundation is supported directly on soil, a friction factor of 0.30 may be used. The passive pressure and frictional resistance values include a factor of safety of at least 1.5 and may be used in combination without further reduction.

6.2 Slab-on-Grade Floors

Concrete slab-on-grade floors may be used for all the buildings south of Midway Drive and for Buildings A, Garage A, and Building A2. Where water vapor transmission through the floor slab is not desirable, we recommend installing a capillary moisture break and water vapor retarder beneath the floor slab. A capillary moisture break consists of at least four inches of clean, free-draining gravel or crushed rock. The vapor retarder should meet the requirements for Class A vapor retarders stated in ASTM E1745. For the mat foundation option for Buildings B and B2, the four inches of capillary break material is not required. The vapor retarder should be placed in accordance with the requirements of ASTM E1643. These requirements include overlapping seams by six inches, taping seams, and sealing penetrations in the vapor retarder. The particle size of the capillary break material should meet the gradation requirements presented in Table 2.

TABLE 2
Gradation Requirements for Capillary Moisture Break

Sieve Size	Percentage Passing Sieve
1 inch	90 – 100
3/4 inch	30 – 100
1/2 inch	5 – 25
3/8 inch	0 – 6

Concrete mixes with high water/cement (w/c) ratios result in excess water in the concrete, which increases the cure time and results in excessive vapor transmission through the slab. Therefore, concrete for the mat and floor slab should have a w/c ratio of less than 0.45. Water should not be added to the concrete mix in the field. If necessary, workability should be increased by adding plasticizers. In addition, the mat/slab should be properly cured. Before the floor covering is placed, the contractor should check that the concrete surface and the moisture emission levels (if emission testing is required) meet the manufacturer's requirements.

6.3 Seismic Design

For design in accordance with the 2019 CBC, we preliminarily recommend Site Class D be used. It is possible the stiffer soils south of Midway Drive may be classified as Site Class C; however, a geophysical survey would be necessary to estimate the average shear-wave velocity of the upper 100 feet of soil (and possibly bedrock) to determine the appropriate site class. This survey could be performed during the final geotechnical investigation for the project.

The latitude and longitude of the site are 37.7020° and -122.4138°, respectively. For design in accordance with 2019 CBC, we preliminarily recommend the following:

- Site Class D
- S_S = 1.66g, S_1 = 0.67g

The 2019 CBC is based on the guidelines contained within ASCE 7-16 which stipulates that where S_1 is greater than 0.2 times gravity (g) for Site Class D, a ground motion hazard analysis is needed unless the seismic response coefficient (C_s) value will be calculated as outlined in Section 11.4.8, Exception 2. Assuming the C_s value will be calculated as outlined in Section 11.4.8, Exception 2, we recommend the following seismic design parameters:

- F_a = 1.0, F_v = 1.7
- S_{MS} = 1.66g, S_{M1} = 1.14g
- S_{DS} = 1.10g, S_{D1} = 0.76g
- Seismic Design Category D for Risk Factors I, II, and III

Depending on the structural design methodology and fundamental period of the proposed building, it may be advantageous to perform a ground motion hazard analysis (the project structural engineer should confirm). We can perform a ground motion hazard analysis upon request.

6.4 Site Preparation and Grading

Site demolition should include the removal of existing pavements, foundations, and underground utilities. In general, abandoned underground utilities should be removed to the property line or service connections and properly capped or plugged with concrete. Where existing utility lines are outside of the proposed building footprint and will not interfere with the proposed construction, they may be abandoned in-place provided the lines are filled with lean concrete or cement grout to the property line. Voids resulting from demolition activities should be properly backfilled with compacted fill following the recommendations provided later in this section.

In areas that will receive improvements (i.e. building pads, exterior concrete flatwork, and new fill), the soil subgrade exposed following stripping and clearing should be scarified to a depth of at least eight inches, moisture-conditioned to above optimum moisture content, and compacted to at least 90 percent relative compaction . If the subgrade is within eight inches of finished subgrade in areas to receive vehicular traffic, it should be moisture-conditioned to near optimum moisture content and compacted to at least 95 percent relative compaction and be non-yielding. The soil subgrade should be kept moist until it is covered by fill or improvements.

Fill should consist of on-site soil or imported soil (select fill) that is free of organic matter, contains no rocks or lumps larger than three inches in greatest dimension, has a liquid limit of less than 40 and a plasticity index lower than 15, and is approved by the Geotechnical Engineer. Samples of proposed imported fill material should be submitted to the Geotechnical Engineer at least three business days prior to use at the site. The grading contractor should provide analytical test results or other suitable environmental documentation indicating the imported fill is free of hazardous materials at least three days before use at the site. If this data is not available, up to two weeks should be allowed to perform analytical testing on the proposed imported material.

Fill should be placed in horizontal lifts not exceeding eight inches in uncompacted thickness, moisture-conditioned to above optimum moisture content, and compacted to at least 90 percent relative compaction. Fill should be compacted to at least 95 percent relative compaction where the fill is greater than five feet in thickness or it consists of clean sand or gravel, defined as soil with less than five percent fines by weight. Fill placed within the upper foot of pavement subgrade should also be compacted to at least 95 percent relative compaction, and be non-yielding.

6.4.1 Utility Trench Backfill

Excavations for utility trenches can be readily made with a backhoe. All trenches should conform to the current CAL-OSHA requirements. To provide uniform support, pipes or conduits should be bedded on a minimum of four inches of sand or fine gravel. After the pipes and conduits are tested, inspected (if required) and approved, they should be covered to a depth of six inches with sand or fine gravel, which should be mechanically tamped.

Backfill for utility trenches and other excavations is also considered fill, and should be placed and compacted in accordance with the recommendations previously presented. If imported clean sand or gravel (defined as soil with less than five percent fines) is used as backfill, it should be compacted to at least 95 percent relative compaction. Fill placed in the public right-of-way should be compacted in accordance with the City of Daly City Standard Specifications. Jetting of trench backfill should not be permitted. Special care should be taken when backfilling utility trenches in pavement areas. Poor compaction may cause excessive settlements, resulting in damage to the pavement section.

6.4.2 Exterior Concrete Flatwork

Exterior concrete flatwork that will not receive vehicular traffic (i.e. sidewalk) should be underlain by at least four inches of Class 2 aggregate base compacted to at least 90 percent relative compaction. Prior to placement of the aggregate base, the upper eight inches of the subgrade soil should be scarified, moisture-conditioned to near optimum moisture content, and compacted to at least 90 percent relative compaction.

6.4.3 Drainage and Landscaping

Positive surface drainage should be provided around the buildings to direct surface water away from foundations. To reduce the potential for water ponding adjacent to the buildings, we recommend the ground surface within a horizontal distance of five feet from the buildings slope down away from the buildings with a surface gradient of at least two percent in unpaved areas and one percent in paved areas. In addition, roof downspouts should be discharged into controlled drainage facilities to keep the water away from the foundations.

6.5 Retaining Walls

Retaining walls should be designed to resist static lateral earth pressures, lateral pressures caused by earthquakes, and traffic loads (if vehicular traffic is expected within a horizontal distance equal to 1.5 times the wall height). All on-site walls, including low retaining walls in landscaped areas, should be designed in accordance with the recommendations presented in this section, although checking the walls for seismic loading is not required for walls less than six feet high. Retaining walls that are restrained from movement at the top or sides (e.g., a wall with a 90-degree turn) should be designed using the at-rest pressure presented in Table 3. Walls that are not restrained from rotation may be designed using the active pressure presented in Table 3.

TABLE 3
Lateral Earth Pressures for Retaining Wall Design

Soil Backfill Type	Active Static Condition (Unrestrained)	At-Rest Static Condition (Restrained)	Seismic Condition
On-site Soil - Drained	35 pcf[1]	55 pcf	35 pcf + 16 pcf
On-site Soil - Undrained	80 pcf	90 pcf	80 pcf + 8 pcf

1. Equivalent fluid weight (triangular distribution); pcf = pounds per cubic foot

The recommended lateral earth pressures above are based on a level backfill condition with no additional surcharge loads. If the retained soil will be sloped, we can provide additional recommendations after the degree to which the soil will be sloped has been determined. Where the below-grade walls are subject to traffic loading within a horizontal distance equal to 1.5 times the wall height, an additional uniform lateral pressure of 50 psf, applied to the entire height of the wall.

The design pressures recommended are based on fully drained walls. Although a majority of the retaining walls will be above the groundwater level, water can accumulate behind the walls from other sources, such as rainfall, irrigation, and broken water lines, etc. One acceptable method for backdraining a retaining wall is to place a prefabricated drainage panel against the back of the wall. The drainage panel should extend down to a perforated PVC collector pipe at the base of the retaining wall. The pipe should be surrounded on all sides by at least four inches of Caltrans Class 2 permeable material or 3/4-inch drain rock wrapped in filter fabric (Mirafi NC or equivalent). The pipe should be connected to a suitable discharge point; a sump and pump system may be required to drain the collector pipes.

Wall backfill material and compaction should conform to the recommendations presented above in Section 6.4 of this report. Lightweight compaction equipment should be used to reduce stresses induced on the retaining walls during fill placement unless the walls are appropriately braced.

Site retaining walls may be supported on spread footings bottomed on one foot of engineered fill compacted to at least 90 percent relative compaction. The footings should be bottomed at least 18 inches below the lowest adjacent finished grade. The allowable bearing pressure, friction factor, and passive pressure presented for mat foundation design in Section 7.2 may be used for design of site retaining walls.

6.6 Flexible (Asphalt Concrete) Pavement Design

The State of California flexible pavement design method was used to develop the recommended asphalt-concrete pavement sections. Based on our experience, we assumed an R-value of 40 for the near-surface soil, which consists mostly of silty sand. Several R-value tests should be performed on the near-surface soil during the final geotechnical investigation. Preliminary pavement design recommendations for asphalt-concrete pavements for the assumed R-value of 40 are presented below in Table 4.

TABLE 4
AC Pavement Sections

TI	Asphaltic Concrete (inches)	Class 2 Aggregate Base R = 78 (inches)
4.5	2.5	6.0
5.0	3.0	6.0
5.5	3.0	6.0
6.0	3.5	6.0
6.5	4.0	6.0
7.0	4.0	7.0

The soil subgrade beneath AC pavements should be scarified to a depth of eight inches, moisture-conditioned to near optimum moisture content, and compacted to at least 95 percent relative compaction. In addition, the subgrade should be a firm and non-yielding surface. The subgrade should be proof-rolled to confirm it is non-yielding prior to placing the aggregate base. The Class 2 aggregate base should be moisture-conditioned to near optimum moisture content and compacted to at least 95 percent relative compaction.

6.7 Portland Cement Concrete Pavement

The PCC pavement section design is based on a maximum single-axle load of 20,000 pounds and a maximum tandem axle of 32,000 pounds. The recommended PCC pavement section for these axle loads is six inches of Portland cement concrete over six inches of Class 2 aggregate base. For PCC pavement areas that will not receive truck traffic, a PCC pavement section consisting of five inches of Portland cement concrete over six inches of Class 2 aggregate base may be used. The modulus of rupture and unconfined compressive strength of the concrete should be at least 500 and 3,000 pounds per square inch (psi) at 28 days, respectively. Contraction joints should be placed at a 15-foot spacing. Where the outer edge of a concrete pavement meets asphalt pavement, the concrete slab should be thickened by 50 percent at a taper not to exceed a slope of 1 in 10.

The soil subgrade beneath PCC pavements should be scarified to a depth of eight inches, moisture-conditioned to near optimum moisture content, and compacted to at least 95 percent relative compaction to provide an unyielding surface. The Class 2 aggregate base should be moisture-conditioned to near optimum moisture content and compacted to at least 95 percent relative compaction.

7.0 ADDITIONAL GEOTECHNICAL SERVICES

The preliminary conclusions and recommendations presented within are based on a preliminary field investigation and not intended for final design. Prior to final design, we should be retained to provide a final geotechnical report based on a supplemental field investigation and the final proposed development. Additional borings and CPTs will be required to further evaluate the subsurface conditions beneath the site. Once our final report has been completed, the design team has selected a foundation system, and prior to construction, we should review the project plans and specifications to check their conformance with the intent of our final recommendations. During construction, we should observe site preparation, ground improvement installation, foundation installation, and the placement and compaction of fill. These observations will allow us to compare the actual with the anticipated soil conditions and to check if the contractor's work conforms with the geotechnical aspects of the plans and specifications.

8.0 LIMITATIONS

This preliminary geotechnical investigation has been conducted in accordance with the standard of care commonly used as state-of-practice in the profession. No other warranties are either expressed or implied. The preliminary recommendations made in this report are based on the assumption that the subsurface conditions do not deviate appreciably from those disclosed in the exploratory CPTs. If any variations or undesirable conditions are encountered during construction, we should be notified so that additional recommendations can be made. The preliminary foundation recommendations presented in this report are developed exclusively for the proposed development described in this report and are not valid for other locations and construction in the project vicinity.

REFERENCES

2019 California Building Code

Boulanger, R.W and Idriss, I.M. (2014). “CPT and SPT Based Liquefaction Triggering Procedures”, Center for Geotechnical Modeling, Department of Civil and Environmental Engineering, University of California, Davis, Report No. UCD/CGM-14/01, April.

Cao, T., Bryant, W. A., Rowshandel, B., Branum D. and Wills, C. J. (2003). The Revised 2002 California Probabilistic Seismic Hazard Maps.

California Division of Mines and Geology (1996). Probabilistic Seismic Hazard Assessment for the State of California, DMG Open-File Report 96-08.

Ecology and Environment, Inc. (1993). “Remedial Investigation Report for the Remedial Investigation/Feasibility Study and the Remedial Action Plan for Midway-Bayshore Site”.

Field, E.H., and 2014 Working Group on California Earthquake Probabilities, (2015). UCERF3: A new earthquake forecast for California’s complex fault system: U.S. Geological Survey 2015-3009, 6 p., http://dx.doi.org/10.3133/fs20153009.

GeoLogismiki (2016). CLiq, Version 2.0.

GeoTracker website, State of California Water Resources Control Board, (http://geotracker.waterboards.ca.gov/), accessed January 17, 2020.

Graymer, R.W., Moring, B.C., Saucedo, G.J, Wentworth, C.M., Brabb, E.E., and Knudsen, K.L. (2006). Geologic Map of the San Francisco Bay Region, prepared in cooperation with U.S. Geological Survey and California Geological Survey, March 6.

Idriss, I.M., Boulanger, R.W. (2008). “Soil Liquefaction During Earthquakes,” Earthquake Engineering Research Institute (EERI), MNO-12.

Ishihara, K. (1985). “Stability of Natural Deposits During Earthquakes,” proceedings of the 11th International Conference of Soil Mechanics and Foundation Engineering, San Francisco, CA, Vol 1, 321-376.

Haley & Aldrich (2015). “Fourth Five-Year Review for Pacific Gas and Electric Company’s Martin Service Center, 731 Schwerin Street, Daly City, California”.

Jennings, C.W. (1994). Fault Activity Map of California and Adjacent Areas with Locations and Ages of Recent Volcanic Eruptions: California Division of Mines and Geology Geologic Data Map No. 6, scale 1: 750,000.

Robertson, P.K. (2009). “Performance based earthquake design using the CPT”, Keynote Lecture, International Conference on Performance-based Design in Earthquake Geotechnical Engineering – from case history to practice, IS-Tokyo, June 2009.

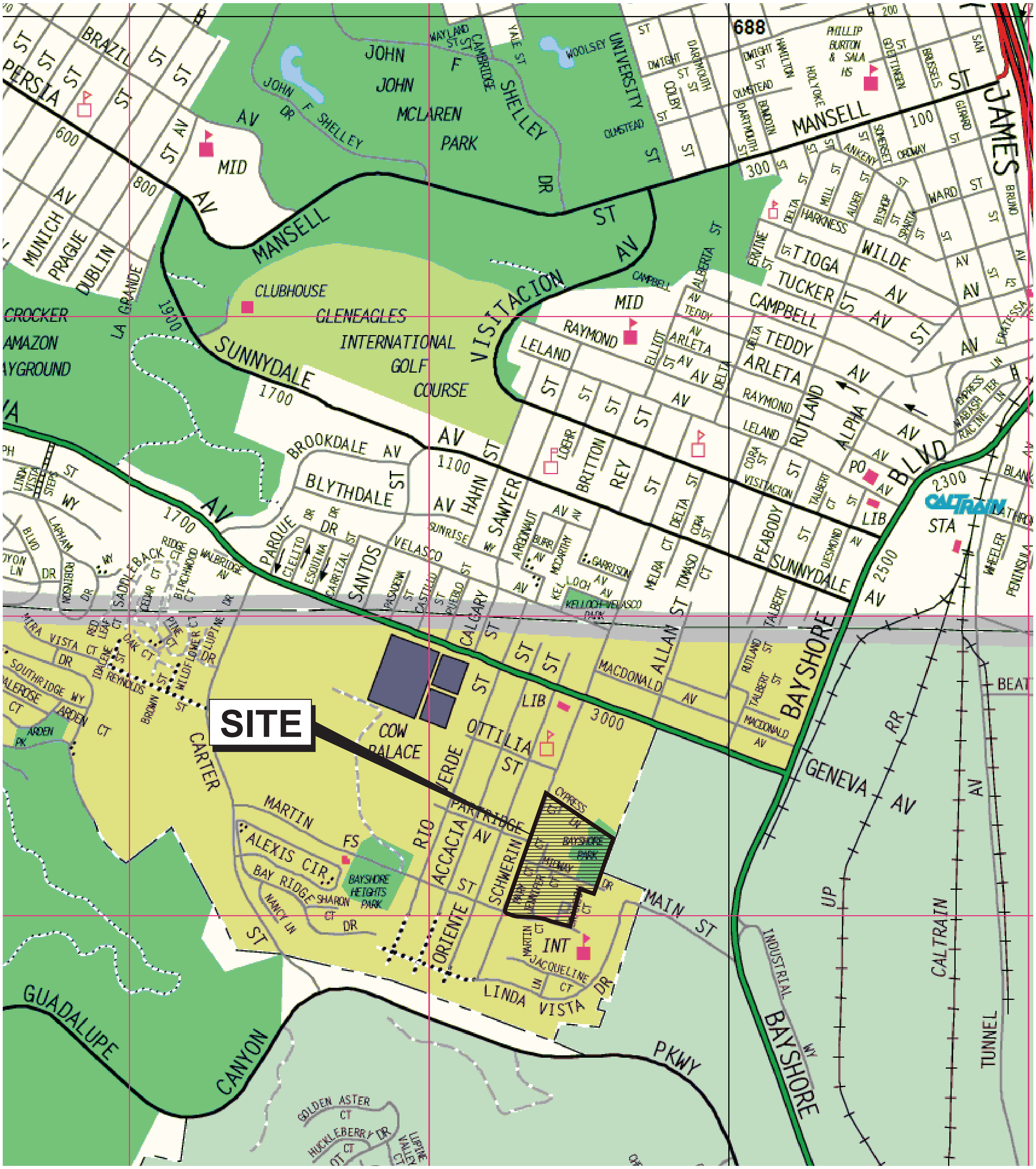
Robertson, P.K. (2009). “Interpretation of Cone Penetration Tests - A Unified Approach”, Canadian Geotechnical Journal, Vol. 46, No. 11, pp 1337-1355.

U.S. Geological Survey (2008). The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2): prepared by the 2007 Working Group on California Earthquake Probabilities, U.S. Geological Survey Open File Report 2007-1437.

Zhang, G., Robertson. P.K., Brachman, R., (2002). “Estimating Liquefaction Induced Ground Settlements from the CPT”, Canadian Geotechnical Journal, 39: pp 1168-1180.

ROCKRIDGE GEOTECHNICAL

FIGURES



Base map: The Thomas Guide
San Francisco County
2002

0 1/4 1/2 Mile
Approximate scale

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE
GEOTECHNICAL

SITE LOCATION MAP

Date 01/21/20	Project No. 18-1569	Figure 1

EXPLANATION

CPT-1 Approximate location of cone penetration test by Rockridge Geotechnical Inc., January 16, 2019

Project limits

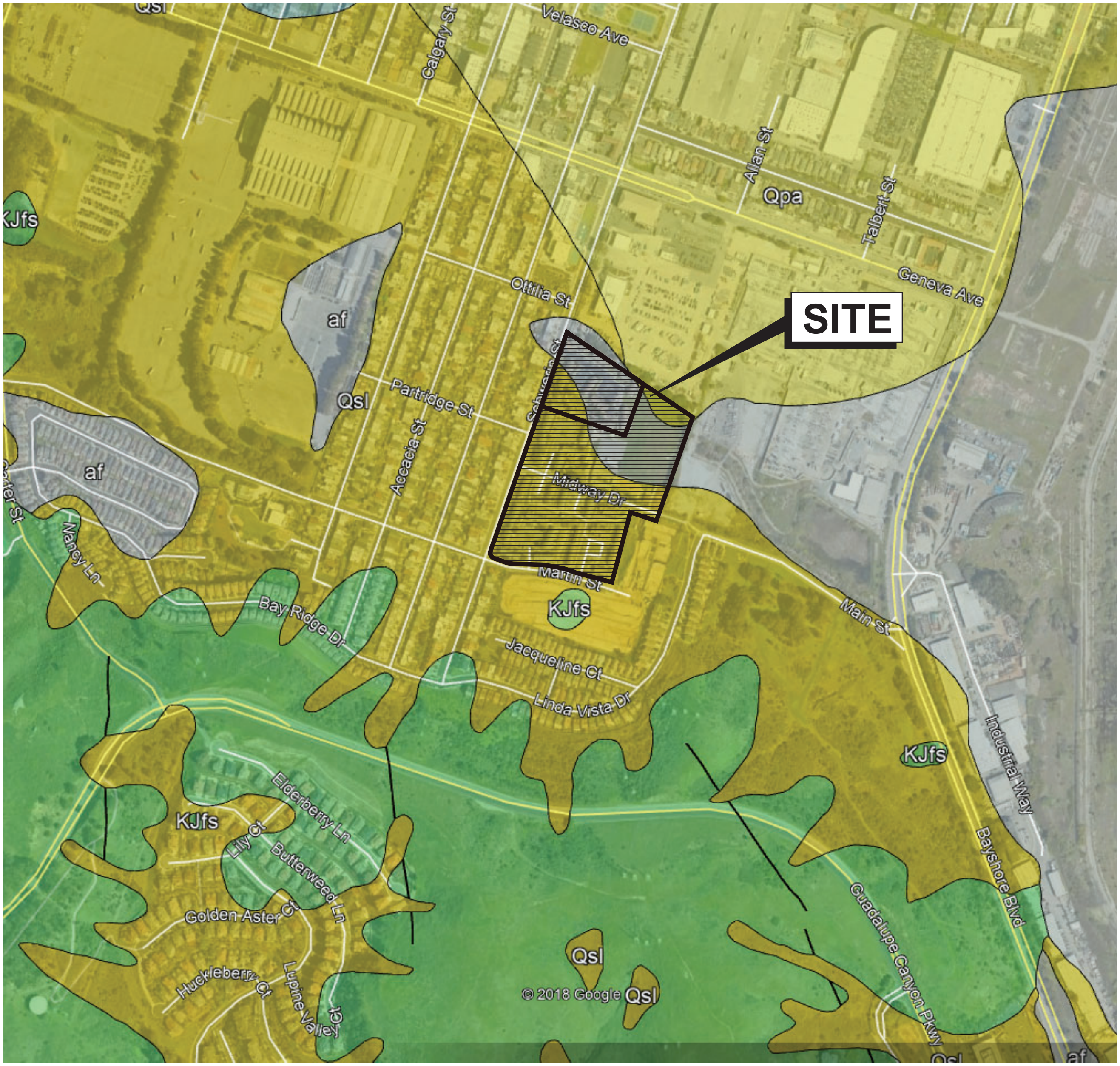
Reference: Base map from a drawing titled "Midway Village Site Plan", by Daivd Baker Architects, undated.

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

SITE PLAN

Date 02/05/20	Project No. 18-1569	Figure 2

ROCKRIDGE GEOTECHNICAL



Base map: Google Earth with U.S. Geological Survey (USGS), San Mateo County, 2018.

EXPLANATION

af	Artificial Fill
Qsl	Hillslope Deposits (Quaternary)
Qpa	Alluvium (Pleistocene)
KJfs	Franciscan Complex sedimentary rocks (Early Cretaceous and (or) Late Jurassic)

Geologic contact: dashed where approximate and dotted where concealed, queried where uncertain

N

0 800 1600 Feet

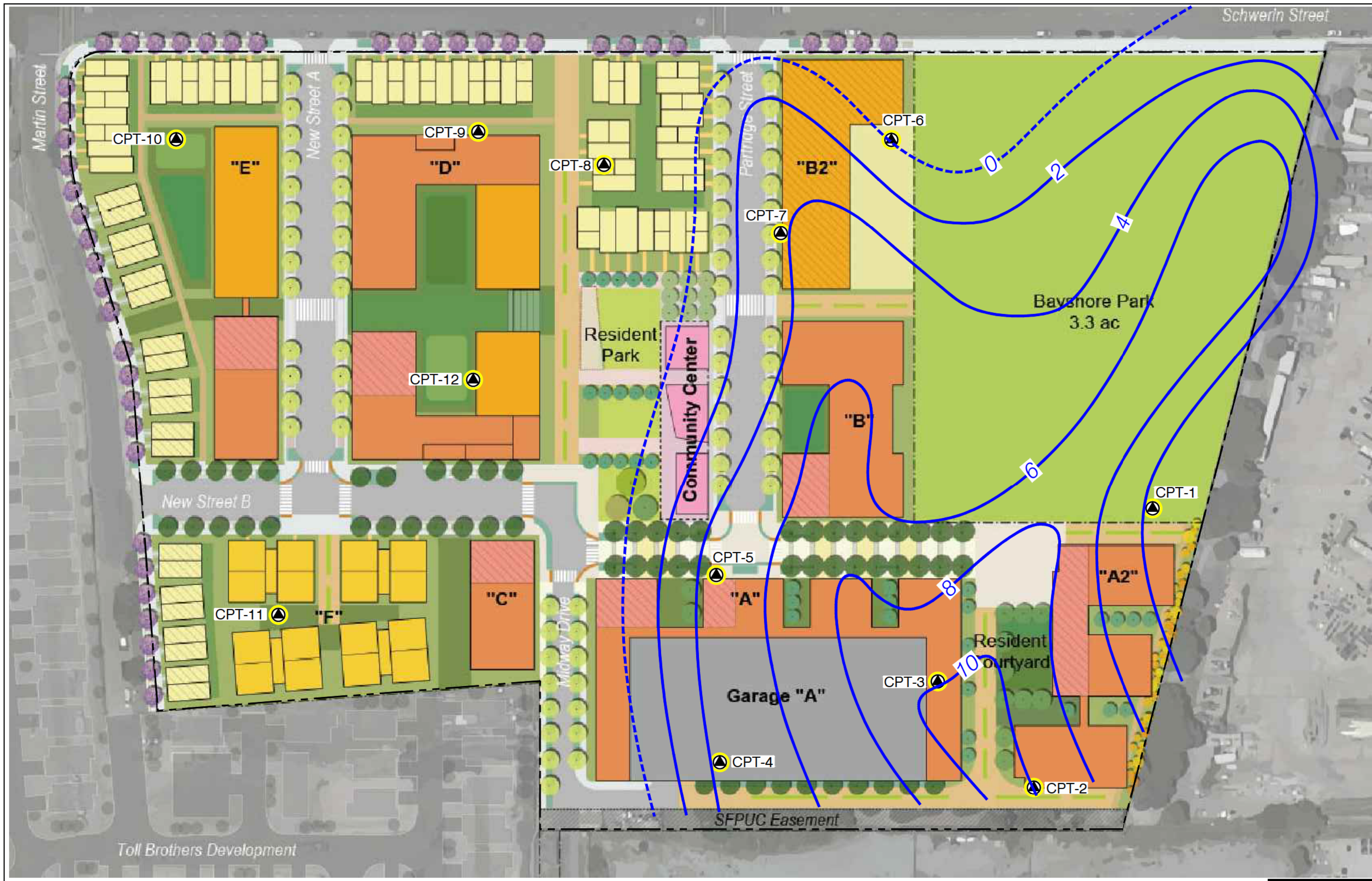
Approximate scale

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

REGIONAL GEOLOGIC MAP

Date 01/29/20	Project No. 18-1569	Figure 3



EXPLANATION

CPT-1 Approximate location of cone penetration test by Rockridge Geotechnical Inc., January 16, 2019

2 Approximate existing fill thickness contours in feet from Figure 5-2 in report titled "Remedial Investigation Report for the Remedial Investigation/Feasibility Study and the Remedial Action Plan for Midway-Bayshore Site, prepared by Ecology and Environment, Inc., dated May 14, 1993

Project limits

0 100 Feet

Approximate scale

Reference: Base map from a drawing titled "Midway Village Site Plan", by Daivd Baker Architects, undated.

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

SITE PLAN SHOWING ESTIMATED THICKNESS OF EXISTING FILL

Date 02/05/20	Project No. 18-1569	Figure 4

ROCKRIDGE GEOTECHNICAL

Base Map: U.S. Geological Survey (USGS), National Seismic Hazards Maps - Fault Sources, 2008.

EXPLANATION

Strike slip

Thrust (Reverse)

Normal

N

0 5 10 Miles

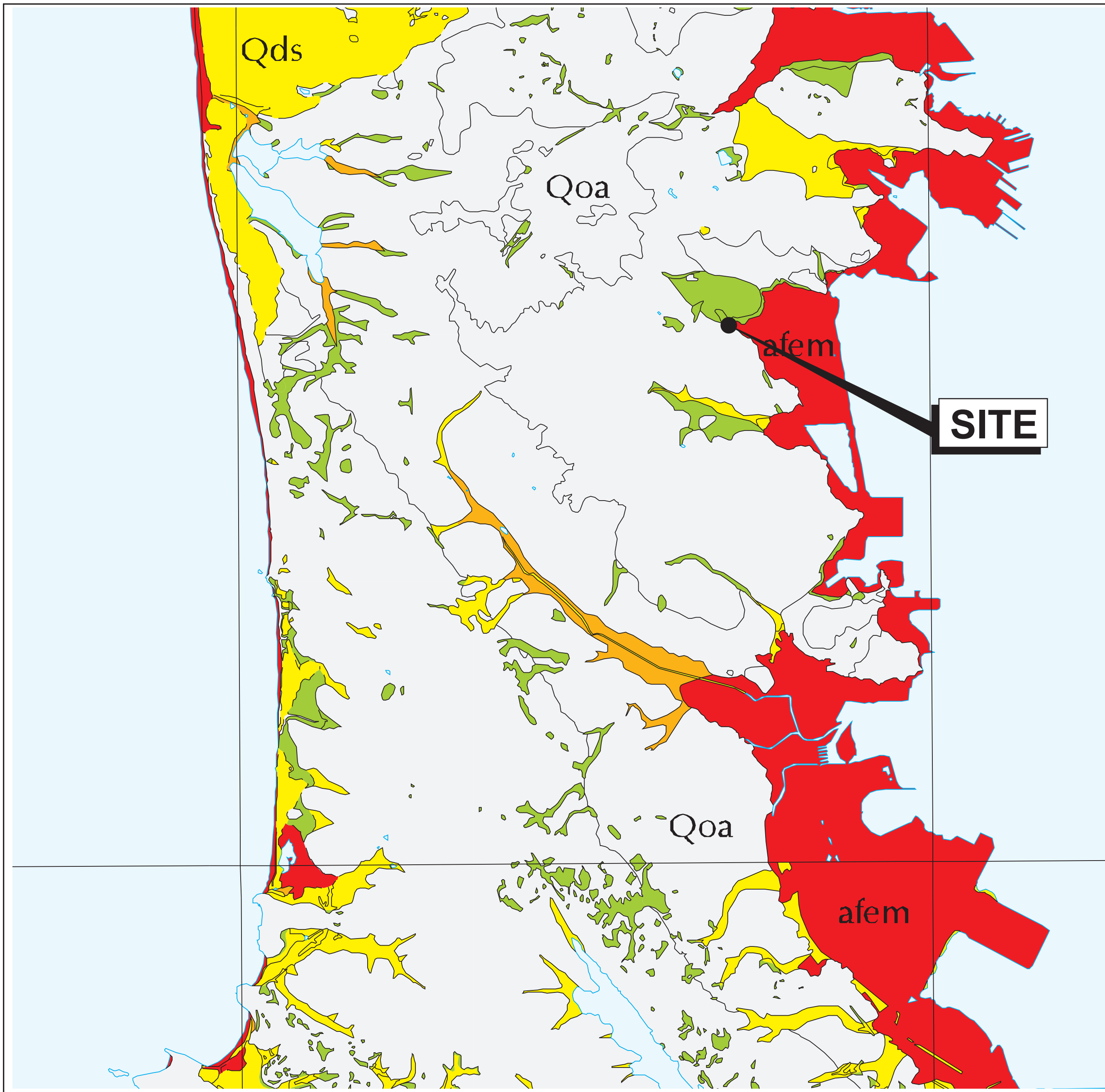
Approximate scale

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

REGIONAL FAULT MAP

Date 01/23/20	Project No. 18-1569	Figure 5



LIQUEFACTION SUSCEPTIBILITY

- VERY HIGH
- HIGH
- MODERATE
- LOW
- VERY LOW

Lines

Contact, dashed where location uncertainty is greater than about +- 100 m.

0 1.5 3 Miles

Approximate scale

Reference:
Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California, by USGS, 2006

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

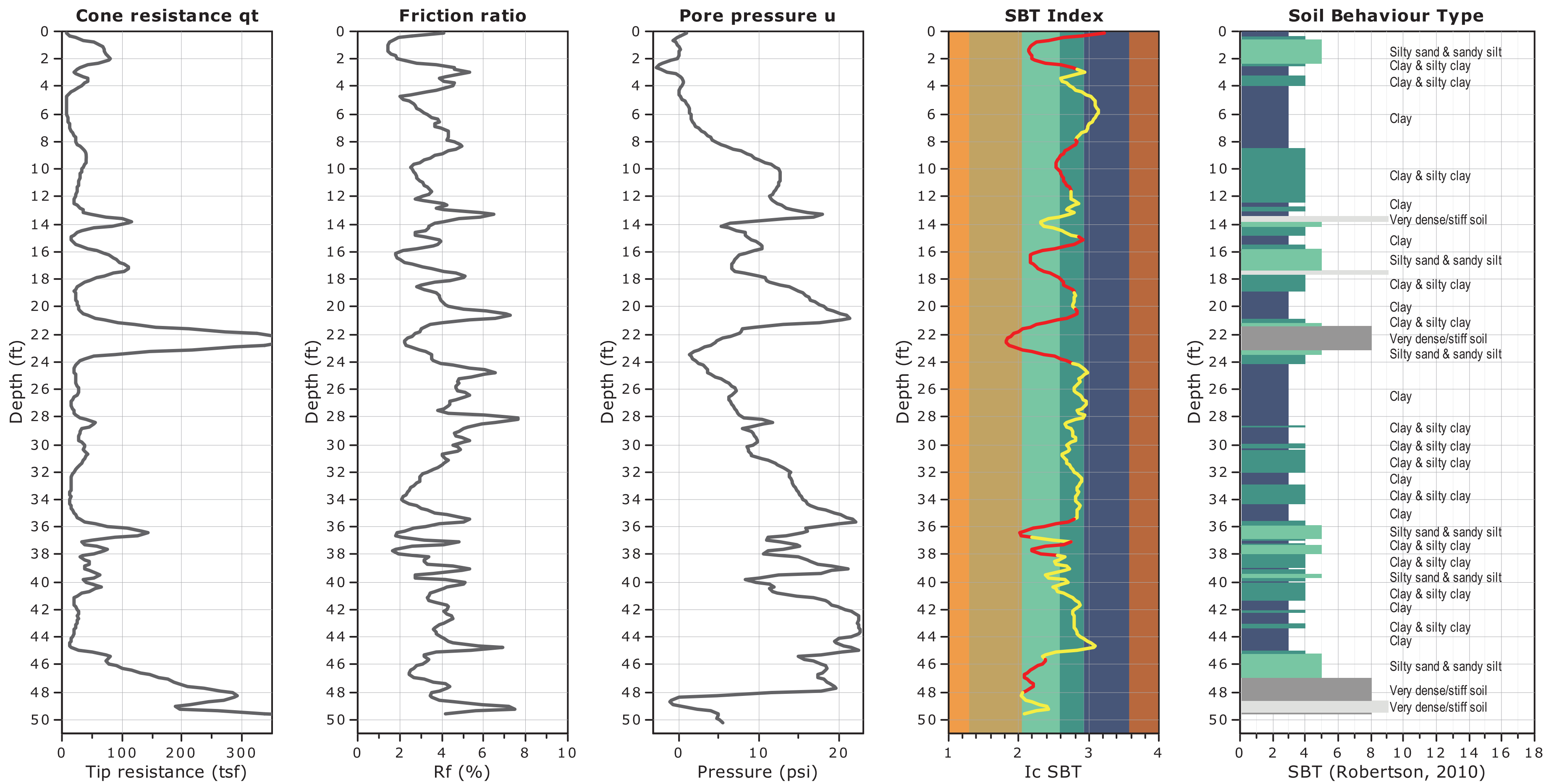
ROCKRIDGE GEOTECHNICAL

LIQUEFACTION SUSCEPTIBILITY MAP

Date 02/04/20	Project No. 18-1569	Figure 6

APPENDIX A

Cone Penetration Test Results



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

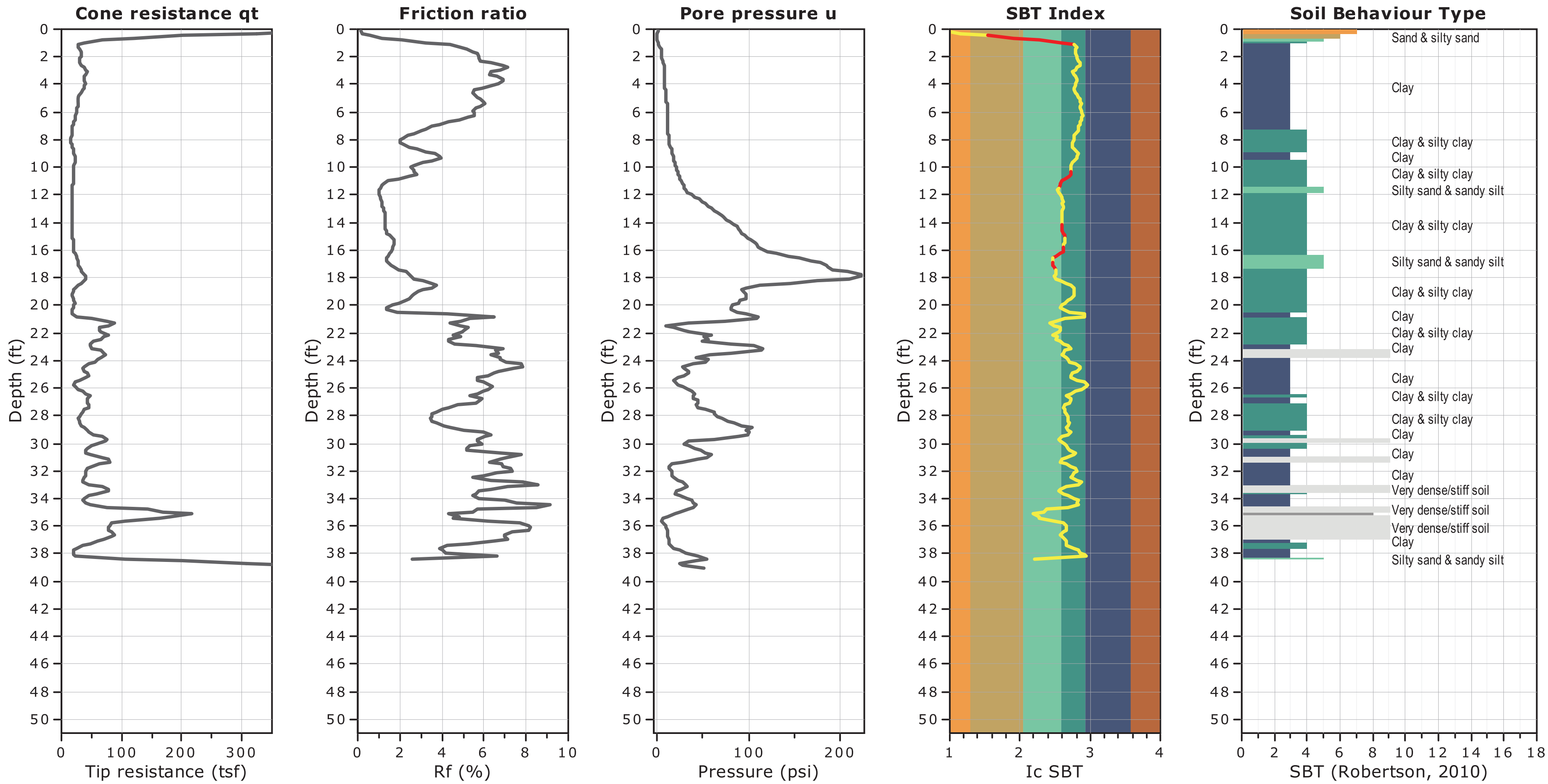
Total depth: 50.2 ft, Date: 1/15/2020
Cone Operator: Middle Earth Geo Testing, Inc.

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-1

Date 01/29/20 | Project No. 18-1569 | Figure A-1



Total depth: 39.0 ft, Date: 1/16/2020
Cone Operator: Middle Earth Geo Testing, Inc.

SBT legend

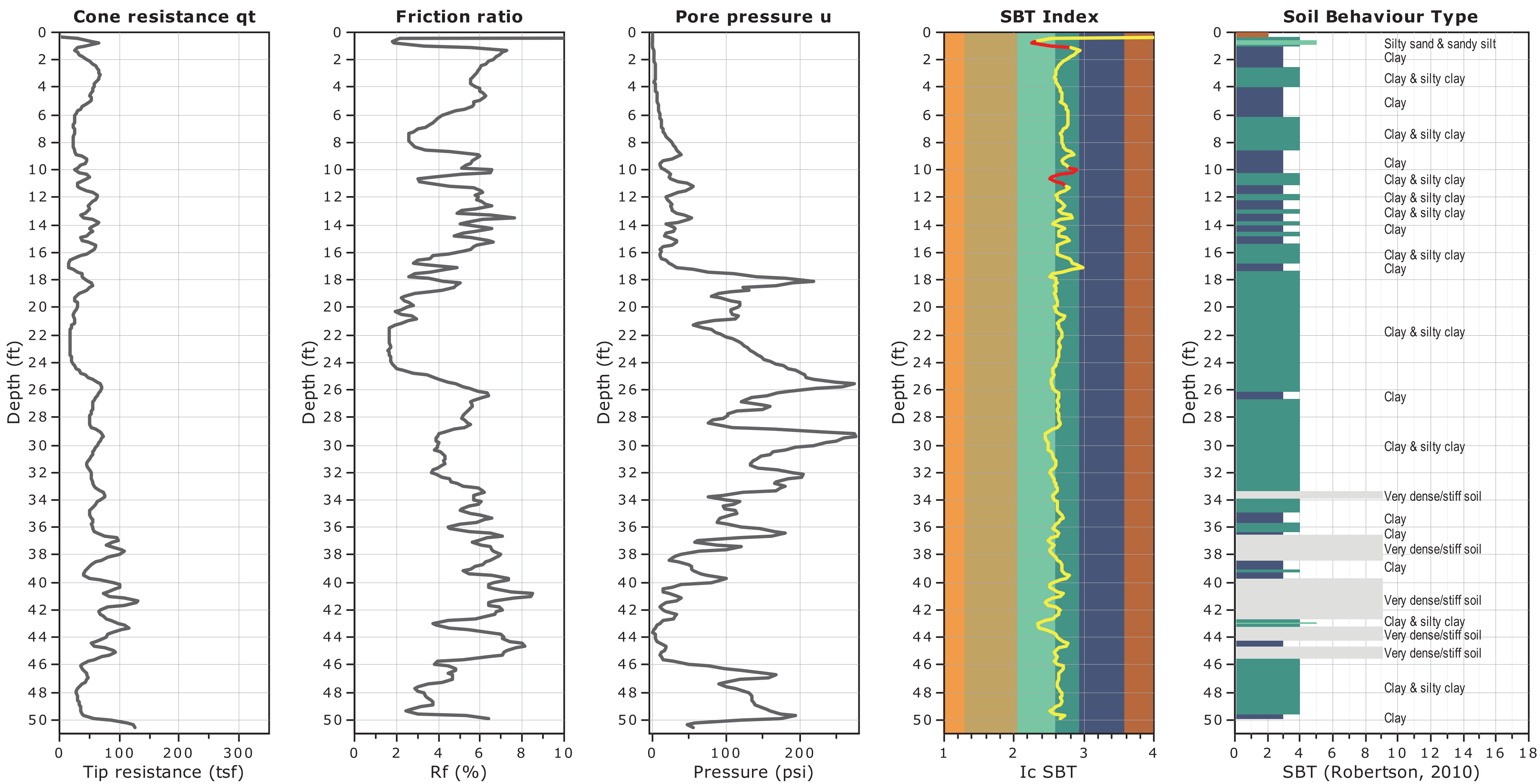
- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-10

Date 01/23/20 | Project No. 18-1569 | Figure A-10



SBT legend

- 1. Sensitive fine grained
- 2. Organic material
- 3. Clay to silty clay
- 4. Clayey silt to silty clay
- 5. Silty sand to sandy silt
- 6. Clean sand to silty sand
- 7. Gravely sand to sand
- 8. Very stiff sand to clayey sand
- 9. Very stiff fine grained

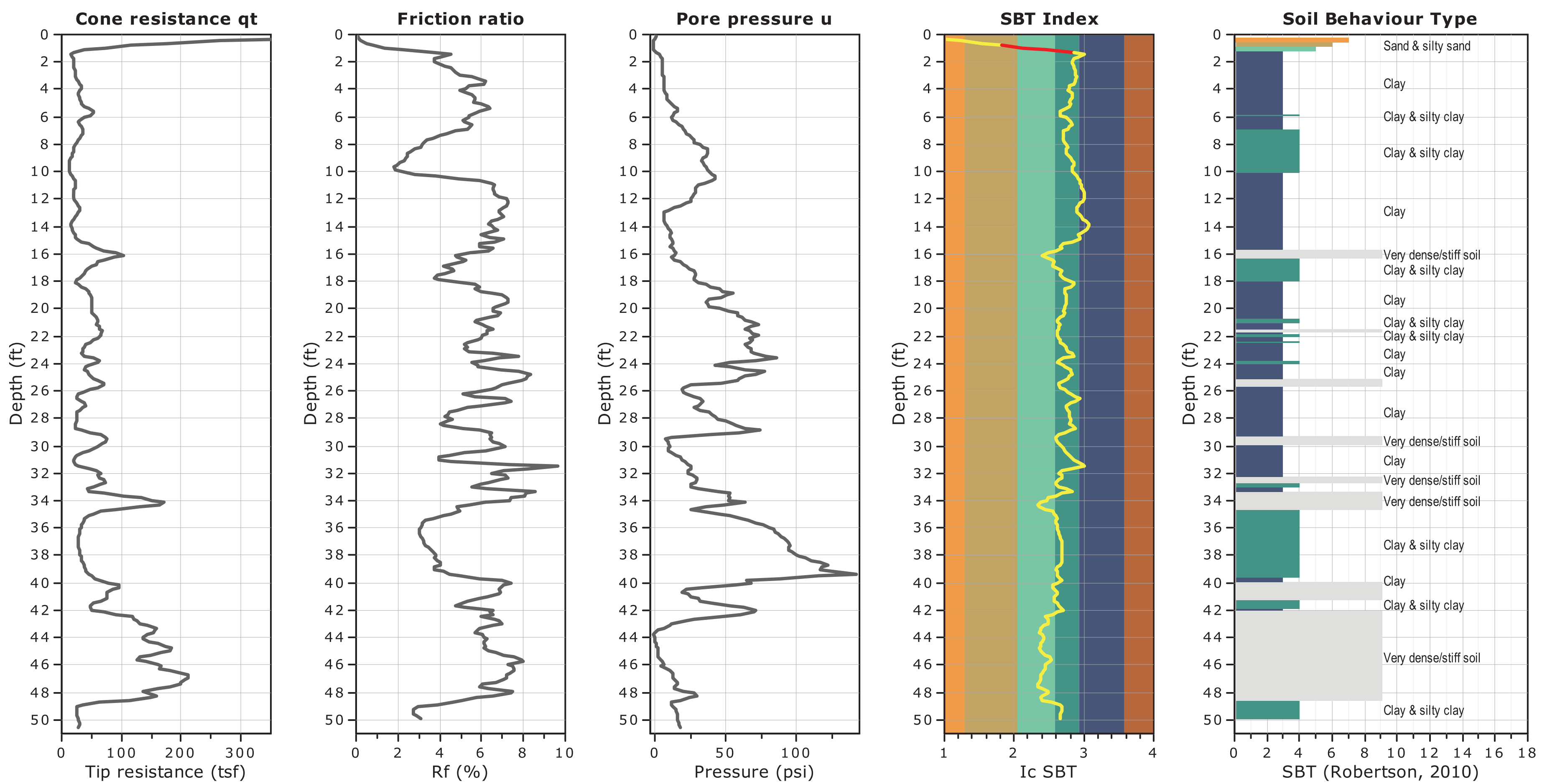
Total depth: 50.5 ft, Date: 1/16/2020
Cone Operator: Middle Earth Geo Testing, Inc.

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-11

Date 01/23/20 | Project No. 18-1569 | Figure A-11



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

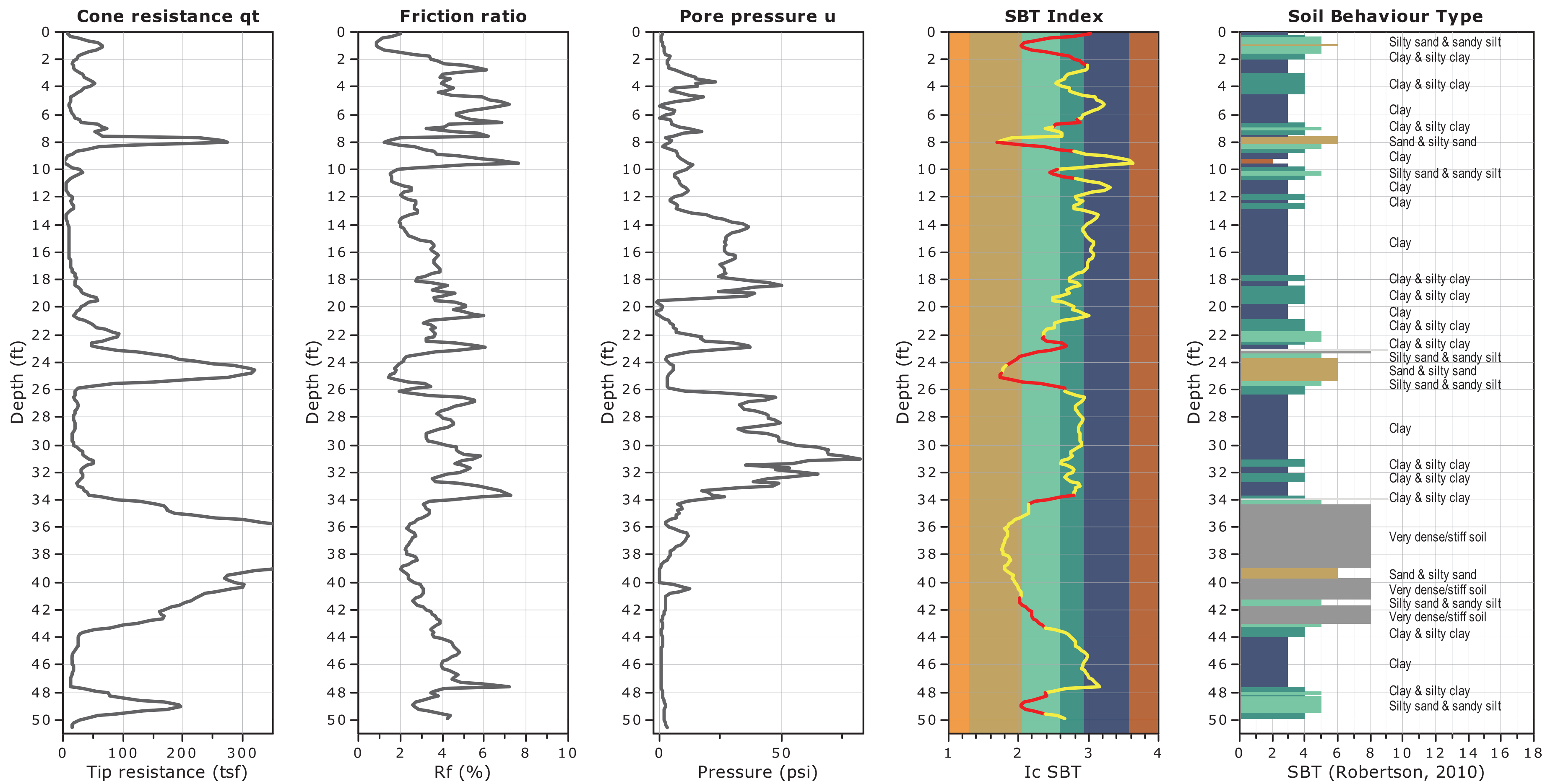
Total depth: 50.5 ft, Date: 1/16/2020
Cone Operator: Middle Earth Geo Testing, Inc.

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-12

Date 01/23/20	Project No. 18-1569	Figure A-12



Total depth: 50.5 ft, Date: 1/15/2020
Cone Operator: Middle Earth Geo Testing, Inc.

SBT legend

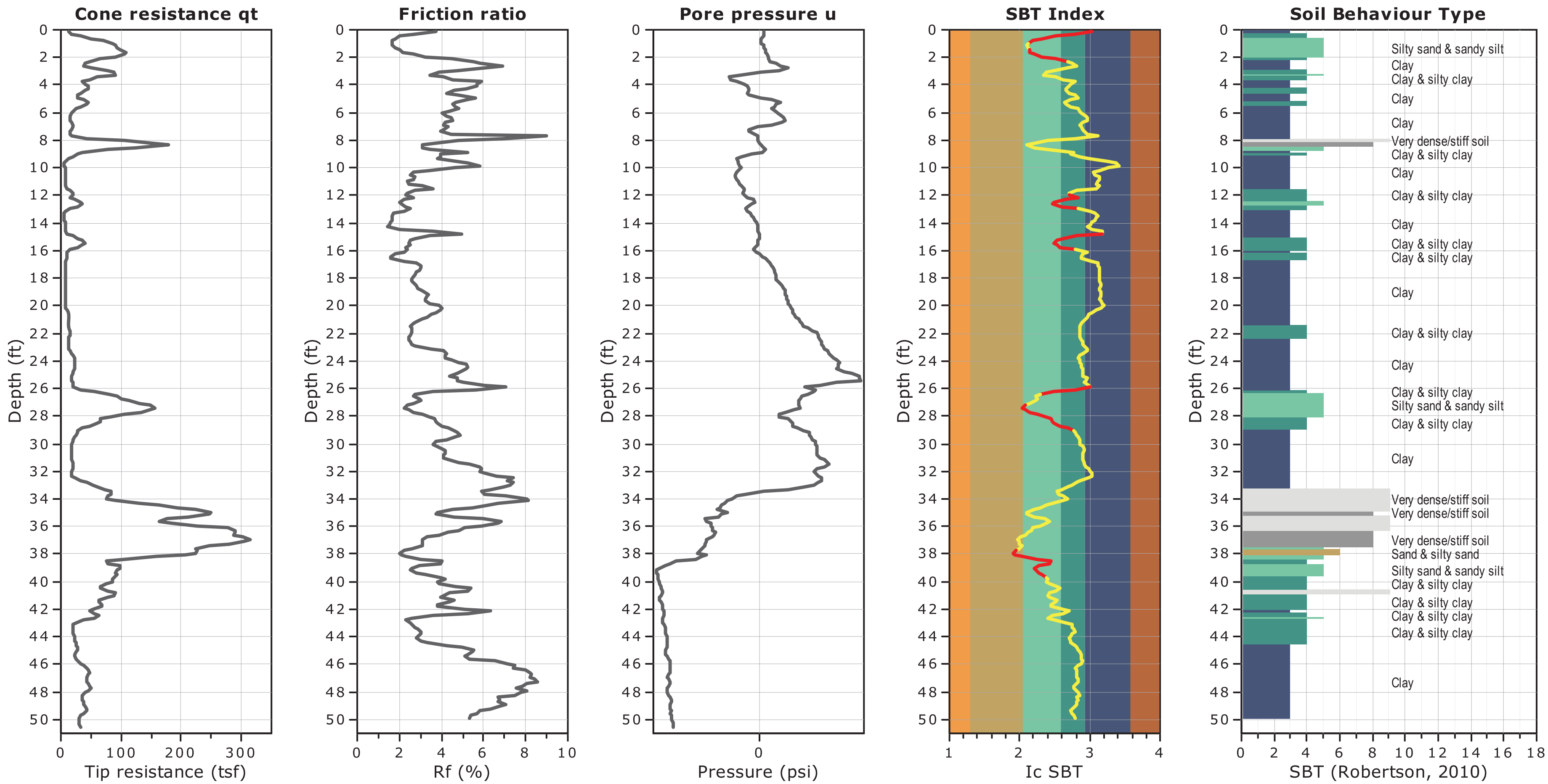
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-2

Date 01/29/20 | Project No. 18-1569 | Figure A-2



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

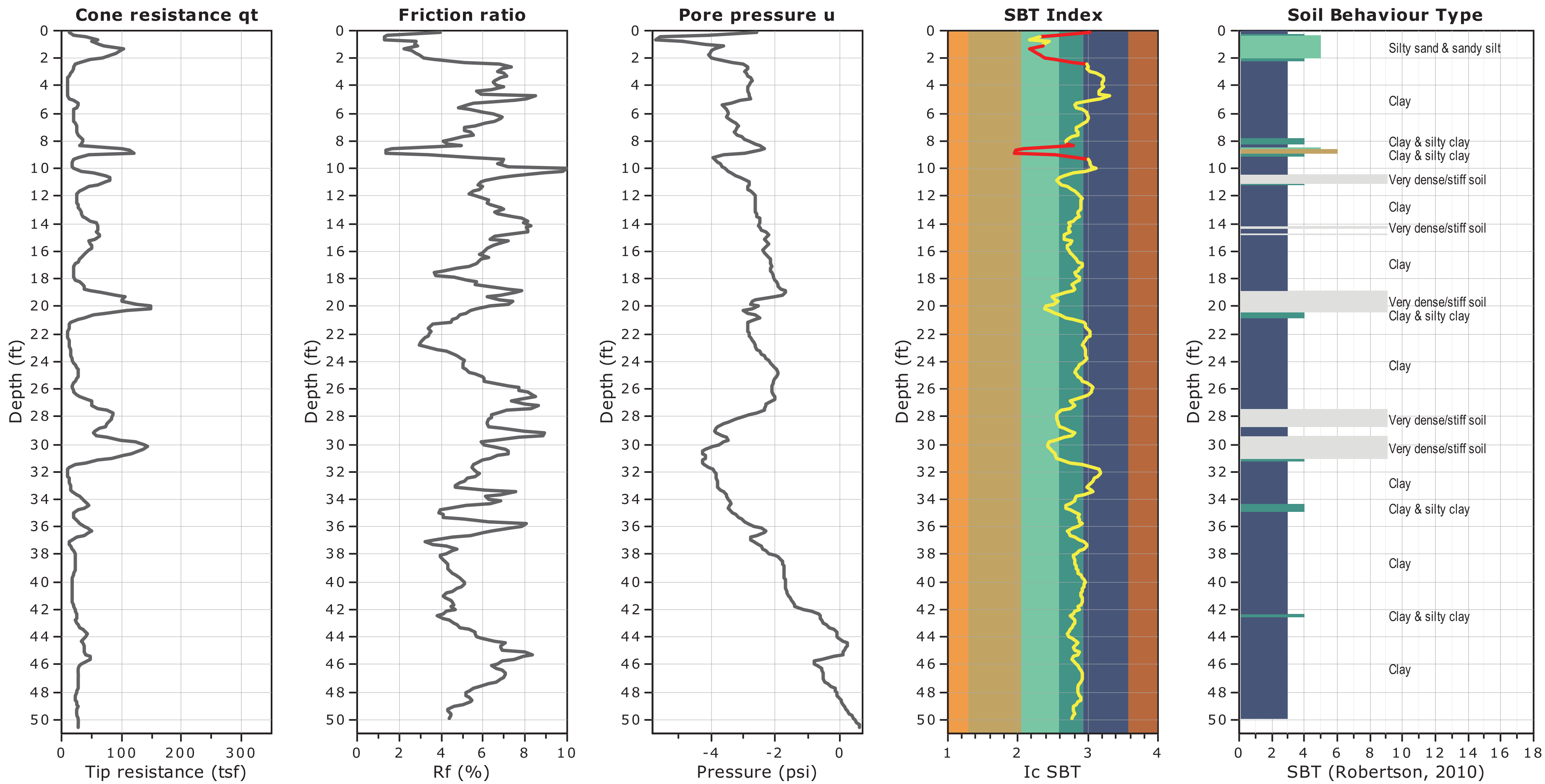
Total depth: 50.5 ft, Date: 1/15/2020
Cone Operator: Middle Earth Geo Testing, Inc.

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-3

Date 01/29/20 | Project No. 18-1569 | Figure A-3



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

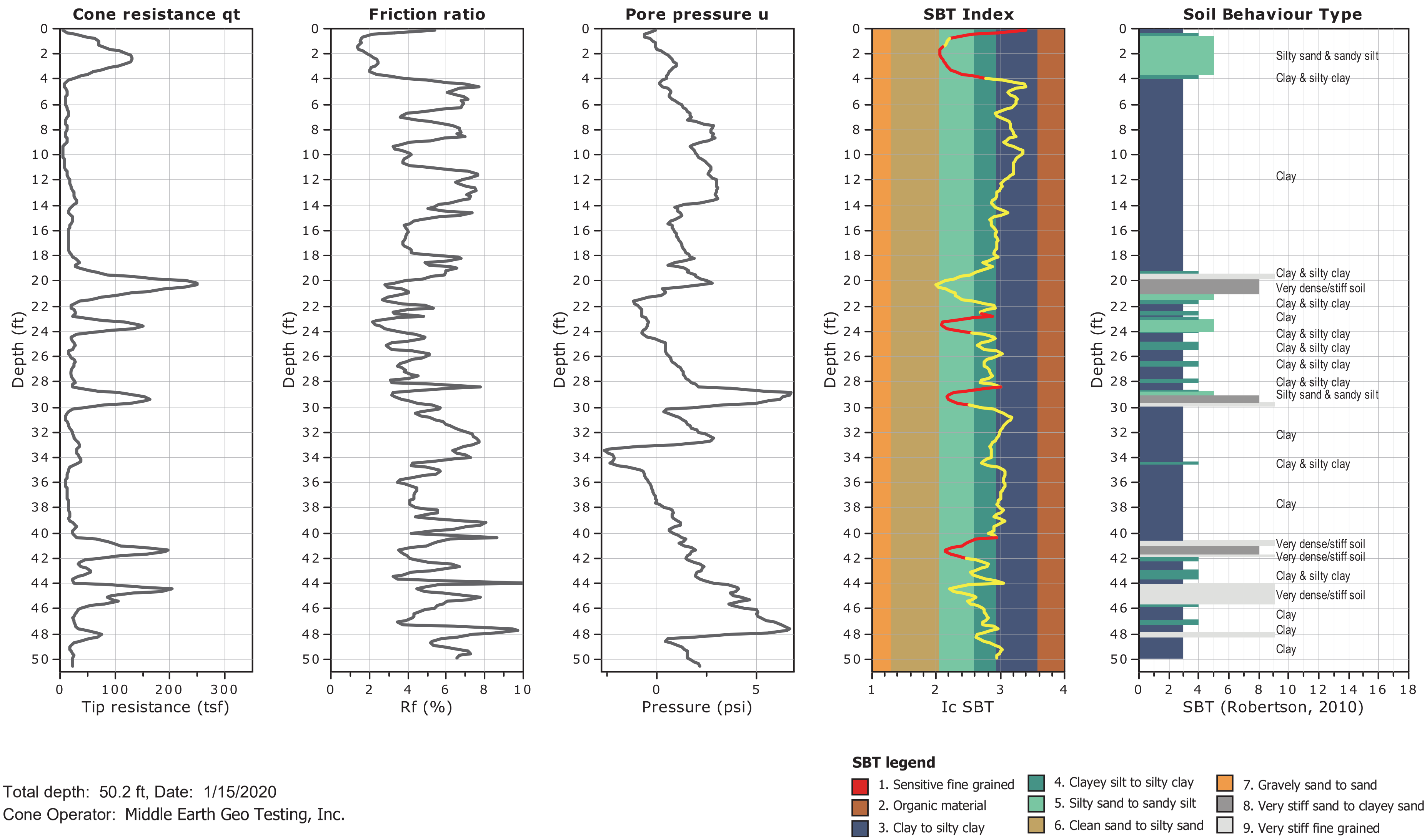
Total depth: 50.5 ft, Date: 1/15/2020
Cone Operator: Middle Earth Geo Testing, Inc.

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

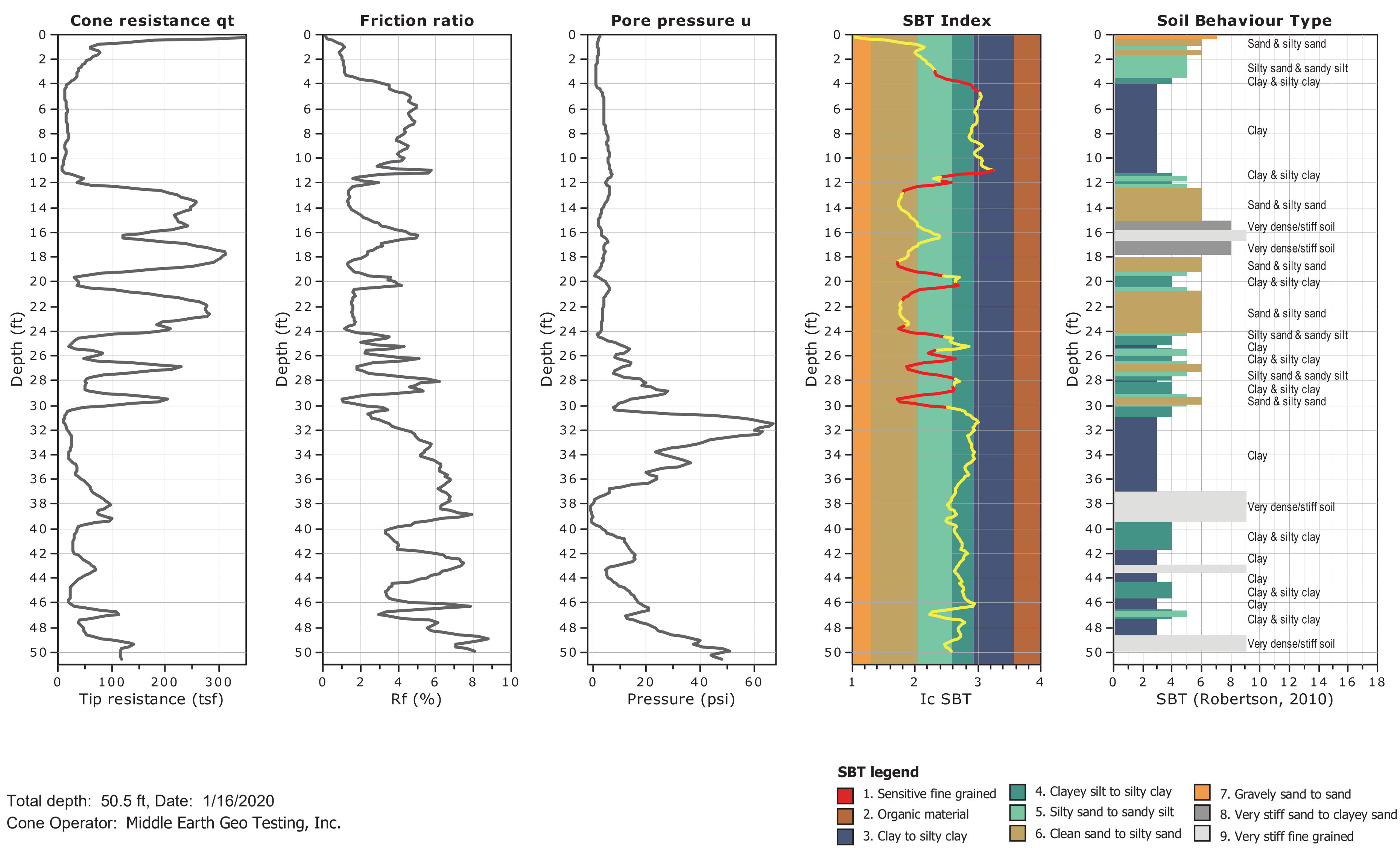
CONE PENETRATION TEST RESULTS
CPT-4

Date 01/29/20	Project No. 18-1569	Figure A-4



Total depth: 50.2 ft, Date: 1/15/2020
Cone Operator: Middle Earth Geo Testing, Inc.

MIDWAY VILLAGE **47 MIDWAY DRIVE** Daly City, California ROCKRIDGE GEOTECHNICAL	**CONE PENETRATION TEST RESULTS** **CPT-5** Date 01/29/20 · Project No. 18-1569 · Figure A-5



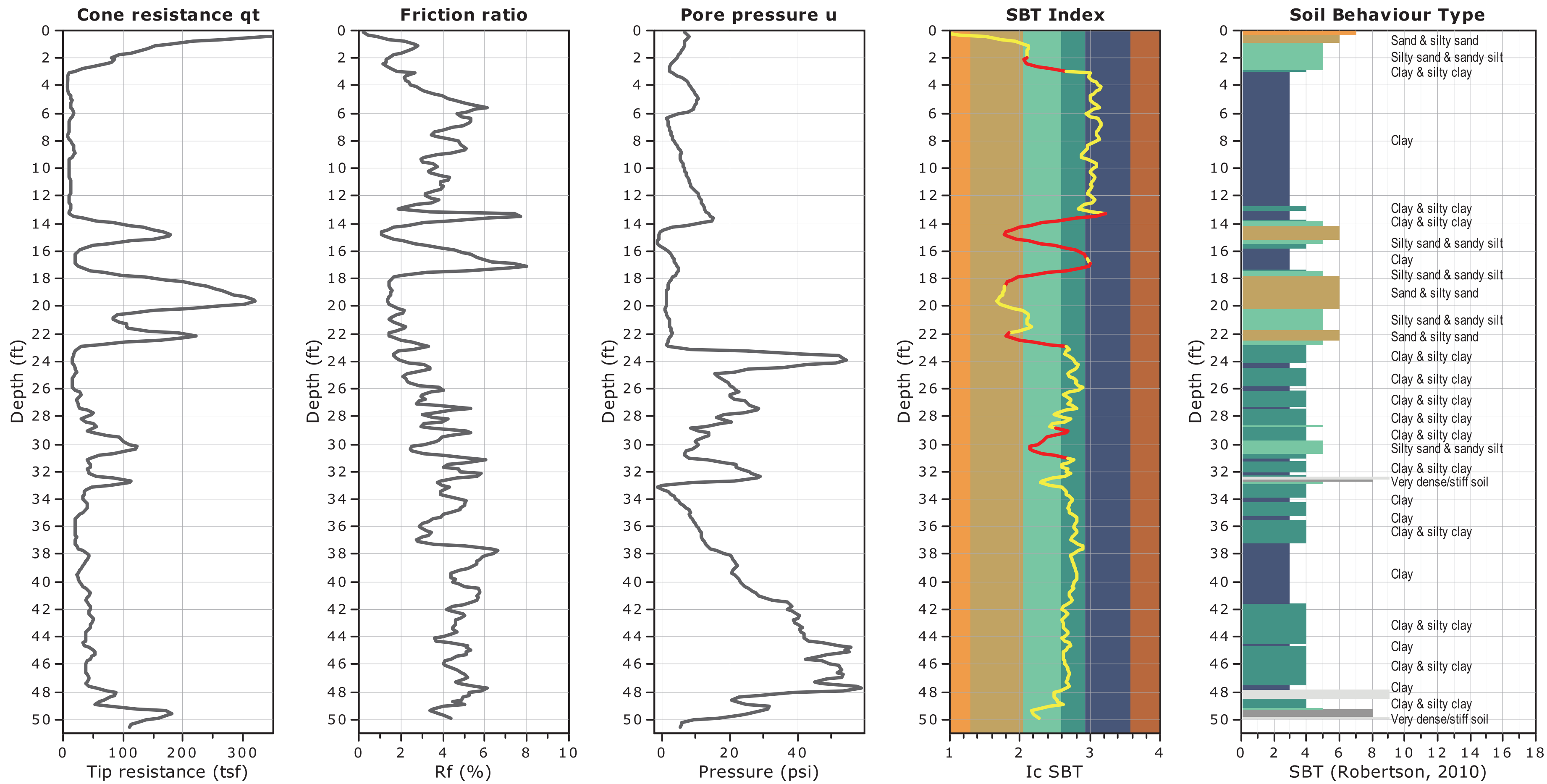
Total depth: 50.5 ft, Date: 1/16/2020
Cone Operator: Middle Earth Geo Testing, Inc.

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-6

Date 01/23/20 | Project No. 18-1569 | Figure A-6

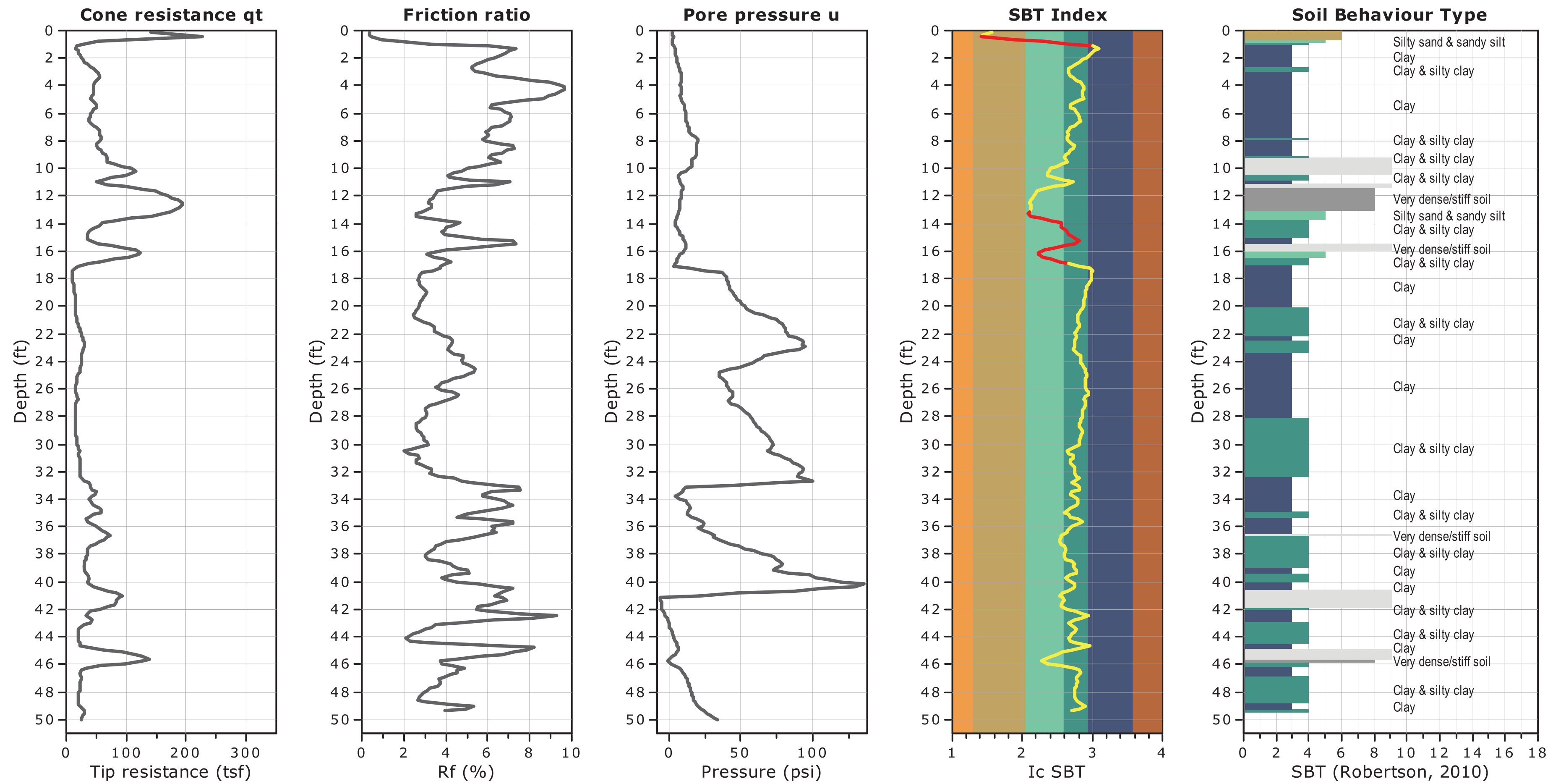


SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Total depth: 50.5 ft, Date: 1/16/2020
Cone Operator: Middle Earth Geo Testing, Inc.

MIDWAY VILLAGE **47 MIDWAY DRIVE** Daly City, California	**CONE PENETRATION TEST RESULTS** **CPT-7**
ROCKRIDGE GEOTECHNICAL	Date 01/23/20 | Project No. 18-1569 | Figure A-7



Total depth: 50.0 ft, Date: 1/16/2020
Cone Operator: Middle Earth Geo Testing, Inc.

SBT legend

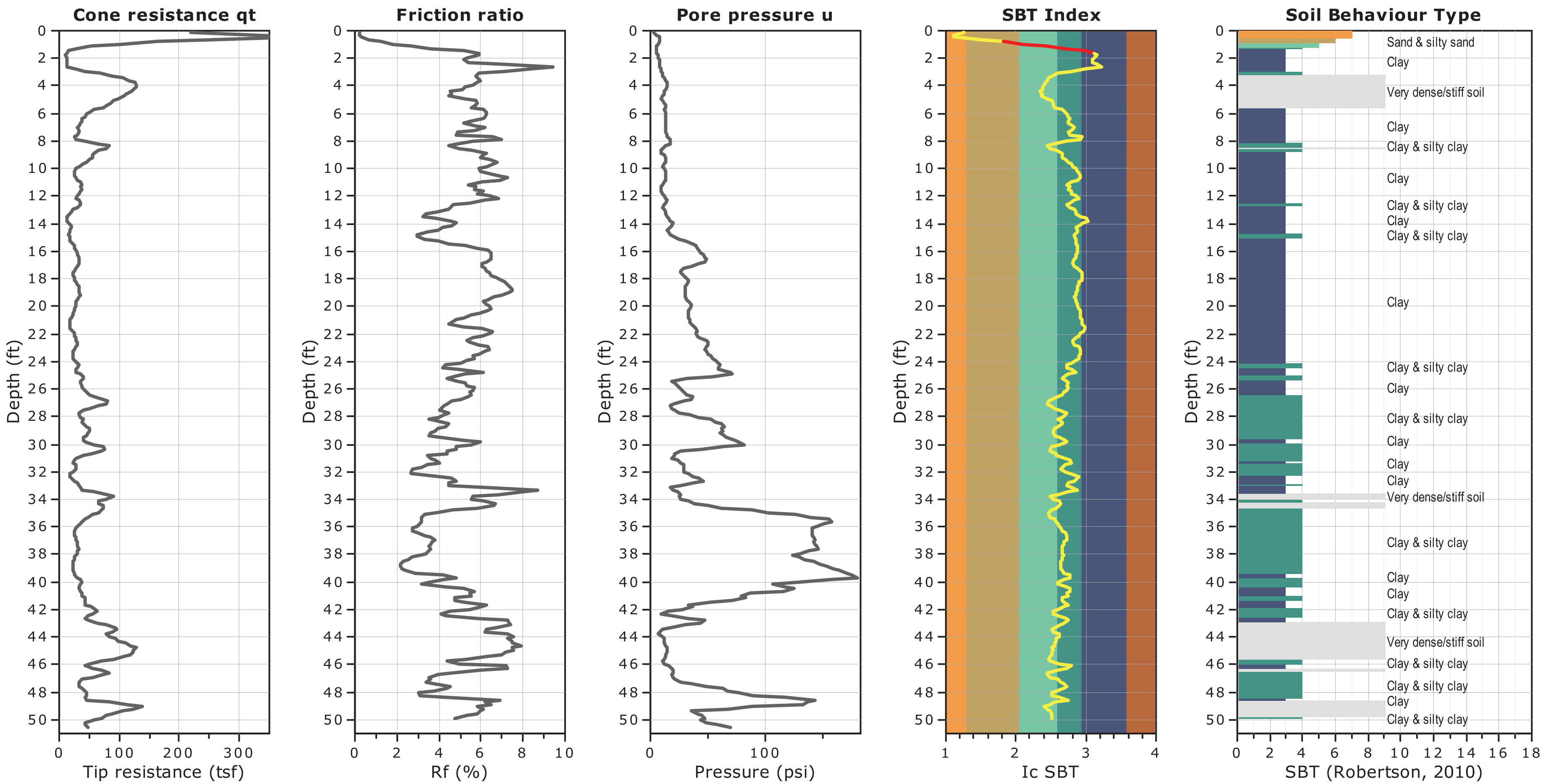
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-8

Date 01/23/20	Project No. 18-1569	Figure A-8



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

Total depth: 50.5 ft, Date: 1/16/2020
Cone Operator: Middle Earth Geo Testing, Inc.

MIDWAY VILLAGE
47 MIDWAY DRIVE
Daly City, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-9

Date 01/23/20	Project No. 18-1569	Figure A-9

APPENDIX H

Noise Modeling Outputs

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/6/2019
Case Description: Midway Village - Demolition Stage

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Closest Residential Receptor Across Martin Street	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	64	0
Excavator	No	40		80.7	64	0
Dozer	No	40		81.7	64	0
Tractor	No	40	84		64	0
Front End Loader	No	40		79.1	64	0
Backhoe	No	40		77.6	64	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	87.4	80.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	78.6	74.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	79.5	75.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	81.9	77.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	77	73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	75.4	71.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.8	84.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/6/2019
Case Description: Midway Village - Site Preparation Stage

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Closest Residential Receptor Across Martin Street	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		64	0
Tractor	No	40	84		64	0
Front End Loader	No	40		79.1	64	0
Backhoe	No	40		77.6	64	0
Excavator	No	40		80.7	64	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	82.9	78.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	81.9	77.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	77	73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	75.4	71.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	78.6	74.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	87.1	83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/6/2019
Case Description: Midway Village - Grading Stage

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Closest Residential Receptor Across Martin Street	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	64	0
Grader	No	40	85		64	0
Tractor	No	40	84		64	0
Dozer	No	40		81.7	64	0
Front End Loader	No	40		79.1	64	0
Backhoe	No	40		77.6	64	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	87.4	80.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	82.9	78.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	81.9	77.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	79.5	75.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	77	73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	75.4	71.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	90.3	85	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/6/2019
Case Description: Midway Village - Building Construction Stage

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Closest Residential Receptor Across Martin Street	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	64	0
Tractor (Forklift)	No	40	84		64	0
Tractor	No	40	84		64	0
Front End Loader	No	40		79.1	64	0
Backhoe	No	40		77.6	64	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	78.4	70.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor (Forklift)	81.9	77.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	81.9	77.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	77	73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	75.4	71.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	86.6	82.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/6/2019
Case Description: Midway Village - Paving Stage

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Closest Residential Receptor Across Martin Street	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	64	0
Paver (Paving Equipment)	No	50		77.2	64	0
Paver	No	50		77.2	64	0
Roller	No	20		80	64	0
Tractor	No	40	84		64	0
Front End Loader	No	40		79.1	64	0
Backhoe	No	40		77.6	64	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	76.7	72.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver (Paving Equipment)	75.1	72.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	75.1	72.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	77.9	70.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	81.9	77.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	77	73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	75.4	71.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	86.2	82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/6/2019
Case Description: Midway Village - Architectural Coating Stage

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Closest Residential Receptor Across Martin Street	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	64	0

Results

		Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
				Day		Evening		Night		Day		Evening		Night	
Equipment		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)		75.5	71.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	75.5	71.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

APPENDIX I

Transportation Impact Analysis

Hexagon Transportation Consultants, Inc.

45 Midway Drive Affordable Housing

Transportation Impact Analysis

Prepared for:

City of Daly City

November 21, 2019

Hexagon Office: 5776 Stoneridge Mall Road, Suite 175
Pleasanton, CA 94588
Hexagon Job Number: 19BW02
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Executive Summary

The purpose of this report is to analyze the transportation impacts of the proposed affordable housing development located at 45 Midway Drive in Daly City, California. The project would replace 150 existing affordable housing units and a childcare center on site with 566 new affordable housing units, a park, and expanded childcare center. Project access would be provided via four driveways on Schwerin Street and one driveway on Martin Street.

The potential impacts of the project were evaluated relative to the applicable level of service standards and methodologies in order to satisfy the requirements of the California Environmental Quality Act (CEQA), the City of Daly City, the City of San Francisco, the City of Brisbane, and the San Mateo County Congestion Management Program (CMP). The City/County Association of Governments (C/CAG) of San Mateo County administers the San Mateo County CMP. The study includes an analysis of AM and PM peak-hour traffic conditions during weekdays at 10 existing and 3 future study intersections in the vicinity of the project site, and includes an evaluation of vehicle queuing, signal warrants, bike/pedestrian/transit conditions, vehicle miles traveled (VMT), C/CAG Travel Demand Management (TDM) compliance, site access, and on-site circulation.

Based on trip generation rates recommended by the Institute of Transportation Engineers, it is estimated that the proposed project would generate 3,106 net new daily vehicle trips, with 203 net new trips occurring during the AM peak hour and 245 net new trips occurring during the PM peak hour.

The analysis showed the following significant cumulative impact:

> **Significant Impact**: Under cumulative conditions, the intersection of Bayshore Boulevard and Geneva Avenue would operate at LOS F during the PM peak hour without the proposed project. The project would add traffic to the intersection. According to the City of Daly City and San Mateo County CMP significance criteria, this would constitute a significant adverse cumulative impact at this intersection.
>
> **Mitigation**: To mitigate this impact would require an overlap traffic signal phase be added at the future northbound Bayshore Boulevard to eastbound Geneva Avenue right turn movement in conjunction with the Geneva Avenue extension to U.S. 101. Construction of this overlap phase would allow northbound right turns on Bayshore Boulevard to go concurrently with westbound left turns on Geneva Avenue. This would improve the overall intersection average delay to 58.4 seconds. Under cumulative no project conditions, the intersection delay is shown to be 80.9 seconds. Thus, this improvement would return the average delay to better than no project conditions. Because this impact does not occur under existing plus project conditions and is the result of cumulative traffic increases, the

proposed project would be responsible for a fair share monetary contribution towards the improvement. Under existing conditions, there are approximately 2,601 PM peak hour trips at the intersection. Cumulative projects (not including project traffic) would add approximately 2,995 PM peak hour trips to the intersection between 2019 and 2035. The proposed project is projected to add approximately 95 PM peak hour trips to the intersection.

The proposed project would not result in significant impacts to any other study locations, nor would it result in any significant impacts to bike, pedestrian, or transit facilities. The report also produced the following conclusions and recommendations:

Recommendation 1: Parking on the east side of Schwerin Street at the Midway Drive driveway should be restricted as needed to maintain adequate sight distance, subject to review and approval by the City's Traffic Safety Committee and City Council. In addition, the project shall maintain the landscaping near the driveway such that it doesn't obstruct the line of sight down Schwerin Street. Placement of any monument signs or other permanent fixtures would need to be located out of the line of sight of exiting drivers. The final site plan will need to be reviewed by city staff.

Recommendation 2: The project shall ensure that alignments of the drive aisles and the corner radii are adequate for the circulation of standard vehicles as well as trucks, garbage collection, and emergency vehicles, subject to review by city staff.

Recommendation 3: The project shall ensure that the garage ingress/egress, internal circulation, ramp design and other relevant design features meet the city code requirements or otherwise accord with industry standards. Final design will be subject to review by city staff.

Recommendation 4: The project should consider establishing a time limit for childcare parking. Because all streets within the development are private roadways, parking restrictions would need to be enforced by private security. In addition, the childcare facility should consider preparing an access plan to show parents how to access the designated parking areas.

Recommendation 5: Prior to final design, the project applicant shall work with City of Daly City and SamTrans staff to consider the desirability of upgrades to the existing shuttle stop along the project frontage.

Recommendation 6: The project shall provide and/or implement CMP-approved TDM measures in order to meet the CMP TDM requirements.

1. Introduction

This report presents the results of the transportation impact analysis conducted for the proposed affordable housing development located at 45 Midway Drive in Daly City, California. The project would replace 150 existing affordable housing units and a childcare center on site with 566 new affordable housing units, a park, and expanded childcare center. Project access would be provided via four driveways on Schwerin Street and one driveway on Martin Street. The project site and the surrounding study area are shown on Figure 1. The project site plan is shown on Figure 2.

Scope of Study

The potential impacts of the project were evaluated relative to the applicable level of service standards and methodologies in order to satisfy the requirements of the California Environmental Quality Act (CEQA), the City of Daly City, the City of San Francisco, the City of Brisbane, and the San Mateo County Congestion Management Program (CMP). The City/County Association of Governments (C/CAG) of San Mateo County administers the CMP.

The study includes an analysis of peak-hour intersection levels of service, vehicle queuing, signal warrants, bike/pedestrian/transit conditions, vehicle miles traveled (VMT), C/CAG Travel Demand Management (TDM) compliance, site access, and on-site circulation. The traffic analysis evaluated conditions at seven signalized intersections and six unsignalized intersections, as follows:

1. Carter Street and Martin Street
2. Carter Street and Guadalupe Canyon Parkway
3. Schwerin Street and Geneva Avenue
4. Schwerin Street and Ottilia Street*
5. Schwerin Street and Partridge Street/Project Driveway*
6. Schwerin Street and Martin Street*
7. U.S. 101 southbound off-ramp and Bayshore Boulevard (San Francisco)
8. Bayshore Boulevard and Geneva Avenue (Brisbane/Daly City/CMP)
9. Bayshore Boulevard and Main Street* (Brisbane)
10. Bayshore Boulevard and Guadalupe Canyon Parkway (Brisbane)
11. Schwerin Street and New Street A* (project driveway)
12. New Street B and Martin Street* (project driveway)
13. Linda Vista Drive and Martin Street* (planned)

* denotes unsignalized intersection

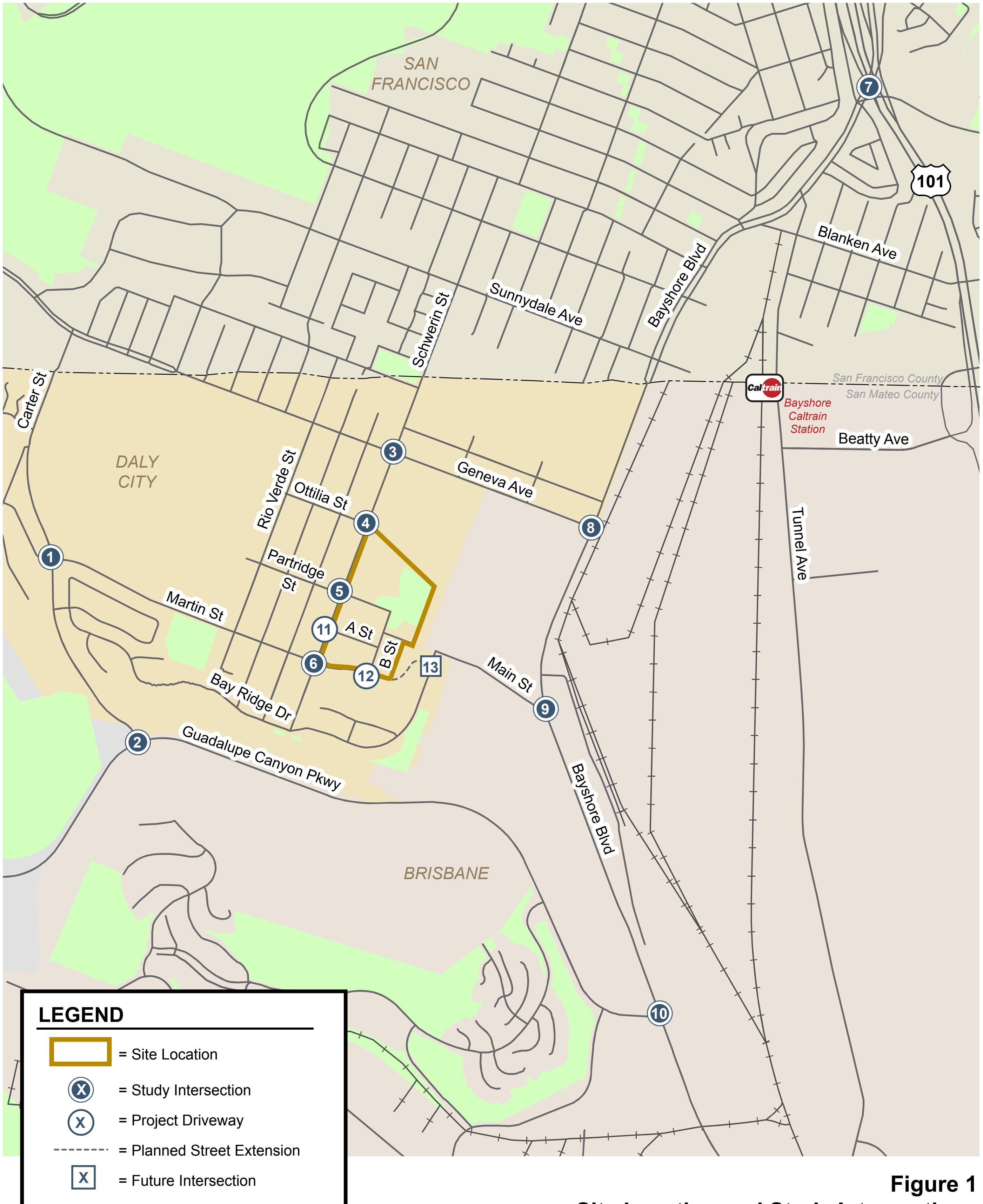


Figure 1
Site Location and Study Intersections

Figure 2
Site Plan

Traffic conditions at the study locations were analyzed for the weekday AM and PM peak hours. The AM peak hour of traffic is typically between 7:00 AM and 9:00 AM and the PM peak hour is typically between 4:00 PM and 6:00 PM. These periods represent the most congested traffic conditions on the surrounding street network during a typical weekday.

The project is anticipated to generate more than 100 trips in the peak hours. Per the County CMP requirements, a CMP analysis was required.

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing conditions were represented by existing traffic volumes on the existing roadway network. Existing traffic volumes were obtained from recent traffic counts.

Scenario 2: *Existing Plus Project Conditions.* Existing plus Project conditions represent existing peak-hour traffic volumes with the addition of net project traffic resulting from the increase in number of affordable units and the increase in childcare center enrollment. Existing plus Project traffic volumes were obtained from the Daly City Travel Demand Forecast model. Existing plus project conditions were evaluated relative to existing conditions in order to identify potential impacts associated with the proposed project.

Scenario 3: *Cumulative No Project Conditions*. Cumulative No Project conditions were represented by Cumulative No Project traffic volumes on the existing roadway network with the addition of planned transportation improvements. Cumulative No Project traffic volumes were obtained from the Daly City Travel Demand Forecast model. The Cumulative No Project traffic volumes reflect all approved and pending development in the City.

Scenario 4: *Cumulative Plus Project Conditions*. Cumulative plus Project conditions were represented by Cumulative plus Project traffic volumes on the existing roadway network with the addition of planned transportation improvements. Cumulative plus Project traffic volumes were estimated using the City's Travel Demand Forecast model based on the project's proposed land use changes (increase in number of affordable units and increase in childcare center enrollment) on the site. Cumulative plus Project conditions were evaluated relative to Cumulative No Project conditions in order to determine potential cumulative project impacts.

Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from traffic counts, published data, public documents, previous traffic studies, the City's traffic model, and field observations. The following data were collected from these sources:

- existing traffic volumes
- existing traffic observations
- lane configurations
- signal timing and phasing
- existing bicycle facilities
- existing transit service
- project traffic volumes
- cumulative traffic volumes

Level of Service Standards and Analysis Methodologies

Traffic conditions at the study locations were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or congested conditions with excessive delays. The analysis methods are described in detail below.

Signalized Intersections

The City of Daly City, City of Brisbane and the San Mateo County CMP evaluate level of service at signalized intersections based on the HCM level of service methodology using Synchro software. The HCM method evaluates signalized intersection operations based on average control delay time for all vehicles at the intersection. *Control delay* is the amount of delay that is attributed to the type of traffic control device at the intersection, and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The correlation between average delay and level of service is shown in Table 1.

The City of Daly City and City of Brisbane have a level of service standard of LOS D or better for signalized intersections. The San Mateo CMP has a level of service standard of LOS E or better for the signalized CMP intersection evaluated in this study.

City of Daly City and San Mateo County

Significance criteria are used to establish what constitutes an impact. For this analysis, the criteria used to determine significant impacts are based on CEQA Guidelines and the LOS standards of Daly City, the City of Brisbane, and the San Mateo County CMP.

For signalized San Mateo County CMP intersections and intersections in Daly City, the project would result in a significant impact if, for any peak hour under evaluation:

- the addition of project traffic would increase peak hour traffic volumes such that signalized intersection level of service would degrade to a level of service below the adopted standard.
- the project would add traffic to a signalized intersection that operates below the adopted level of service standard.

The San Mateo County CMP has additional, separate criteria for what constitutes an impact under cumulative conditions. For a CMP intersection currently in compliance with the adopted LOS standard, a project will be considered to have a CMP impact if the cumulative analysis indicates that:

- the combination of the proposed project and future cumulative traffic demand would cause operations of the CMP intersection to degrade to a level of service below the adopted CMP standard for the intersection, AND the proposed project would increase average control delay at the intersection by four (4) seconds or more relative to cumulative conditions without the project.

City of Brisbane

For signalized intersections in the City of Brisbane, the project would result in a significant impact if, for any peak hour under evaluation:

- the addition of project traffic would increase peak hour traffic volumes such that signalized intersection level of service would degrade to a level of service below the adopted standard (LOS D), or
- at a signalized intersection that operates below the adopted level of service standard without the project, the project would increase traffic at the critical movements by 5 percent or more

A significant impact at a signalized intersection is said to be satisfactorily mitigated when measures are implemented that would restore intersection levels of service to an acceptable level of service or restore the intersection to operating levels that are equal to or better than no project conditions.

City of San Francisco and San Francisco CMP

The City and County (CMP) of San Francisco no longer define project traffic impacts on the basis of level of service, having adopted vehicle-miles-travelled (VMT) as the metric for evaluating project impacts. In addition, the one study intersection within the jurisdiction of San Francisco- U.S. southbound ramps and Bayshore Boulevard- is located within a district that has been defined as exempt from impact analysis. There are therefore no applicable criteria for determining significant impacts at this intersection. The intersection at U.S. southbound ramps and Bayshore Boulevard was analyzed for informational purposes only.

Table 1
Signalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though some vehicles may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, *Highway Capacity Manual* .

Unsignalized Intersections

Level of service at unsignalized intersections is also based on the Highway Capacity Manual (HCM) method. Synchro software was used to apply the HCM operations method for evaluation of conditions at unsignalized intersections. This method is applicable for one-way, two-way, and all-way stop-controlled intersections. For side-street stop-controlled intersections, the LOS is reported for the overall intersection average delay and the average delay at the worst approach. The correlation between average delay and level of service for unsignalized, stop-controlled intersections is shown in Table 2.

Unlike signalized intersections, which typically represent constraint points for the roadway network, unsignalized intersections rarely limit the potential capacity of a roadway. The determination of appropriate improvements to unsignalized intersections typically includes a qualitative and quantitative analysis of movement delay, traffic signal warrants, movement traffic volumes, availability of alternate routes, and intersection safety. For this reason, improvements to unsignalized intersections are frequently determined on the basis of professional engineering judgment.

Table 2
Unsignalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0

Source: Transportation Research Board, *Highway Capacity Manual* (HCM).

The City of Daly City and the San Mateo County CMP do not apply significance thresholds to unsignalized intersections. The City of Brisbane does, however, have LOS standards and significance criteria for impacts at unsignalized intersections. As with signalized intersections, the level of service standard for unsignalized intersections in Brisbane is LOS D.

For unsignalized intersections in the City of Brisbane, the project would result in a significant impact if, for any peak hour under evaluation:

- the addition of project traffic would increase peak hour traffic volumes such that unsignalized intersection level of service would degrade to a level of service below the adopted standard, or
- at an unsignalized intersection that operates below the adopted level of service standard without the project, the project would increase traffic by 5 percent or more (a) for the critical movements of an all-way-stop-controlled intersection, or (b) on the worst approach of a side-street-stop-controlled intersection.

Signal Warrant Methodology

The level of service analysis at unsignalized intersections is supplemented with an assessment of the need for signalization of the intersections. For this study, the need for signalization is assessed, in part, on the basis of the operating conditions at the intersections (i.e., level of service) and on the peak hour volume signal warrant – warrant #3 – described in the *California Manual on Uniform Traffic Control Devices* (MUTCD). This method provides an indication of whether traffic conditions and peak hour traffic levels are, or would be, sufficient to justify installation of a traffic signal.

Freeway Segment Capacity Analysis

A freeway segment analysis was performed using City/County Association of Governments (C/CAG) Congestion Management Program (CMP) guidelines. According to the 2017 San Mateo County Congestion Management Program guidelines, a freeway segment shall be included in a traffic impact analysis if it is expected to be impacted by the proposed project.

The selected LOS method for freeway segments is based on calculating V/C ratios for each direction of travel, wherein the traffic volume for each segment is divided by the capacity of the segment. The capacity is estimated as the number of lanes multiplied by 2,200 vehicles per hour per lane for four-lane freeway segments and 2,300 vehicles per hour per lane for segments with six or more lanes. The level of service standard for the freeway segments studied is LOS E.

Freeway impacts are generally considered to occur when a project causes a traffic increase equal to or greater than one-percent of capacity. A screen-line analysis of project traffic on U.S. 101 to and from the project site showed the project would add considerably less than one percent of the segment capacity on any study segment. Table 3 shows the project's expected contribution to traffic on the freeways in the vicinity of the project site. In accordance with County CMP guidelines, since no freeway segment is expected to be impacted by the proposed project, no further analysis of freeways is required.

Vehicle Queuing

A vehicle queuing analysis was performed for intersection turning movements where the project would add a considerable number of trips. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of "n" vehicles for a vehicle movement using the following formula:

$$P\,(x=n) = \frac{\lambda^n e^{-(\lambda)}}{n!}$$

Where:

P (x=n) = probability of "n" vehicles in queue

n = number of vehicles in the queue

λ = Average number of vehicles in the queue per lane (vehicles per hour /signal cycles per hour)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th-percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement.

Table 3
Freeway Analysis

Freeway	Segment	# of Lanes[1]	Capacity (vphpl)[2]	1% of Capacity	Project Peak Hour Trips AM	Project Peak Hour Trips PM
Southbound Direction						
US 101	north of Bayshore Blvd	5	11500	115	10	31
US 101	Bayshore Bl to Beatty Ave[3]	4	9200	92	8	23
US 101	Beatty Ave to Lagoon Rd[3]	4	9200	92	8	5
US 101	South of Lagoon Rd	4	9200	92	15	9
Northbound Direction						
US 101	South of Lagoon Rd	4	9200	92	5	15
US 101	Lagoon Rd to Beatty Ave[3]	4	9200	92	3	8
US 101	Beatty Ave to Bayshore Bl[3]	4	9200	92	23	14
US 101	north of Bayshore Blvd	5	11500	115	31	18

[1] includes mixed-flow lanes only; based on the narrowest part of the segment.
[2] capacity is based on the ideal capacity cited in San Mateo County CMP Guidelines: 2,200 vehicles per lane for 4-lane freeways, and 2,300 vehicles per lane for freeway segments with or six or more lanes.
[3] segments are applicable only under future conditions, because project traffic would use those segments only after the Geneva Avenue extension connects to the Beatty Ave (Candlestick) interchange.

Transportation Demand Management (TDM) Measures

In its role as the Congestion Management Agency (CMA) for San Mateo County, the City/County Association of Governments (C/CAG) is responsible for maintaining the performance and standards of the Congestion Management Program (CMP) roadway network. The CMP requires new developments that are projected to generate 100 or more peak-hour trips to implement TDM measures that would reduce the demand for new peak-hour trips. The project is expected to generate more than 100 peak-hour trips and therefore would be subject to the C/CAG TDM guidelines.

Report Organization

The remainder of this report is divided into five chapters. Chapter 2 describes the existing roadway network, transit service, existing bicycle and pedestrian facilities, and existing traffic conditions. Chapter 3 explains the method used to estimate project traffic. Chapter 4 describes the potential project impacts on the transportation system under Existing plus Project traffic conditions. Chapter 5 presents Cumulative traffic conditions without and with project traffic. Chapter 6 describes the evaluation of other transportation related issues, including site access and circulation, TDM measures, and VMT assessment.

2. Existing Conditions

This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, bicycle and pedestrian facilities, and transit service.

Existing Roadway Network

The existing roadways in the project vicinity are U.S. 101, Geneva Avenue, Bayshore Boulevard, Guadalupe Canyon Parkway, Carter Street, Martin Street, Linda Vista Drive, Schwerin Street, and Partridge Street. These roadways are described below.

U.S. Highway 101 (U.S. 101) near the project site is a limited-access eight- to 10-lane freeway that connects Brisbane and the Peninsula with San Francisco and Marin Counties to the north and San Jose to the south. U.S. 101 provides direct access to the Project Site to and from the north at the Bayshore Boulevard interchange located approximately one mile north of the site. Access to and from the south is provided via interchanges at Beatty Avenue and Lagoon Road, and via ramps at Sierra Point Parkway and Bayshore Boulevard/Airport Parkway approximately 3 miles south of the site.

Geneva Avenue is a four lane, east-west primary arterial in the vicinity of the project site. It begins at Bayshore Boulevard and ends at Ocean Avenue in San Francisco. It has a center left-turn lane and parking on both sides between Schwerin Street and Bayshore Boulevard in the vicinity of the project site. It provides direct access for various commercial uses and surrounding residential properties. Access to Geneva Avenue from the project site is provided primarily via Schwerin Street. There's a mix of Class II and Class III bike facilities on Geneva Avenue between Ocean Avenue and Bayshore Boulevard.

Bayshore Boulevard is a four-lane, north-south primary arterial with Class II bike lanes on both sides in the vicinity of the project site. It parallels U.S. 101 between Caesar Chavez Boulevard in San Francisco and South San Francisco, where it becomes Airport Boulevard. It provides a direct connection to the Third Street corridor in San Francisco and also serves the surrounding light industrial and residential uses. Access to Bayshore Boulevard from the project site is provided via Geneva Avenue, Linda Vista Drive and Main Street.

Guadalupe Canyon Parkway is a four lane, east-west secondary arterial in the vicinity of the project site. It begins at Bayshore Boulevard and runs westerly through the San Bruno Mountains where it connects with East Market Street to the east. Access to the site would be provided via

Carter Street and Martin Street. It also provides access to some office and residential land uses in the City of Brisbane.

Carter Street is a two-lane, north-south collector street in the vicinity of the project site. It begins at Geneva Avenue in the north and ends at Guadalupe Canyon Parkway in the south. It provides direct access to the surrounding residential properties. Access to Carter Street from the project site would be provided via Martin Street.

Martin Street is a two-lane, east-west local roadway that directly borders the site at its southern end. It begins in the east near the eastern boundary of the project site and ends at Carter Street in the west, where it becomes Martin Trail. It would provide direct access to the site via a new driveway. As part of the City's planned improvements, Martin Street would be extended easterly from its current eastern end to intersect with Linda Vista Drive, providing project site access to Bayshore Boulevard.

Linda Vista Drive is a two-lane local roadway with parking on both sides in the vicinity of the project site. It extends from Main Street at the east end to Schwerin Street at its west end, where it becomes Bay Ridge Drive. It provides direct access to the surrounding residential properties.

Schwerin Street is a two-lane, north-south local street with parking on both sides in the vicinity of the project site. Schwerin Street borders the western boundary of the site and would provide direct access to the site via the extension of Partridge Street and a new driveway between Partridge Street and Martin Street.

Partridge Street is an east-west, two-lane local street with parking on both sides in the vicinity of the project site. Partridge Street is proposed to be extended eastward to connect to the site via a new driveway; this portion of Partridge Street will be privately maintained.

Existing Bicycle and Pedestrian Facilities

Geneva Avenue and Bayshore Boulevard have existing Class II bicycle lanes in the vicinity of the project site. Carter Street between Geneva Avenue and Guadalupe Canyon Parkway, Martin Street between Carter Street and Schwerin Street, and Schwerin Street along the site frontage between Martin Street and Geneva Avenue, are all existing Class III bike routes. On the local streets surrounding the project site, the volume and speed of vehicular traffic is generally low enough such that shared use between bikes and motor vehicles is feasible.

In addition to the existing bicycle facilities described above, the City of Brisbane has "unclassified On-Street" improvements planned for Guadalupe Canyon Parkway. Class II bicycle lanes are also planned along the planned Geneva Avenue extension east of Bayshore Boulevard. The planned bicycle facilities within the study area are shown on Figure 3.

Pedestrian facilities in the area include sidewalks along streets, curb ramps and crosswalks at intersections, pedestrian signals at controlled locations, and pedestrian paths. Direct pedestrian access to the site is provided by sidewalks along the site frontage on Schwerin Street and Martin Street. Pedestrian facilities in the project area consist of sidewalks along all previously described streets: Geneva Avenue, Schwerin Street, Partridge Street, Martin Street, and Linda Vista Drive. Bayshore Boulevard has no sidewalks south of Geneva Avenue, nor on the east side north of Geneva Avenue. According to the Daly City Pedestrian Master Plan, pedestrian access improvements are proposed at various crossings along Geneva Avenue.

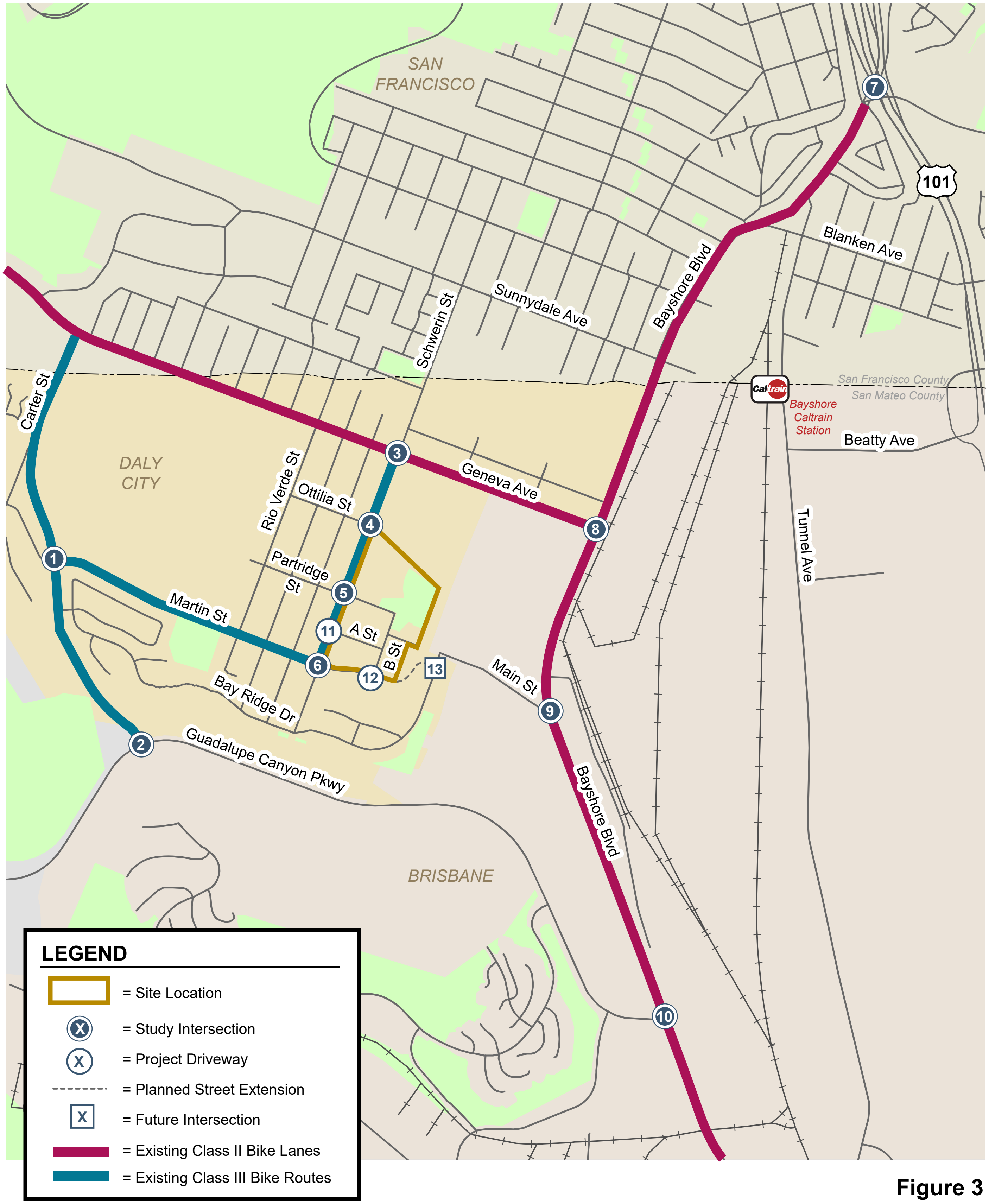


Figure 3
Existing and Proposed Bicycle Facilities

Existing Transit Service

Existing transit service to the study area is provided by the San Francisco Municipal Transportation Agency (MUNI), San Mateo County Transit District (SamTrans), Caltrain and BART. Figure 4 shows the existing transit service routes in the study area.

MUNI

MUNI provides bus service near the project site via Route 9, which travels between Daly City and San Francisco. The closest bus stop to the project site is located on Schwerin Street at MacDonalds Avenue, approximately 0.30 miles north of the site.

SamTrans

SamTrans provides bus service near the project site on Geneva Avenue via Routes 24 and 29. Route 24 operates only on school days between Brisbane and Westmoor High School in Daly City with one daily westbound AM departure and one daily eastbound PM departure. Route 29 also operates only on school days between Lipman Middle School in Brisbane and central Daly City. Route 29 has one daily eastbound AM departure and one daily westbound PM departure. For both routes, the closest bus stop from the project site is located on Geneva Avenue at the intersection with Schwerin Street, approximately 0.25 miles from the site.

Route 292 provides service between downtown San Francisco and Hillsdale Shopping Center in San Mateo, with service to San Francisco International Airport. From the Hillsdale Mall Shopping Center terminus, connections are provided to AC Transit. The route serves Daly City, with the stop at Bayshore Boulevard and Geneva Avenue, located approximately 0.65 miles away, being nearest to the project site.

SamTrans Route 397 provides limited overnight “night owl” service between downtown San Francisco and the Palo Alto transit center, with service to San Francisco International Airport. From the San Francisco terminus, connections are provided to AC Transit and Golden Gate Transit. From the Palo Alto transit center, connections are provided to VTA. The route serves Daly City, with the stop at Bayshore Boulevard and Geneva Avenue, located approximately 0.65 miles away, being nearest to the project site.

The Daly City Bayshore (DSB) Shuttle, operated by SamTrans, provides free shuttle service between the Daly City BART station and Bayshore Boulevard/Geneva Avenue, with a connection to the Balboa BART station on weekdays. The shuttle has a stop immediately fronting the site, at the Schwerin Street/Martin Street intersection.

The Bayshore/Brisbane Commuter Shuttle is a free service which runs between the Bayshore Caltrain Station and the Brisbane–Crocker Industrial Park area during commute hours on weekdays. The closest stop for the shuttle is on Bayshore Boulevard near Geneva Avenue.

The Bayshore/Brisbane Senior Shuttle is operated by SamTrans and the San Mateo County Transportation Authority. It operates similar to a paratransit service except that it circles on a fixed route between Bayshore Caltrain Station and South San Francisco (with connections to other SamTrans bus routes) until it receives a call to book a trip.

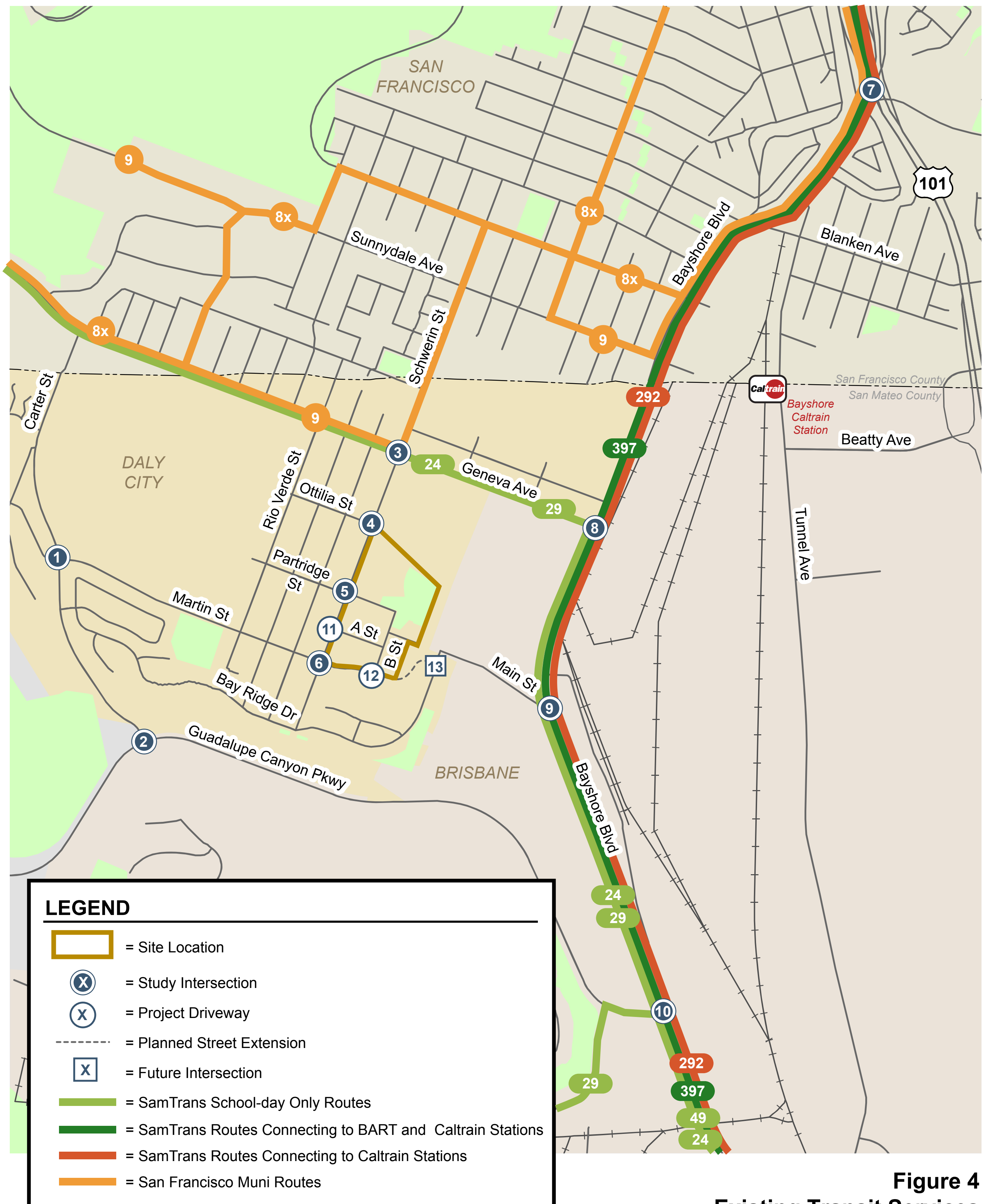


Figure 4
Existing Transit Services

Caltrain

Caltrain provides commuter rail service between Gilroy and San Francisco and most peninsula cities in between. Caltrain provides key transfer points to other transit lines in San Francisco at 4th & King, in Millbrae (to SFO via BART), Palo Alto Transit Center, Mountain View (to VTA Light Rail), and San Jose stations. The Caltrain station nearest to the project site is the Bayshore Station, which is located approximately 1.5 miles from the project site, on Tunnel Avenue at the border of Brisbane and San Francisco.

BART

The nearest BART station is the Balboa BART station, located approximately 2.25 miles northwest of the project site. From the Balboa BART station, riders can access Fremont, Pleasanton/Dublin, Richmond and Pittsburg as wells as numerous points in between. Trains run on approximately 15 minute headways during commute hours. There are also a number of bus routes and shuttles operated by SamTrans and SFMTA that stop at the Daly City BART station.

Existing Intersection Lane Configurations and Traffic Volumes

The existing lane configurations at the study intersections were obtained from field observations. The existing intersection lane configurations are shown on Figure 5. The existing peak hour traffic volumes at the study intersections were obtained from turning movement counts conducted in February 2019. The peak hour traffic volumes are shown on Figure 6. The intersection traffic count data are included in Appendix A.

Existing Signalized Intersection Levels of Service

The results of the signalized intersection level of service analysis under existing conditions are summarized in Table 4. The results indicate that, measured against the City of Daly City, City of Brisbane and San Mateo County CMP level of service standards, all of the signalized study intersections currently operate at an acceptable level of service during the AM and PM peak hours.

Existing Unsignalized Intersection Levels of Service

The results of the unsignalized intersection level of service analysis under existing conditions are summarized in Table 4. The results indicate that all of the unsignalized study intersections currently operate at LOS B or better during the AM and PM peak hours. The level of service calculation sheets are included in Appendix B.

Table 4
Existing Intersection Levels of Service

No.	Study Intersection	Traffic Control[1]	Peak Hour	LOS Std[2]	Avg. Delay[3]	LOS[4]
	City of Daly City Intersections					
1	Carter Street and Martin Street	signal	AM	D	6.7	A
			PM	D	4.6	A
2	Carter Street and Guadalupe Canyon Parkway	signal	AM	D	15.5	B
			PM	D	13.2	B
3	Schwerin Street and Geneva Avenue	signal	AM	D	8.3	A
			PM	D	10.5	B
4	Schwerin Street and Ottilia Street	AWSC	AM	D	8.1	A
			PM	D	7.6	A
5	Schwerin Street and Partridge Street/Project Driveway	AWSC	AM	D	7.6	A
			PM	D	7.6	A
6	Schwerin Street and Martin Street	AWSC	AM	D	7.4	A
			PM	D	7.4	A
8	Bayshore Boulevard and Geneva Avenue[5]	signal	AM	D	13.1	B
			PM	D	15.5	B
11	Schwerin Street and Project Driveway (New Street A)	SSSC	AM	D	----	----
			PM	D	----	----
12	Project Driveway (New Street B) and Martin Street	SSSC	AM	D	----	----
			PM	D	----	----
13	Linda Vista Drive and Martin Street (planned)[6]	SSSC	AM	D	----	----
			PM	D	----	----
	City of San Francisco Intersections					
7	U.S. 101 southbound off-ramp and Bayshore Blvd	signal	AM	n/a[7]	22.7	C
			PM	n/a[7]	20.3	C
	City of Brisbane Intersections					
9	Bayshore Boulevard and Main Street	SSSC	AM	D	0.6 / 13.3	A / B
			PM	D	0.6 / 10.3	A / B
10	Bayshore Boulevard and Guadalupe Canyon Parkway	signal	AM	D	25.3	C
			PM	D	15.1	B

[1] AWSC - All Way Stop Control. SSSC = Side Street Stop Control.

[2] There is no official LOS standard for unsignalized (AWSC and SSSC) intersections, except in the City of Brisbane, which uses standard LOS D for unsignalized intersections.

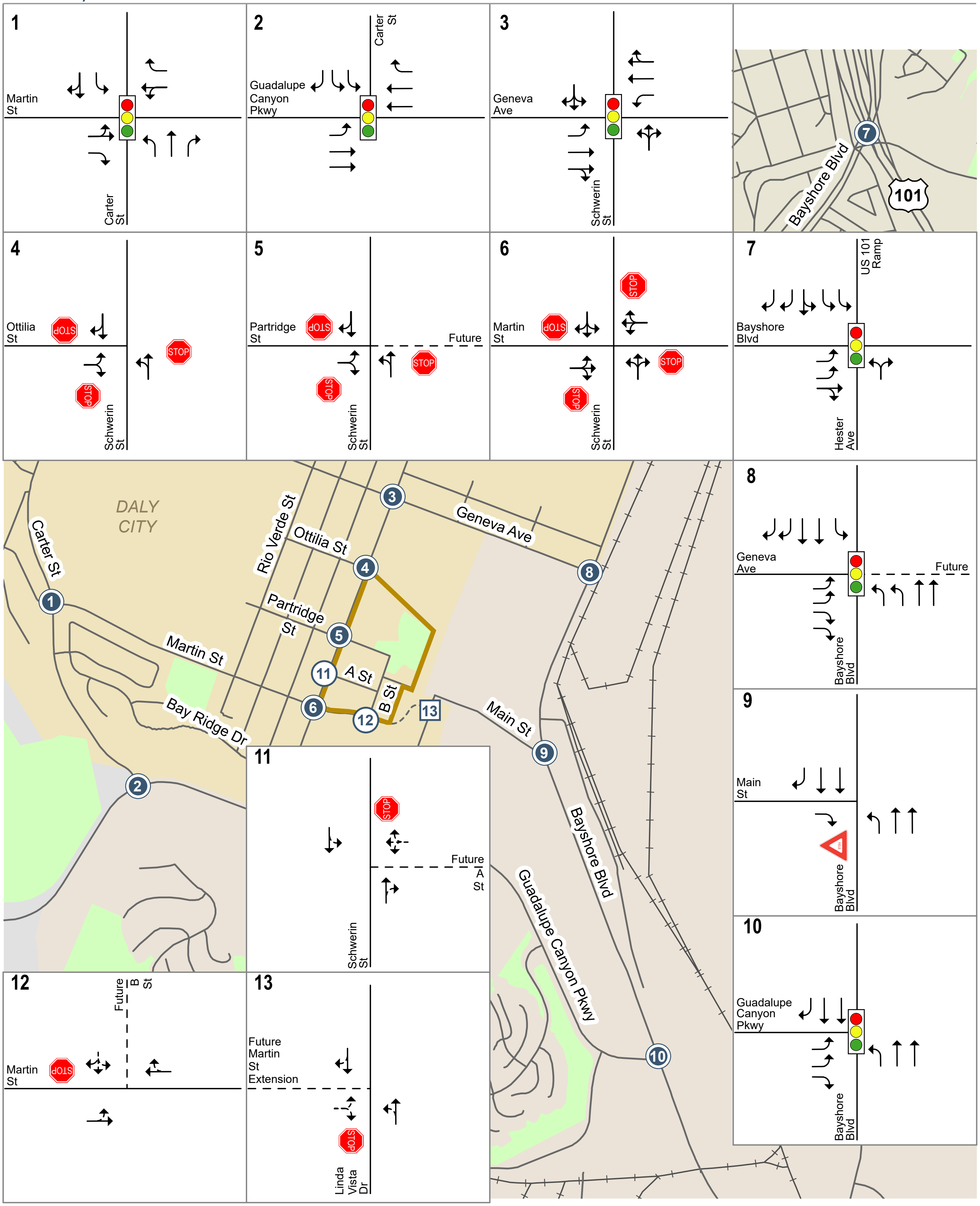
[3] Signalized intersection levels of service and delays reported are for average control delay per vehicle. The intersection levels of service and delays reported for the AWSC intersections pertain to overall average delay. SSSC intersection levels of service and delays are reported for both the overall average delay / the approach with highest delay.

[4] Level of service was calculated based on the HCM methodology using Synchro software.

[5] The Bayshore Blvd & Geneva Avenue intersection operates under jurisdictions of Daly City, Brisbane and County (CMP). The CMP LOS standard at the intersection is LOS E.

[6] The planned intersection is assumed as SSSC, per the assumption in the Martin Street Residential TIA.

[7] The intersection of US 101 SB ramps and Bayshore Boulevard is exempt from the City and County CMP LOS standard because of its location within an IOZ (Infill Opportunity Zone).



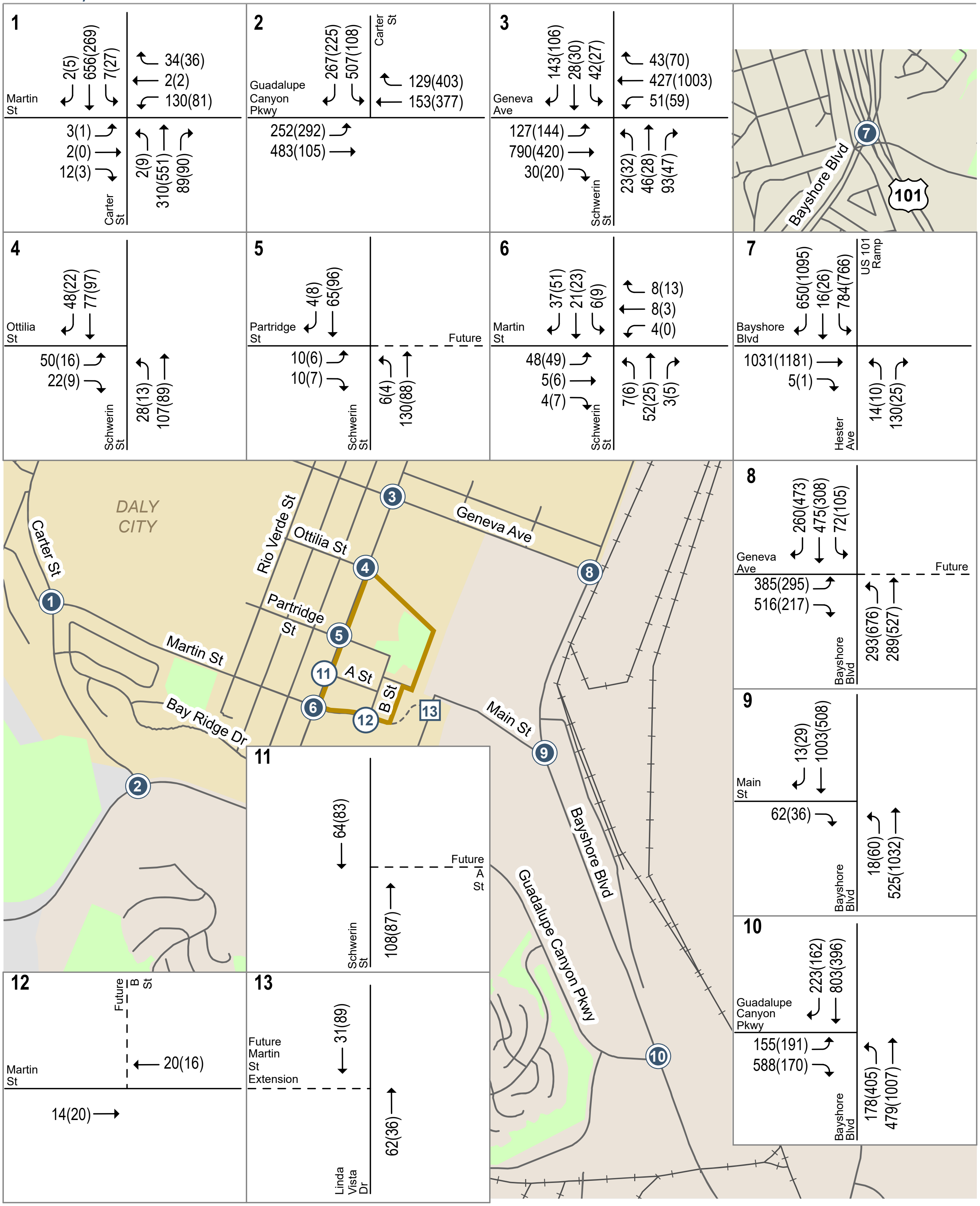
LEGEND

= Site Location

Figure 5
Existing Lane Configurations

HEXAGON

NORTH
Not to Scale



LEGEND

= Site Location

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 6
Existing Traffic Volumes

HEXAGON

Observed Existing Traffic Conditions

Traffic conditions in the field were observed in order to identify existing operational deficiencies and to confirm the accuracy of calculated levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to intersection level of service, and (2) to identify any locations where the level of service calculation does not accurately reflect level of service in the field.

With one exception, the level of service analysis appears to accurately reflect actual existing traffic conditions. Observations at the intersection of the U.S. 101 southbound off-ramp and Bayshore Boulevard revealed heavy traffic congestion during both the AM and PM peak hours. However, these conditions are not directly related to operations at the intersection itself. The source of congestion is a vehicle queue that extends from the northbound U.S. 101 freeway mainline all the way back to the intersection, which thereby obstructs traffic flow at the intersection.

At Bayshore Boulevard and Main Street, the sight distance for the eastbound right-turn from Main Street onto southbound Bayshore Boulevard is limited due to vegetation. This vegetation needs to be trimmed back and maintained to ensure adequate sight distance.

3.
Project Characteristics

This chapter describes the method by which project traffic is estimated. The proposed project would replace 150 existing affordable housing units and a childcare center on site with 566 new affordable housing units, a park, and expanded childcare center. Project access would be provided via four driveways on Schwerin Street and one driveway on Martin Street. The streets within the project site will be privately maintained.

Project Traffic Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear were estimated using a two-step process: (1) trip generation, and (2) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site was estimated for the weekday AM and PM peak hours. In the project trip assignment step, the project trips were assigned to specific streets and intersections in the study area. These procedures are described further in the following sections.

Through empirical research, data have been collected that correlate common land uses to their propensity for producing traffic. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development. Project trip generation was estimated by applying to the size and uses of the development the appropriate trip generation rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation*, *10th Edition*.

The representative land use for the project was assumed to be low-rise multi-family housing (ITE code 220) and day-care center (ITE code 565). The proposed park use was assumed to be local-serving and generate little traffic external to the surrounding neighborhood (also note that the existing development on-site includes a park). Trip generation estimates were based on the net increase in development, which is an increase of 416 dwelling units and 15 daycare center students. Accordingly, ITE's trip generation rates for the project would generate 3,106 net new daily vehicle trips, with 203 net new trips occurring during the AM peak hour and 245 net new trips occurring during the PM peak hour. The trip generation estimates are shown in Table 5.

Table 5
Project Trip Generation Estimates

				AM Peak Hour				PM Peak Hour			
Land Use	Size[1]	Daily Rate	Daily Trips	Rate	Total Trips	In	Out	Rate	Total Trips	In	Out
Residential[2]	416 units	7.32	3,045	0.46	191	44	147	0.56	233	147	86
Child Care Center[3]	15 students	4.09	61	0.78	12	6	6	0.79	12	6	6
Total Trips			3,106		203	50	153		245	153	92

[1] Size based on increase in development levels. Residential units: 566 units planned, 150 units existing. Child care center: 124 enrollment planned, 109 enrollment existing.

[2] Rate per dwelling unit, based on ITE *Trip Generation, 10th Edition*, 2017 for Multi-family housing - low-rise (ITE land-use code 220).

[3] Rate per enrolled child, based on ITE *Trip Generation, 10th Edition*, 2017 for Day Care Center (ITE land-use code 565).

The project trip assignment was carried out directly within the Daly City travel demand model for each project condition study scenario (existing+project, cumulative+project, AM and PM peak hours). However, the general directions of approach and departure of project traffic are shown on Figure 7.

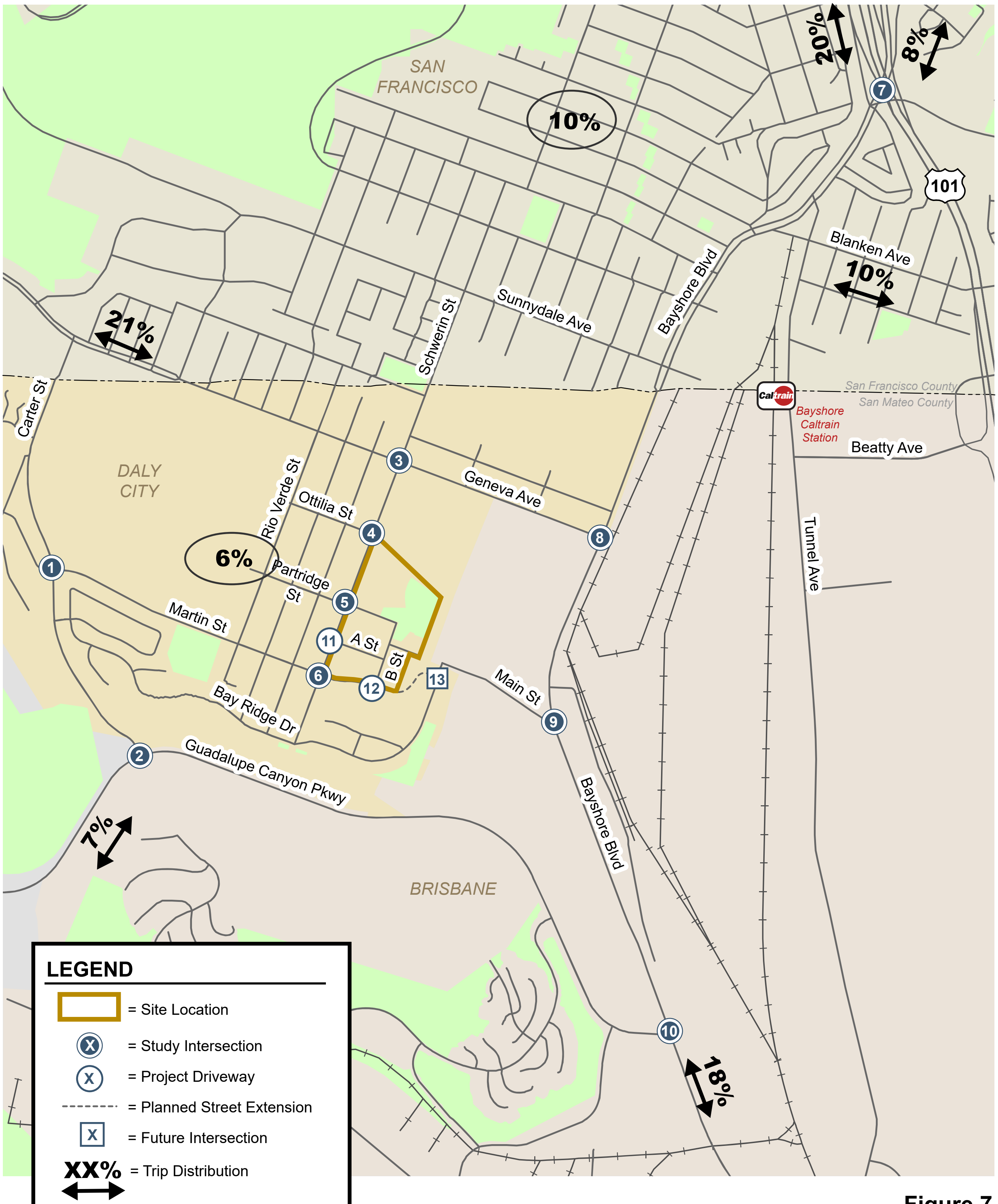


Figure 7
Project Trip Distribution

NORTH
Not to Scale

4. Existing Plus Project Conditions

This chapter describes existing plus project traffic conditions. Existing plus project traffic conditions represent the traffic conditions that would occur if the project were constructed and occupied today. This scenario is used to determine project-specific impacts.

Existing Plus Project Traffic Volumes & Transportation Network

It is assumed in this analysis that the roadway network and the study intersection lane configurations under existing plus project conditions would be the same as those described under existing conditions, with the exception of inclusion of the planned extension of Martin Street to Linda Vista Drive. Existing plus Project traffic volumes were provided by Daly City staff, via Kittelson Associates, using the Daly City Travel Demand Forecast (TDF) model. The existing plus project traffic volumes at the study intersections are shown graphically on Figure 8.

Existing Plus Project Signalized Intersection Levels of Service

The signalized intersection level of service results under existing plus project conditions are summarized in Table 6. The results show that, measured against the City of Daly City, City of Brisbane and San Mateo County CMP level of service standards, all of the signalized study intersections would operate at an acceptable level of service under existing plus project conditions during the AM and PM peak hours. Therefore, the proposed project would not create a significant impact at these locations.

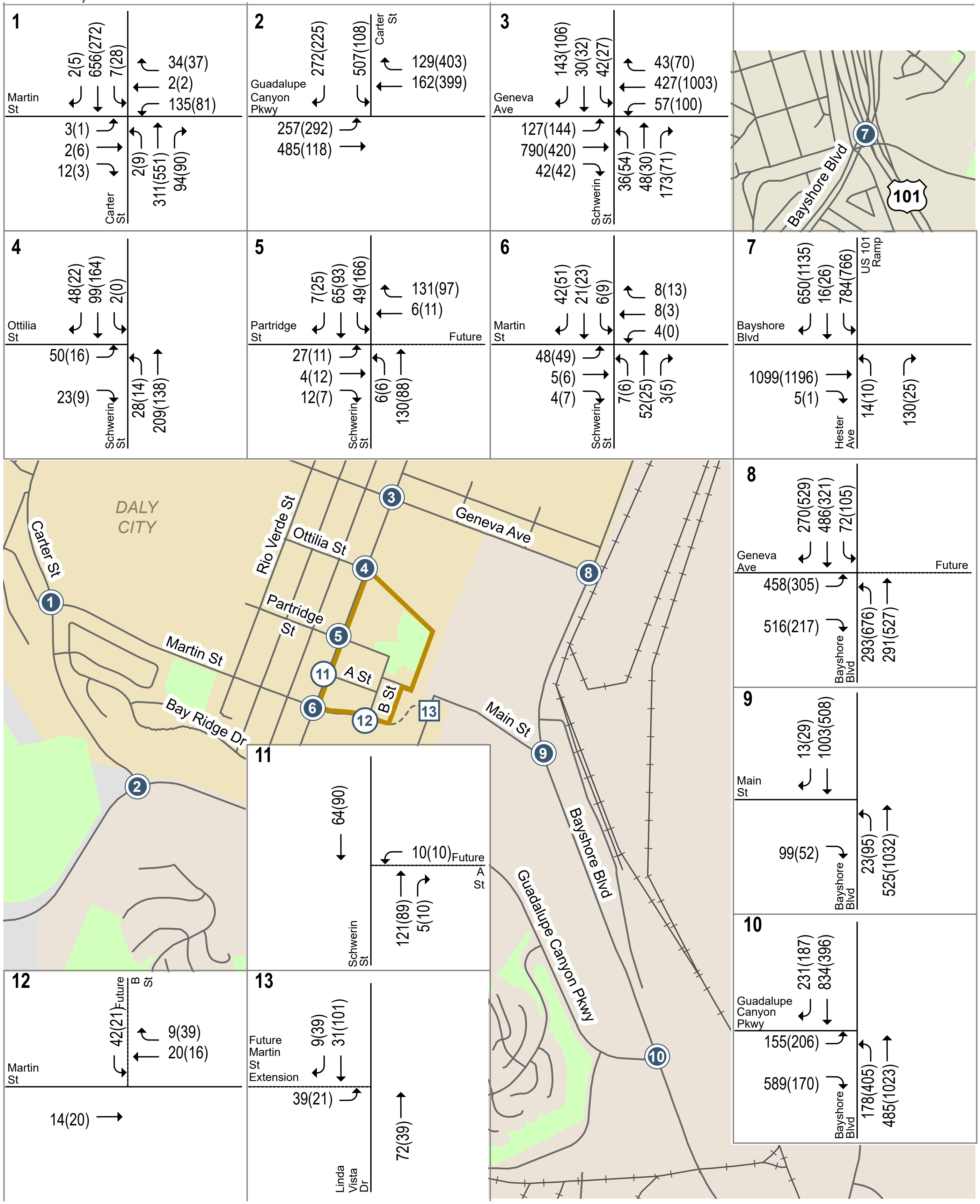
Existing Plus Project Unsignalized Intersection Levels of Service

The unsignalized intersection level of service results under existing plus project conditions are summarized in Table 6. The results show that all of the unsignalized study intersections would operate at overall LOS A under existing plus project conditions during the AM and PM peak hours. All of the side-street-stop-controlled intersections would operate at LOS B or better on the worst approach in all cases.

Table 6
Existing Plus Project Intersection Levels of Service

					Existing		Existing + Project		
No.	Study Intersection	Traffic Control[1]	Peak Hour	LOS Std[2]	Avg. Delay[3]	LOS[4]	Avg. Delay[3]	LOS[4]	Incr. In Avg. Delay
	City of Daly City Intersections								
1	Carter Street and Martin Street	signal	AM	D	6.7	A	6.8	A	0.1
			PM	D	4.6	A	4.7	A	0.1
2	Carter Street and Guadalupe Canyon Pkwy	signal	AM	D	15.5	B	15.8	B	0.3
			PM	D	13.2	B	13.3	B	0.1
3	Schwerin Street and Geneva Avenue	signal	AM	D	8.3	A	9.0	A	0.7
			PM	D	10.5	B	11.4	B	0.9
4	Schwerin Street and Ottilia Street	AWSC	AM	D	8.1	A	9.0	A	0.9
			PM	D	7.6	A	8.2	A	0.6
5	Schwerin St and Partridge St/Project Drive	AWSC	AM	D	7.6	A	8.3	A	0.7
			PM	D	7.6	A	9.3	A	1.7
6	Schwerin Street and Martin Street	AWSC	AM	D	7.4	A	7.4	A	0.0
			PM	D	7.4	A	7.4	A	0.0
8	Bayshore Boulevard and Geneva Avenue[5]	signal	AM	D	13.1	B	13.8	B	0.7
			PM	D	15.5	B	15.9	B	0.4
11	Schwerin St and Project Drive (New Street A)	SSSC	AM	D	----	----	0.5 / 9.6	A / A	----
			PM	D	----	----	0.5 / 9.7	A / A	----
12	Project Drive (New Street B) and Martin St	SSSC	AM	D	----	----	4.4 / 8.9	A / A	----
			PM	D	----	----	1.9 / 8.9	A / A	----
13	Linda Vista Dr and Martin Street (planned)[6]	SSSC	AM	D	----	----	2.4 / 9.3	A / A	----
			PM	D	----	----	1.0 / 9.6	A / A	----
	City of San Francisco Intersections								
7	U.S. 101 SB off-ramp and Bayshore Blvd	signal	AM	n/a[7]	22.7	C	23.5	C	0.8
			PM	n/a[7]	20.3	C	20.5	C	0.2
	City of Brisbane Intersections								
9	Bayshore Boulevard and Main Street	SSSC	AM	D	0.6 / 13.3	A / B	1.0 / 14.1	A / B	0.4 / 0.8
			PM	D	0.6 / 10.3	A / B	0.8 / 10.4	A / B	0.2 / 0.1
10	Bayshore Bl and Guadalupe Canyon Pkwy	signal	AM	D	25.3	C	25.7	C	0.4
			PM	D	15.1	B	15.1	B	0.0

[1] AWSC - All Way Stop Control. SSSC = Side Street Stop Control.
[2] There is no official LOS standard for unsignalized (AWSC and SSSC) intersections, except in the City of Brisbane, which uses standard LOS D for unsignalized intersections.
[3] Signalized intersection levels of service and delays reported are for average control delay per vehicle. The intersection levels of service and delays reported for the AWSC intersections pertain to overall average delay. SSSC intersection levels of service and delays are reported for both the overall average delay / the approach with highest delay.
[4] Level of service was calculated based on the HCM methodology using Synchro software.
[5] The Bayshore Blvd & Geneva Avenue intersection operates under jurisdictions of Daly City, Brisbane and County (CMP). The CMP LOS standard at the intersection is LOS E.
[6] The planned intersection is assumed to be SSSC, per the assumption in the Martin Street Residential TIA.
[7] The intersection of US 101 SB ramps and Bayshore Boulevard is exempt from the City and County CMP LOS standard because of its location within an IOZ (Infill Opportunity Zone).



LEGEND

= Site Location

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 8
Existing with Project Traffic Volumes

HEXAGON

NORTH
Not to Scale

The City of Daly City and San Mateo County CMP do not have a level of service threshold of significance for unsignalized intersections. An evaluation of traffic signal warrants can further guide the decision whether to install a traffic signal. Refer to Chapter 6, Other Transportation Issues, for the analysis of traffic signal warrants.

The City of Brisbane does have a level of service threshold of significance for unsignalized intersections. However, the only unsignalized study intersection located in Brisbane is the side-street-yield-controlled intersection at Bayshore Boulevard and Main Street, which would operate at LOS A overall and LOS B on the minor street approach under both existing conditions and existing conditions with the project.

5.
Cumulative Conditions

This chapter presents a summary of the traffic conditions that would occur under cumulative conditions. For this analysis, cumulative conditions represent traffic conditions assuming the buildout of the Daly City General Plan to year 2035. Cumulative no project and with project traffic volumes were provided by Daly City staff, via Kittelson Associates, using the Daly City Travel Demand Forecast (TDF) model. The Daly City TDF model includes various local and regional improvements outside of the project area. Included in this chapter is a summary of results from the cumulative conditions analysis and identification of any intersection impacts caused by the project.

Cumulative Transportation Network

While there are various regional transportation improvements planned by the year 2035, it is assumed in this analysis that the transportation network in the project vicinity under cumulative conditions would be the same as that described under existing conditions, with the following exceptions:

Daly City General Plan Improvements

- Geneva Avenue extension from Bayshore Boulevard to U.S. 101 at Beatty interchange
- Martin Avenue extension from existing terminus to Linda Vista Drive
- Pedestrian access improvements at various crossings along Geneva Avenue

Brisbane General Plan Improvements

- Geneva Avenue/Harney Way extension from Bayshore Blvd to U.S. 101 (same as Daly City)
- New U.S. 101 interchange at Geneva Avenue/Harney Way

San Mateo County CMP (C/CAG) Planned Improvements

- U.S. 101 auxiliary lanes: add northbound and southbound modified auxiliary lanes and/or HOT lanes on U.S. 101 from Oyster Point Boulevard to the San Francisco County line

- New U.S. 101 interchange at Geneva Avenue/Harney Way (same as Brisbane)

Cumulative Traffic Volumes

Cumulative No Project traffic volumes were obtained from the Daly City TDF model based on General Plan land uses. Cumulative plus Project traffic volumes were estimated using the City's model based on incorporating into the General Plan land uses the project's proposed land use changes (increase in number of affordable units and increase in childcare center enrollment) on the site. The cumulative traffic volumes without and with the proposed project are shown on Figures 9 and 10.

Cumulative Signalized Intersection Levels of Service

The signalized intersection level of service results under Cumulative with Project conditions are summarized in Table 7. The level of service calculation sheets are included in Appendix B. The results show that all but one of the signalized study intersections would operate at an acceptable level of service under Cumulative with Project conditions during the peak hours. The intersection of Bayshore Boulevard and Geneva Avenue would operate at an unacceptable LOS F in the PM peak hour under Cumulative with Project conditions. The project would add traffic to a LOS F intersection, thereby constituting a significant impact at this intersection.

Significant Impact: Under cumulative conditions, the intersection of Bayshore Boulevard and Geneva Avenue would operate at LOS F during the PM peak hour without the proposed project. The project would add traffic to the intersection. According to the City of Daly City and San Mateo County CMP significance criteria, this would constitute a significant adverse cumulative impact at this intersection.

Mitigation: To mitigate this impact would require an overlap traffic signal phase be added at the future northbound Bayshore Boulevard to eastbound Geneva Avenue right turn movement in conjunction with the Geneva Avenue extension to U.S. 101. Construction of this overlap phase would allow northbound right turns on Bayshore Boulevard to go concurrently with westbound left turns on Geneva Avenue. This would improve the overall intersection average delay to 58.4 seconds. Under cumulative no project conditions, the intersection delay is shown to be 80.9 seconds. Thus, this improvement would return the average delay to better than no project conditions. Because this impact does not occur under existing plus project conditions and is the result of cumulative traffic increases, the proposed project would be responsible for a fair share monetary contribution toward the improvement. Under existing conditions, there are approximately 2,601 PM peak hour trips at the intersection. Cumulative projects (not including project traffic) would add approximately 2,995 PM peak hour trips to the intersection between 2019 and 2035. The proposed project is projected to add approximately 95 PM peak hour trips to the intersection.

Cumulative Unsignalized Intersection Levels of Service

The unsignalized intersection level of service results under cumulative plus project conditions are summarized in Table 7. The level of service calculation sheets are shown in Appendix B. The results show that all of the unsignalized study intersections would operate at overall LOS A under cumulative plus project conditions during the AM and PM peak hours. All of the side-street-stop-controlled intersections would operate at LOS C or better on the worst approach in all cases.

The City of Daly City and San Mateo County CMP do not have a level of service threshold of significance for unsignalized intersections. An evaluation of traffic signal warrants can further guide the decision whether to install a traffic signal. Refer to Chapter 6, Other Transportation Issues, for the analysis of traffic signal warrants.

The City of Brisbane does have a level of service threshold of significance for unsignalized intersections. However, the only unsignalized study intersection located in Brisbane is the side-street-yield-controlled intersection at Bayshore Boulevard and Main Street, which would operate at LOS C (on the minor street approach) or better under cumulative conditions both without and with the project.

Table 7
Cumulative Intersection Levels of Service

					Cumulative				
					No Project		With Project		
No.	Study Intersection	Traffic Control[1]	Peak Hour	LOS Std[2]	Avg. Delay[3]	LOS[4]	Avg. Delay[3]	LOS[4]	Incr. In Avg. Delay
	City of Daly City Intersections								
1	Carter Street and Martin Street	signal	AM	D	9.7	A	9.7	A	0.0
			PM	D	6.1	A	6.2	A	0.1
2	Carter Street and Guadalupe Canyon Pkwy	signal	AM	D	17.1	B	17.6	B	0.5
			PM	D	29.0	C	29.8	C	0.8
3	Schwerin Street and Geneva Avenue	signal	AM	D	12.1	B	14.7	B	2.6
			PM	D	12.3	B	14.7	B	2.4
4	Schwerin Street and Ottilia Street	AWSC	AM	D	9.5	A	10.0	A	0.5
			PM	D	8.6	A	9.4	A	0.8
5	Schwerin St and Partridge St/Project Drive	AWSC	AM	D	8.1	A	8.9	A	0.8
			PM	D	8.0	A	9.8	A	1.8
6	Schwerin Street and Martin Street	AWSC	AM	D	7.5	A	7.5	A	0.0
			PM	D	7.4	A	7.5	A	0.1
8	Bayshore Boulevard and Geneva Avenue[5]	signal	AM	D	52.3	D	54.5	D	2.2
			PM	D	80.9	F	82.5	F	1.6
11	Schwerin St and Project Drive (New Street A)	SSSC	AM	D	----	----	0.4 / 10.0	A / B	----
			PM	D	----	----	0.5 / 10.0	A / B	----
12	Project Drive (New Street B) and Martin St	SSSC	AM	D	----	----	3.7 / 9.0	A / A	----
			PM	D	----	----	1.6 / 9.0	A / A	----
13	Linda Vista Dr and Martin Street (planned)[6]	SSSC	AM	D	----	----	3.0 / 9.2	A / A	1.5 / 0.3
			PM	D	----	----	1.1 / 9.5	A / A	0.6 / 0.2
	City of San Francisco Intersections								
7	U.S. 101 SB off-ramp and Bayshore Blvd	signal	AM	n/a[7]	26.7	C	26.7	C	0.0
			PM	n/a[7]	19.9	B	19.9	B	0.0
	City of Brisbane Intersections								
9	Bayshore Boulevard and Main Street	SSSC	AM	D	0.5 / 20.0	A / C	0.8 / 22.1	A / C	0.3 / 2.1
			PM	D	0.5 / 12.4	A / B	0.6 / 12.4	A / B	0.1 / 0.0
10	Bayshore Blvd and Guadalupe Canyon Pkwy	signal	AM	D	41.6	D	45.6	D	4.0
			PM	D	23.4	C	23.4	C	0.0

[1] AWSC - All Way Stop Control. SSSC = Side Street Stop Control.

[2] There is no official LOS standard for unsignalized (AWSC and SSSC) intersections, except in the City of Brisbane, which uses standard LOS D for unsignalized intersections.

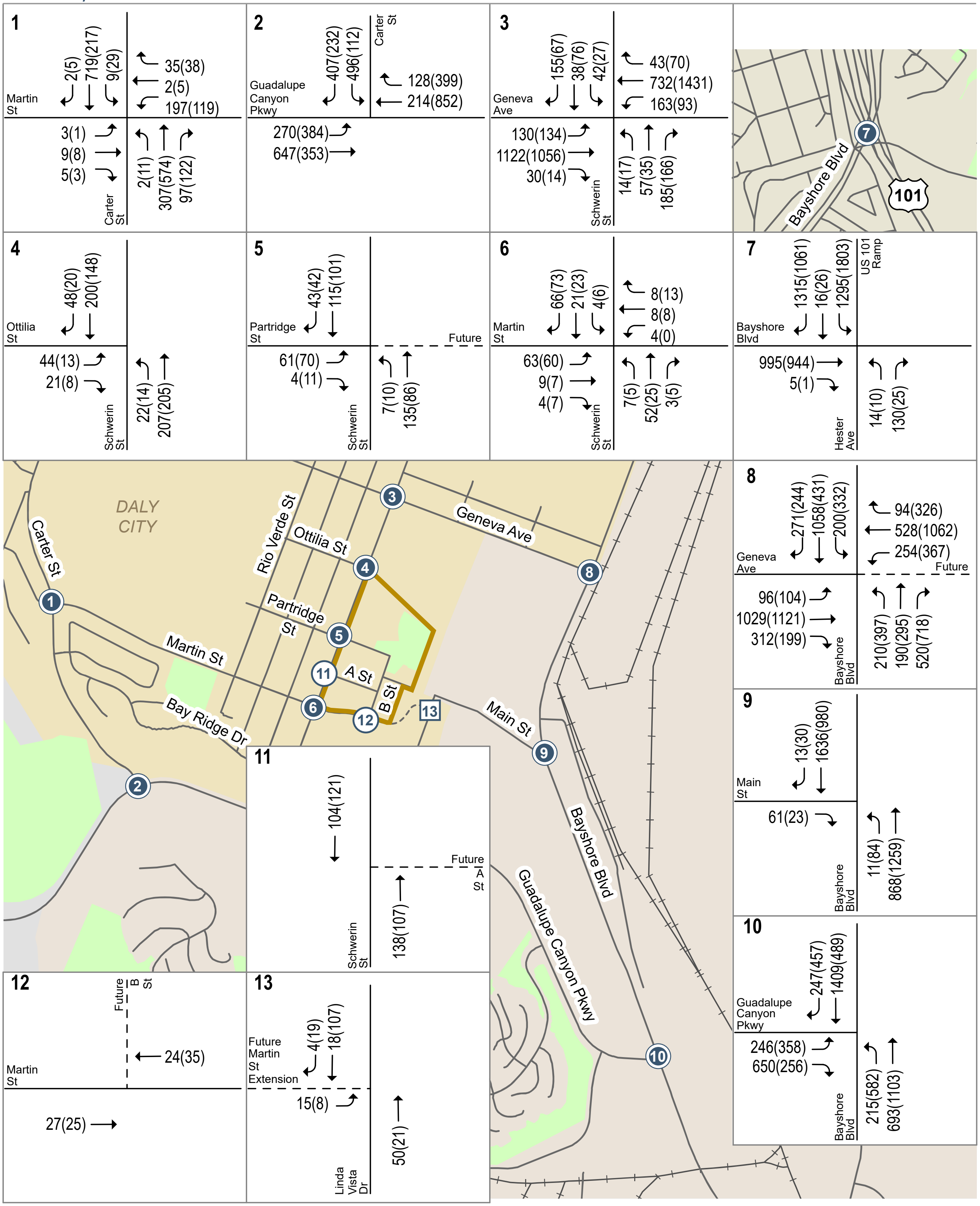
[3] Signalized intersection levels of service and delays reported are for average control delay per vehicle. The intersection levels of service and delays reported for the AWSC intersections pertain to overall average delay. SSSC intersection levels of service and delays are reported for both the overall average delay / the approach with highest delay.

[4] Level of service was calculated based on the HCM methodology using Synchro software.

[5] The Bayshore Blvd & Geneva Avenue intersection operates under jurisdictions of Daly City, Brisbane and County (CMP). The CMP LOS standard at the intersection is LOS E.

[6] The planned intersection is assumed to be SSSC, per the assumption in the Martin Street Residential TIA.

[7] The intersection of US 101 SB ramps and Bayshore Boulevard is exempt from the City and County CMP LOS standard because of its location within an IOZ (Infill Opportunity Zone).



LEGEND

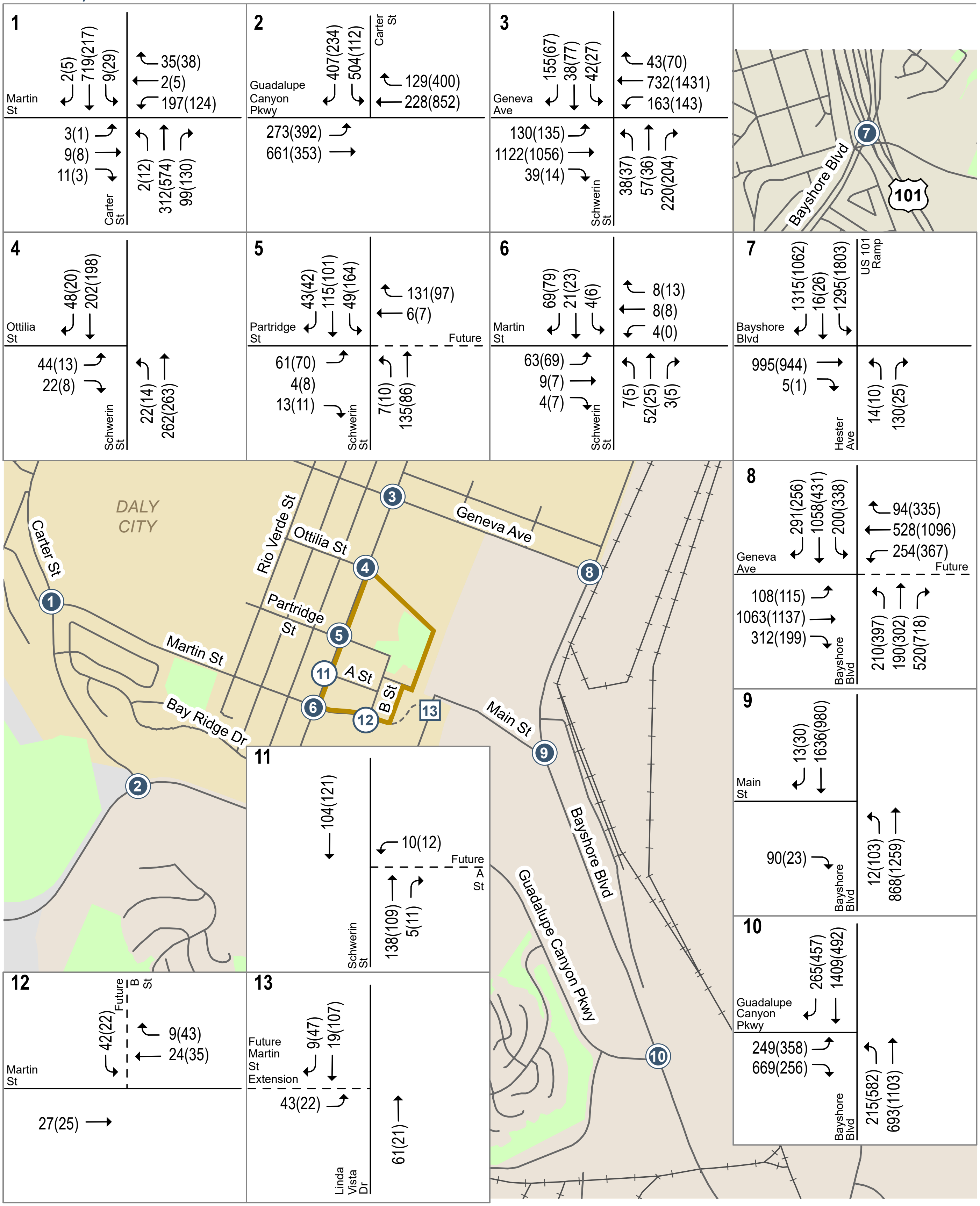
= Site Location

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 9
Cumulative No Project Traffic Volumes

HEXAGON

NORTH
Not to Scale



LEGEND

= Site Location

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 10
Cumulative with Project Traffic Volumes

HEXAGON

NORTH
Not to Scale

6.
Other Transportation Issues

This chapter presents an analysis of other transportation issues associated with the project, including:

- Traffic Signal Warrants
- Vehicle Queuing Analysis
- Pedestrian, Bicycle and Transit Analysis
- Site Access and On-Site Circulation
- TDM Plan
- Vehicle Miles Travelled (VMT)

Unlike the signalized level of service impact methodology, which is adopted by the City Council, the analyses of non-LOS issues are based on professional judgment in accordance with the standards and methods employed by the traffic engineering community.

Traffic Signal Warrants

The level of service analysis for the unsignalized intersections was supplemented with an assessment of the need for signalization of the intersections. For this study, the need for signalization is assessed on the basis of the peak-hour volume signal warrant – warrant #3 – described in the *California Manual on Uniform Traffic Control Devices* (MUTCD). This method provides an indication of whether traffic conditions and peak-hour traffic levels are, or would be, sufficient to justify installation of a traffic signal. The results indicate that none of the study intersections currently meet or would meet the peak-hour volume signal warrant under any scenarios in the AM and PM peak hours. The signal warrant calculation sheets are shown in Appendix C.

Vehicle Queuing Analysis

There are no established thresholds under CEQA or policy adopted by Daly City for determining significance impacts for vehicle queuing. A vehicle queuing analysis can be useful in determining the adequacy of existing vehicle storage capacity at intersections in the vicinity of the site. Accordingly, a vehicle queuing analysis was conducted for the high demand turn movements where the project would add traffic.

Vehicle queues were estimated using a Poisson probability distribution. The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95^{th} percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future storage requirements at intersections.

Vehicle queuing was evaluated for the westbound left turn movement at the intersection of Schwerin Street and Geneva Avenue. The vehicle queuing estimates are shown in Table 8. The results show that, under existing and existing plus project conditions, the estimated maximum westbound left-turn vehicle queues of 100 feet in the AM peak hour and 150 feet in the PM peak hour would not exceed the 160-foot vehicle storage capacity.

Due to the low ambient traffic volumes on Schwerin Street and Martin Street, a qualitative evaluation concluded that the estimated maximum inbound and outbound vehicle queues at the site driveways would rarely exceed one or two vehicles.

Table 8
Off-Site Vehicle Queuing Analysis

	#3 Schwerin St & Geneva Ave	
	Westbound Left-Turn	
Measurement	AM	PM
Existing		
Cycle[1] (seconds)	95	95
Volume (vph)	51	59
Average Queue (vehicles)	1.3	1.6
Average Queue (feet) [2]	34	39
95th %ile Queue (vehicles)	3	4
95th %ile Queue (feet) [2]	75	100
Storage	160	160
Adequate (Y/N)	Y	Y
Existing + Project		
Cycle[1] (seconds)	95	95
Volume (vph)	57	100
Average Queue (vehicles)	1.5	2.6
Average Queue (feet) [2]	38	66
95th %ile Queue (vehicles)	4	6
95th %ile Queue (feet) [2]	100	150
Storage	160	160
Adequate (Y/N)	Y	Y

[1] Vehicle queue calculations based on signal cycle length.

[2] Assumes 25 feet per vehicle queued.

Pedestrian, Bicycle, and Transit Analysis

The potential impacts of the project on pedestrian, bicycle and transit are described below.

Pedestrian Facilities. Existing observations at the study intersections showed a moderate amount of pedestrian activity at some intersections. Pedestrian activity at the Schwerin Street/Geneva Avenue intersection is fairly heavy, with 100 or more pedestrian crossings per hour. Pedestrian volumes at the Schwerin Street/Ottilia Street intersection are moderate, ranging between 30 and 90 pedestrian crossings per hour, with the higher number occurring during the morning at the start of school at the Bayshore Elementary School.

Pedestrian volumes directly in front of the project site were fairly light, ranging from 10 to 25 pedestrian crossings per hour. Overall, the volume of pedestrian trips generated by the project is expected to be relatively low and not exceed the carrying capacity of the sidewalks and crosswalks nearby.

Bicycle Facilities. According to the City of Daly City General Plan, approximately one percent of the proposed project's users could be expected to commute to and from the project site via bike. For the proposed project, this would equate to approximately one or two new bike trips during each of the AM and PM peak hours. The low volume of bicycle trips generated by the project would not exceed the bicycle-carrying capacity of the streets surrounding the site, and the increase in bicycle trips would not, by itself, require new off-site bicycle facilities.

Transit Service. Transit service in the project vicinity is currently provided by SamTrans and San Francisco MUNI. The nearest bus service is provided by Lines 24 and 29, with bus stops located about 0.25 miles from the project site. According to the U.S. Census, bus trips comprise approximately 11 percent of the total commute mode share in the City of Daly City. For the proposed project, this would equate to 22 new transit trips during the AM peak hour and 27 new transit trips during the PM peak commute hour. This volume of riders would not exceed the carrying capacity of the existing bus service near the project site. Therefore, the proposed project would not create an adverse impact to transit service in the area.\

According to the CEQA Guidelines, a project would create an impact to bicycle, transit or pedestrians on the transportation system if it: (1) conflicts with a program, plan, ordinance or policy addressing the circulation system, including transit, bicycle and pedestrian facilities; or (2) substantially increases hazards due to a geometric design feature; or (3) would create demand in excess of capacity. The project would not alter any existing or planned offsite bicycle, pedestrian or transit facilities nor would it create demand in excess of capacity. Therefore, the proposed project would not cause a significant impact to bicycle, pedestrian, or transit operations in the study area.

Site Access and On-Site Circulation

This section describes site access and on-site circulation for the proposed project, as shown on the site plan dated September 18, 2019, by David Baker Architects (see Figure 2). The site is located on the northeast corner of the intersection at Schwerin Street and Martin Street. Schwerin Street fronts the western border of the site, and Martin Street fronts the southern border of the site.

Site Access Design

Site access would be provided by 4 driveways. The first driveway would access what the plan calls New Street 'B' (study intersection #12), and is located on Martin Street approximately 390 feet east of Schwerin Street. The second driveway would access New Street 'A', located on Schwerin Street about 200 feet north of Martin Street (study intersection #11). The third driveway, called Partridge Street, would be located directly opposite the existing Partridge Street west of Schwerin Street (study intersection #5). The driveways to all three streets have bulb-outs that narrow the driveway widths to about 21 feet on Schwerin Street and 26 feet on Martin Street.

The fourth driveway would be located on Schwerin Street at the location of the existing Midway Drive, between Partridge Street and New Street ‘A’, providing access exclusively to Garage D on site (refer to Figure 2 for locations of Garage A and Garage D). The entry to Garage D would be located approximately 80 feet east of Schwerin Street. Eastward from there, the Midway Drive right-of-way is to be closed to vehicular traffic and serve as a fire lane and on-site pedestrian walkway.

Both Schwerin Street and Martin Street are two-lane local streets that serve a low volume of traffic. Parking is permitted on both sides of Schwerin Street along the site frontage. Parking is currently permitted on the north side of Martin Street along a 400-foot segment of the site frontage between Schwerin Street and Brandon Court. Parking is currently prohibited elsewhere on Martin Street east of Schwerin Street. However, there is a housing development under construction along the south side of this segment of Martin Street. With this project, and the development on the south side, it is likely that there will be parking on both sides of Martin Street.

Site Access Operations

Site Driveway Study Intersections. The results of the level of service and signal warrant analyses for the three main site-driveway intersections analyzed were reported previously. The results showed all three site driveway intersections would operate under satisfactory conditions, as unsignalized intersections, both near-term and far-term, without and with the project.

Project traffic volumes on Martin Street are expected to be relatively low in the near term, since there is currently no direct Martin Street connection to Bayshore Boulevard and U.S. 101. Under cumulative conditions, with direct project access to Bayshore Boulevard via the Martin Street extension, project traffic patterns will shift slightly, resulting in an increase in trips on Martin Street.

All approaches to the site driveway intersections, including the approaches on Schwerin Street and Martin Street, are single lane- requiring that all movements share the same lane. Without turn pockets or separate turn lanes, all vehicles would backup behind left-turning vehicles and would be subject to the corresponding delays. However, traffic volumes on Schwerin Street and Martin Streets are low, creating lengthy gaps in traffic that provide ample time and opportunity for left turns. This is explained further in the next section.

Midway Drive to Garage D. Traffic conditions at the Midway Drive driveway to Garage D were evaluated qualitatively. Under existing conditions, the total volume of vehicles on Schwerin Street along the site frontage, in both directions, is only 211 peak hour trips during the AM peak hour and 195 peak hour trips during the PM peak hour. This equates to an average headway of 17 seconds per vehicle in the AM peak hour and 18 seconds per vehicle in the PM peak hour. Thus, there will be a gap in traffic nearly every time a vehicle exits from the Midway Drive driveway. With there being sufficient gaps in traffic on Schwerin Street, there would be minimal average delay at the driveway, both inbound and outbound. Accordingly, vehicle queues on southbound Schwerin Street at the driveway would be infrequent and typically be no more than one vehicle. Similarly for outbound traffic from the Midway Drive driveway- there would generally be no more than one vehicle queued. It can therefore be expected that the maximum vehicle queues at all four site driveways would generally not exceed one vehicle, and the delays would be relatively short. In addition, most of the stop-controlled intersections in the area operate at LOS A, so the Midway Drive driveway would not be expected to operate any differently (See Tables 6 and 7).

Sight Distance. Observations in the field showed no impediments to lines of sight (such as horizontal or vertical curves, trees or signs) for vehicles exiting the existing site driveways, other than cars parked on the street. The site frontage is designed with recessed, on-street parking and curb extensions (bulb-outs) where the main site driveways meet Schwerin Street or, in the case of New Street ‘B’, where it meets Martin Street. The on-street parking along the site frontage, adjacent to the main site driveways would thereby be set back from the curb line. This benefits the visibility of and for drivers exiting the site because their line of sight down the street is much less obstructed by vehicles parked on the street or by any obstructions on the sidewalk. Based on the layout shown on the site plan, the setback of on-street parking would provide adequate sight distance, looking both left and right down Schwerin Street and Martin Street, for vehicles exiting the three main site driveways.

The Midway Drive driveway to Garage D's entry on Schwerin Street is shown to not have curb extensions. The adjacent on-street parking is not recessed, relative to this driveway. The driver's view when exiting the site could be obstructed by vehicles parked on the street on either side of the driveway. Therefore, parking on the east side of Schwerin Street should be restricted as needed to maintain adequate sight distance at the driveway, subject to review and approval by the City's Traffic Safety Committee and City Council. In addition, landscaping near the driveway would need to be maintained such that adequate sight distance is provided.

Recommendation 1: Parking on the east side of Schwerin Street at the Midway Drive driveway should be restricted as needed to maintain adequate sight distance, subject to review and approval by the City's Traffic Safety Committee and City Council. In addition, the project shall maintain the landscaping near the driveway such that it doesn't obstruct the line of sight down Schwerin Street. Placement of any monument signs or other permanent fixtures would need to be located out of the line of sight of exiting drivers. The final site plan will need to be reviewed by city staff.

On-Site Circulation

The on-site circulation system consists of the north-south New Street 'B' east of, and parallel to, Schwerin Street. New Street 'B' extends from Martin Street at its south end to a loading area just north of Partridge Street at its north end. The south section of New Street 'B', between Martin Street and Midway Drive would be offset relative to the north section of New Street 'B', which follows an alignment slightly east of the south section. From New Street 'B', Partridge Street extends westward, on site, to Schwerin Street, connecting to the existing Partridge Street west of Schwerin Street. New Street 'A' is about 200 feet north of, and parallel to, Martin Street. It extends between New Street 'B' and Schwerin Street. The private on-site streets are shown to have the following cross-sections:

Partridge Street and *New Street 'A'* would include a 20-foot wide traveled way plus sidewalks and parking on both sides

New Street 'B' (south section) would include a 26-foot wide traveled way plus sidewalks and parking on both sides

New Street 'B' (north section) would be 26-feet wide, with set-back sidewalks and no parking or curbs on either side; New Street 'B' is identified as a "traffic-calmed" street

Midway Drive east of New Street 'B' would be 20-feet wide, with sidewalks but no parking

The existing Midway Drive, between Schwerin Street and New Street 'B' would be eliminated, except for a 20-foot wide, 80-foot long section connecting Schwerin Street to the entrance of Garage D. The section of Midway Drive between the garage entrance and New Street 'B' would be converted to a pedestrian-only walkway and fire lane. There would be a second entrance to Garage D accessed from New Street 'B'.

East of New Street 'B', Midway Drive would provide access to Garage A, and would provide fire access along the SFPUC easement between Garage A and the eastern border of the site.

The site layout provides a relatively straightforward circulation pattern with no dead-end aisles, curb radii of 8 feet at all intersecting streets on site and adequate lines of sight at corners due to building setbacks of at least 17 feet along all streets. The jog in New Street 'B' at the intersection with Midway Drive requires two sharp turns in a relatively narrow space with 8-foot turning radii. It is uncertain whether two vehicles approaching the intersection from opposite directions could safely pass through the intersection simultaneously. The narrowing of the streets at all internal intersections (due to the bulbouts), limits the area available for vehicles to turn. Turning templates will be needed to determine the adequacy of the layout to accommodate standard vehicles at the New Street 'B'/Midway Drive intersection, and to accommodate the circulation of trucks, garbage collection, and emergency vehicles throughout the site.

Recommendation 2: The project shall ensure that alignments of the drive aisles and the corner radii are adequate for the circulation of standard vehicles as well as trucks, garbage collection, and emergency vehicles, subject to review by city staff.

In addition to the streets on-site, there would be several fire lanes on site: along the Midway Drive alignment between Schwerin Street and New Street 'B'; along the SFPUC easement; along a north-south alignment bisecting Building E, connecting Martin Street with New Street 'A'; along the extension of New Street 'B' north of Building 'A' (adjacent to the park); and along the northern edge of Building A/Parking Garage A. All fire lanes are to be a minimum of 20 feet wide.

Parking on site would be provided in Garage A, located along the eastern border of the site, north of Midway Drive; Garage D, located between New Street 'A' and Midway Drive, and on the streets on site.

Garage A is shown to have one entrance, located at the southeast corner of the garage, about 60 feet north of Midway Drive. The turning radius at the garage entrance is not specified, but it appears to be less than 5 feet, which would not be adequate for two-way traffic at a ninety-degree turn for a 20-foot wide travel way. Circulation within Garage A is shown to consist of a rectangular loop serving two-way traffic in 26-foot wide parking aisles, with 90-degree perpendicular parking on both sides. The garage is shown to have more than one level.

Garage D is shown to have two entrances, as described previously, and as shown on Figure 2. The entrance on Midway Drive, located 80 feet east of Schwerin Street, is shown to be 26 feet wide. The turning radius at the garage entrance is not specified. As with Garage A, the turning radius would need to accommodate two-way traffic through the turn. Circulation within Garage D is similar to that in Garage A: consisting of a rectangular loop serving two-way traffic in 26-foot wide parking aisles, with 90-degree perpendicular parking on both sides. The garage is shown to have more than one level. The aforementioned entrance from Midway Drive is shown to access the lower level of the garage. The other entrance, located off of New Street 'B', is shown to access the upper level of the garage.

Recommendation 3: The project shall ensure that the garage ingress/egress, internal circulation, ramp design and other relevant design features meet the city code requirements or otherwise accord with industry standards. Final design will be subject to review by city staff.

Garage A is shown to provide 378 parking spaces, Garage D would provide 250 spaces, and there would be an additional 118 total parking spaces on site on New Street 'A,' New Street 'B,' Partridge Street, and in the townhomes.

The site plan shows 13 parking spaces on Partridge Street along the frontage of the childcare center designated specifically for use by the childcare center (these 13 spaces are included in the 118 on-site, on-street spaces described above). This conforms with the city code required number of spaces, which calls for one space for every ten children enrolled. The site plan also refers to the childcare center parking spaces as childcare (passenger) loading. It is anticipated that this area, which spans the entire length of the childcare center frontage, and east, would serve as a pick-up/drop-off area for loading and unloading children. Children in the 5 and under age range, which is the age range to be served by the proposed childcare center, generally would be escorted into the childcare center, therefore requiring vehicles to park briefly during drop-off and pick-up.

Because these spaces are provided primarily for loading and unloading, and for visitors during off hours, it is recommended that these childcare center parking spaces have a time limit.

Since the loading and unloading of children going to the childcare facility would primarily occur on the north side of Partridge Street, vehicles picking up and dropping off their children would be traveling westbound toward Schwerin Street. This would require that vehicles destined for the childcare center enter the site from either New Street ‘A’ or New Street ‘B’ to access westbound Partridge Street in front of the childcare center. The childcare facility should direct parents to use these roadways to access the parking area fronting the childcare facility to help prevent vehicles from making u-turns on Partridge Street.

Recommendation 4: The project should consider establishing a time limit for childcare parking. Because all streets within the development are private roadways, parking restrictions would need to be enforced by private security. In addition, the childcare facility should consider preparing an access plan to show parents how to access the designated parking areas.

The site plan shows a loading zone at the very north end of New Street ‘B’, adjacent to the park. Other loading areas are to be provided on street (in the parking lanes) at mid-block on both sides of New Street ‘A’, on the east side of the south section of New Street ‘B’, and on both sides of Partridge Street at the very eastern end.

Pedestrian circulation on site, and pedestrian access to off-site pedestrian facilities appear adequate. Most streets on-site provide sidewalks, all of which are at least 6 feet wide. The cross-sections of the on-site streets were described previously. All streets are shown to have landscape strips the full length of the street. Every intersection on site would have high-visibility crosswalks on every approach. Both New Street ‘A’ and Partridge Street would be provided with high-visibility, mid-block crosswalks. The east-west fire lane on Midway Drive is also to serve as a pedestrian path. The plan shows a direct path between the Child Care Center and the adjacent park. All buildings and residential units on site have direct access to either a sidewalk, a pathway, or both.

The site plan shows bicycle parking/storage would be provided throughout the site. The number and type of spaces are not yet specified, but the site plan shows public bicycle parking on both sides of New Street ‘A’, both sides of the south section of New Street ‘B’, both sides of Partridge Street, and on the east side of the north section of New Street ‘B’. Resident bicycle storage would be provided at or in Buildings A, A2, B, D and E. The number and type of bicycle parking spaces (e.g. short-term vs. long-term, racks vs. lockers) will need to meet the city code requirements, at a minimum.

As described previously, the Daly City Bayshore (DSB) Shuttle, operated by SamTrans, provides shuttle service between the Daly City BART station and Bayshore Boulevard/Geneva Avenue, with a stop immediately fronting the site, at the Schwerin Street/Martin Street intersection. The shuttle stop does not currently serve any other routes, and its only feature is a shuttle sign. While the project would not create a significant impact to transit operations, as part of the project’s enhancement to the site’s frontage along Schwerin Street, the project should consider installing a bus shelter or bench. Providing an upgrade to the shuttle/bus stop, be it a bench or shelter, would encourage transit usage.

Recommendation 5: Prior to final design, the project applicant shall work with City of Daly City and SamTrans staff to consider the desirability of upgrades to the existing shuttle stop along the project frontage.

TDM Plan

In accordance with CMP requirements, the project shall implement TDM measures to reduce the demand for net new peak-hour trips generated by the project. The total number of trip credits earned through the project's TDM plan are required to total, if not exceed, the number of net new AM or PM peak-hour trips (whichever is greater) generated by the project. Based on the trip generation estimates described previously, the project is expected to generate 203 AM peak hour trips and 245 PM peak hour trips. The project's TDM plan would therefore be required to provide at least 245 C/CAG trip credits. Since the project would be constructed in phases, the project applicant shall submit, to the City and C/CAG, a TDM plan demonstrating its compliance with C/CAG's TDM requirements in advance of each phase.

Recommendation 6: The project shall provide and/or implement CMP-approved TDM measures in order to meet the CMP TDM requirements.

Vehicle Miles Traveled (VMT)

According to the December 2018 Technical Advisory from the State of California Governor's Office of Planning and Research (OPR) on Evaluating Transportation Impacts in CEQA (California Environmental Quality Act), affordable housing projects are exempt from Vehicle Miles Traveled (VMT) analysis and are assumed to have a less than significant impact. Relevant excerpts from the OPR Technical Advisory are provided below.

> ***Presumption of Less Than Significant Impact for Affordable Residential Development****.* *Adding affordable housing to infill locations generally improves the jobs-housing match, in turn shortening commutes and reducing VMT. Further, "… low-wage workers in particular would be more likely to choose a residential location close to their workplace, if one is available." In areas where the existing jobs-housing match is closer to optimal, low income housing nevertheless generates less VMT than market-rate housing. Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT. Evidence supports a presumption of less than significant impact for a 100 percent affordable residential development (or the residential component of a mixed-use development) in infill locations.*

The Metropolitan Transportation Commission (MTC) provides data on trip lengths for employment and residential uses within the nine-county Bay Area. According to the MTC ArcGIS VMT tool, the Bay Area has an average VMT per capita of 15 miles. Using the same tool, the traffic analysis zone where the proposed project is located shows a residential VMT per capita of 11.5 miles. Thus, the project VMT would be 23% lower than the regional average. Daly City does not have an adopted method or threshold to determine impacts based on VMT. For this reason, this data is presented for informational purposes only.

Technical Appendices

Appendix A

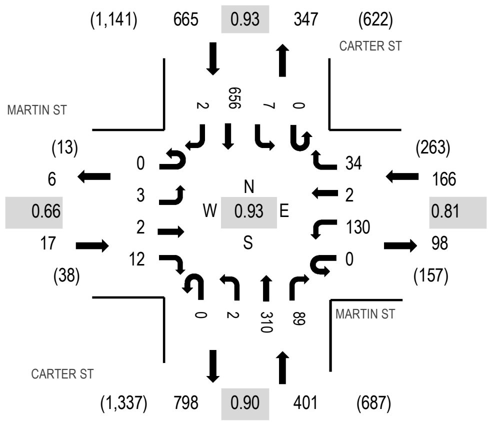
Traffic Counts

All Traffic Data Services Inc.

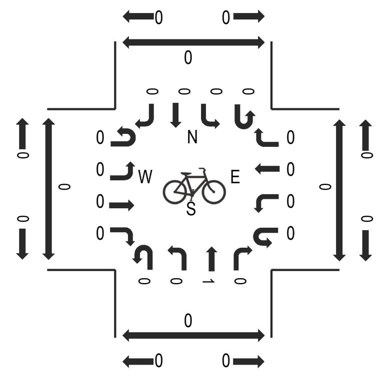
(303) 216-2439
www.alltrafficdata.net

Location: 2 CARTER ST & MARTIN ST AM
Date: Thursday, February 28, 2019
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

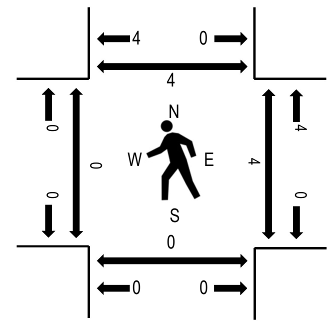
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	MARTIN ST Eastbound U-Turn	Left	Thru	Right	MARTIN ST Westbound U-Turn	Left	Thru	Right	CARTER ST Northbound U-Turn	Left	Thru	Right	CARTER ST Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	3	0	4	0	15	0	10	0	1	61	8	0	3	100	0	205	1,054	0	0	0	0
7:15 AM	0	4	0	4	0	18	0	6	0	2	51	13	0	3	116	0	217	1,180	0	0	0	1
7:30 AM	0	0	0	3	0	43	0	8	0	0	65	15	0	0	162	0	296	1,249	0	0	0	0
7:45 AM	0	1	0	2	0	32	0	13	0	0	83	27	0	1	176	1	336	1,191	0	1	0	1
8:00 AM	0	1	0	3	0	30	1	6	0	0	93	20	0	5	172	0	331	1,075	0	0	0	0
8:15 AM	0	1	2	4	0	25	1	7	0	2	69	27	0	1	146	1	286		0	3	0	3
8:30 AM	0	2	0	3	0	18	0	7	0	0	69	15	0	2	120	2	238		0	2	0	0
8:45 AM	0	0	0	1	0	17	0	6	0	1	55	10	1	5	123	1	220		0	0	0	0

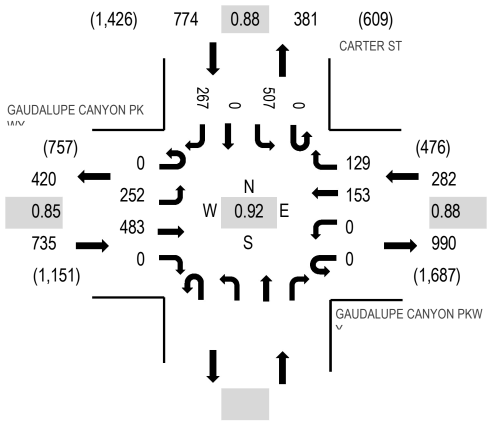
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Lights	0	3	2	12	0	130	2	33	0	2	303	87	0	7	655	2	1,238
Mediums	0	0	0	0	0	0	0	1	0	0	6	2	0	0	1	0	10
Total	0	3	2	12	0	130	2	34	0	2	310	89	0	7	656	2	1,249

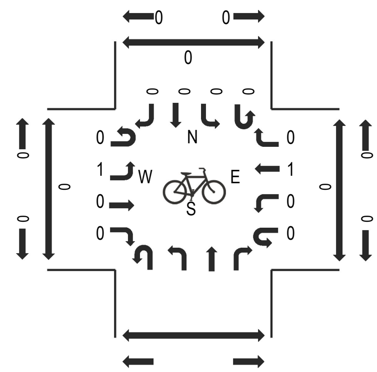
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 3 CARTER ST & GAUDALUPE CANYON PKWY AM
Date: Thursday, February 28, 2019
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

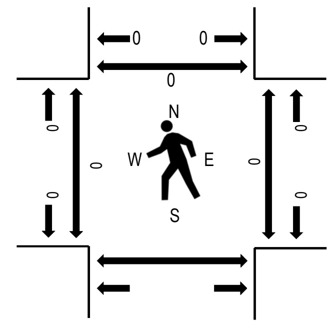
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	GAUDALUPE CANYON PKWY Eastbound				GAUDALUPE CANYON PKWY Westbound				Northbound				CARTER ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	23	47	0	0	0	24	24					0	88	0	39	245	1,411	0	0		0
7:15 AM	0	32	62	0	0	0	27	21					0	101	0	56	299	1,609	0	0		0
7:30 AM	0	41	69	0	0	0	30	24					0	127	0	88	379	1,777	0	0		0
7:45 AM	0	65	106	0	0	0	43	37					0	144	0	93	488	1,791	0	0		0
8:00 AM	0	70	99	0	0	0	36	41					0	129	0	68	443	1,642	0	0		0
8:15 AM	0	58	159	0	0	0	37	25					0	129	0	59	467		0	0		0
8:30 AM	0	59	119	0	0	0	37	26					0	105	0	47	393		0	0		0
8:45 AM	0	44	98	0	0	0	25	19					0	105	0	48	339		0	0		0

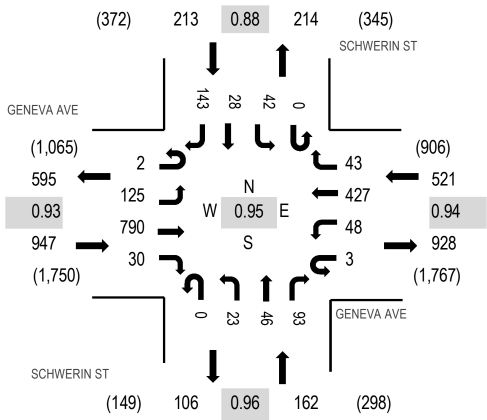
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0					0	0	0	0	0
Bicycles on Road	0	1	0	0	0	0	1	0					0	0	0	0	2
Lights	0	250	481	0	0	0	148	121					0	507	0	267	1,774
Mediums	0	1	2	0	0	0	4	8					0	0	0	0	15
Total	0	252	483	0	0	0	153	129					0	507	0	267	1,791

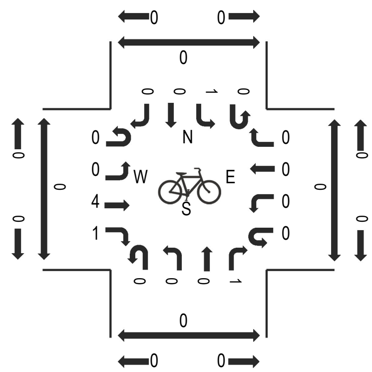
(303) 216-2439
www.alltrafficdata.net

Location: 4 SCHWERIN ST & GENEVA AVE AM
Date: Thursday, February 28, 2019
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

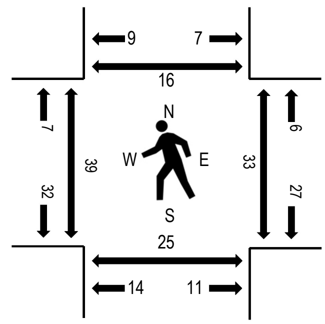
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	GENEVA AVE Eastbound U-Turn	Left	Thru	Right	GENEVA AVE Westbound U-Turn	Left	Thru	Right	SCHWERIN ST Northbound U-Turn	Left	Thru	Right	SCHWERIN ST Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	15	159	1	0	2	80	6	0	12	6	27	0	11	2	18	339	1,588	11	3	10	7
7:15 AM	0	17	176	1	0	4	70	6	0	9	4	26	0	12	4	30	359	1,732	2	7	5	2
7:30 AM	1	26	191	2	0	9	103	11	0	1	4	18	0	11	3	35	415	1,807	3	5	9	4
7:45 AM	0	30	209	7	1	14	111	13	0	4	20	17	0	13	4	32	475	1,843	14	3	4	2
8:00 AM	2	37	195	6	0	11	118	12	0	11	8	20	0	14	8	41	483	1,738	11	3	5	7
8:15 AM	0	24	171	12	1	11	105	8	0	4	8	30	0	10	11	39	434		12	16	8	2
8:30 AM	0	34	215	5	1	12	93	10	0	4	10	26	0	5	5	31	451		2	11	8	5
8:45 AM	0	21	189	4	0	6	83	5	0	7	10	12	0	7	5	21	370		2	7	1	4

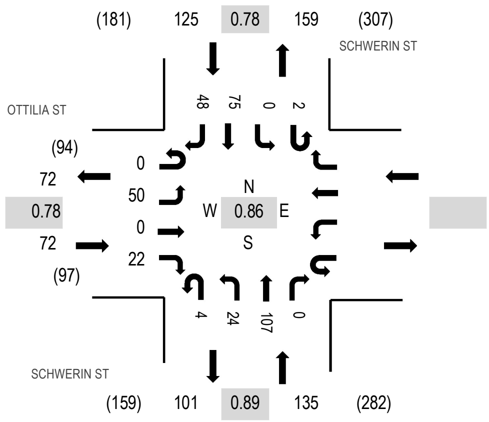
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
Bicycles on Road	0	0	4	1	0	0	0	0	0	0	0	1	0	1	0	0	7
Lights	2	119	766	29	3	48	396	41	0	23	46	91	0	32	28	134	1,758
Mediums	0	6	19	0	0	0	29	2	0	0	0	1	0	9	0	9	75
Total	2	125	790	30	3	48	427	43	0	23	46	93	0	42	28	143	1,843

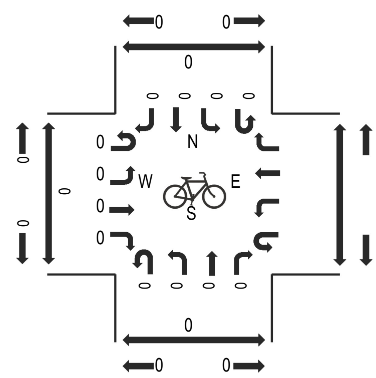
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 5 SCHWERIN ST & OTTILIA ST AM
Date: Thursday, February 28, 2019
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

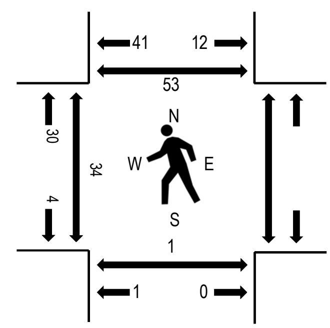
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	OTTILIA ST Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	SCHWERIN ST Northbound U-Turn	Left	Thru	Right	SCHWERIN ST Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	1	2	0	4					0	1	38	0	0	0	6	2	54	228	3		0	7
7:15 AM	1	3	0	2					0	2	34	0	0	0	12	2	56	268	4		1	6
7:30 AM	0	4	0	1					1	3	28	0	0	0	15	3	55	308	2		0	4
7:45 AM	0	5	0	2					2	4	34	0	0	0	13	3	63	329	5		1	3
8:00 AM	0	11	0	3					0	7	35	0	1	0	18	19	94	332	8		0	11
8:15 AM	0	19	0	4					0	9	24	0	1	0	22	17	96		21		1	18
8:30 AM	0	14	0	6					1	4	24	0	0	0	18	9	76		3		0	24
8:45 AM	0	6	0	9					3	4	24	0	0	0	17	3	66		2		0	0

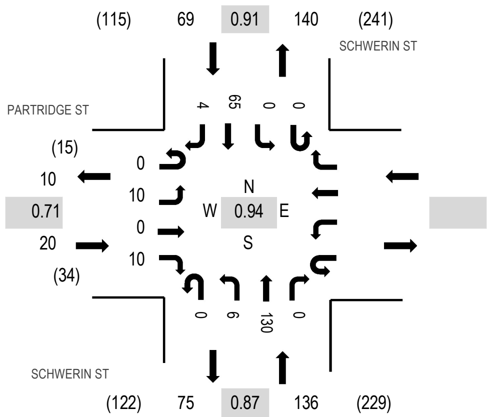
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0					0	0	0	0	0	0	0	0	0
Bicycles on Road	0	0	0	0					0	0	0	0	0	0	0	0	0
Lights	0	49	0	22					1	22	104	0	2	0	73	48	321
Mediums	0	1	0	0					3	2	3	0	0	0	2	0	11
Total	0	50	0	22					4	24	107	0	2	0	75	48	332

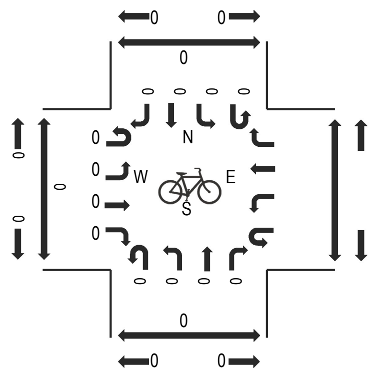
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 6 SCHWERIN ST & PARTRIDGE ST AM
Date: Thursday, February 28, 2019
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

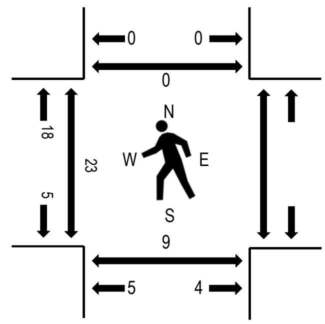
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	PARTRIDGE ST Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	SCHWERIN ST Northbound U-Turn	Left	Thru	Right	SCHWERIN ST Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	4	0	1					0	0	27	0	0	0	8	0	40	174	1		0	1
7:15 AM	0	4	0	1					0	2	21	0	1	0	7	0	36	188	1		1	1
7:30 AM	0	1	0	3					0	0	22	0	0	0	16	2	44	212	1		0	0
7:45 AM	0	2	0	1					0	2	37	0	0	0	11	1	54	225	6		1	0
8:00 AM	0	3	0	3					0	0	29	0	0	0	18	1	54	204	4		1	0
8:15 AM	0	2	0	2					0	3	34	0	0	0	18	1	60		11		5	0
8:30 AM	0	3	0	4					0	1	30	0	0	0	18	1	57		2		2	0
8:45 AM	0	0	0	0					0	0	21	0	0	0	11	1	33		4		3	0

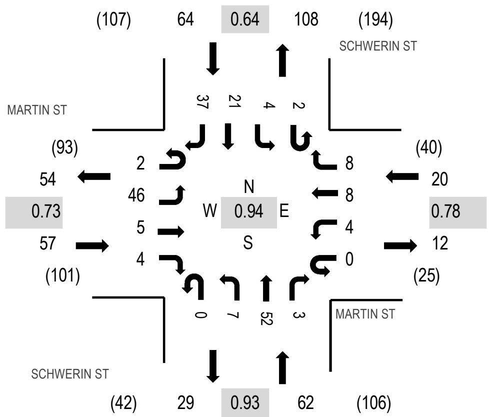
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0					0	0	0	0	0	0	0	0	0
Bicycles on Road	0	0	0	0					0	0	0	0	0	0	0	0	0
Lights	0	10	0	10					0	6	129	0	0	0	65	4	224
Mediums	0	0	0	0					0	0	1	0	0	0	0	0	1
Total	0	10	0	10					0	6	130	0	0	0	65	4	225

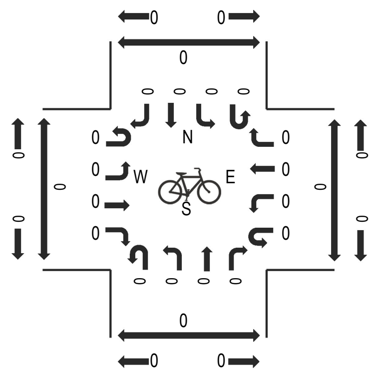
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 7 SCHWERIN ST & MARTIN ST AM
Date: Thursday, February 28, 2019
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

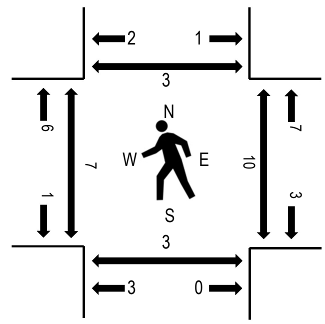
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	MARTIN ST Eastbound U-Turn	Left	Thru	Right	MARTIN ST Westbound U-Turn	Left	Thru	Right	SCHWERIN ST Northbound U-Turn	Left	Thru	Right	SCHWERIN ST Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	11	1	1	0	0	2	4	0	1	11	1	1	0	2	4	39	185	0	2	3	1
7:15 AM	0	9	1	0	0	1	3	1	0	3	10	0	0	1	2	9	40	191	1	5	1	2
7:30 AM	0	10	1	0	0	2	3	3	0	3	7	0	0	1	6	18	54	203	0	4	0	1
7:45 AM	1	15	2	2	0	1	4	1	0	2	15	1	0	0	4	4	52	196	3	0	1	2
8:00 AM	1	8	0	1	0	0	0	1	0	1	16	0	2	2	6	7	45	169	4	1	0	0
8:15 AM	0	13	2	1	0	1	1	3	0	1	14	2	0	1	5	8	52		0	5	2	0
8:30 AM	0	9	2	1	1	0	0	6	0	1	12	2	1	1	4	7	47		2	2	0	2
8:45 AM	0	7	1	1	0	0	1	1	0	1	2	0	1	2	1	7	25		0	1	0	1

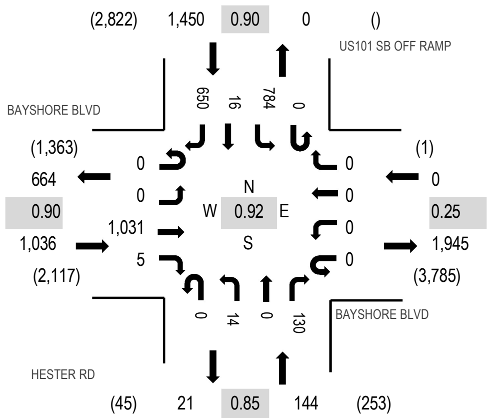
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	2	45	4	4	0	4	7	8	0	7	52	3	2	4	21	37	200
Mediums	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Total	2	46	5	4	0	4	8	8	0	7	52	3	2	4	21	37	203

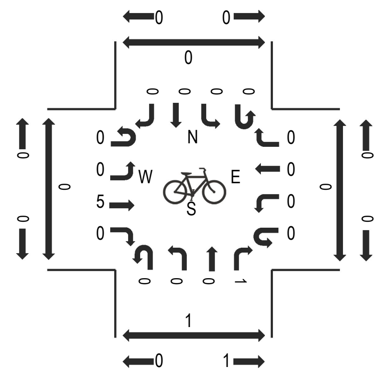
(303) 216-2439
www.alltrafficdata.net

Location: 8 HESTER RD & BAYSHORE BLVD AM
Date: Thursday, February 28, 2019
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

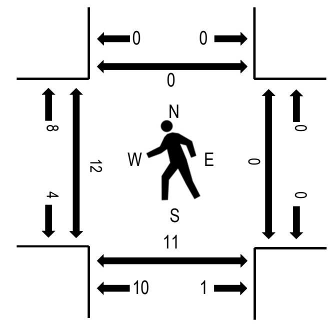
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	BAYSHORE BLVD Eastbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Westbound U-Turn	Left	Thru	Right	HESTER RD Northbound U-Turn	Left	Thru	Right	US101 SB OFF RAMP Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	0	324	1	0	0	0	0	0	3	0	20	0	212	4	149	713	2,630	4	0	5	0
7:15 AM	0	0	283	1	0	0	0	0	0	3	0	30	0	196	2	154	669	2,597	1	0	2	0
7:30 AM	0	0	211	1	0	0	0	0	0	3	0	35	0	167	3	156	576	2,580	5	0	0	0
7:45 AM	0	0	213	2	0	0	0	0	0	5	0	45	0	209	7	191	672	2,558	2	0	4	0
8:00 AM	0	0	258	2	0	0	0	0	0	4	0	44	0	184	4	184	680	2,563	5	0	0	0
8:15 AM	0	0	265	2	0	0	0	0	0	3	0	20	0	183	2	177	652		0	0	2	0
8:30 AM	0	0	252	1	0	0	1	0	0	3	0	14	0	133	5	145	554		2	0	1	1
8:45 AM	0	0	298	3	0	0	0	0	0	7	0	14	0	175	5	175	677		1	0	3	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	5	0	0	0	0	0	0	0	0	0	0	8	0	3	16
Bicycles on Road	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	6
Lights	0	0	933	4	0	0	0	0	0	12	0	128	0	743	16	591	2,427
Mediums	0	0	88	1	0	0	0	0	0	2	0	1	0	33	0	56	181
Total	0	0	1,031	5	0	0	0	0	0	14	0	130	0	784	16	650	2,630

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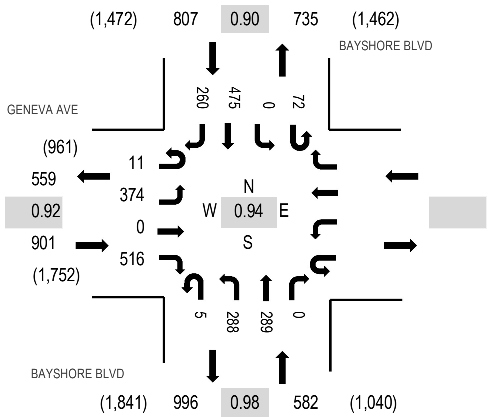
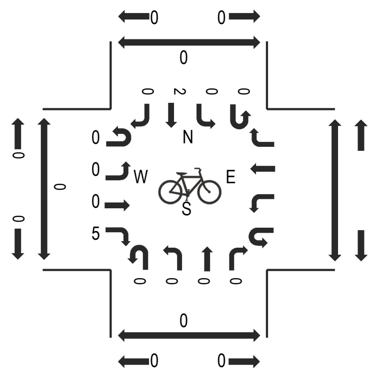
Location: 9 BAYSHORE BLVD & GENEVA AVE AM
Date: Thursday, February 28, 2019
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

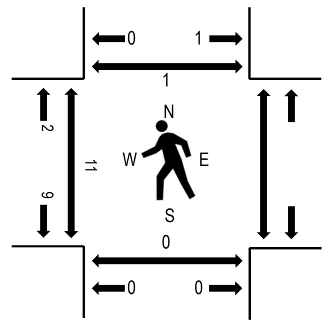
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	GENEVA AVE Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Northbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	2	108	0	84					0	51	57	0	25	0	98	40	465	2,088	3		0	0
7:15 AM	0	103	0	124					0	45	61	0	18	0	86	44	481	2,201	1		0	0
7:30 AM	0	97	0	132					0	58	57	0	16	0	114	56	530	2,260	8		0	0
7:45 AM	1	107	0	144					0	73	75	0	21	0	120	71	612	2,290	2		0	0
8:00 AM	3	78	0	136					1	71	66	0	10	0	140	73	578	2,176	2		0	1
8:15 AM	3	85	0	120					2	74	72	0	21	0	107	56	540		4		0	0
8:30 AM	4	104	0	116					2	70	76	0	20	0	108	60	560		3		0	0
8:45 AM	1	95	0	105					0	53	76	0	14	0	102	52	498		0		2	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	2	0	2					0	0	7	0	0	0	5	1	17
Bicycles on Road	0	0	0	5					0	0	0	0	0	0	2	0	7
Lights	11	345	0	497					3	264	253	0	70	0	447	249	2,139
Mediums	0	27	0	12					2	24	29	0	2	0	21	10	127
Total	11	374	0	516					5	288	289	0	72	0	475	260	2,290

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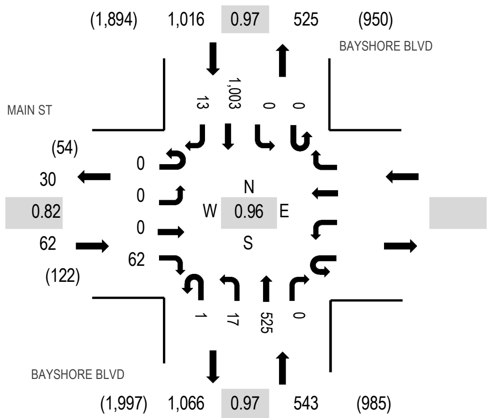
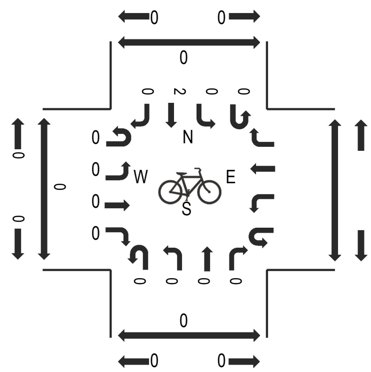
Location: 10 BAYSHORE BLVD & MAIN ST AM
Date: Thursday, February 28, 2019
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 08:15 AM - 08:30 AM

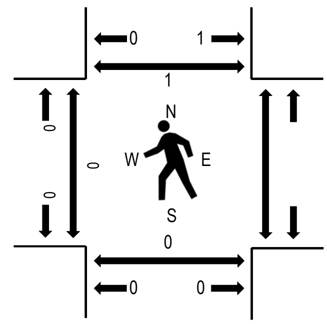
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	MAIN ST Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Northbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	0	0	15					0	4	100	0	0	0	183	3	305	1,426	0		0	0
7:15 AM	0	0	0	15					0	4	102	0	0	0	215	0	336	1,526	0		0	0
7:30 AM	0	0	0	21					0	5	100	0	0	0	251	0	377	1,611	0		0	0
7:45 AM	0	0	0	18					1	8	131	0	0	0	249	1	408	1,621	0		0	0
8:00 AM	0	0	0	13					0	4	131	0	0	0	251	6	405	1,575	0		0	0
8:15 AM	0	0	0	16					0	4	136	0	0	0	262	3	421		0		0	0
8:30 AM	0	0	0	15					0	1	127	0	0	0	241	3	387		0		0	1
8:45 AM	0	0	0	9					0	4	123	0	0	0	222	4	362		0		0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0					0	0	6	0	0	0	3	0	9
Bicycles on Road	0	0	0	0					0	0	0	0	0	0	2	0	2
Lights	0	0	0	61					1	16	473	0	0	0	959	12	1,522
Mediums	0	0	0	1					0	1	46	0	0	0	39	1	88
Total	0	0	0	62					1	17	525	0	0	0	1,003	13	1,621

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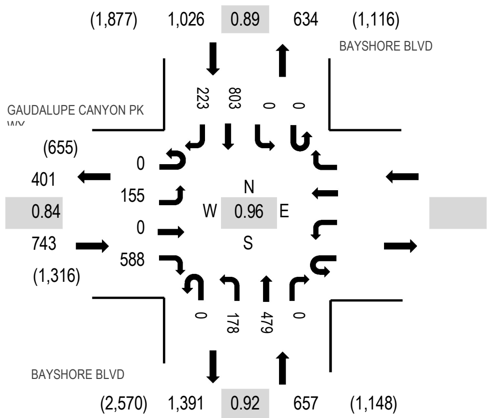
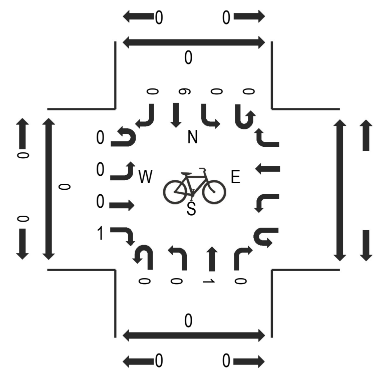
Location: 11 BAYSHORE BLVD & GAUDALUPE CANYON PKWY AM
Date: Thursday, February 28, 2019
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

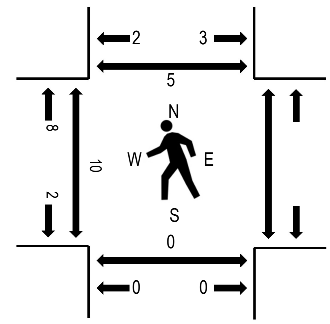
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	GAUDALUPE CANYON PKWY Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Northbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	27	0	93					0	24	79	0	0	0	147	29	399	2,039	1		0	0
7:15 AM	0	22	0	116					0	31	79	0	0	0	185	30	463	2,251	3		0	0
7:30 AM	0	33	0	128					0	34	94	0	0	0	213	40	542	2,408	0		0	0
7:45 AM	0	30	0	144					0	44	121	0	0	0	222	74	635	2,426	5		0	2
8:00 AM	0	32	0	144					0	48	131	0	0	0	200	56	611	2,302	2		0	2
8:15 AM	0	45	0	175					0	39	113	0	0	0	201	47	620		2		0	0
8:30 AM	0	48	0	125					0	47	114	0	0	0	180	46	560		1		0	1
8:45 AM	0	29	0	125					0	31	119	0	0	0	172	35	511		7		0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	1	0	0					0	0	8	0	0	0	6	1	16
Bicycles on Road	0	0	0	1					0	0	1	0	0	0	6	0	8
Lights	0	142	0	584					0	170	433	0	0	0	764	214	2,307
Mediums	0	12	0	3					0	8	37	0	0	0	27	8	95
Total	0	155	0	588					0	178	479	0	0	0	803	223	2,426

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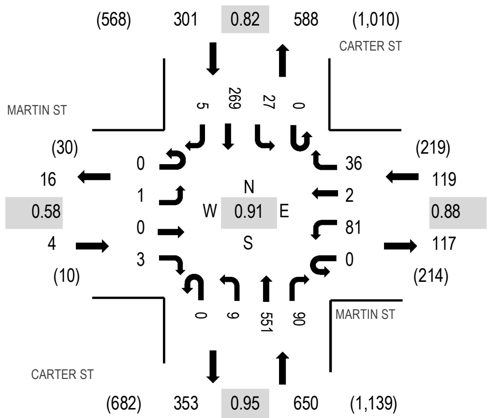
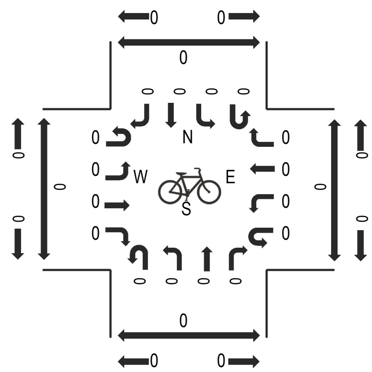
Location: 2 CARTER ST & MARTIN ST PM
Date: Thursday, February 28, 2019
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

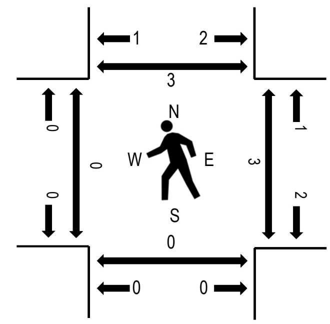
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	MARTIN ST Eastbound U-Turn	Left	Thru	Right	MARTIN ST Westbound U-Turn	Left	Thru	Right	CARTER ST Northbound U-Turn	Left	Thru	Right	CARTER ST Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	1	0	0	0	15	0	2	0	4	76	22	0	7	47	0	174	862	0	2	0	0
4:15 PM	0	1	0	0	0	24	1	3	0	0	102	18	0	4	69	1	223	983	0	0	0	0
4:30 PM	0	0	0	1	0	18	0	10	0	5	117	20	0	3	68	1	243	1,031	0	0	0	0
4:45 PM	0	1	1	1	0	22	0	5	0	1	104	20	0	2	64	1	222	1,063	0	0	0	0
5:00 PM	0	0	0	1	0	23	2	11	0	2	139	24	0	8	84	1	295	1,074	0	0	0	0
5:15 PM	0	0	0	0	0	20	0	8	0	2	142	27	0	7	63	2	271		0	2	0	2
5:30 PM	0	1	0	2	0	26	0	9	0	3	142	24	0	7	60	1	275		0	0	0	0
5:45 PM	0	0	0	0	0	12	0	8	0	2	128	15	0	5	62	1	233		0	1	0	1

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	1	0	3	0	81	2	35	0	9	550	90	0	27	266	5	1,069
Mediums	0	0	0	0	0	0	0	1	0	0	1	0	0	0	3	0	5
Total	0	1	0	3	0	81	2	36	0	9	551	90	0	27	269	5	1,074

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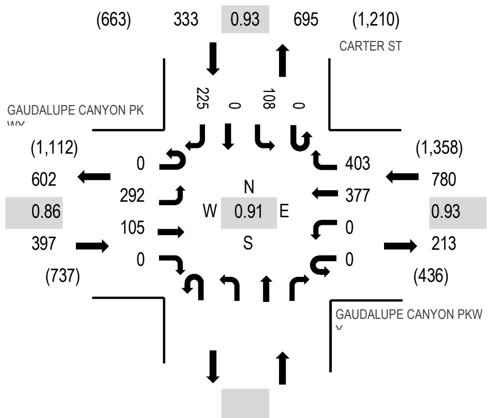
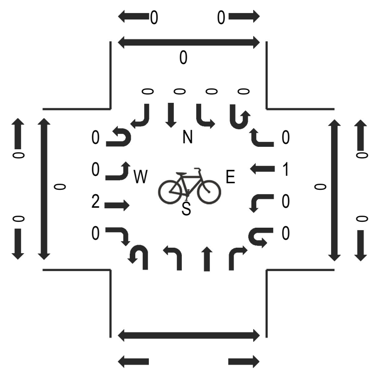
Location: 3 CARTER ST & GAUDALUPE CANYON PKWY PM
Date: Thursday, February 28, 2019
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

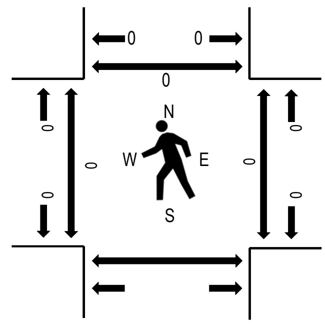
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	GAUDALUPE CANYON PKWY Eastbound U-Turn	Left	Thru	Right	GAUDALUPE CANYON PKWY Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	CARTER ST Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	55	18	0	0	0	78	57					0	19	0	46	273	1,248	0	0		0
4:15 PM	0	65	38	0	0	0	66	68					0	35	0	51	323	1,361	0	0		0
4:30 PM	0	48	22	0	0	0	80	90					0	28	0	56	324	1,455	0	0		0
4:45 PM	0	61	33	0	0	0	68	71					0	30	0	65	328	1,509	0	0		0
5:00 PM	0	65	25	0	0	0	88	108					0	30	0	70	386	1,510	0	0		0
5:15 PM	0	83	33	0	0	0	108	102					0	26	0	65	417		0	0		0
5:30 PM	0	75	24	0	0	0	92	109					0	28	0	50	378		0	0		0
5:45 PM	0	69	23	0	0	0	89	84					0	24	0	40	329		0	0		0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	1	0	0	0	0	0					0	0	0	0	1
Bicycles on Road	0	0	2	0	0	0	1	0					0	0	0	0	3
Lights	0	292	100	0	0	0	376	402					0	105	0	225	1,500
Mediums	0	0	2	0	0	0	0	1					0	3	0	0	6
Total	0	292	105	0	0	0	377	403					0	108	0	225	1,510

Location: 4 SCHWERIN ST & GENEVA AVE PM
Date: Thursday, February 28, 2019
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

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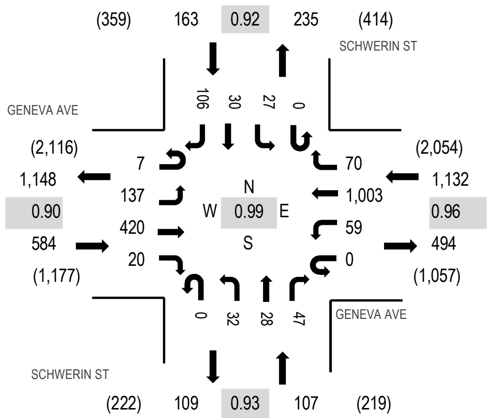
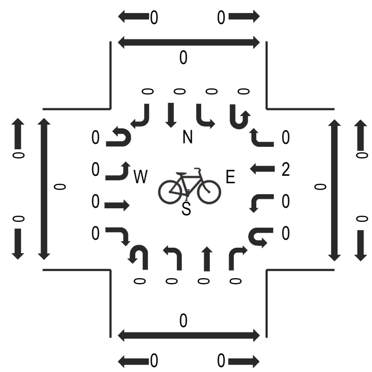
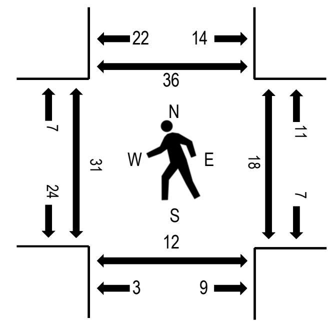
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	GENEVA AVE Eastbound				GENEVA AVE Westbound				SCHWERIN ST Northbound				SCHWERIN ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	1	27	133	3	1	11	178	11	0	6	14	10	0	6	7	35	443	1,823	5	5	4	12
4:15 PM	2	23	107	8	1	15	207	16	0	5	7	18	0	9	5	34	457	1,872	21	4	6	8
4:30 PM	0	25	115	6	0	15	200	10	0	2	8	17	0	7	10	36	451	1,918	4	5	1	2
4:45 PM	1	21	113	8	0	21	224	12	0	5	5	15	0	11	4	32	472	1,966	19	1	2	7
5:00 PM	1	29	108	6	0	19	234	27	0	7	5	11	0	5	8	32	492	1,986	9	5	5	11
5:15 PM	2	34	109	2	0	16	263	13	0	11	4	13	0	8	7	21	503		10	2	1	7
5:30 PM	2	39	81	5	0	13	268	14	0	8	11	16	0	9	8	25	499		7	6	3	8
5:45 PM	2	35	122	7	0	11	238	16	0	6	8	7	0	5	7	28	492		5	5	3	10

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
Bicycles on Road	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Lights	7	130	405	19	0	59	998	70	0	32	28	47	0	20	30	98	1,943
Mediums	0	7	13	1	0	0	2	0	0	0	0	0	0	7	0	8	38
Total	7	137	420	20	0	59	1,003	70	0	32	28	47	0	27	30	106	1,986

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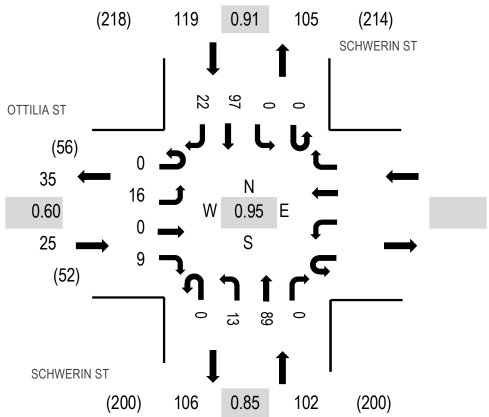
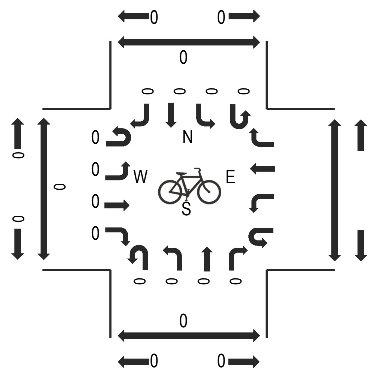
Location: 5 SCHWERIN ST & OTTILIA ST PM
Date: Thursday, February 28, 2019
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

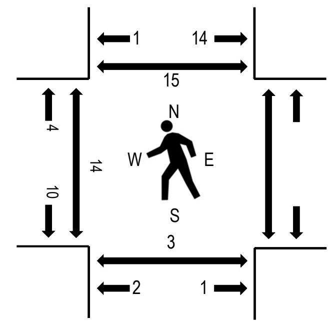
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	OTTILIA ST Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	SCHWERIN ST Northbound U-Turn	Left	Thru	Right	SCHWERIN ST Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	3	0	1					0	4	26	0	0	0	17	1	52	236	4		0	1
4:15 PM	0	8	0	4					0	1	18	0	0	0	25	3	59	244	7		0	0
4:30 PM	0	2	0	3					0	4	24	0	0	0	24	8	65	246	3		2	6
4:45 PM	0	6	0	1					0	4	19	0	0	0	24	6	60	242	5		0	6
5:00 PM	0	2	0	3					0	2	19	0	0	0	30	4	60	234	4		0	3
5:15 PM	0	6	0	2					0	3	27	0	0	0	19	4	61		2		1	0
5:30 PM	0	4	0	2					1	1	26	0	0	0	20	7	61		7		1	3
5:45 PM	0	3	0	2					0	0	21	0	0	0	22	4	52		8		4	1

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0					0	0	0	0	0	0	0	0	0
Bicycles on Road	0	0	0	0					0	0	0	0	0	0	0	0	0
Lights	0	16	0	9					0	12	87	0	0	0	97	22	243
Mediums	0	0	0	0					0	1	2	0	0	0	0	0	3
Total	0	16	0	9					0	13	89	0	0	0	97	22	246

All Traffic Data Services Inc.
(303) 216-2439
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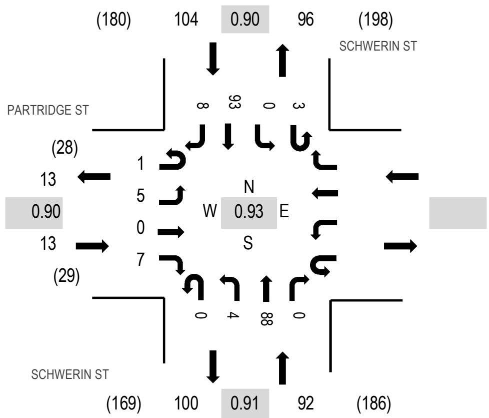
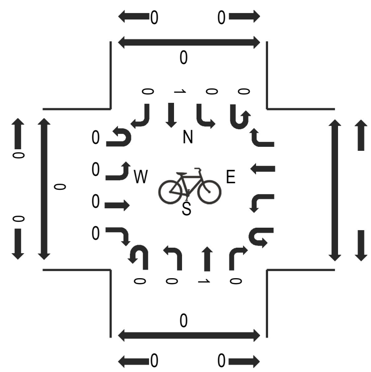
Location: 6 SCHWERIN ST & PARTRIDGE ST PM
Date: Thursday, February 28, 2019
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

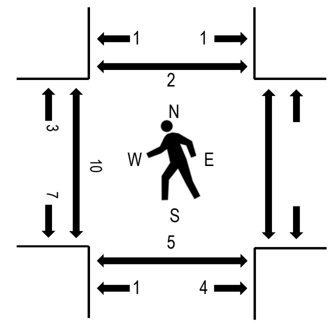
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	PARTRIDGE ST Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	SCHWERIN ST Northbound U-Turn	Left	Thru	Right	SCHWERIN ST Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	1	1	0	1					0	1	26	0	0	0	16	2	48	201	3		3	0
4:15 PM	0	2	0	2					0	1	20	0	0	0	25	3	53	209	3		3	1
4:30 PM	0	1	0	2					0	0	27	0	1	0	16	2	49	205	1		0	0
4:45 PM	0	0	0	1					0	1	21	0	1	0	24	3	51	200	2		0	0
5:00 PM	1	2	0	2					0	2	20	0	1	0	28	0	56	194	4		2	1
5:15 PM	0	3	0	1					0	0	27	0	0	0	17	1	49		6		2	1
5:30 PM	0	4	0	1					1	0	21	0	0	0	14	3	44		1		0	3
5:45 PM	0	4	0	0					0	3	15	0	1	0	18	4	45		4		0	2

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0					0	0	0	0	0	0	0	0	0
Bicycles on Road	0	0	0	0					0	0	1	0	0	0	1	0	2
Lights	1	5	0	7					0	4	84	0	3	0	92	8	204
Mediums	0	0	0	0					0	0	3	0	0	0	0	0	3
Total	1	5	0	7					0	4	88	0	3	0	93	8	209

All Traffic Data Services Inc.

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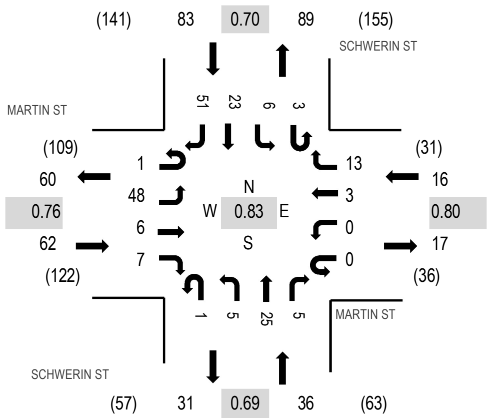
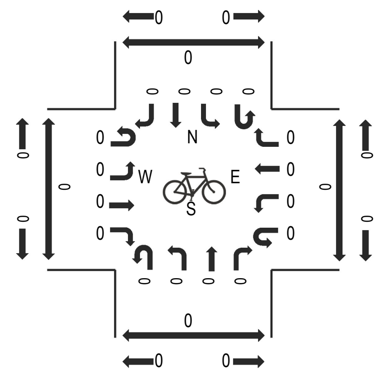
Location: 7 SCHWERIN ST & MARTIN ST PM
Date: Thursday, February 28, 2019
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

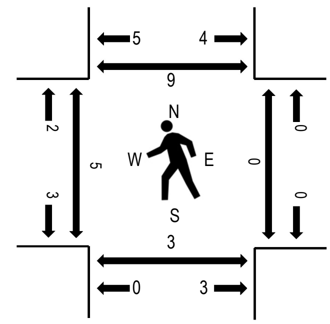
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	MARTIN ST Eastbound U-Turn	Left	Thru	Right	MARTIN ST Westbound U-Turn	Left	Thru	Right	SCHWERIN ST Northbound U-Turn	Left	Thru	Right	SCHWERIN ST Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	2	13	6	0	0	0	4	1	0	0	5	1	0	0	4	4	40	172	0	1	0	0
4:15 PM	0	11	1	0	0	0	3	1	1	0	5	1	1	1	7	11	43	191	1	1	0	1
4:30 PM	0	14	1	1	0	0	1	4	0	1	5	1	1	1	6	11	47	197	1	0	1	1
4:45 PM	0	13	0	2	0	0	1	1	0	0	8	0	1	0	6	10	42	188	1	0	1	1
5:00 PM	0	10	5	1	0	0	1	3	0	1	5	2	0	4	7	20	59	185	0	0	0	3
5:15 PM	1	11	0	3	0	0	0	5	1	3	7	2	1	1	4	10	49		3	0	1	4
5:30 PM	0	9	2	4	0	1	0	0	0	2	5	0	1	1	4	9	38		2	1	2	1
5:45 PM	0	7	4	1	0	0	2	3	0	3	4	0	0	2	4	9	39		1	0	2	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	1	47	6	6	0	0	3	13	1	5	23	5	3	6	23	51	193
Mediums	0	1	0	1	0	0	0	0	0	0	2	0	0	0	0	0	4
Total	1	48	6	7	0	0	3	13	1	5	25	5	3	6	23	51	197

All Traffic Data Services Inc.
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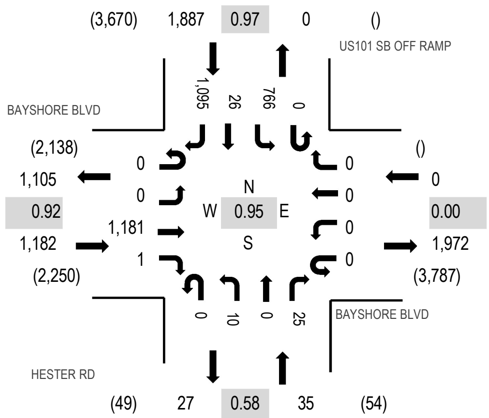
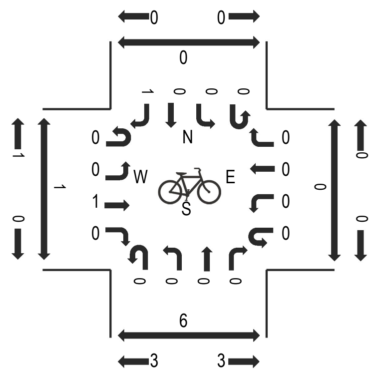
Location: 8 HESTER RD & BAYSHORE BLVD PM
Date: Thursday, February 28, 2019
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

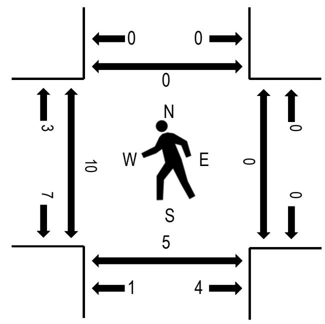
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	BAYSHORE BLVD Eastbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Westbound U-Turn	Left	Thru	Right	HESTER RD Northbound U-Turn	Left	Thru	Right	US101 SB OFF RAMP Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	0	268	1	0	0	0	0	0	0	0	4	0	201	1	268	743	3,032	3	0	2	0
4:15 PM	0	0	296	0	0	0	0	0	0	4	0	2	0	182	5	225	714	3,065	6	0	3	0
4:30 PM	0	0	281	0	0	0	0	0	0	7	0	8	0	176	4	285	761	3,104	3	0	0	0
4:45 PM	0	0	322	0	0	0	0	0	0	1	0	5	0	216	6	264	814	3,057	2	0	0	0
5:00 PM	0	0	290	1	0	0	0	0	0	1	0	5	0	195	6	278	776	2,942	2	0	1	0
5:15 PM	0	0	288	0	0	0	0	0	0	1	0	7	0	179	10	268	753		3	0	4	0
5:30 PM	0	0	248	2	0	0	0	0	0	0	0	4	0	183	6	271	714		3	0	2	0
5:45 PM	0	0	252	1	0	0	0	0	0	2	0	3	0	172	6	263	699		0	0	1	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	7
Bicycles on Road	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Lights	0	0	1,126	1	0	0	0	0	0	10	0	25	0	753	26	1,044	2,985
Mediums	0	0	48	0	0	0	0	0	0	0	0	0	0	13	0	49	110
Total	0	0	1,181	1	0	0	0	0	0	10	0	25	0	766	26	1,095	3,104

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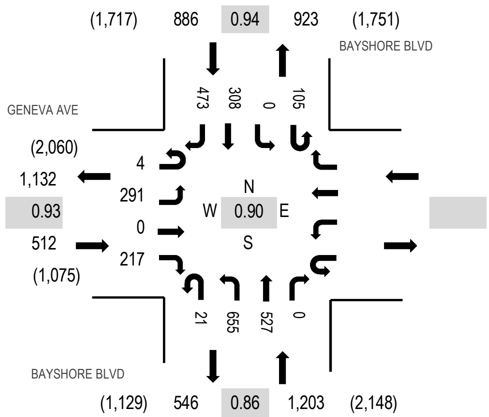
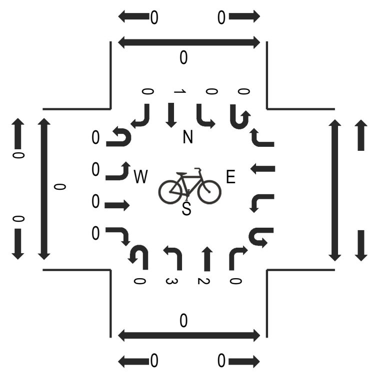
Location: 9 BAYSHORE BLVD & GENEVA AVE PM
Date: Thursday, February 28, 2019
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

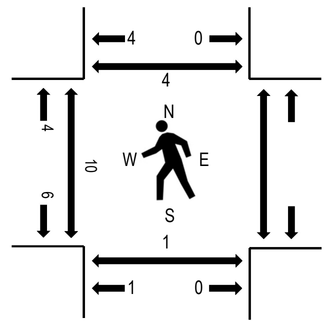
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	GENEVA AVE Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Northbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	83	0	71					1	90	109	0	21	0	67	106	548	2,349	2		0	1
4:15 PM	0	68	0	72					2	118	106	0	24	0	77	107	574	2,434	5		0	0
4:30 PM	0	87	0	59					1	128	124	0	26	0	82	101	608	2,585	3		0	2
4:45 PM	1	84	0	50					2	137	107	0	25	0	80	133	619	2,601	1		1	0
5:00 PM	0	75	0	60					4	156	128	0	30	0	79	101	633	2,591	1		0	0
5:15 PM	1	73	0	58					12	183	161	0	23	0	86	128	725		6		0	1
5:30 PM	2	59	0	49					3	179	131	0	27	0	63	111	624		2		0	3
5:45 PM	2	59	0	62					1	163	102	0	19	0	88	113	609		0		0	1

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	1	0	1					0	1	5	0	0	0	1	0	9
Bicycles on Road	0	0	0	0					0	3	2	0	0	0	1	0	6
Lights	4	274	0	204					21	646	507	0	99	0	291	466	2,512
Mediums	0	16	0	12					0	5	13	0	6	0	15	7	74
Total	4	291	0	217					21	655	527	0	105	0	308	473	2,601

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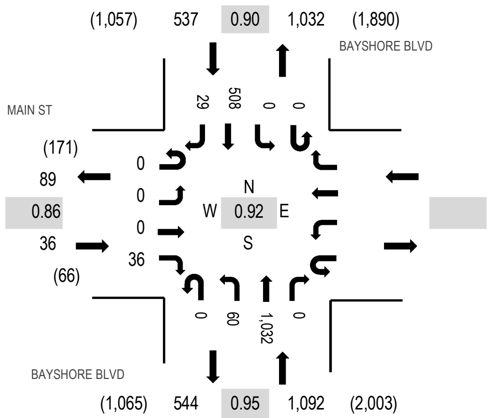
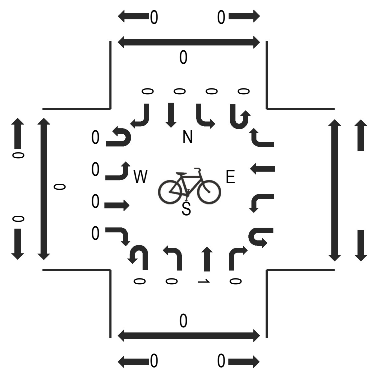
Location: 10 BAYSHORE BLVD & MAIN ST PM
Date: Thursday, February 28, 2019
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

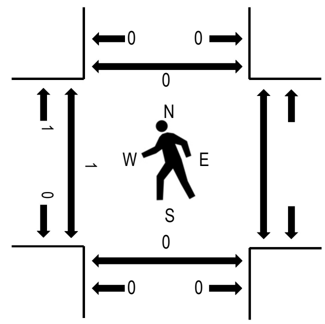
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	MAIN ST Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Northbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	0	0	5					0	11	181	0	0	0	124	4	325	1,465	1		0	0
4:15 PM	0	0	0	5					0	14	205	0	0	0	122	7	353	1,594	0		0	0
4:30 PM	0	0	0	10					0	12	238	0	0	0	140	5	405	1,654	0		0	0
4:45 PM	0	0	0	10					0	21	223	0	0	0	123	5	382	1,665	0		0	0
5:00 PM	0	0	0	11					0	13	275	0	0	0	146	9	454	1,661	0		0	0
5:15 PM	0	0	0	7					0	13	263	0	0	0	121	9	413		0		0	0
5:30 PM	0	0	0	8					0	13	271	0	0	0	118	6	416		1		0	0
5:45 PM	0	1	0	9					0	17	233	0	0	0	106	12	378		0		0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0					0	0	3	0	0	0	0	0	3
Bicycles on Road	0	0	0	0					0	0	1	0	0	0	0	0	1
Lights	0	0	0	35					0	60	1,015	0	0	0	489	28	1,627
Mediums	0	0	0	1					0	0	13	0	0	0	19	1	34
Total	0	0	0	36					0	60	1,032	0	0	0	508	29	1,665

All Traffic Data Services Inc.

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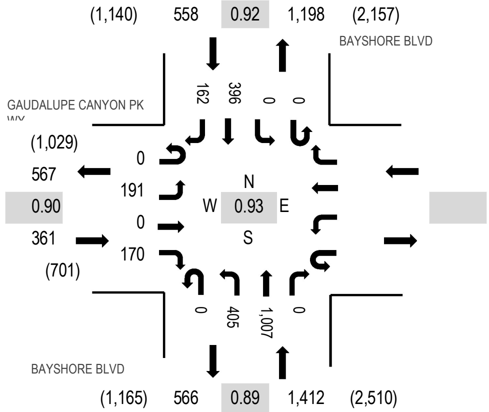
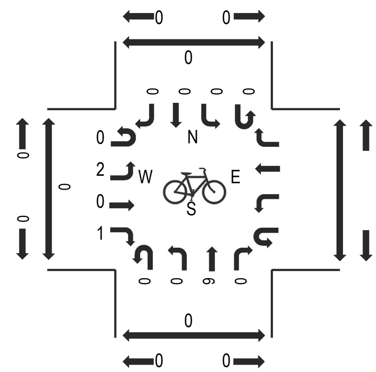
Location: 11 BAYSHORE BLVD & GAUDALUPE CANYON PKWY PM
Date: Thursday, February 28, 2019
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

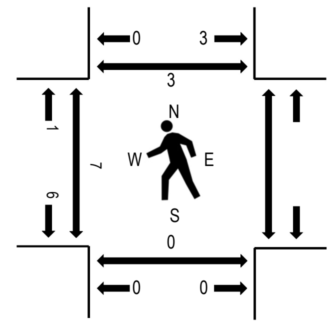
Peak Hour - All Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	GAUDALUPE CANYON PKWY Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Northbound U-Turn	Left	Thru	Right	BAYSHORE BLVD Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
4:00 PM	0	44	0	32					0	79	164	0	0	0	110	30	459	2,020	4		0	0
4:15 PM	0	27	0	49					0	87	187	0	0	0	113	40	503	2,121	3		0	0
4:30 PM	0	62	0	38					0	75	193	0	0	0	114	45	527	2,242	0		0	0
4:45 PM	0	47	0	41					0	78	235	0	0	0	102	28	531	2,317	0		0	0
5:00 PM	0	55	0	43					0	78	240	0	0	0	107	37	560	2,331	1		0	2
5:15 PM	0	58	0	52					0	112	256	0	0	0	112	34	624		4		0	1
5:30 PM	0	41	0	37					0	117	279	0	0	0	89	39	602		1		0	0
5:45 PM	0	37	0	38					0	98	232	0	0	0	88	52	545		1		0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound U-Turn	Left	Thru	Right	Westbound U-Turn	Left	Thru	Right	Northbound U-Turn	Left	Thru	Right	Southbound U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0					0	0	3	0	0	0	3	1	7
Bicycles on Road	0	2	0	1					0	0	6	0	0	0	0	0	9
Lights	0	186	0	163					0	403	980	0	0	0	378	154	2,264
Mediums	0	3	0	6					0	2	18	0	0	0	15	7	51
Total	0	191	0	170					0	405	1,007	0	0	0	396	162	2,331

Appendix B

Intersection Level of Service Calculations

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	2	12	130	2	34	2	310	89	7	656	2
Future Volume (vph)	3	2	12	130	2	34	2	310	89	7	656	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		0.99	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.97	1.00		0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1796	1583		1775	1536	1770	1863	1547	1766	1862	
Flt Permitted		0.82	1.00		0.73	1.00	0.29	1.00	1.00	0.56	1.00	
Satd. Flow (perm)		1522	1583		1353	1536	538	1863	1547	1041	1862	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	3	2	13	140	2	37	2	333	96	8	705	2
RTOR Reduction (vph)	0	0	10	0	0	30	0	0	40	0	0	0
Lane Group Flow (vph)	0	5	3	0	142	7	2	333	56	8	707	0
Confl. Peds. (#/hr)	4					4			4	4		
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		6.9	6.9		6.9	6.9	20.8	20.8	20.8	20.8	20.8	
Effective Green, g (s)		6.9	6.9		6.9	6.9	20.8	20.8	20.8	20.8	20.8	
Actuated g/C Ratio		0.19	0.19		0.19	0.19	0.58	0.58	0.58	0.58	0.58	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		294	305		261	296	313	1085	901	606	1084	
v/s Ratio Prot								0.18			c0.38	
v/s Ratio Perm		0.00	0.00		c0.10	0.00	0.00		0.04	0.01		
v/c Ratio		0.02	0.01		0.54	0.02	0.01	0.31	0.06	0.01	0.65	
Uniform Delay, d1		11.7	11.6		13.0	11.7	3.1	3.8	3.2	3.1	5.0	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.0	0.0		2.3	0.0	0.0	0.2	0.0	0.0	1.4	
Delay (s)		11.7	11.6		15.3	11.7	3.1	3.9	3.3	3.1	6.4	
Level of Service		B	B		B	B	A	A	A	A	A	
Approach Delay (s)		11.7			14.6			3.8			6.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	35.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	252	483	153	129	507	267
Future Volume (vph)	252	483	153	129	507	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	274	525	166	140	551	290
RTOR Reduction (vph)	0	0	0	119	0	164
Lane Group Flow (vph)	274	525	166	21	551	126
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	10.0	21.8	7.8	7.8	23.0	23.0
Effective Green, g (s)	10.0	21.8	7.8	7.8	23.0	23.0
Actuated g/C Ratio	0.19	0.41	0.15	0.15	0.44	0.44
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	335	1461	522	233	1495	689
v/s Ratio Prot	c0.15	c0.15	0.05		c0.16	
v/s Ratio Perm				0.01		0.08
v/c Ratio	0.82	0.36	0.32	0.09	0.37	0.18
Uniform Delay, d1	20.5	10.7	20.1	19.4	10.0	9.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.3	0.2	0.4	0.2	0.7	0.6
Delay (s)	34.8	10.8	20.5	19.6	10.7	9.7
Level of Service	C	B	C	B	B	A
Approach Delay (s)		19.1	20.1		10.4	
Approach LOS		B	C		B	

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	52.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	790	30	51	427	43	23	46	93	42	28	143
Future Volume (vph)	127	790	30	51	427	43	23	46	93	42	28	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.98	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.92			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1765	3513		1752	3478			1678			1643	
Flt Permitted	0.34	1.00		0.33	1.00			0.95			0.93	
Satd. Flow (perm)	632	3513		605	3478			1604			1537	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	134	832	32	54	449	45	24	48	98	44	29	151
RTOR Reduction (vph)	0	3	0	0	8	0	0	71	0	0	108	0
Lane Group Flow (vph)	134	861	0	54	486	0	0	99	0	0	116	0
Confl. Peds. (#/hr)	16		25	25		16	39		33	33		39
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	22.6	22.6		12.3	12.3			8.6			8.6	
Effective Green, g (s)	22.6	22.6		12.3	12.3			8.6			8.6	
Actuated g/C Ratio	0.58	0.58		0.31	0.31			0.22			0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	546	2025		189	1091			351			337	
v/s Ratio Prot	0.04	c0.25			0.14							
v/s Ratio Perm	0.10			0.09				0.06			c0.08	
v/c Ratio	0.25	0.43		0.29	0.45			0.28			0.35	
Uniform Delay, d1	4.1	4.7		10.1	10.7			12.7			12.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.2	0.1		0.8	0.3			0.4			0.6	
Delay (s)	4.3	4.8		11.0	11.0			13.2			13.5	
Level of Service	A	A		B	B			B			B	
Approach Delay (s)		4.7			11.0			13.2			13.5	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	39.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	22	28	107	77	48
Future Vol, veh/h	50	22	28	107	77	48
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	26	33	124	90	56
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.1	8.3	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	21%	69%	0%
Vol Thru, %	79%	0%	62%
Vol Right, %	0%	31%	38%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	135	72	125
LT Vol	28	50	0
Through Vol	107	0	77
RT Vol	0	22	48
Lane Flow Rate	157	84	145
Geometry Grp	1	1	1
Degree of Util (X)	0.185	0.106	0.164
Departure Headway (Hd)	4.233	4.543	4.074
Convergence, Y/N	Yes	Yes	Yes
Cap	834	793	885
Service Time	2.329	2.55	2.074
HCM Lane V/C Ratio	0.188	0.106	0.164
HCM Control Delay	8.3	8.1	7.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.7	0.4	0.6

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Vol, veh/h	10	0	10	0	0	0	6	130	0	0	65	4
Future Vol, veh/h	10	0	10	0	0	0	6	130	0	0	65	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	11	0	0	0	6	138	0	0	69	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	0	7.8	7.4
HCM LOS	A	-	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	50%	0%	0%
Vol Thru, %	96%	0%	100%	94%
Vol Right, %	0%	50%	0%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	136	20	0	69
LT Vol	6	10	0	0
Through Vol	130	0	0	65
RT Vol	0	10	0	4
Lane Flow Rate	145	21	0	73
Geometry Grp	1	1	1	1
Degree of Util (X)	0.162	0.024	0	0.082
Departure Headway (Hd)	4.035	4.107	4.426	4.045
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	890	857	0	883
Service Time	2.059	2.201	2.426	2.083
HCM Lane V/C Ratio	0.163	0.025	0	0.083
HCM Control Delay	7.8	7.3	7.4	7.4
HCM Lane LOS	A	A	N	A
HCM 95th-tile Q	0.6	0.1	0	0.3

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	5	4	4	8	8	7	52	3	6	21	37
Future Vol, veh/h	48	5	4	4	8	8	7	52	3	6	21	37
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	5	4	4	9	9	7	55	3	6	22	39
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.2	7.5	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	84%	20%	9%
Vol Thru, %	84%	9%	40%	33%
Vol Right, %	5%	7%	40%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	62	57	20	64
LT Vol	7	48	4	6
Through Vol	52	5	8	21
RT Vol	3	4	8	37
Lane Flow Rate	66	61	21	68
Geometry Grp	1	1	1	1
Degree of Util (X)	0.076	0.073	0.024	0.072
Departure Headway (Hd)	4.123	4.31	4.014	3.799
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	862	825	881	933
Service Time	2.18	2.369	2.086	1.861
HCM Lane V/C Ratio	0.077	0.074	0.024	0.073
HCM Control Delay	7.5	7.7	7.2	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.1	0.2

Movement	EBT	EBR	NBR	SBL2	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1031	5	144	784	16	650
Future Volume (vph)	1031	5	144	784	16	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.91	0.91	0.88
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		0.86	1.00	1.00	0.85
Flt Protected	1.00		1.00	0.95	0.96	1.00
Satd. Flow (prot)	3536		1611	3221	1619	2664
Flt Permitted	1.00		1.00	0.95	0.96	1.00
Satd. Flow (perm)	3536		1611	3221	1619	2664
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1121	5	157	852	17	707
RTOR Reduction (vph)	1	0	0	437	206	534
Lane Group Flow (vph)	1125	0	157	142	84	173
Confl. Peds. (#/hr)		11				12
Turn Type	NA		Prot	Split	NA	Perm
Protected Phases	2		5	4	4	
Permitted Phases						4
Actuated Green, G (s)	32.6		13.3	18.8	18.8	18.8
Effective Green, g (s)	32.6		13.3	18.8	18.8	18.8
Actuated g/C Ratio	0.43		0.17	0.25	0.25	0.25
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1502		279	789	396	652
v/s Ratio Prot	c0.32		c0.10	0.04	0.05	
v/s Ratio Perm						c0.07
v/c Ratio	0.75		0.56	0.18	0.21	0.27
Uniform Delay, d1	18.6		29.0	22.9	23.1	23.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1		2.6	0.1	0.3	0.2
Delay (s)	20.7		31.6	23.0	23.3	23.6
Level of Service	C		C	C	C	C
Approach Delay (s)	20.7				23.3	
Approach LOS	C				C	

Intersection Summary			
HCM 2000 Control Delay	22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	76.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	385	0	516	0	0	0	293	289	0	72	475	260
Future Volume (vph)	385	0	516	0	0	0	293	289	0	72	475	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97		0.88				0.97	0.95		1.00	0.95	0.88
Frpb, ped/bikes	1.00		0.98				1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00		1.00				1.00	1.00		1.00	1.00	1.00
Frt	1.00		0.85				1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433		2726				3433	3539		1770	3539	2709
Flt Permitted	0.95		1.00				0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433		2726				3433	3539		1770	3539	2709
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	410	0	549	0	0	0	312	307	0	77	505	277
RTOR Reduction (vph)	0	0	425	0	0	0	0	0	0	0	0	193
Lane Group Flow (vph)	410	0	124	0	0	0	312	307	0	77	505	84
Confl. Peds. (#/hr)	1						11					11
Confl. Bikes (#/hr)			1									
Turn Type	Prot		Perm				Prot	NA		Prot	NA	Perm
Protected Phases	4						5	2		1	6	
Permitted Phases			4									6
Actuated Green, G (s)	9.5		9.5				7.8	17.2		3.4	12.8	12.8
Effective Green, g (s)	9.5		9.5				7.8	17.2		3.4	12.8	12.8
Actuated g/C Ratio	0.23		0.23				0.19	0.41		0.08	0.30	0.30
Clearance Time (s)	4.0		4.0				4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0				3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	774		615				636	1445		142	1075	823
v/s Ratio Prot	c0.12						c0.09	0.09		0.04	c0.14	
v/s Ratio Perm			0.05									0.03
v/c Ratio	0.53		0.20				0.49	0.21		0.54	0.47	0.10
Uniform Delay, d1	14.3		13.2				15.4	8.1		18.6	11.9	10.5
Progression Factor	1.00		1.00				1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.7		0.2				0.6	0.1		4.2	0.3	0.1
Delay (s)	15.0		13.4				16.0	8.1		22.8	12.2	10.6
Level of Service	B		B				B	A		C	B	B
Approach Delay (s)		14.1			0.0			12.1			12.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	42.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	62	18	525	1003	13
Future Vol, veh/h	0	62	18	525	1003	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	440	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	65	19	547	1045	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	523	1045	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	499	661	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	499	661	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.3	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	661	-	499	-	-
HCM Lane V/C Ratio	0.028	-	0.129	-	-
HCM Control Delay (s)	10.6	-	13.3	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	155	588	178	479	803	223
Future Volume (vph)	155	588	178	479	803	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3401	1583	1770	3539	3539	1553
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3401	1583	1770	3539	3539	1553
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	161	612	185	499	836	232
RTOR Reduction (vph)	0	216	0	0	0	135
Lane Group Flow (vph)	161	397	185	499	836	97
Confl. Peds. (#/hr)	5		10			10
Turn Type	Perm	Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases	4	4				6
Actuated Green, G (s)	15.9	15.9	7.0	36.0	25.0	25.0
Effective Green, g (s)	15.9	15.9	7.0	36.0	25.0	25.0
Actuated g/C Ratio	0.27	0.27	0.12	0.60	0.42	0.42
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	902	420	206	2126	1477	648
v/s Ratio Prot			c0.10	0.14	c0.24	
v/s Ratio Perm	0.05	c0.25				0.06
v/c Ratio	0.18	0.95	0.90	0.23	0.57	0.15
Uniform Delay, d1	17.0	21.6	26.1	5.6	13.3	10.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	30.1	35.7	0.3	1.6	0.5
Delay (s)	17.1	51.7	61.8	5.8	14.9	11.3
Level of Service	B	D	E	A	B	B
Approach Delay (s)	44.5			20.9	14.1	
Approach LOS	D			C	B	

Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	59.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection						
Int Delay, s/veh	0					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	108	0	0	64
Future Vol, veh/h	0	0	108	0	0	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	115	0	0	68

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	183	115	0	0	115	0
Stage 1	115	-	-	-	-	-
Stage 2	68	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	806	937	-	-	1474	-
Stage 1	910	-	-	-	-	-
Stage 2	955	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	806	937	-	-	1474	-
Mov Cap-2 Maneuver	806	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	955	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1474	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	14	20	0	0	0
Future Vol, veh/h	0	14	20	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	15	21	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	21	0	-	0	36	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1595	-	-	-	977	1056
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	1008	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1595	-	-	-	977	1056
Mov Cap-2 Maneuver	-	-	-	-	977	-
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	1008	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1595	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	62	31	0
Future Vol, veh/h	0	0	0	62	31	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	66	33	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	99	33	33	0	-	0
Stage 1	33	-	-	-	-	-
Stage 2	66	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	900	1041	1579	-	-	-
Stage 1	989	-	-	-	-	-
Stage 2	957	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	900	1041	1579	-	-	-
Mov Cap-2 Maneuver	900	-	-	-	-	-
Stage 1	989	-	-	-	-	-
Stage 2	957	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1579	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	2	12	135	2	34	2	311	94	7	656	2
Future Volume (vph)	3	2	12	135	2	34	2	311	94	7	656	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		0.99	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.97	1.00		0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1796	1583		1775	1536	1770	1863	1547	1766	1862	
Flt Permitted		0.83	1.00		0.73	1.00	0.29	1.00	1.00	0.56	1.00	
Satd. Flow (perm)		1526	1583		1353	1536	537	1863	1547	1040	1862	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	3	2	13	145	2	37	2	334	101	8	705	2
RTOR Reduction (vph)	0	0	10	0	0	30	0	0	42	0	0	0
Lane Group Flow (vph)	0	5	3	0	147	7	2	334	59	8	707	0
Confl. Peds. (#/hr)	4					4			4	4		
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		7.1	7.1		7.1	7.1	21.2	21.2	21.2	21.2	21.2	
Effective Green, g (s)		7.1	7.1		7.1	7.1	21.2	21.2	21.2	21.2	21.2	
Actuated g/C Ratio		0.20	0.20		0.20	0.20	0.58	0.58	0.58	0.58	0.58	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		298	309		264	300	313	1088	903	607	1087	
v/s Ratio Prot								0.18			c0.38	
v/s Ratio Perm		0.00	0.00		c0.11	0.00	0.00		0.04	0.01		
v/c Ratio		0.02	0.01		0.56	0.02	0.01	0.31	0.07	0.01	0.65	
Uniform Delay, d1		11.8	11.8		13.2	11.8	3.2	3.8	3.3	3.2	5.1	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.0	0.0		2.5	0.0	0.0	0.2	0.0	0.0	1.4	
Delay (s)		11.8	11.8		15.7	11.8	3.2	4.0	3.3	3.2	6.5	
Level of Service		B	B		B	B	A	A	A	A	A	
Approach Delay (s)		11.8			14.9			3.8			6.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	36.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	257	485	162	129	507	272
Future Volume (vph)	257	485	162	129	507	272
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	279	527	176	140	551	296
RTOR Reduction (vph)	0	0	0	119	0	167
Lane Group Flow (vph)	279	527	176	21	551	129
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	10.0	21.9	7.9	7.9	23.0	23.0
Effective Green, g (s)	10.0	21.9	7.9	7.9	23.0	23.0
Actuated g/C Ratio	0.19	0.41	0.15	0.15	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	334	1465	528	236	1492	688
v/s Ratio Prot	c0.16	c0.15	0.05		c0.16	
v/s Ratio Perm				0.01		0.08
v/c Ratio	0.84	0.36	0.33	0.09	0.37	0.19
Uniform Delay, d1	20.7	10.7	20.1	19.4	10.1	9.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.3	0.2	0.4	0.2	0.7	0.6
Delay (s)	37.0	10.8	20.5	19.6	10.8	9.8
Level of Service	D	B	C	B	B	A
Approach Delay (s)		19.9	20.1		10.4	
Approach LOS		B	C		B	

Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	52.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	790	42	57	427	43	36	48	173	42	30	143
Future Volume (vph)	127	790	42	57	427	43	36	48	173	42	30	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.98			0.98	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.91			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1765	3503		1752	3478			1651			1646	
Flt Permitted	0.34	1.00		0.33	1.00			0.93			0.92	
Satd. Flow (perm)	631	3503		600	3478			1545			1524	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	134	832	44	60	449	45	38	51	182	44	32	151
RTOR Reduction (vph)	0	5	0	0	11	0	0	41	0	0	108	0
Lane Group Flow (vph)	134	871	0	60	483	0	0	230	0	0	119	0
Confl. Peds. (#/hr)	16		25	25		16	39		33	33		39
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.0	20.0		12.3	12.3			11.3			11.3	
Effective Green, g (s)	20.0	20.0		12.3	12.3			11.3			11.3	
Actuated g/C Ratio	0.51	0.51		0.31	0.31			0.29			0.29	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	427	1782		187	1088			444			438	
v/s Ratio Prot	0.03	c0.25			0.14							
v/s Ratio Perm	0.13			0.10				c0.15			0.08	
v/c Ratio	0.31	0.49		0.32	0.44			0.52			0.27	
Uniform Delay, d1	5.4	6.3		10.3	10.8			11.7			10.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.4	0.2		1.0	0.3			1.0			0.3	
Delay (s)	5.9	6.5		11.3	11.1			12.8			11.2	
Level of Service	A	A		B	B			B			B	
Approach Delay (s)		6.4			11.1			12.8			11.2	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	39.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	23	28	209	99	48
Future Vol, veh/h	50	23	28	209	99	48
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	27	33	243	115	56
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.5	9.5	8.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	12%	68%	0%
Vol Thru, %	88%	0%	67%
Vol Right, %	0%	32%	33%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	237	73	147
LT Vol	28	50	0
Through Vol	209	0	99
RT Vol	0	23	48
Lane Flow Rate	276	85	171
Geometry Grp	1	1	1
Degree of Util (X)	0.333	0.114	0.201
Departure Headway (Hd)	4.344	4.852	4.237
Convergence, Y/N	Yes	Yes	Yes
Cap	830	739	848
Service Time	2.36	2.879	2.255
HCM Lane V/C Ratio	0.333	0.115	0.202
HCM Control Delay	9.5	8.5	8.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.5	0.4	0.7

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✥			✥			✥			✥	
Traffic Vol, veh/h	27	4	12	0	6	131	6	130	0	49	65	7
Future Vol, veh/h	27	4	12	0	6	131	6	130	0	49	65	7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	4	13	0	6	139	6	138	0	52	69	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	7.9	8.5	8.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	63%	0%	40%
Vol Thru, %	96%	9%	4%	54%
Vol Right, %	0%	28%	96%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	136	43	137	121
LT Vol	6	27	0	49
Through Vol	130	4	6	65
RT Vol	0	12	131	7
Lane Flow Rate	145	46	146	129
Geometry Grp	1	1	1	1
Degree of Util (X)	0.181	0.06	0.164	0.163
Departure Headway (Hd)	4.502	4.684	4.05	4.556
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	797	765	886	788
Service Time	2.528	2.712	2.071	2.583
HCM Lane V/C Ratio	0.182	0.06	0.165	0.164
HCM Control Delay	8.5	8	7.9	8.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.2	0.6	0.6

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Vol, veh/h	48	5	4	4	8	8	7	52	3	6	21	42
Future Vol, veh/h	48	5	4	4	8	8	7	52	3	6	21	42
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	5	4	4	9	9	7	55	3	6	22	45
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.2	7.5	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	84%	20%	9%
Vol Thru, %	84%	9%	40%	30%
Vol Right, %	5%	7%	40%	61%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	62	57	20	69
LT Vol	7	48	4	6
Through Vol	52	5	8	21
RT Vol	3	4	8	42
Lane Flow Rate	66	61	21	73
Geometry Grp	1	1	1	1
Degree of Util (X)	0.076	0.073	0.024	0.077
Departure Headway (Hd)	4.126	4.318	4.022	3.779
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	861	823	879	938
Service Time	2.184	2.378	2.095	1.841
HCM Lane V/C Ratio	0.077	0.074	0.024	0.078
HCM Control Delay	7.5	7.7	7.2	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.1	0.2

Movement	EBT	EBR	NBR	SBL2	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1099	5	144	784	16	650
Future Volume (vph)	1099	5	144	784	16	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.91	0.91	0.88
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		0.86	1.00	1.00	0.85
Flt Protected	1.00		1.00	0.95	0.96	1.00
Satd. Flow (prot)	3536		1611	3221	1619	2660
Flt Permitted	1.00		1.00	0.95	0.96	1.00
Satd. Flow (perm)	3536		1611	3221	1619	2660
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1195	5	157	852	17	707
RTOR Reduction (vph)	1	0	0	444	209	543
Lane Group Flow (vph)	1199	0	157	135	81	164
Confl. Peds. (#/hr)		11				12
Turn Type	NA		Prot	Split	NA	Perm
Protected Phases	2		5	4	4	
Permitted Phases						4
Actuated Green, G (s)	35.4		13.3	18.4	18.4	18.4
Effective Green, g (s)	35.4		13.3	18.4	18.4	18.4
Actuated g/C Ratio	0.45		0.17	0.23	0.23	0.23
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1582		270	749	376	618
v/s Ratio Prot	c0.34		c0.10	0.04	0.05	
v/s Ratio Perm						c0.06
v/c Ratio	0.76		0.58	0.18	0.21	0.27
Uniform Delay, d1	18.3		30.3	24.3	24.5	24.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1		3.2	0.1	0.3	0.2
Delay (s)	20.4		33.5	24.4	24.8	25.1
Level of Service	C		C	C	C	C
Approach Delay (s)	20.4				24.8	
Approach LOS	C				C	

Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	79.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	458	0	516	0	0	0	293	291	0	72	486	270
Future Volume (vph)	458	0	516	0	0	0	293	291	0	72	486	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97		0.88				0.97	0.95		1.00	0.95	0.88
Frpb, ped/bikes	1.00		0.98				1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00		1.00				1.00	1.00		1.00	1.00	1.00
Frt	1.00		0.85				1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433		2727				3433	3539		1770	3539	2708
Flt Permitted	0.95		1.00				0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433		2727				3433	3539		1770	3539	2708
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	487	0	549	0	0	0	312	310	0	77	517	287
RTOR Reduction (vph)	0	0	419	0	0	0	0	0	0	0	0	191
Lane Group Flow (vph)	487	0	130	0	0	0	312	310	0	77	517	96
Confl. Peds. (#/hr)	1						11					11
Confl. Bikes (#/hr)			1									
Turn Type	Prot		Perm				Prot	NA		Prot	NA	Perm
Protected Phases	4						5	2		1	6	
Permitted Phases			4									6
Actuated Green, G (s)	10.5		10.5				7.1	18.6		3.4	14.9	14.9
Effective Green, g (s)	10.5		10.5				7.1	18.6		3.4	14.9	14.9
Actuated g/C Ratio	0.24		0.24				0.16	0.42		0.08	0.33	0.33
Clearance Time (s)	4.0		4.0				4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0				3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	810		643				547	1479		135	1184	906
v/s Ratio Prot	c0.14						c0.09	c0.09		0.04	c0.15	
v/s Ratio Perm			0.05									0.04
v/c Ratio	0.60		0.20				0.57	0.21		0.57	0.44	0.11
Uniform Delay, d1	15.1		13.6				17.3	8.3		19.8	11.5	10.2
Progression Factor	1.00		1.00				1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3		0.2				1.4	0.1		5.7	0.3	0.1
Delay (s)	16.4		13.8				18.7	8.3		25.6	11.8	10.3
Level of Service	B		B				B	A		C	B	B
Approach Delay (s)		15.0			0.0			13.5			12.5	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	44.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection						
Int Delay, s/veh	1					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	99	23	525	1003	13
Future Vol, veh/h	0	99	23	525	1003	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	440	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	103	24	547	1045	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	523	1045	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	499	661	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	499	661	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.1	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	661	-	499	-	-
HCM Lane V/C Ratio	0.036	-	0.207	-	-
HCM Control Delay (s)	10.7	-	14.1	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	155	589	178	485	834	231
Future Volume (vph)	155	589	178	485	834	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3401	1583	1770	3539	3539	1553
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3401	1583	1770	3539	3539	1553
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	161	614	185	505	869	241
RTOR Reduction (vph)	0	211	0	0	0	141
Lane Group Flow (vph)	161	403	185	505	869	100
Confl. Peds. (#/hr)	5		10			10
Turn Type	Perm	Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases	4	4				6
Actuated Green, G (s)	16.0	16.0	7.0	36.0	25.0	25.0
Effective Green, g (s)	16.0	16.0	7.0	36.0	25.0	25.0
Actuated g/C Ratio	0.27	0.27	0.12	0.60	0.42	0.42
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	906	422	206	2123	1474	647
v/s Ratio Prot			c0.10	0.14	c0.25	
v/s Ratio Perm	0.05	c0.25				0.06
v/c Ratio	0.18	0.95	0.90	0.24	0.59	0.16
Uniform Delay, d1	16.9	21.6	26.1	5.6	13.5	10.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	32.1	35.7	0.3	1.7	0.5
Delay (s)	17.0	53.7	61.8	5.9	15.3	11.4
Level of Service	B	D	E	A	B	B
Approach Delay (s)	46.1			20.9	14.4	
Approach LOS	D			C	B	

Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	0	121	5	0	64
Future Vol, veh/h	10	0	121	5	0	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	0	129	5	0	68

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	200	132	0	0	134	0
Stage 1	132	-	-	-	-	-
Stage 2	68	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	789	917	-	-	1451	-
Stage 1	894	-	-	-	-	-
Stage 2	955	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	789	917	-	-	1451	-
Mov Cap-2 Maneuver	789	-	-	-	-	-
Stage 1	894	-	-	-	-	-
Stage 2	955	-	-	-	-	-

Approach	WB		NB		SB	
HCM Control Delay, s	9.6		0		0	
HCM LOS	A					

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	789	1451	-
HCM Lane V/C Ratio	-	-	0.013	-	-
HCM Control Delay (s)	-	-	9.6	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	14	20	9	42	0
Future Vol, veh/h	0	14	20	9	42	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	15	21	10	45	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	31	0	-	0	41	26
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1582	-	-	-	970	1050
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	1008	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1582	-	-	-	970	1050
Mov Cap-2 Maneuver	-	-	-	-	970	-
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	1008	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1582	-	-	-	970
HCM Lane V/C Ratio	-	-	-	-	0.046
HCM Control Delay (s)	0	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	2.4					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	39	0	0	72	31	9
Future Vol, veh/h	39	0	0	72	31	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	0	0	77	33	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	115	38	43	0	-	0
Stage 1	38	-	-	-	-	-
Stage 2	77	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	881	1034	1566	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	946	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	881	1034	1566	-	-	-
Mov Cap-2 Maneuver	881	-	-	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1566	-	881	-	-
HCM Lane V/C Ratio	-	-	0.047	-	-
HCM Control Delay (s)	0	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	9	5	197	2	35	2	307	97	9	719	2
Future Volume (vph)	3	9	5	197	2	35	2	307	97	9	719	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00		0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1837	1583		1775	1536	1770	1863	1547	1766	1862	
Flt Permitted		0.91	1.00		0.72	1.00	0.24	1.00	1.00	0.56	1.00	
Satd. Flow (perm)		1689	1583		1339	1536	438	1863	1547	1044	1862	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	3	10	5	212	2	38	2	330	104	10	773	2
RTOR Reduction (vph)	0	0	4	0	0	30	0	0	44	0	0	0
Lane Group Flow (vph)	0	13	1	0	214	8	2	330	60	10	775	0
Confl. Peds. (#/hr)	4					4			4	4		
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		7.3	7.3		7.3	7.3	20.6	20.6	20.6	20.6	20.6	
Effective Green, g (s)		7.3	7.3		7.3	7.3	20.6	20.6	20.6	20.6	20.6	
Actuated g/C Ratio		0.20	0.20		0.20	0.20	0.57	0.57	0.57	0.57	0.57	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		343	321		272	312	251	1069	887	599	1068	
v/s Ratio Prot								0.18			c0.42	
v/s Ratio Perm		0.01	0.00		c0.16	0.01	0.00		0.04	0.01		
v/c Ratio		0.04	0.00		0.79	0.02	0.01	0.31	0.07	0.02	0.73	
Uniform Delay, d1		11.5	11.4		13.6	11.4	3.3	4.0	3.4	3.3	5.6	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.0	0.0		13.9	0.0	0.0	0.2	0.0	0.0	2.5	
Delay (s)		11.5	11.4		27.5	11.5	3.3	4.1	3.4	3.3	8.1	
Level of Service		B	B		C	B	A	A	A	A	A	
Approach Delay (s)		11.5			25.1			4.0			8.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	35.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	270	647	214	128	496	407
Future Volume (vph)	270	647	214	128	496	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	703	233	139	539	442
RTOR Reduction (vph)	0	0	0	116	0	254
Lane Group Flow (vph)	293	703	233	23	539	188
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	10.0	23.0	9.0	9.0	23.0	23.0
Effective Green, g (s)	10.0	23.0	9.0	9.0	23.0	23.0
Actuated g/C Ratio	0.19	0.43	0.17	0.17	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	327	1507	589	263	1462	674
v/s Ratio Prot	c0.17	c0.20	0.07		c0.16	
v/s Ratio Perm				0.01		0.12
v/c Ratio	0.90	0.47	0.40	0.09	0.37	0.28
Uniform Delay, d1	21.5	11.1	20.1	19.0	10.6	10.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	25.4	0.2	0.4	0.1	0.7	1.0
Delay (s)	46.8	11.3	20.5	19.2	11.3	11.1
Level of Service	D	B	C	B	B	B
Approach Delay (s)		21.8	20.0		11.2	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	54.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	1122	30	163	732	43	14	57	185	42	38	155
Future Volume (vph)	130	1122	30	163	732	43	14	57	185	42	38	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.97			0.97	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.90			0.91	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1766	3518		1750	3499			1629			1632	
Flt Permitted	0.27	1.00		0.23	1.00			0.98			0.80	
Satd. Flow (perm)	509	3518		419	3499			1595			1315	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	137	1181	32	172	771	45	15	60	195	44	40	163
RTOR Reduction (vph)	0	2	0	0	4	0	0	50	0	0	92	0
Lane Group Flow (vph)	137	1211	0	172	812	0	0	220	0	0	155	0
Confl. Peds. (#/hr)	16		25	25		16	39		33	33		39
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	52.2	52.2		44.2	44.2			15.3			15.3	
Effective Green, g (s)	52.2	52.2		44.2	44.2			15.3			15.3	
Actuated g/C Ratio	0.69	0.69		0.59	0.59			0.20			0.20	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	418	2432		245	2048			323			266	
v/s Ratio Prot	0.02	c0.34			0.23							
v/s Ratio Perm	0.21			c0.41				c0.14			0.12	
v/c Ratio	0.33	0.50		0.70	0.40			0.68			0.58	
Uniform Delay, d1	4.7	5.5		11.0	8.5			27.8			27.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.5	0.2		8.8	0.1			5.8			3.2	
Delay (s)	5.2	5.6		19.8	8.6			33.6			30.4	
Level of Service	A	A		B	A			C			C	
Approach Delay (s)		5.6			10.5			33.6			30.4	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	75.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	21	22	207	200	48
Future Vol, veh/h	44	21	22	207	200	48
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	24	26	241	233	56
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.7	9.6	9.6
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	10%	68%	0%
Vol Thru, %	90%	0%	81%
Vol Right, %	0%	32%	19%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	229	65	248
LT Vol	22	44	0
Through Vol	207	0	200
RT Vol	0	21	48
Lane Flow Rate	266	76	288
Geometry Grp	1	1	1
Degree of Util (X)	0.329	0.107	0.344
Departure Headway (Hd)	4.444	5.074	4.295
Convergence, Y/N	Yes	Yes	Yes
Cap	809	705	839
Service Time	2.467	3.112	2.317
HCM Lane V/C Ratio	0.329	0.108	0.343
HCM Control Delay	9.6	8.7	9.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.4	0.4	1.5

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	0	4	0	0	0	7	135	0	0	115	43
Future Vol, veh/h	61	0	4	0	0	0	7	135	0	0	115	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	65	0	4	0	0	0	7	144	0	0	122	46
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.3	0	8.2	8
HCM LOS	A	-	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	94%	0%	0%
Vol Thru, %	95%	0%	100%	73%
Vol Right, %	0%	6%	0%	27%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	142	65	0	158
LT Vol	7	61	0	0
Through Vol	135	0	0	115
RT Vol	0	4	0	43
Lane Flow Rate	151	69	0	168
Geometry Grp	1	1	1	1
Degree of Util (X)	0.176	0.092	0	0.187
Departure Headway (Hd)	4.192	4.772	4.714	4.006
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	841	755	0	879
Service Time	2.288	2.772	2.717	2.105
HCM Lane V/C Ratio	0.18	0.091	0	0.191
HCM Control Delay	8.2	8.3	7.7	8
HCM Lane LOS	A	A	N	A
HCM 95th-tile Q	0.6	0.3	0	0.7

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Vol, veh/h	63	9	4	4	8	8	7	52	3	4	21	66
Future Vol, veh/h	63	9	4	4	8	8	7	52	3	4	21	66
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	10	4	4	9	9	7	55	3	4	22	70
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.3	7.6	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	83%	20%	4%
Vol Thru, %	84%	12%	40%	23%
Vol Right, %	5%	5%	40%	73%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	62	76	20	91
LT Vol	7	63	4	4
Through Vol	52	9	8	21
RT Vol	3	4	8	66
Lane Flow Rate	66	81	21	97
Geometry Grp	1	1	1	1
Degree of Util (X)	0.077	0.098	0.024	0.1
Departure Headway (Hd)	4.18	4.366	4.079	3.736
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	848	813	865	946
Service Time	2.254	2.432	2.165	1.812
HCM Lane V/C Ratio	0.078	0.1	0.024	0.103
HCM Control Delay	7.6	7.9	7.3	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.1	0.3

Movement	EBT	EBR	NBR	SBL2	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	995	5	144	1295	16	1315
Future Volume (vph)	995	5	144	1295	16	1315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.91	0.91	0.88
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		0.86	1.00	1.00	0.85
Flt Protected	1.00		1.00	0.95	0.95	1.00
Satd. Flow (prot)	3536		1611	3221	1617	2686
Flt Permitted	1.00		1.00	0.95	0.95	1.00
Satd. Flow (perm)	3536		1611	3221	1617	2686
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1082	5	157	1408	17	1429
RTOR Reduction (vph)	0	0	0	598	295	906
Lane Group Flow (vph)	1087	0	157	345	187	523
Confl. Peds. (#/hr)		11				12
Turn Type	NA		Prot	Split	NA	Perm
Protected Phases	2		5	4	4	
Permitted Phases						4
Actuated Green, G (s)	35.4		13.7	35.3	35.3	35.3
Effective Green, g (s)	35.4		13.7	35.3	35.3	35.3
Actuated g/C Ratio	0.37		0.14	0.37	0.37	0.37
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1298		228	1179	592	983
v/s Ratio Prot	c0.31		c0.10	0.11	0.12	
v/s Ratio Perm						c0.19
v/c Ratio	0.84		0.69	0.29	0.32	0.53
Uniform Delay, d1	27.9		39.3	21.7	21.9	24.1
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9		8.4	0.1	0.3	0.6
Delay (s)	32.7		47.7	21.8	22.2	24.6
Level of Service	C		D	C	C	C
Approach Delay (s)	32.7				23.3	
Approach LOS	C				C	

Intersection Summary			
HCM 2000 Control Delay	26.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	96.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	1029	312	254	528	94	210	190	520	200	1058	271
Future Volume (vph)	96	1029	312	254	528	94	210	190	520	200	1058	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95	1.00	0.97	0.95	0.88
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2679
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2679
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	102	1095	332	270	562	100	223	202	553	213	1126	288
RTOR Reduction (vph)	0	0	126	0	0	63	0	0	191	0	0	151
Lane Group Flow (vph)	102	1095	206	270	562	37	223	202	362	213	1126	137
Confl. Peds. (#/hr)	1						11					11
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	8.9	30.8	30.8	15.0	36.9	36.9	7.0	31.0	31.0	8.0	32.0	32.0
Effective Green, g (s)	8.9	30.8	30.8	15.0	36.9	36.9	7.0	31.0	31.0	8.0	32.0	32.0
Actuated g/C Ratio	0.09	0.31	0.31	0.15	0.37	0.37	0.07	0.31	0.31	0.08	0.32	0.32
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	156	1081	477	263	1861	579	238	1088	486	272	1123	850
v/s Ratio Prot	0.06	c0.31		c0.15	0.11		c0.06	0.06		0.06	c0.32	
v/s Ratio Perm			0.13			0.02			0.23			0.05
v/c Ratio	0.65	1.01	0.43	1.03	0.30	0.06	0.94	0.19	0.74	0.78	1.00	0.16
Uniform Delay, d1	44.5	35.0	28.0	42.9	22.8	20.7	46.7	25.6	31.3	45.5	34.4	24.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.5	30.6	0.6	62.5	0.1	0.0	40.9	0.1	6.1	13.7	27.5	0.1
Delay (s)	53.9	65.6	28.6	105.4	22.9	20.8	87.6	25.7	37.5	59.2	61.9	24.8
Level of Service	D	E	C	F	C	C	F	C	D	E	E	C
Approach Delay (s)		56.8			46.6			46.5			55.0	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	100.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	61	11	868	1636	13
Future Vol, veh/h	0	61	11	868	1636	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	440	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	64	11	904	1704	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	852	1704	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	303	369	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	303	369	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	369	-	303	-	-
HCM Lane V/C Ratio	0.031	-	0.21	-	-
HCM Control Delay (s)	15.1	-	20	-	-
HCM Lane LOS	C	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	246	650	215	693	1409	247
Future Volume (vph)	246	650	215	693	1409	247
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3404	1583	1770	3539	3539	1547
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3404	1583	1770	3539	3539	1547
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	256	677	224	722	1468	257
RTOR Reduction (vph)	0	185	0	0	0	114
Lane Group Flow (vph)	256	492	224	722	1468	143
Confl. Peds. (#/hr)	5		10			10
Turn Type	Perm	Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases	4	4				6
Actuated Green, G (s)	27.0	27.0	12.0	55.0	39.0	39.0
Effective Green, g (s)	27.0	27.0	12.0	55.0	39.0	39.0
Actuated g/C Ratio	0.30	0.30	0.13	0.61	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1021	474	236	2162	1533	670
v/s Ratio Prot			c0.13	0.20	c0.41	
v/s Ratio Perm	0.08	c0.31				0.09
v/c Ratio	0.25	1.04	0.95	0.33	0.96	0.21
Uniform Delay, d1	23.8	31.5	38.7	8.6	24.7	15.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	51.6	44.0	0.4	14.9	0.7
Delay (s)	24.0	83.1	82.7	9.0	39.6	16.6
Level of Service	C	F	F	A	D	B
Approach Delay (s)	66.9			26.4	36.2	
Approach LOS	E			C	D	

Intersection Summary			
HCM 2000 Control Delay	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	138	0	0	104
Future Vol, veh/h	0	0	138	0	0	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	147	0	0	111

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	258	147	0	0	147	0
Stage 1	147	-	-	-	-	-
Stage 2	111	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	731	900	-	-	1435	-
Stage 1	880	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	731	900	-	-	1435	-
Mov Cap-2 Maneuver	731	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	914	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1435	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	27	24	0	0	0
Future Vol, veh/h	0	27	24	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	29	26	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	26	0	-	0	55	26
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	29	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1588	-	-	-	953	1050
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1588	-	-	-	953	1050
Mov Cap-2 Maneuver	-	-	-	-	953	-
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	994	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1588	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	0	0	50	18	4
Future Vol, veh/h	15	0	0	50	18	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	0	53	19	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	74	21	23	0	-	0
Stage 1	21	-	-	-	-	-
Stage 2	53	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	930	1056	1592	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	930	1056	1592	-	-	-
Mov Cap-2 Maneuver	930	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	970	-	-	-	-	-

Approach	EB		NB		SB	
HCM Control Delay, s	8.9		0		0	
HCM LOS	A					

Minor Lane/Major Mvmt		NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1592	-	930	-	-
HCM Lane V/C Ratio		-	-	0.017	-	-
HCM Control Delay (s)		0	-	8.9	-	-
HCM Lane LOS		A	-	A	-	-
HCM 95th %tile Q(veh)		0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	9	11	197	2	35	2	312	99	9	719	2
Future Volume (vph)	3	9	11	197	2	35	2	312	99	9	719	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00		0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1837	1583		1775	1536	1770	1863	1547	1766	1862	
Flt Permitted		0.91	1.00		0.72	1.00	0.24	1.00	1.00	0.56	1.00	
Satd. Flow (perm)		1689	1583		1339	1536	438	1863	1547	1039	1862	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	3	10	12	212	2	38	2	335	106	10	773	2
RTOR Reduction (vph)	0	0	10	0	0	30	0	0	45	0	0	0
Lane Group Flow (vph)	0	13	2	0	214	8	2	335	61	10	775	0
Confl. Peds. (#/hr)	4					4			4	4		
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		7.3	7.3		7.3	7.3	20.6	20.6	20.6	20.6	20.6	
Effective Green, g (s)		7.3	7.3		7.3	7.3	20.6	20.6	20.6	20.6	20.6	
Actuated g/C Ratio		0.20	0.20		0.20	0.20	0.57	0.57	0.57	0.57	0.57	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		343	321		272	312	251	1069	887	596	1068	
v/s Ratio Prot								0.18			c0.42	
v/s Ratio Perm		0.01	0.00		c0.16	0.01	0.00		0.04	0.01		
v/c Ratio		0.04	0.01		0.79	0.02	0.01	0.31	0.07	0.02	0.73	
Uniform Delay, d1		11.5	11.4		13.6	11.4	3.3	4.0	3.4	3.3	5.6	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.0	0.0		13.9	0.0	0.0	0.2	0.0	0.0	2.5	
Delay (s)		11.5	11.4		27.5	11.5	3.3	4.1	3.4	3.3	8.1	
Level of Service		B	B		C	B	A	A	A	A	A	
Approach Delay (s)		11.5			25.1			4.0			8.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	35.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	273	661	228	129	504	407
Future Volume (vph)	273	661	228	129	504	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	297	718	248	140	548	442
RTOR Reduction (vph)	0	0	0	116	0	254
Lane Group Flow (vph)	297	718	248	24	548	188
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	10.0	23.2	9.2	9.2	23.0	23.0
Effective Green, g (s)	10.0	23.2	9.2	9.2	23.0	23.0
Actuated g/C Ratio	0.18	0.43	0.17	0.17	0.42	0.42
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	326	1514	600	268	1456	671
v/s Ratio Prot	c0.17	c0.20	0.07		c0.16	
v/s Ratio Perm				0.02		0.12
v/c Ratio	0.91	0.47	0.41	0.09	0.38	0.28
Uniform Delay, d1	21.7	11.1	20.1	19.0	10.7	10.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.3	0.2	0.5	0.1	0.7	1.0
Delay (s)	50.0	11.4	20.6	19.1	11.4	11.2
Level of Service	D	B	C	B	B	B
Approach Delay (s)		22.7	20.0		11.3	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	54.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	1122	39	163	732	43	38	57	220	42	38	155
Future Volume (vph)	130	1122	39	163	732	43	38	57	220	42	38	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.97			0.97	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.91			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1766	3511		1750	3498			1627			1631	
Flt Permitted	0.26	1.00		0.21	1.00			0.93			0.82	
Satd. Flow (perm)	492	3511		392	3498			1520			1346	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	137	1181	41	172	771	45	40	60	232	44	40	163
RTOR Reduction (vph)	0	2	0	0	4	0	0	48	0	0	88	0
Lane Group Flow (vph)	137	1220	0	172	812	0	0	284	0	0	159	0
Confl. Peds. (#/hr)	16		25	25		16	39		33	33		39
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	52.3	52.3		44.3	44.3			19.5			19.5	
Effective Green, g (s)	52.3	52.3		44.3	44.3			19.5			19.5	
Actuated g/C Ratio	0.66	0.66		0.56	0.56			0.24			0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	386	2301		217	1941			371			328	
v/s Ratio Prot	0.02	c0.35			0.23							
v/s Ratio Perm	0.21			c0.44				c0.19			0.12	
v/c Ratio	0.35	0.53		0.79	0.42			0.77			0.49	
Uniform Delay, d1	6.1	7.3		14.1	10.3			28.0			25.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.6	0.2		17.7	0.1			9.1			1.1	
Delay (s)	6.7	7.5		31.8	10.4			37.2			27.0	
Level of Service	A	A		C	B			D			C	
Approach Delay (s)		7.4			14.2			37.2			27.0	
Approach LOS		A			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	79.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	22	22	262	202	48
Future Vol, veh/h	44	22	22	262	202	48
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	26	26	305	235	56
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.9	10.5	9.8
HCM LOS	A	B	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	8%	67%	0%
Vol Thru, %	92%	0%	81%
Vol Right, %	0%	33%	19%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	284	66	250
LT Vol	22	44	0
Through Vol	262	0	202
RT Vol	0	22	48
Lane Flow Rate	330	77	291
Geometry Grp	1	1	1
Degree of Util (X)	0.408	0.111	0.353
Departure Headway (Hd)	4.453	5.211	4.37
Convergence, Y/N	Yes	Yes	Yes
Cap	809	686	823
Service Time	2.479	3.255	2.396
HCM Lane V/C Ratio	0.408	0.112	0.354
HCM Control Delay	10.5	8.9	9.8
HCM Lane LOS	B	A	A
HCM 95th-tile Q	2	0.4	1.6

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	4	13	0	6	131	7	135	0	49	115	43
Future Vol, veh/h	61	4	13	0	6	131	7	135	0	49	115	43
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	65	4	14	0	6	139	7	144	0	52	122	46
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	8.3	9	9.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	78%	0%	24%
Vol Thru, %	95%	5%	4%	56%
Vol Right, %	0%	17%	96%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	142	78	137	207
LT Vol	7	61	0	49
Through Vol	135	4	6	115
RT Vol	0	13	131	43
Lane Flow Rate	151	83	146	220
Geometry Grp	1	1	1	1
Degree of Util (X)	0.198	0.116	0.176	0.279
Departure Headway (Hd)	4.727	5.031	4.336	4.563
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	755	709	825	784
Service Time	2.776	3.081	2.379	2.609
HCM Lane V/C Ratio	0.2	0.117	0.177	0.281
HCM Control Delay	9	8.7	8.3	9.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.4	0.6	1.1

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	9	4	4	8	8	7	52	3	4	21	69
Future Vol, veh/h	63	9	4	4	8	8	7	52	3	4	21	69
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	10	4	4	9	9	7	55	3	4	22	73
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.3	7.6	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	83%	20%	4%
Vol Thru, %	84%	12%	40%	22%
Vol Right, %	5%	5%	40%	73%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	62	76	20	94
LT Vol	7	63	4	4
Through Vol	52	9	8	21
RT Vol	3	4	8	69
Lane Flow Rate	66	81	21	100
Geometry Grp	1	1	1	1
Degree of Util (X)	0.077	0.098	0.024	0.104
Departure Headway (Hd)	4.183	4.372	4.085	3.73
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	847	812	863	947
Service Time	2.257	2.44	2.173	1.807
HCM Lane V/C Ratio	0.078	0.1	0.024	0.106
HCM Control Delay	7.6	7.9	7.3	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.1	0.3

Movement	EBT	EBR	NBR	SBL2	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	995	5	144	1295	16	1315
Future Volume (vph)	995	5	144	1295	16	1315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.91	0.91	0.88
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		0.86	1.00	1.00	0.85
Flt Protected	1.00		1.00	0.95	0.95	1.00
Satd. Flow (prot)	3536		1611	3221	1617	2686
Flt Permitted	1.00		1.00	0.95	0.95	1.00
Satd. Flow (perm)	3536		1611	3221	1617	2686
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1082	5	157	1408	17	1429
RTOR Reduction (vph)	0	0	0	598	295	906
Lane Group Flow (vph)	1087	0	157	345	187	523
Confl. Peds. (#/hr)		11				12
Turn Type	NA		Prot	Split	NA	Perm
Protected Phases	2		5	4	4	
Permitted Phases						4
Actuated Green, G (s)	35.4		13.7	35.3	35.3	35.3
Effective Green, g (s)	35.4		13.7	35.3	35.3	35.3
Actuated g/C Ratio	0.37		0.14	0.37	0.37	0.37
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1298		228	1179	592	983
v/s Ratio Prot	c0.31		c0.10	0.11	0.12	
v/s Ratio Perm						c0.19
v/c Ratio	0.84		0.69	0.29	0.32	0.53
Uniform Delay, d1	27.9		39.3	21.7	21.9	24.1
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9		8.4	0.1	0.3	0.6
Delay (s)	32.7		47.7	21.8	22.2	24.6
Level of Service	C		D	C	C	C
Approach Delay (s)	32.7				23.3	
Approach LOS	C				C	

Intersection Summary			
HCM 2000 Control Delay	26.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	96.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	1063	312	254	528	94	210	190	520	200	1058	291
Future Volume (vph)	108	1063	312	254	528	94	210	190	520	200	1058	291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95	1.00	0.97	0.95	0.88
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2679
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2679
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	115	1131	332	270	562	100	223	202	553	213	1126	310
RTOR Reduction (vph)	0	0	126	0	0	65	0	0	200	0	0	162
Lane Group Flow (vph)	115	1131	206	270	562	35	223	202	353	213	1126	148
Confl. Peds. (#/hr)	1						11					11
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.0	31.0	31.0	15.0	35.0	35.0	7.0	30.0	30.0	8.0	31.0	31.0
Effective Green, g (s)	11.0	31.0	31.0	15.0	35.0	35.0	7.0	30.0	30.0	8.0	31.0	31.0
Actuated g/C Ratio	0.11	0.31	0.31	0.15	0.35	0.35	0.07	0.30	0.30	0.08	0.31	0.31
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	194	1097	484	265	1779	554	240	1061	474	274	1097	830
v/s Ratio Prot	0.06	c0.32		c0.15	c0.11		c0.06	0.06		0.06	c0.32	
v/s Ratio Perm			0.13			0.02			0.22			0.06
v/c Ratio	0.59	1.03	0.43	1.02	0.32	0.06	0.93	0.19	0.74	0.78	1.03	0.18
Uniform Delay, d1	42.4	34.5	27.4	42.5	23.8	21.6	46.3	26.0	31.5	45.1	34.5	25.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	35.4	0.6	60.2	0.1	0.0	38.7	0.1	6.2	13.0	34.1	0.1
Delay (s)	47.2	69.9	28.0	102.7	23.9	21.7	85.0	26.1	37.8	58.1	68.6	25.3
Level of Service	D	E	C	F	C	C	F	C	D	E	E	C
Approach Delay (s)		59.5			46.5			46.1			59.1	
Approach LOS		E			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	54.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Intersection						
Int Delay, s/veh	0.8					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	90	12	868	1636	13
Future Vol, veh/h	1	90	12	868	1636	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	440	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	94	13	904	1704	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2182	852	1704	0	-	0
Stage 1	1704	-	-	-	-	-
Stage 2	478	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	39	303	369	-	-	-
Stage 1	132	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	38	303	369	-	-	-
Mov Cap-2 Maneuver	38	-	-	-	-	-
Stage 1	127	-	-	-	-	-
Stage 2	590	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.1	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	369	-	303	-	-
HCM Lane V/C Ratio	0.034	-	0.309	-	-
HCM Control Delay (s)	15.1	-	22.1	-	-
HCM Lane LOS	C	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	249	669	215	693	1409	265
Future Volume (vph)	249	669	215	693	1409	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3404	1583	1770	3539	3539	1550
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3404	1583	1770	3539	3539	1550
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	259	697	224	722	1468	276
RTOR Reduction (vph)	0	192	0	0	0	147
Lane Group Flow (vph)	259	505	224	722	1468	129
Confl. Peds. (#/hr)	5		10			10
Turn Type	Perm	Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases	4	4				6
Actuated Green, G (s)	22.0	22.0	10.0	45.0	31.0	31.0
Effective Green, g (s)	22.0	22.0	10.0	45.0	31.0	31.0
Actuated g/C Ratio	0.29	0.29	0.13	0.60	0.41	0.41
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	998	464	236	2123	1462	640
v/s Ratio Prot			c0.13	0.20	c0.41	
v/s Ratio Perm	0.08	c0.32				0.08
v/c Ratio	0.26	1.09	0.95	0.34	1.00	0.20
Uniform Delay, d1	20.3	26.5	32.2	7.5	22.0	14.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	67.6	44.0	0.4	24.5	0.7
Delay (s)	20.4	94.1	76.3	8.0	46.5	14.8
Level of Service	C	F	E	A	D	B
Approach Delay (s)	74.2			24.1	41.5	
Approach LOS	E			C	D	

Intersection Summary			
HCM 2000 Control Delay	45.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	0	138	0	0	104
Future Vol, veh/h	10	0	138	0	0	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	0	147	0	0	111

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	258	147	0	0	147	0
Stage 1	147	-	-	-	-	-
Stage 2	111	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	731	900	-	-	1435	-
Stage 1	880	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	731	900	-	-	1435	-
Mov Cap-2 Maneuver	731	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	914	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	731	1435	-
HCM Lane V/C Ratio	-	-	0.015	-	-
HCM Control Delay (s)	-	-	10	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	27	24	9	42	0
Future Vol, veh/h	0	27	24	9	42	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	29	26	10	45	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	36	0	-	0	60	31
Stage 1	-	-	-	-	31	-
Stage 2	-	-	-	-	29	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1575	-	-	-	947	1043
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1575	-	-	-	947	1043
Mov Cap-2 Maneuver	-	-	-	-	947	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	994	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1575	-	-	-	947
HCM Lane V/C Ratio	-	-	-	-	0.047
HCM Control Delay (s)	0	-	-	-	9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	3					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	43	0	0	61	19	9
Future Vol, veh/h	43	0	0	61	19	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	0	0	65	20	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	90	25	30	0	-	0
Stage 1	25	-	-	-	-	-
Stage 2	65	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	910	1051	1583	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	910	1051	1583	-	-	-
Mov Cap-2 Maneuver	910	-	-	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	958	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1583	-	910	-	-
HCM Lane V/C Ratio	-	-	0.05	-	-
HCM Control Delay (s)	0	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	1063	312	254	528	94	210	190	520	200	1058	291
Future Volume (vph)	108	1063	312	254	528	94	210	190	520	200	1058	291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95	1.00	0.97	0.95	0.88
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2679
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2679
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	115	1131	332	270	562	100	223	202	553	213	1126	310
RTOR Reduction (vph)	0	0	119	0	0	65	0	0	56	0	0	162
Lane Group Flow (vph)	115	1131	213	270	562	35	223	202	497	213	1126	148
Confl. Peds. (#/hr)	1						11					11
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.0	31.0	31.0	15.0	35.0	35.0	6.0	27.7	42.7	10.3	32.0	32.0
Effective Green, g (s)	11.0	31.0	31.0	15.0	35.0	35.0	6.0	27.7	42.7	10.3	32.0	32.0
Actuated g/C Ratio	0.11	0.31	0.31	0.15	0.35	0.35	0.06	0.28	0.43	0.10	0.32	0.32
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	194	1097	484	265	1779	554	205	980	739	353	1132	857
v/s Ratio Prot	0.06	c0.32		c0.15	c0.11		c0.06	0.06	0.10	0.06	c0.32	
v/s Ratio Perm			0.14			0.02			0.21			0.06
v/c Ratio	0.59	1.03	0.44	1.02	0.32	0.06	1.09	0.21	0.67	0.60	0.99	0.17
Uniform Delay, d1	42.4	34.5	27.6	42.5	23.8	21.6	47.0	27.7	23.0	42.9	33.9	24.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	35.4	0.6	60.2	0.1	0.0	88.2	0.1	2.4	2.9	25.3	0.1
Delay (s)	47.2	69.9	28.2	102.7	23.9	21.7	135.2	27.8	25.4	45.8	59.2	24.6
Level of Service	D	E	C	F	C	C	F	C	C	D	E	C
Approach Delay (s)		59.5			46.5			51.0			51.0	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	3	81	2	36	9	551	90	27	269	5
Future Volume (vph)	1	0	3	81	2	36	9	551	90	27	269	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		0.99	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.95	1.00		0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1755	1583		1776	1535	1770	1863	1549	1768	1858	
Flt Permitted		0.95	1.00		0.94	1.00	0.58	1.00	1.00	0.38	1.00	
Satd. Flow (perm)		1760	1583		1755	1535	1074	1863	1549	715	1858	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	1	0	3	89	2	40	10	605	99	30	296	5
RTOR Reduction (vph)	0	0	3	0	0	34	0	0	40	0	1	0
Lane Group Flow (vph)	0	1	0	0	91	6	10	605	59	30	300	0
Confl. Peds. (#/hr)	3					3			3	3		
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		4.2	4.2		4.2	4.2	18.3	18.3	18.3	18.3	18.3	
Effective Green, g (s)		4.2	4.2		4.2	4.2	18.3	18.3	18.3	18.3	18.3	
Actuated g/C Ratio		0.14	0.14		0.14	0.14	0.60	0.60	0.60	0.60	0.60	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		242	217		241	211	644	1117	929	429	1114	
v/s Ratio Prot								c0.32			0.16	
v/s Ratio Perm		0.00	0.00		c0.05	0.00	0.01		0.04	0.04		
v/c Ratio		0.00	0.00		0.38	0.03	0.02	0.54	0.06	0.07	0.27	
Uniform Delay, d1		11.3	11.3		12.0	11.4	2.5	3.6	2.5	2.5	2.9	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.0	0.0		1.0	0.1	0.0	0.5	0.0	0.1	0.1	
Delay (s)		11.4	11.3		13.0	11.4	2.5	4.2	2.6	2.6	3.0	
Level of Service		B	B		B	B	A	A	A	A	A	
Approach Delay (s)		11.3			12.5			3.9			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	4.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	30.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	292	105	377	403	108	225
Future Volume (vph)	292	105	377	403	108	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	321	115	414	443	119	247
RTOR Reduction (vph)	0	0	0	291	0	219
Lane Group Flow (vph)	321	115	414	152	119	28
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	8.1	23.6	11.5	11.5	4.0	4.0
Effective Green, g (s)	8.1	23.6	11.5	11.5	4.0	4.0
Actuated g/C Ratio	0.23	0.66	0.32	0.32	0.11	0.11
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	402	2346	1143	511	385	177
v/s Ratio Prot	c0.18	0.03	c0.12		c0.03	
v/s Ratio Perm				0.10		0.02
v/c Ratio	0.80	0.05	0.36	0.30	0.31	0.16
Uniform Delay, d1	13.0	2.1	9.2	9.0	14.5	14.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.6	0.0	0.2	0.3	2.1	1.9
Delay (s)	23.6	2.1	9.4	9.4	16.6	16.2
Level of Service	C	A	A	A	B	B
Approach Delay (s)		17.9	9.4		16.3	
Approach LOS		B	A		B	

Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	35.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	420	20	59	1003	70	32	28	47	27	30	106
Future Volume (vph)	144	420	20	59	1003	70	32	28	47	27	30	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.94			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1768	3509		1749	3486			1703			1651	
Flt Permitted	0.15	1.00		0.49	1.00			0.87			0.94	
Satd. Flow (perm)	272	3509		911	3486			1506			1572	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	145	424	20	60	1013	71	32	28	47	27	30	107
RTOR Reduction (vph)	0	2	0	0	5	0	0	38	0	0	90	0
Lane Group Flow (vph)	145	442	0	60	1079	0	0	69	0	0	74	0
Confl. Peds. (#/hr)	36		12	12		36	31		18	18		31
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	37.5	37.5		25.7	25.7			8.7			8.7	
Effective Green, g (s)	37.5	37.5		25.7	25.7			8.7			8.7	
Actuated g/C Ratio	0.69	0.69		0.47	0.47			0.16			0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	403	2427		431	1652			241			252	
v/s Ratio Prot	c0.05	0.13			c0.31							
v/s Ratio Perm	0.20			0.07				0.05			c0.05	
v/c Ratio	0.36	0.18		0.14	0.65			0.29			0.29	
Uniform Delay, d1	5.1	2.9		8.0	10.9			20.0			20.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.6	0.0		0.1	0.9			0.7			0.7	
Delay (s)	5.6	3.0		8.2	11.8			20.7			20.7	
Level of Service	A	A		A	B			C			C	
Approach Delay (s)		3.6			11.6			20.7			20.7	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	54.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	9	13	89	97	22
Future Vol, veh/h	16	9	13	89	97	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	9	14	94	102	23
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.5	7.7	7.6
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	13%	64%	0%
Vol Thru, %	87%	0%	82%
Vol Right, %	0%	36%	18%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	102	25	119
LT Vol	13	16	0
Through Vol	89	0	97
RT Vol	0	9	22
Lane Flow Rate	107	26	125
Geometry Grp	1	1	1
Degree of Util (X)	0.122	0.031	0.137
Departure Headway (Hd)	4.098	4.241	3.948
Convergence, Y/N	Yes	Yes	Yes
Cap	872	830	904
Service Time	2.137	2.34	1.987
HCM Lane V/C Ratio	0.123	0.031	0.138
HCM Control Delay	7.7	7.5	7.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.1	0.5

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✥			✥			✥			✥	
Traffic Vol, veh/h	6	0	7	0	0	0	4	88	0	3	93	8
Future Vol, veh/h	6	0	7	0	0	0	4	88	0	3	93	8
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	0	8	0	0	0	4	95	0	3	100	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.2	0	7.6	7.6
HCM LOS	A	-	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	46%	0%	3%
Vol Thru, %	96%	0%	100%	89%
Vol Right, %	0%	54%	0%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	92	13	0	104
LT Vol	4	6	0	3
Through Vol	88	0	0	93
RT Vol	0	7	0	8
Lane Flow Rate	99	14	0	112
Geometry Grp	1	1	1	1
Degree of Util (X)	0.111	0.016	0	0.124
Departure Headway (Hd)	4.049	4.062	4.306	3.991
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	884	867	0	898
Service Time	2.078	2.152	2.4	2.018
HCM Lane V/C Ratio	0.112	0.016	0	0.125
HCM Control Delay	7.6	7.2	7.4	7.6
HCM Lane LOS	A	A	N	A
HCM 95th-tile Q	0.4	0	0	0.4

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	6	7	0	3	13	6	25	5	9	23	51
Future Vol, veh/h	49	6	7	0	3	13	6	25	5	9	23	51
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	7	8	0	4	16	7	30	6	11	28	61
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	6.9	7.4	7.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	79%	0%	11%
Vol Thru, %	69%	10%	19%	28%
Vol Right, %	14%	11%	81%	61%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	62	16	83
LT Vol	6	49	0	9
Through Vol	25	6	3	23
RT Vol	5	7	13	51
Lane Flow Rate	43	75	19	100
Geometry Grp	1	1	1	1
Degree of Util (X)	0.05	0.089	0.02	0.105
Departure Headway (Hd)	4.123	4.288	3.753	3.782
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	860	830	941	938
Service Time	2.189	2.343	1.826	1.843
HCM Lane V/C Ratio	0.05	0.09	0.02	0.107
HCM Control Delay	7.4	7.8	6.9	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.1	0.4

Movement	EBT	EBR	NBR	SBL2	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1181	1	35	766	26	1095
Future Volume (vph)	1181	1	35	766	26	1095
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.91	0.91	0.88
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		0.86	1.00	1.00	0.85
Flt Protected	1.00		1.00	0.95	0.96	1.00
Satd. Flow (prot)	3539		1611	3221	1622	2687
Flt Permitted	1.00		1.00	0.95	0.96	1.00
Satd. Flow (perm)	3539		1611	3221	1622	2687
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1243	1	37	806	27	1153
RTOR Reduction (vph)	0	0	0	355	160	736
Lane Group Flow (vph)	1244	0	37	201	117	417
Confl. Peds. (#/hr)		5				10
Turn Type	NA		Prot	Split	NA	Perm
Protected Phases	2		5	4	4	
Permitted Phases						4
Actuated Green, G (s)	36.2		3.4	29.2	29.2	29.2
Effective Green, g (s)	36.2		3.4	29.2	29.2	29.2
Actuated g/C Ratio	0.45		0.04	0.36	0.36	0.36
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1585		67	1164	586	971
v/s Ratio Prot	c0.35		c0.02	0.06	0.07	
v/s Ratio Perm						c0.16
v/c Ratio	0.78		0.55	0.17	0.20	0.43
Uniform Delay, d1	19.0		38.0	17.6	17.8	19.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6		9.5	0.1	0.2	0.3
Delay (s)	21.6		47.4	17.6	17.9	19.8
Level of Service	C		D	B	B	B
Approach Delay (s)	21.6				18.9	
Approach LOS	C				B	

Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	80.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	0	217	0	0	0	676	527	0	105	308	473
Future Volume (vph)	295	0	217	0	0	0	676	527	0	105	308	473
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0		2.5	4.0	4.0
Lane Util. Factor	0.97		0.88				0.97	0.95		1.00	0.95	0.88
Frpb, ped/bikes	1.00		0.98				1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00		1.00				1.00	1.00		1.00	1.00	1.00
Frt	1.00		0.85				1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3423		2724				3433	3539		1770	3539	2710
Flt Permitted	0.95		1.00				0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3423		2724				3433	3539		1770	3539	2710
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	328	0	241	0	0	0	751	586	0	117	342	526
RTOR Reduction (vph)	0	0	190	0	0	0	0	0	0	0	0	392
Lane Group Flow (vph)	328	0	51	0	0	0	751	586	0	117	342	134
Confl. Peds. (#/hr)	4		1				10					10
Confl. Bikes (#/hr)			1									
Turn Type	Perm		Perm				Prot	NA		Prot	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases	4		4									6
Actuated Green, G (s)	10.3		10.3				14.2	20.9		7.3	12.5	12.5
Effective Green, g (s)	10.3		10.3				14.2	20.9		7.3	12.5	12.5
Actuated g/C Ratio	0.21		0.21				0.29	0.43		0.15	0.26	0.26
Clearance Time (s)	4.0		4.0				4.0	4.0		2.5	4.0	4.0
Vehicle Extension (s)	3.0		3.0				3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	719		572				994	1509		263	902	691
v/s Ratio Prot							c0.22	c0.17		0.07	0.10	
v/s Ratio Perm	c0.10		0.02									0.05
v/c Ratio	0.46		0.09				0.76	0.39		0.44	0.38	0.19
Uniform Delay, d1	16.9		15.6				15.8	9.7		19.0	15.1	14.3
Progression Factor	1.00		1.00				1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5		0.1				3.3	0.2		1.2	0.3	0.1
Delay (s)	17.4		15.6				19.1	9.8		20.2	15.3	14.4
Level of Service	B		B				B	A		C	B	B
Approach Delay (s)		16.6			0.0			15.1			15.4	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	49.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection						
Int Delay, s/veh	0.6					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	36	60	1032	508	29
Future Vol, veh/h	0	36	60	1032	508	29
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Yield
Storage Length	-	0	440	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	39	65	1122	552	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	277	553	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	720	1013	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	719	1012	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1012	-	719	-	-
HCM Lane V/C Ratio	0.064	-	0.054	-	-
HCM Control Delay (s)	8.8	-	10.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	191	170	405	1007	396	162
Future Volume (vph)	191	170	405	1007	396	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1554
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1554
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	205	183	435	1083	426	174
RTOR Reduction (vph)	0	161	0	0	0	103
Lane Group Flow (vph)	205	22	435	1083	426	71
Confl. Peds. (#/hr)	3		7			7
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)	9.0	9.0	23.0	57.0	30.0	30.0
Effective Green, g (s)	9.0	9.0	23.0	57.0	30.0	30.0
Actuated g/C Ratio	0.12	0.12	0.31	0.77	0.41	0.41
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	417	192	550	2725	1434	630
v/s Ratio Prot	c0.06		c0.25	c0.31	0.12	
v/s Ratio Perm		0.01				0.05
v/c Ratio	0.49	0.12	0.79	0.40	0.30	0.11
Uniform Delay, d1	30.4	29.0	23.3	2.8	14.9	13.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.3	7.6	0.4	0.5	0.4
Delay (s)	31.3	29.2	30.9	3.2	15.4	14.1
Level of Service	C	C	C	A	B	B
Approach Delay (s)	30.3			11.2	15.0	
Approach LOS	C			B	B	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	87	0	0	83
Future Vol, veh/h	0	0	87	0	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	102	0	0	98

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	200	102	0	0	102	0
Stage 1	102	-	-	-	-	-
Stage 2	98	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	789	953	-	-	1490	-
Stage 1	922	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	789	953	-	-	1490	-
Mov Cap-2 Maneuver	789	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1490	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection						
Int Delay, s/veh	0					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	16	0	0	0
Future Vol, veh/h	0	20	16	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	24	19	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	19	0	-	0	43	19
Stage 1	-	-	-	-	19	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1597	-	-	-	968	1059
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	999	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1597	-	-	-	968	1059
Mov Cap-2 Maneuver	-	-	-	-	968	-
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	999	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1597	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection						
Int Delay, s/veh	0					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	36	89	0
Future Vol, veh/h	0	0	0	36	89	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	41	101	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	142	101	101	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	41	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	851	954	1491	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	981	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	851	954	1491	-	-	-
Mov Cap-2 Maneuver	851	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	981	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1491	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	6	3	81	2	37	9	551	90	28	272	5
Future Volume (vph)	1	6	3	81	2	37	9	551	90	28	272	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00		0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1849	1583		1776	1535	1770	1863	1549	1768	1858	
Flt Permitted		0.94	1.00		0.94	1.00	0.57	1.00	1.00	0.38	1.00	
Satd. Flow (perm)		1749	1583		1755	1535	1071	1863	1549	715	1858	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	1	7	3	89	2	41	10	605	99	31	299	5
RTOR Reduction (vph)	0	0	3	0	0	35	0	0	40	0	1	0
Lane Group Flow (vph)	0	8	0	0	91	6	10	605	59	31	303	0
Confl. Peds. (#/hr)	3					3			3	3		
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		4.2	4.2		4.2	4.2	18.3	18.3	18.3	18.3	18.3	
Effective Green, g (s)		4.2	4.2		4.2	4.2	18.3	18.3	18.3	18.3	18.3	
Actuated g/C Ratio		0.14	0.14		0.14	0.14	0.60	0.60	0.60	0.60	0.60	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		240	217		241	211	642	1117	929	429	1114	
v/s Ratio Prot								c0.32			0.16	
v/s Ratio Perm		0.00	0.00		c0.05	0.00	0.01		0.04	0.04		
v/c Ratio		0.03	0.00		0.38	0.03	0.02	0.54	0.06	0.07	0.27	
Uniform Delay, d1		11.4	11.3		12.0	11.4	2.5	3.6	2.5	2.6	2.9	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.1	0.0		1.0	0.1	0.0	0.5	0.0	0.1	0.1	
Delay (s)		11.4	11.3		13.0	11.4	2.5	4.2	2.6	2.6	3.0	
Level of Service		B	B		B	B	A	A	A	A	A	
Approach Delay (s)		11.4			12.5			3.9			3.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	4.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	30.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	292	118	399	403	108	225
Future Volume (vph)	292	118	399	403	108	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	321	130	438	443	119	247
RTOR Reduction (vph)	0	0	0	288	0	219
Lane Group Flow (vph)	321	130	438	155	119	28
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	8.1	24.0	11.9	11.9	4.1	4.1
Effective Green, g (s)	8.1	24.0	11.9	11.9	4.1	4.1
Actuated g/C Ratio	0.22	0.66	0.33	0.33	0.11	0.11
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	397	2352	1166	521	389	179
v/s Ratio Prot	c0.18	0.04	c0.12		c0.03	
v/s Ratio Perm				0.10		0.02
v/c Ratio	0.81	0.06	0.38	0.30	0.31	0.16
Uniform Delay, d1	13.3	2.1	9.3	9.0	14.7	14.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.5	0.0	0.2	0.3	2.0	1.9
Delay (s)	24.8	2.1	9.5	9.3	16.7	16.3
Level of Service	C	A	A	A	B	B
Approach Delay (s)		18.2	9.4		16.4	
Approach LOS		B	A		B	

Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	36.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	420	42	100	1003	70	54	30	71	27	32	106
Future Volume (vph)	144	420	42	100	1003	70	54	30	71	27	32	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.98	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.94			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1768	3478		1748	3485			1692			1653	
Flt Permitted	0.14	1.00		0.48	1.00			0.83			0.95	
Satd. Flow (perm)	266	3478		891	3485			1429			1578	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	145	424	42	101	1013	71	55	30	72	27	32	107
RTOR Reduction (vph)	0	6	0	0	5	0	0	39	0	0	85	0
Lane Group Flow (vph)	145	460	0	101	1079	0	0	118	0	0	81	0
Confl. Peds. (#/hr)	36		12	12		36	31		18	18		31
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	38.6	38.6		26.8	26.8			10.6			10.6	
Effective Green, g (s)	38.6	38.6		26.8	26.8			10.6			10.6	
Actuated g/C Ratio	0.67	0.67		0.47	0.47			0.19			0.19	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	384	2347		417	1632			264			292	
v/s Ratio Prot	c0.05	0.13			c0.31							
v/s Ratio Perm	0.20			0.11				c0.08			0.05	
v/c Ratio	0.38	0.20		0.24	0.66			0.45			0.28	
Uniform Delay, d1	5.8	3.5		9.1	11.7			20.7			20.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.6	0.0		0.3	1.0			1.2			0.5	
Delay (s)	6.4	3.5		9.4	12.7			21.9			20.5	
Level of Service	A	A		A	B			C			C	
Approach Delay (s)		4.2			12.4			21.9			20.5	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	11.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	57.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	9	14	138	164	22
Future Vol, veh/h	16	9	14	138	164	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	9	15	145	173	23
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.8	8.2	8.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	9%	64%	0%
Vol Thru, %	91%	0%	88%
Vol Right, %	0%	36%	12%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	152	25	186
LT Vol	14	16	0
Through Vol	138	0	164
RT Vol	0	9	22
Lane Flow Rate	160	26	196
Geometry Grp	1	1	1
Degree of Util (X)	0.184	0.034	0.219
Departure Headway (Hd)	4.144	4.605	4.028
Convergence, Y/N	Yes	Yes	Yes
Cap	859	782	885
Service Time	2.205	2.605	2.086
HCM Lane V/C Ratio	0.186	0.033	0.221
HCM Control Delay	8.2	7.8	8.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.7	0.1	0.8

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Vol, veh/h	11	12	7	0	11	97	6	88	0	166	93	25
Future Vol, veh/h	11	12	7	0	11	97	6	88	0	166	93	25
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	13	8	0	12	104	6	95	0	178	100	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.2	8.1	8.3	10.2
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	37%	0%	58%
Vol Thru, %	94%	40%	10%	33%
Vol Right, %	0%	23%	90%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	94	30	108	284
LT Vol	6	11	0	166
Through Vol	88	12	11	93
RT Vol	0	7	97	25
Lane Flow Rate	101	32	116	305
Geometry Grp	1	1	1	1
Degree of Util (X)	0.13	0.044	0.141	0.378
Departure Headway (Hd)	4.623	4.947	4.371	4.452
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	775	723	820	809
Service Time	2.653	2.984	2.401	2.476
HCM Lane V/C Ratio	0.13	0.044	0.141	0.377
HCM Control Delay	8.3	8.2	8.1	10.2
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	0.4	0.1	0.5	1.8

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✥			✥			✥			✥	
Traffic Vol, veh/h	49	6	7	0	3	13	6	25	5	9	23	51
Future Vol, veh/h	49	6	7	0	3	13	6	25	5	9	23	51
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	7	8	0	4	16	7	30	6	11	28	61
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	6.9	7.4	7.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	79%	0%	11%
Vol Thru, %	69%	10%	19%	28%
Vol Right, %	14%	11%	81%	61%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	62	16	83
LT Vol	6	49	0	9
Through Vol	25	6	3	23
RT Vol	5	7	13	51
Lane Flow Rate	43	75	19	100
Geometry Grp	1	1	1	1
Degree of Util (X)	0.05	0.089	0.02	0.105
Departure Headway (Hd)	4.123	4.288	3.753	3.782
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	860	830	941	938
Service Time	2.189	2.343	1.826	1.843
HCM Lane V/C Ratio	0.05	0.09	0.02	0.107
HCM Control Delay	7.4	7.8	6.9	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.1	0.4

Movement	EBT	EBR	NBR	SBL2	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1196	1	35	766	26	1135
Future Volume (vph)	1196	1	35	766	26	1135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.91	0.91	0.88
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		0.86	1.00	1.00	0.85
Flt Protected	1.00		1.00	0.95	0.96	1.00
Satd. Flow (prot)	3539		1611	3221	1622	2686
Flt Permitted	1.00		1.00	0.95	0.96	1.00
Satd. Flow (perm)	3539		1611	3221	1622	2686
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1259	1	37	806	27	1195
RTOR Reduction (vph)	0	0	0	355	160	764
Lane Group Flow (vph)	1260	0	37	201	117	431
Confl. Peds. (#/hr)		5				10
Turn Type	NA		Prot	Split	NA	Perm
Protected Phases	2		5	4	4	
Permitted Phases						4
Actuated Green, G (s)	36.7		3.4	29.4	29.4	29.4
Effective Green, g (s)	36.7		3.4	29.4	29.4	29.4
Actuated g/C Ratio	0.45		0.04	0.36	0.36	0.36
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1593		67	1161	585	968
v/s Ratio Prot	c0.36		c0.02	0.06	0.07	
v/s Ratio Perm						c0.16
v/c Ratio	0.79		0.55	0.17	0.20	0.45
Uniform Delay, d1	19.1		38.3	17.8	17.9	19.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8		9.5	0.1	0.2	0.3
Delay (s)	21.9		47.8	17.8	18.1	20.2
Level of Service	C		D	B	B	C
Approach Delay (s)	21.9				19.2	
Approach LOS	C				B	

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	81.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	305	0	217	0	0	0	676	527	0	105	321	529
Future Volume (vph)	305	0	217	0	0	0	676	527	0	105	321	529
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0				4.0	4.0		2.5	4.0	4.0
Lane Util. Factor	0.97		0.88				0.97	0.95		1.00	0.95	0.88
Frpb, ped/bikes	1.00		0.98				1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00		1.00				1.00	1.00		1.00	1.00	1.00
Frt	1.00		0.85				1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3422		2724				3433	3539		1770	3539	2709
Flt Permitted	0.95		1.00				0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3422		2724				3433	3539		1770	3539	2709
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	339	0	241	0	0	0	751	586	0	117	357	588
RTOR Reduction (vph)	0	0	190	0	0	0	0	0	0	0	0	430
Lane Group Flow (vph)	339	0	51	0	0	0	751	586	0	117	357	158
Confl. Peds. (#/hr)	4		1				10					10
Confl. Bikes (#/hr)			1									
Turn Type	Perm		Perm				Prot	NA		Prot	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases	4		4									6
Actuated Green, G (s)	10.6		10.6				14.2	21.9		7.3	13.5	13.5
Effective Green, g (s)	10.6		10.6				14.2	21.9		7.3	13.5	13.5
Actuated g/C Ratio	0.21		0.21				0.28	0.44		0.15	0.27	0.27
Clearance Time (s)	4.0		4.0				4.0	4.0		2.5	4.0	4.0
Vehicle Extension (s)	3.0		3.0				3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	721		574				969	1540		256	949	727
v/s Ratio Prot							c0.22	c0.17		0.07	0.10	
v/s Ratio Perm	c0.10		0.02									0.06
v/c Ratio	0.47		0.09				0.78	0.38		0.46	0.38	0.22
Uniform Delay, d1	17.4		16.0				16.6	9.6		19.7	15.0	14.3
Progression Factor	1.00		1.00				1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5		0.1				3.9	0.2		1.3	0.3	0.2
Delay (s)	17.9		16.0				20.5	9.8		21.0	15.2	14.4
Level of Service	B		B				C	A		C	B	B
Approach Delay (s)		17.1			0.0			15.8			15.4	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	50.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection						
Int Delay, s/veh	0.8					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	52	95	1032	508	29
Future Vol, veh/h	0	52	95	1032	508	29
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Yield
Storage Length	-	0	440	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	57	103	1122	552	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	277	553	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	720	1013	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	719	1012	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1012	-	719	-	-
HCM Lane V/C Ratio	0.102	-	0.079	-	-
HCM Control Delay (s)	9	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.3	-	-

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	191	170	405	1007	396	162
Future Volume (vph)	191	170	405	1007	396	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	3539	3539	1554
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	3539	3539	1554
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	205	183	435	1083	426	174
RTOR Reduction (vph)	0	161	0	0	0	103
Lane Group Flow (vph)	205	22	435	1083	426	71
Confl. Peds. (#/hr)	3		7			7
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)	9.0	9.0	23.0	57.0	30.0	30.0
Effective Green, g (s)	9.0	9.0	23.0	57.0	30.0	30.0
Actuated g/C Ratio	0.12	0.12	0.31	0.77	0.41	0.41
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	417	192	550	2725	1434	630
v/s Ratio Prot	c0.06		c0.25	c0.31	0.12	
v/s Ratio Perm		0.01				0.05
v/c Ratio	0.49	0.12	0.79	0.40	0.30	0.11
Uniform Delay, d1	30.4	29.0	23.3	2.8	14.9	13.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.3	7.6	0.4	0.5	0.4
Delay (s)	31.3	29.2	30.9	3.2	15.4	14.1
Level of Service	C	C	C	A	B	B
Approach Delay (s)	30.3			11.2	15.0	
Approach LOS	C			B	B	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	0	89	10	0	90
Future Vol, veh/h	10	0	89	10	0	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	0	105	12	0	106

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	217	111	0	0	117	0
Stage 1	111	-	-	-	-	-
Stage 2	106	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	771	942	-	-	1471	-
Stage 1	914	-	-	-	-	-
Stage 2	918	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	771	942	-	-	1471	-
Mov Cap-2 Maneuver	771	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	918	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	771	1471	-
HCM Lane V/C Ratio	-	-	0.015	-	-
HCM Control Delay (s)	-	-	9.7	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection						
Int Delay, s/veh	1.9					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	16	39	21	0
Future Vol, veh/h	0	20	16	39	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	24	19	47	25	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	66	0	-	0	67	43
Stage 1	-	-	-	-	43	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1536	-	-	-	938	1027
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	999	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1536	-	-	-	938	1027
Mov Cap-2 Maneuver	-	-	-	-	938	-
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	999	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1536	-	-	-	938
HCM Lane V/C Ratio	-	-	-	-	0.027
HCM Control Delay (s)	0	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	0	0	39	101	39
Future Vol, veh/h	21	0	0	39	101	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	0	0	44	115	44

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	181	137	159	0	-	0
Stage 1	137	-	-	-	-	-
Stage 2	44	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	808	911	1420	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	978	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	808	911	1420	-	-	-
Mov Cap-2 Maneuver	808	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	978	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1420	-	808	-	-
HCM Lane V/C Ratio	-	-	0.03	-	-
HCM Control Delay (s)	0	-	9.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	8	3	119	5	38	11	574	122	29	217	5
Future Volume (vph)	1	8	3	119	5	38	11	574	122	29	217	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00		0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1851	1583		1777	1536	1770	1863	1547	1768	1857	
Flt Permitted		0.97	1.00		0.73	1.00	0.61	1.00	1.00	0.35	1.00	
Satd. Flow (perm)		1796	1583		1354	1536	1138	1863	1547	643	1857	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1	9	3	128	5	41	12	617	131	31	233	5
RTOR Reduction (vph)	0	0	2	0	0	33	0	0	58	0	2	0
Lane Group Flow (vph)	0	10	1	0	133	8	12	617	73	31	236	0
Confl. Peds. (#/hr)	4					4			4	4		
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		6.8	6.8		6.8	6.8	18.8	18.8	18.8	18.8	18.8	
Effective Green, g (s)		6.8	6.8		6.8	6.8	18.8	18.8	18.8	18.8	18.8	
Actuated g/C Ratio		0.20	0.20		0.20	0.20	0.56	0.56	0.56	0.56	0.56	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		363	320		274	310	636	1042	865	359	1039	
v/s Ratio Prot								c0.33			0.13	
v/s Ratio Perm		0.01	0.00		c0.10	0.01	0.01		0.05	0.05		
v/c Ratio		0.03	0.00		0.49	0.03	0.02	0.59	0.08	0.09	0.23	
Uniform Delay, d1		10.7	10.7		11.9	10.7	3.3	4.9	3.4	3.4	3.7	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.0	0.0		1.4	0.0	0.0	0.9	0.0	0.1	0.1	
Delay (s)		10.8	10.7		13.2	10.8	3.3	5.8	3.5	3.5	3.8	
Level of Service		B	B		B	B	A	A	A	A	A	
Approach Delay (s)		10.8			12.6			5.3			3.8	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	33.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	384	353	852	399	112	232
Future Volume (vph)	384	353	852	399	112	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	417	384	926	434	122	252
RTOR Reduction (vph)	0	0	0	301	0	179
Lane Group Flow (vph)	417	384	926	133	122	73
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	19.8	48.1	24.3	24.3	23.0	23.0
Effective Green, g (s)	19.8	48.1	24.3	24.3	23.0	23.0
Actuated g/C Ratio	0.25	0.61	0.31	0.31	0.29	0.29
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	443	2152	1087	486	998	460
v/s Ratio Prot	c0.24	0.11	c0.26		0.04	
v/s Ratio Perm				0.08		c0.05
v/c Ratio	0.94	0.18	0.85	0.27	0.12	0.16
Uniform Delay, d1	29.1	6.8	25.7	20.7	20.6	20.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.4	0.0	6.6	0.3	0.3	0.7
Delay (s)	57.5	6.9	32.3	21.0	20.9	21.6
Level of Service	E	A	C	C	C	C
Approach Delay (s)		33.2	28.7		21.4	
Approach LOS		C	C		C	

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	79.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	1056	14	93	1431	70	17	35	166	27	76	67
Future Volume (vph)	134	1056	14	93	1431	70	17	35	166	27	76	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.97			0.98	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.90			0.95	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1770	3529		1748	3505			1617			1718	
Flt Permitted	0.09	1.00		0.25	1.00			0.97			0.88	
Satd. Flow (perm)	169	3529		465	3505			1581			1526	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	141	1112	15	98	1506	74	18	37	175	28	80	71
RTOR Reduction (vph)	0	1	0	0	3	0	0	61	0	0	32	0
Lane Group Flow (vph)	141	1126	0	98	1577	0	0	169	0	0	147	0
Confl. Peds. (#/hr)	16		25	25		16	39		33	33		39
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	49.1	49.1		40.0	40.0			12.6			12.6	
Effective Green, g (s)	49.1	49.1		40.0	40.0			12.6			12.6	
Actuated g/C Ratio	0.70	0.70		0.57	0.57			0.18			0.18	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	236	2485		266	2011			285			275	
v/s Ratio Prot	c0.04	0.32			c0.45							
v/s Ratio Perm	0.38			0.21				c0.11			0.10	
v/c Ratio	0.60	0.45		0.37	0.78			0.59			0.53	
Uniform Delay, d1	10.5	4.5		8.0	11.5			26.2			25.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	4.0	0.1		0.9	2.1			3.3			2.0	
Delay (s)	14.5	4.6		8.9	13.6			29.5			27.9	
Level of Service	B	A		A	B			C			C	
Approach Delay (s)		5.7			13.3			29.5			27.9	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	69.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	8	14	205	148	20
Future Vol, veh/h	13	8	14	205	148	20
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	9	16	238	172	23
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.9	8.9	8.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	6%	62%	0%
Vol Thru, %	94%	0%	88%
Vol Right, %	0%	38%	12%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	219	21	168
LT Vol	14	13	0
Through Vol	205	0	148
RT Vol	0	8	20
Lane Flow Rate	255	24	195
Geometry Grp	1	1	1
Degree of Util (X)	0.293	0.032	0.222
Departure Headway (Hd)	4.137	4.79	4.096
Convergence, Y/N	Yes	Yes	Yes
Cap	861	752	865
Service Time	2.198	2.79	2.173
HCM Lane V/C Ratio	0.296	0.032	0.225
HCM Control Delay	8.9	7.9	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.2	0.1	0.8

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Vol, veh/h	70	0	11	0	0	0	10	86	0	0	101	42
Future Vol, veh/h	70	0	11	0	0	0	10	86	0	0	101	42
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	74	0	12	0	0	0	11	91	0	0	107	45
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	0	7.9	7.9
HCM LOS	A	-	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	86%	0%	0%
Vol Thru, %	90%	0%	100%	71%
Vol Right, %	0%	14%	0%	29%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	81	0	143
LT Vol	10	70	0	0
Through Vol	86	0	0	101
RT Vol	0	11	0	42
Lane Flow Rate	102	86	0	152
Geometry Grp	1	1	1	1
Degree of Util (X)	0.12	0.11	0	0.169
Departure Headway (Hd)	4.224	4.577	4.591	3.988
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	834	788	0	885
Service Time	2.321	2.577	2.594	2.08
HCM Lane V/C Ratio	0.122	0.109	0	0.172
HCM Control Delay	7.9	8.1	7.6	7.9
HCM Lane LOS	A	A	N	A
HCM 95th-tile Q	0.4	0.4	0	0.6

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✥			✥			✥			✥	
Traffic Vol, veh/h	60	7	7	0	8	13	5	25	5	6	23	73
Future Vol, veh/h	60	7	7	0	8	13	5	25	5	6	23	73
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	64	7	7	0	9	14	5	27	5	6	24	78
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7	7.4	7.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	81%	0%	6%
Vol Thru, %	71%	9%	38%	23%
Vol Right, %	14%	9%	62%	72%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	35	74	21	102
LT Vol	5	60	0	6
Through Vol	25	7	8	23
RT Vol	5	7	13	73
Lane Flow Rate	37	79	22	109
Geometry Grp	1	1	1	1
Degree of Util (X)	0.043	0.094	0.024	0.112
Departure Headway (Hd)	4.136	4.308	3.875	3.72
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	856	827	912	953
Service Time	2.206	2.362	1.947	1.783
HCM Lane V/C Ratio	0.043	0.096	0.024	0.114
HCM Control Delay	7.4	7.8	7	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.1	0.4

Movement	EBT	EBR	NBR	SBL2	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	944	1	35	1803	26	1061
Future Volume (vph)	944	1	35	1803	26	1061
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.91	0.91	0.88
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		0.86	1.00	1.00	0.85
Flt Protected	1.00		1.00	0.95	0.95	1.00
Satd. Flow (prot)	3539		1611	3221	1618	2695
Flt Permitted	1.00		1.00	0.95	0.95	1.00
Satd. Flow (perm)	3539		1611	3221	1618	2695
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1026	1	38	1960	28	1153
RTOR Reduction (vph)	0	0	0	721	339	580
Lane Group Flow (vph)	1027	0	38	612	316	573
Confl. Peds. (#/hr)		11				12
Turn Type	NA		Prot	Split	NA	Perm
Protected Phases	2		5	4	4	
Permitted Phases						4
Actuated Green, G (s)	32.5		3.8	41.0	41.0	41.0
Effective Green, g (s)	32.5		3.8	41.0	41.0	41.0
Actuated g/C Ratio	0.36		0.04	0.46	0.46	0.46
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1287		68	1478	742	1237
v/s Ratio Prot	c0.29		c0.02	0.19	0.20	
v/s Ratio Perm						c0.21
v/c Ratio	0.80		0.56	0.41	0.43	0.46
Uniform Delay, d1	25.5		41.9	16.1	16.2	16.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.5		9.6	0.2	0.4	0.3
Delay (s)	29.0		51.5	16.3	16.6	16.9
Level of Service	C		D	B	B	B
Approach Delay (s)	29.0				16.6	
Approach LOS	C				B	

Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	89.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	1121	199	367	1062	326	397	295	718	332	431	244
Future Volume (vph)	104	1121	199	367	1062	326	397	295	718	332	431	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95	1.00	0.97	0.95	0.88
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2661
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2661
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	111	1193	212	390	1130	347	422	314	764	353	459	260
RTOR Reduction (vph)	0	0	120	0	0	208	0	0	227	0	0	198
Lane Group Flow (vph)	111	1193	92	390	1130	139	422	314	537	353	459	62
Confl. Peds. (#/hr)	1						11					11
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	12.8	41.0	41.0	26.0	54.2	54.2	19.9	40.0	40.0	12.0	32.1	32.1
Effective Green, g (s)	12.8	41.0	41.0	26.0	54.2	54.2	19.9	40.0	40.0	12.0	32.1	32.1
Actuated g/C Ratio	0.09	0.30	0.30	0.19	0.40	0.40	0.15	0.30	0.30	0.09	0.24	0.24
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	167	1074	474	340	2041	635	506	1048	469	305	841	632
v/s Ratio Prot	0.06	c0.34		c0.22	0.22		0.12	0.09		c0.10	0.13	
v/s Ratio Perm			0.06			0.09			c0.34			0.02
v/c Ratio	0.66	1.11	0.19	1.15	0.55	0.22	0.83	0.30	1.14	1.16	0.55	0.10
Uniform Delay, d1	59.0	47.0	34.8	54.5	31.1	26.5	55.9	36.7	47.5	61.5	45.1	40.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.6	63.1	0.2	95.0	0.3	0.2	11.3	0.2	87.5	101.2	0.7	0.1
Delay (s)	68.6	110.1	35.0	149.5	31.4	26.7	67.2	36.8	135.0	162.7	45.8	40.2
Level of Service	E	F	C	F	C	C	E	D	F	F	D	D
Approach Delay (s)		96.6			55.2			95.4			82.9	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	80.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	94.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Intersection						
Int Delay, s/veh	0.5					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	84	1259	980	30
Future Vol, veh/h	0	23	84	1259	980	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	440	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	24	88	1311	1021	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	511	1021	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	508	675	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	508	675	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	675	-	508	-	-
HCM Lane V/C Ratio	0.13	-	0.047	-	-
HCM Control Delay (s)	11.1	-	12.4	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.1	-	-

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	358	256	582	1103	489	457
Future Volume (vph)	358	256	582	1103	489	457
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3362	1583	1770	3539	3539	1550
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3362	1583	1770	3539	3539	1550
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	373	267	606	1149	509	476
RTOR Reduction (vph)	0	235	0	0	0	237
Lane Group Flow (vph)	373	32	606	1149	509	239
Confl. Peds. (#/hr)	5		10			10
Turn Type	Perm	Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases	4	4				6
Actuated Green, G (s)	9.0	9.0	27.9	58.0	26.1	26.1
Effective Green, g (s)	9.0	9.0	27.9	58.0	26.1	26.1
Actuated g/C Ratio	0.12	0.12	0.37	0.77	0.35	0.35
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	403	189	658	2736	1231	539
v/s Ratio Prot			c0.34	c0.32	0.14	
v/s Ratio Perm	c0.11	0.02				0.15
v/c Ratio	0.93	0.17	0.92	0.42	0.41	0.44
Uniform Delay, d1	32.7	29.6	22.5	2.9	18.6	18.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	26.9	0.4	18.3	0.5	1.0	2.6
Delay (s)	59.5	30.1	40.8	3.3	19.6	21.5
Level of Service	E	C	D	A	B	C
Approach Delay (s)	47.2			16.3	20.5	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection						
Int Delay, s/veh	0					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	107	0	0	121
Future Vol, veh/h	0	0	107	0	0	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	114	0	0	129

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	243	114	0	0	114	0
Stage 1	114	-	-	-	-	-
Stage 2	129	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	745	939	-	-	1475	-
Stage 1	911	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	745	939	-	-	1475	-
Mov Cap-2 Maneuver	745	-	-	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1475	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection						
Int Delay, s/veh	0					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	25	35	0	0	0
Future Vol, veh/h	0	25	35	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	27	37	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	37	0	-	0	64	37
Stage 1	-	-	-	-	37	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1574	-	-	-	942	1035
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	996	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1574	-	-	-	942	1035
Mov Cap-2 Maneuver	-	-	-	-	942	-
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	996	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1574	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	0	0	21	107	19
Future Vol, veh/h	8	0	0	21	107	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	0	0	22	114	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	146	124	134	0	-	0
Stage 1	124	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	846	927	1451	-	-	-
Stage 1	902	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	846	927	1451	-	-	-
Mov Cap-2 Maneuver	846	-	-	-	-	-
Stage 1	902	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB		NB		SB	
HCM Control Delay, s	9.3		0		0	
HCM LOS	A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1451	-	846	-	-
HCM Lane V/C Ratio	-	-	0.01	-	-
HCM Control Delay (s)	0	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	8	3	124	5	38	12	574	130	29	217	5
Future Volume (vph)	1	8	3	124	5	38	12	574	130	29	217	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00		0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1851	1583		1777	1537	1770	1863	1547	1768	1857	
Flt Permitted		0.97	1.00		0.73	1.00	0.61	1.00	1.00	0.34	1.00	
Satd. Flow (perm)		1797	1583		1354	1537	1138	1863	1547	641	1857	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1	9	3	133	5	41	13	617	140	31	233	5
RTOR Reduction (vph)	0	0	2	0	0	33	0	0	62	0	2	0
Lane Group Flow (vph)	0	10	1	0	138	8	13	617	78	31	236	0
Confl. Peds. (#/hr)	4					4			4	4		
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Actuated Green, G (s)		7.0	7.0		7.0	7.0	19.1	19.1	19.1	19.1	19.1	
Effective Green, g (s)		7.0	7.0		7.0	7.0	19.1	19.1	19.1	19.1	19.1	
Actuated g/C Ratio		0.21	0.21		0.21	0.21	0.56	0.56	0.56	0.56	0.56	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		368	324		277	315	637	1043	866	359	1040	
v/s Ratio Prot								c0.33			0.13	
v/s Ratio Perm		0.01	0.00		c0.10	0.01	0.01		0.05	0.05		
v/c Ratio		0.03	0.00		0.50	0.03	0.02	0.59	0.09	0.09	0.23	
Uniform Delay, d1		10.8	10.8		12.0	10.8	3.3	4.9	3.5	3.5	3.8	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.0	0.0		1.4	0.0	0.0	0.9	0.0	0.1	0.1	
Delay (s)		10.9	10.8		13.4	10.9	3.4	5.8	3.5	3.6	3.9	
Level of Service		B	B		B	B	A	A	A	A	A	
Approach Delay (s)		10.8			12.8			5.4			3.9	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	34.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	392	353	852	400	112	234
Future Volume (vph)	392	353	852	400	112	234
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	384	926	435	122	254
RTOR Reduction (vph)	0	0	0	302	0	180
Lane Group Flow (vph)	426	384	926	133	122	74
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	20.0	48.2	24.2	24.2	23.0	23.0
Effective Green, g (s)	20.0	48.2	24.2	24.2	23.0	23.0
Actuated g/C Ratio	0.25	0.61	0.31	0.31	0.29	0.29
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	446	2153	1081	483	996	459
v/s Ratio Prot	c0.24	0.11	c0.26		0.04	
v/s Ratio Perm				0.08		c0.05
v/c Ratio	0.96	0.18	0.86	0.28	0.12	0.16
Uniform Delay, d1	29.2	6.8	25.9	20.9	20.7	20.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	31.1	0.0	6.8	0.3	0.3	0.7
Delay (s)	60.3	6.8	32.7	21.2	20.9	21.7
Level of Service	E	A	C	C	C	C
Approach Delay (s)		34.9	29.0		21.4	
Approach LOS		C	C		C	

Intersection Summary			
HCM 2000 Control Delay	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	79.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	1056	14	143	1431	70	37	36	204	27	77	67
Future Volume (vph)	135	1056	14	143	1431	70	37	36	204	27	77	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.97			0.98	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.90			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	3528		1747	3505			1616			1719	
Flt Permitted	0.09	1.00		0.25	1.00			0.95			0.89	
Satd. Flow (perm)	167	3528		464	3505			1540			1547	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	142	1112	15	151	1506	74	39	38	215	28	81	71
RTOR Reduction (vph)	0	1	0	0	3	0	0	55	0	0	31	0
Lane Group Flow (vph)	142	1126	0	151	1577	0	0	237	0	0	149	0
Confl. Peds. (#/hr)	16		25	25		16	39		33	33		39
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	48.8	48.8		40.7	40.7			16.5			16.5	
Effective Green, g (s)	48.8	48.8		40.7	40.7			16.5			16.5	
Actuated g/C Ratio	0.67	0.67		0.56	0.56			0.23			0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	200	2348		257	1946			346			348	
v/s Ratio Prot	c0.04	0.32			c0.45							
v/s Ratio Perm	0.43			0.33				c0.15			0.10	
v/c Ratio	0.71	0.48		0.59	0.81			0.68			0.43	
Uniform Delay, d1	12.3	6.0		10.8	13.2			26.0			24.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	11.0	0.2		3.4	2.7			5.5			0.8	
Delay (s)	23.3	6.2		14.2	15.8			31.5			25.2	
Level of Service	C	A		B	B			C			C	
Approach Delay (s)		8.1			15.7			31.5			25.2	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	73.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	8	14	263	198	20
Future Vol, veh/h	13	8	14	263	198	20
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	9	16	306	230	23
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.2	9.8	9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	5%	62%	0%
Vol Thru, %	95%	0%	91%
Vol Right, %	0%	38%	9%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	277	21	218
LT Vol	14	13	0
Through Vol	263	0	198
RT Vol	0	8	20
Lane Flow Rate	322	24	253
Geometry Grp	1	1	1
Degree of Util (X)	0.374	0.034	0.293
Departure Headway (Hd)	4.177	5.056	4.163
Convergence, Y/N	Yes	Yes	Yes
Cap	850	712	849
Service Time	2.259	3.056	2.263
HCM Lane V/C Ratio	0.379	0.034	0.298
HCM Control Delay	9.8	8.2	9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.7	0.1	1.2

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	8	11	0	7	97	10	86	0	164	101	42
Future Vol, veh/h	70	8	11	0	7	97	10	86	0	164	101	42
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	74	9	12	0	7	103	11	91	0	174	107	45
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9	8.3	8.7	10.9
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	79%	0%	53%
Vol Thru, %	90%	9%	7%	33%
Vol Right, %	0%	12%	93%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	89	104	307
LT Vol	10	70	0	164
Through Vol	86	8	7	101
RT Vol	0	11	97	42
Lane Flow Rate	102	95	111	327
Geometry Grp	1	1	1	1
Degree of Util (X)	0.137	0.136	0.139	0.415
Departure Headway (Hd)	4.829	5.163	4.511	4.574
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	738	691	790	784
Service Time	2.884	3.218	2.565	2.618
HCM Lane V/C Ratio	0.138	0.137	0.141	0.417
HCM Control Delay	8.7	9	8.3	10.9
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	0.5	0.5	0.5	2.1

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Vol, veh/h	69	7	7	0	8	13	5	25	5	6	23	79
Future Vol, veh/h	69	7	7	0	8	13	5	25	5	6	23	79
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	7	7	0	9	14	5	27	5	6	24	84
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.1	7.4	7.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	83%	0%	6%
Vol Thru, %	71%	8%	38%	21%
Vol Right, %	14%	8%	62%	73%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	35	83	21	108
LT Vol	5	69	0	6
Through Vol	25	7	8	23
RT Vol	5	7	13	79
Lane Flow Rate	37	88	22	115
Geometry Grp	1	1	1	1
Degree of Util (X)	0.043	0.106	0.024	0.119
Departure Headway (Hd)	4.157	4.33	3.894	3.725
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	850	822	907	950
Service Time	2.236	2.386	1.972	1.797
HCM Lane V/C Ratio	0.044	0.107	0.024	0.121
HCM Control Delay	7.4	7.9	7.1	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.4	0.1	0.4

Movement	EBT	EBR	NBR	SBL2	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	944	1	35	1803	26	1062
Future Volume (vph)	944	1	35	1803	26	1062
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.91	0.91	0.88
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.97
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		0.86	1.00	1.00	0.85
Flt Protected	1.00		1.00	0.95	0.95	1.00
Satd. Flow (prot)	3539		1611	3221	1618	2695
Flt Permitted	1.00		1.00	0.95	0.95	1.00
Satd. Flow (perm)	3539		1611	3221	1618	2695
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1026	1	38	1960	28	1154
RTOR Reduction (vph)	0	0	0	721	339	580
Lane Group Flow (vph)	1027	0	38	612	316	574
Confl. Peds. (#/hr)		11				12
Turn Type	NA		Prot	Split	NA	Perm
Protected Phases	2		5	4	4	
Permitted Phases						4
Actuated Green, G (s)	32.5		3.8	41.0	41.0	41.0
Effective Green, g (s)	32.5		3.8	41.0	41.0	41.0
Actuated g/C Ratio	0.36		0.04	0.46	0.46	0.46
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1287		68	1478	742	1237
v/s Ratio Prot	c0.29		c0.02	0.19	0.20	
v/s Ratio Perm						c0.21
v/c Ratio	0.80		0.56	0.41	0.43	0.46
Uniform Delay, d1	25.5		41.9	16.1	16.2	16.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.5		9.6	0.2	0.4	0.3
Delay (s)	29.0		51.5	16.3	16.6	16.9
Level of Service	C		D	B	B	B
Approach Delay (s)	29.0				16.6	
Approach LOS	C				B	

Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	89.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	1137	199	367	1096	335	397	302	718	338	431	256
Future Volume (vph)	115	1137	199	367	1096	335	397	302	718	338	431	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95	1.00	0.97	0.95	0.88
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2661
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2661
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	122	1210	212	390	1166	356	422	321	764	360	459	272
RTOR Reduction (vph)	0	0	119	0	0	216	0	0	227	0	0	207
Lane Group Flow (vph)	122	1210	93	390	1166	140	422	321	537	360	459	65
Confl. Peds. (#/hr)	1						11					11
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	14.0	41.0	41.0	26.0	53.0	53.0	19.9	40.0	40.0	12.0	32.1	32.1
Effective Green, g (s)	14.0	41.0	41.0	26.0	53.0	53.0	19.9	40.0	40.0	12.0	32.1	32.1
Actuated g/C Ratio	0.10	0.30	0.30	0.19	0.39	0.39	0.15	0.30	0.30	0.09	0.24	0.24
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	183	1074	474	340	1996	621	506	1048	469	305	841	632
v/s Ratio Prot	0.07	c0.34		c0.22	0.23		0.12	0.09		c0.10	0.13	
v/s Ratio Perm			0.06			0.09			c0.34			0.02
v/c Ratio	0.67	1.13	0.20	1.15	0.58	0.23	0.83	0.31	1.14	1.18	0.55	0.10
Uniform Delay, d1	58.3	47.0	34.8	54.5	32.3	27.3	55.9	36.8	47.5	61.5	45.1	40.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.8	69.3	0.2	95.0	0.4	0.2	11.3	0.2	87.5	109.7	0.7	0.1
Delay (s)	67.1	116.3	35.0	149.5	32.8	27.5	67.2	36.9	135.0	171.2	45.8	40.3
Level of Service	E	F	D	F	C	C	E	D	F	F	D	D
Approach Delay (s)		101.2			55.6			95.2			85.8	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	82.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	103	1259	980	30
Future Vol, veh/h	0	23	103	1259	980	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	0	440	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	24	107	1311	1021	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	511	1021	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	508	675	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	508	675	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	675	-	508	-	-
HCM Lane V/C Ratio	0.159	-	0.047	-	-
HCM Control Delay (s)	11.3	-	12.4	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.6	-	0.1	-	-

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	358	256	582	1103	492	457
Future Volume (vph)	358	256	582	1103	492	457
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	0.98	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3362	1583	1770	3539	3539	1550
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3362	1583	1770	3539	3539	1550
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	373	267	606	1149	512	476
RTOR Reduction (vph)	0	235	0	0	0	237
Lane Group Flow (vph)	373	32	606	1149	513	239
Confl. Peds. (#/hr)	5		10			10
Turn Type	Perm	Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases	4	4				6
Actuated Green, G (s)	9.0	9.0	27.9	58.0	26.1	26.1
Effective Green, g (s)	9.0	9.0	27.9	58.0	26.1	26.1
Actuated g/C Ratio	0.12	0.12	0.37	0.77	0.35	0.35
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	403	189	658	2736	1231	539
v/s Ratio Prot			c0.34	c0.32	0.14	
v/s Ratio Perm	c0.11	0.02				0.15
v/c Ratio	0.93	0.17	0.92	0.42	0.42	0.44
Uniform Delay, d1	32.7	29.6	22.5	2.9	18.6	18.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	26.9	0.4	18.3	0.5	1.0	2.6
Delay (s)	59.5	30.1	40.8	3.3	19.7	21.5
Level of Service	E	C	D	A	B	C
Approach Delay (s)	47.2			16.3	20.5	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection						
Int Delay, s/veh	0.5					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	0	109	11	0	121
Future Vol, veh/h	12	0	109	11	0	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	0	116	12	0	129

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	251	122	0	0	128	0
Stage 1	122	-	-	-	-	-
Stage 2	129	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	738	929	-	-	1458	-
Stage 1	903	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	738	929	-	-	1458	-
Mov Cap-2 Maneuver	738	-	-	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	738	1458	-
HCM Lane V/C Ratio	-	-	0.017	-	-
HCM Control Delay (s)	-	-	10	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection						
Int Delay, s/veh	1.6					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	25	35	43	22	0
Future Vol, veh/h	0	25	35	43	22	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	27	37	46	23	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	83	0	-	0	87	60
Stage 1	-	-	-	-	60	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1514	-	-	-	914	1005
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	996	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1514	-	-	-	914	1005
Mov Cap-2 Maneuver	-	-	-	-	914	-
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	996	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1514	-	-	-	914
HCM Lane V/C Ratio	-	-	-	-	0.026
HCM Control Delay (s)	0	-	-	-	9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	0	0	21	107	47
Future Vol, veh/h	22	0	0	21	107	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	0	0	22	114	50

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	161	139	164	0	-	0
Stage 1	139	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	830	909	1414	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	830	909	1414	-	-	-
Mov Cap-2 Maneuver	830	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	1001	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1414	-	830	-	-
HCM Lane V/C Ratio	-	-	0.028	-	-
HCM Control Delay (s)	0	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	1137	199	367	1096	335	397	302	718	338	431	256
Future Volume (vph)	115	1137	199	367	1096	335	397	302	718	338	431	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.95	1.00	0.97	0.95	0.88
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2665
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1563	1770	5085	1583	3433	3539	1583	3433	3539	2665
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	122	1210	212	390	1166	356	422	321	764	360	459	272
RTOR Reduction (vph)	0	0	116	0	0	188	0	0	44	0	0	223
Lane Group Flow (vph)	122	1210	96	390	1166	168	422	321	720	360	459	49
Confl. Peds. (#/hr)	1						11					11
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	13.4	43.1	43.1	30.0	59.7	59.7	15.0	19.9	49.9	17.8	22.7	22.7
Effective Green, g (s)	13.4	43.1	43.1	30.0	59.7	59.7	15.0	19.9	49.9	17.8	22.7	22.7
Actuated g/C Ratio	0.11	0.34	0.34	0.24	0.47	0.47	0.12	0.16	0.39	0.14	0.18	0.18
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	187	1202	531	418	2394	745	406	555	672	481	633	477
v/s Ratio Prot	0.07	c0.34		0.22	0.23		c0.12	0.09	c0.25	0.10	c0.13	
v/s Ratio Perm			0.06			0.11			0.20			0.02
v/c Ratio	0.65	1.01	0.18	0.93	0.49	0.22	1.04	0.58	1.07	0.75	0.73	0.10
Uniform Delay, d1	54.5	41.8	29.4	47.4	23.0	19.9	55.9	49.6	38.5	52.3	49.1	43.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.9	27.6	0.2	27.7	0.2	0.2	55.3	1.5	55.3	6.3	4.1	0.1
Delay (s)	62.4	69.4	29.6	75.2	23.2	20.0	111.2	51.0	93.8	58.6	53.2	43.6
Level of Service	E	E	C	E	C	C	F	D	F	E	D	D
Approach Delay (s)		63.4			33.2			89.5			52.6	
Approach LOS		E			C			F			D	

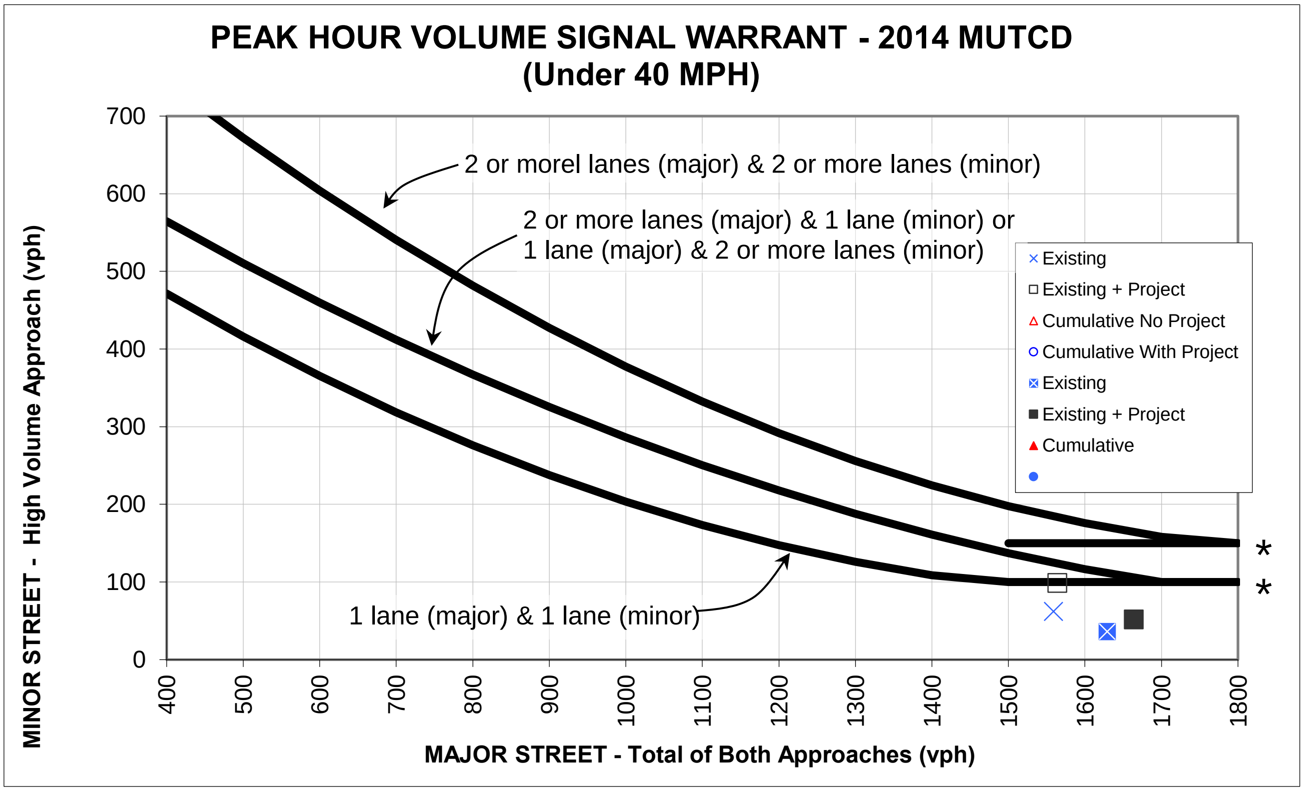
Intersection Summary			
HCM 2000 Control Delay	58.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	126.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Appendix C

Traffic Signal Warrants

#9 Bayshore Boulevard & Main Street



* NOTE: 150 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2012 MUTCD- Under 40 MPH

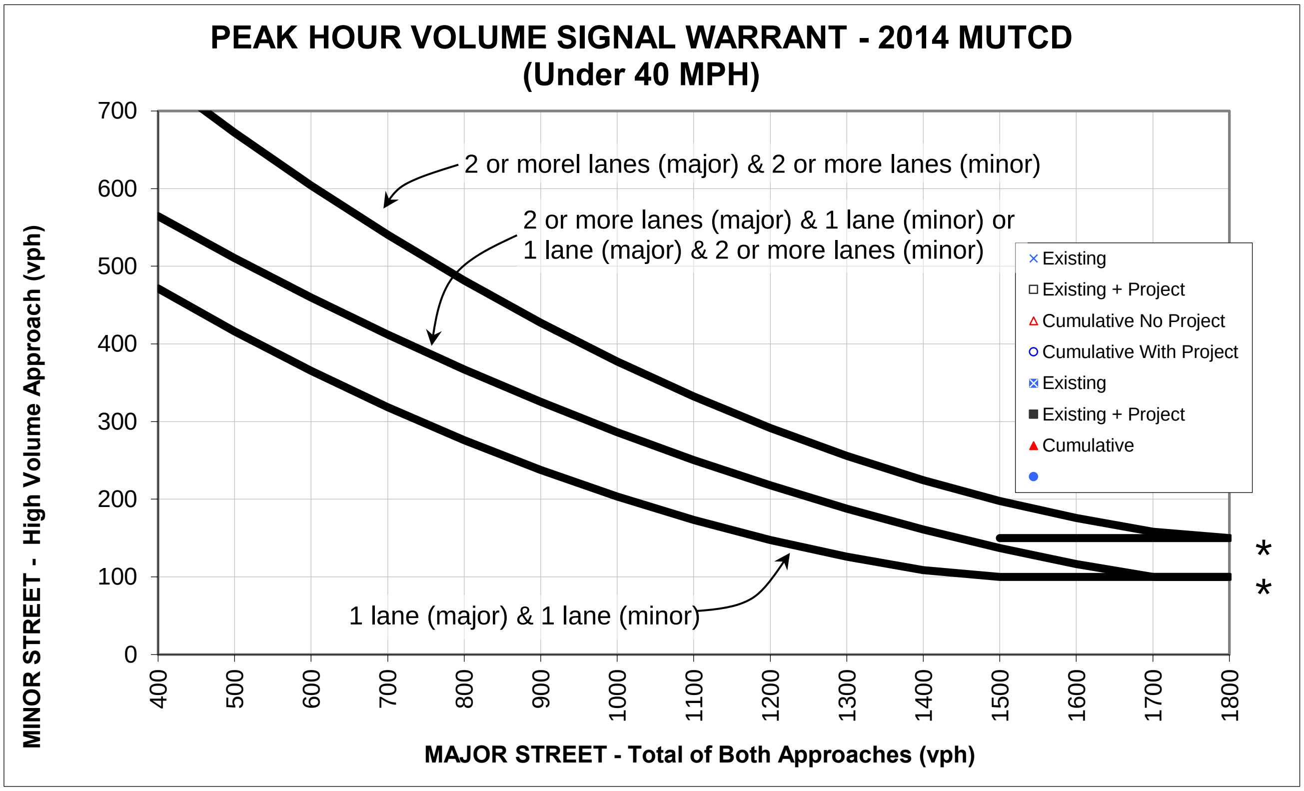
AM Peak Hour Volumes

		Approach Lanes One	Approach Lanes 2 or More	Existing	Existing + Project	Cumulative No Project	Cumulative With Project
Major Street - Both Approaches	Bayshore Blvd		x	1559	1564	2528	2529
Minor Street - Highest Approach	Main Street	x		62	99	61	91
			Warrant Met?	N	N	N	N

PM Peak Hour Volumes

		Approach Lanes One	Approach Lanes 2 or More	Existing	Existing + Project	Cumulative No Project	Cumulative With Project
Major Street - Both Approaches	Bayshore Blvd		x	1629	1664	2353	2372
Minor Street - Highest Approach	Main Street	x		36	52	23	23
			Warrant Met?	N	N	N	N

#11 Schwerin Street & New 'A' Street



* NOTE: 150 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2012 MUTCD- Under 40 MPH

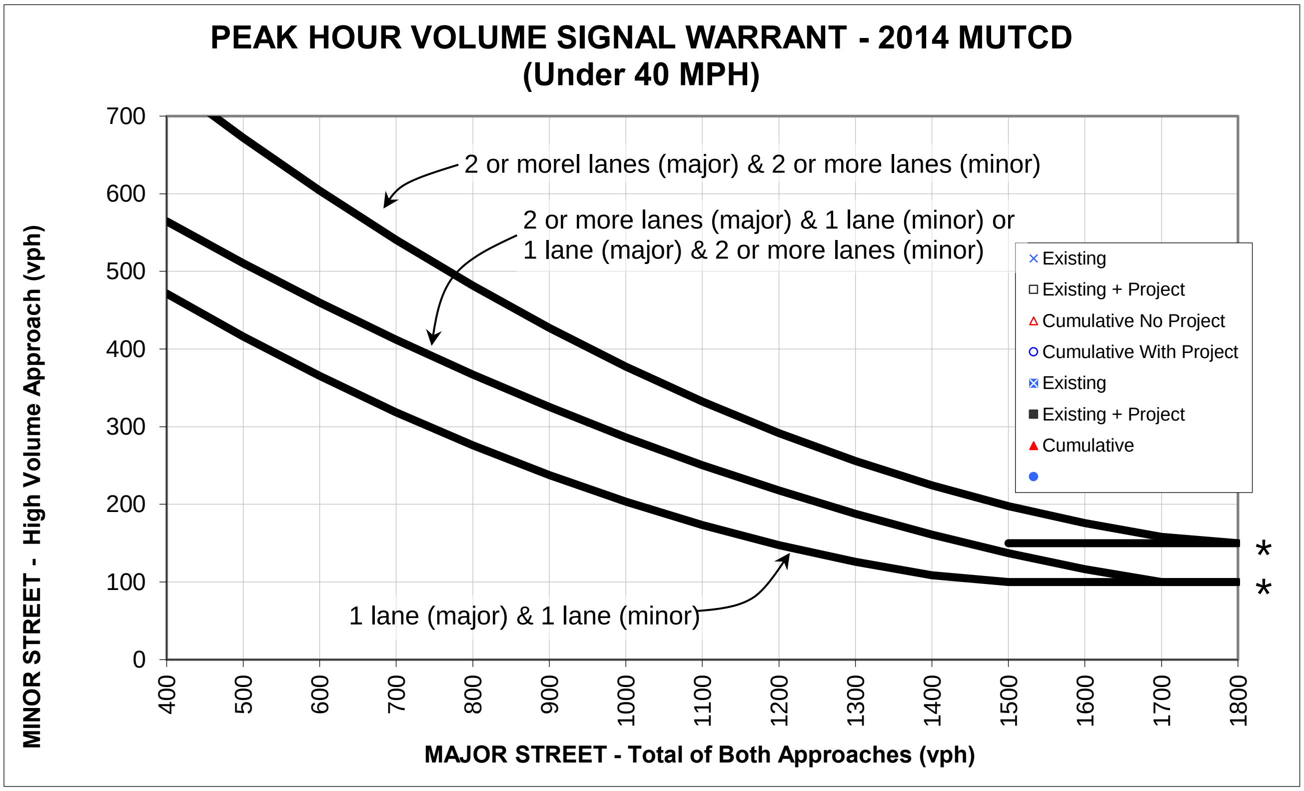
AM Peak Hour Volumes

		Approach Lanes				Cumulative	
		One	2 or More	Existing	Existing + Project	No Project	With Project
Major Street - Both Approaches	Schwerin Street	x		172	190	242	247
Minor Street - Highest Approach	New 'A' Street	x		0	10	0	10
			Warrant Met?	N	N	N	N

PM Peak Hour Volumes

		Approach Lanes				Cumulative	
		One	2 or More	Existing	Existing + Project	No Project	With Project
Major Street - Both Approaches	Schwerin Street	x		170	189	228	241
Minor Street - Highest Approach	New 'A' Street	x		0	10	0	12
			Warrant Met?	N	N	N	N

#12 New 'B' Street & Martin Street



* NOTE: 150 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2012 MUTCD- Under 40 MPH

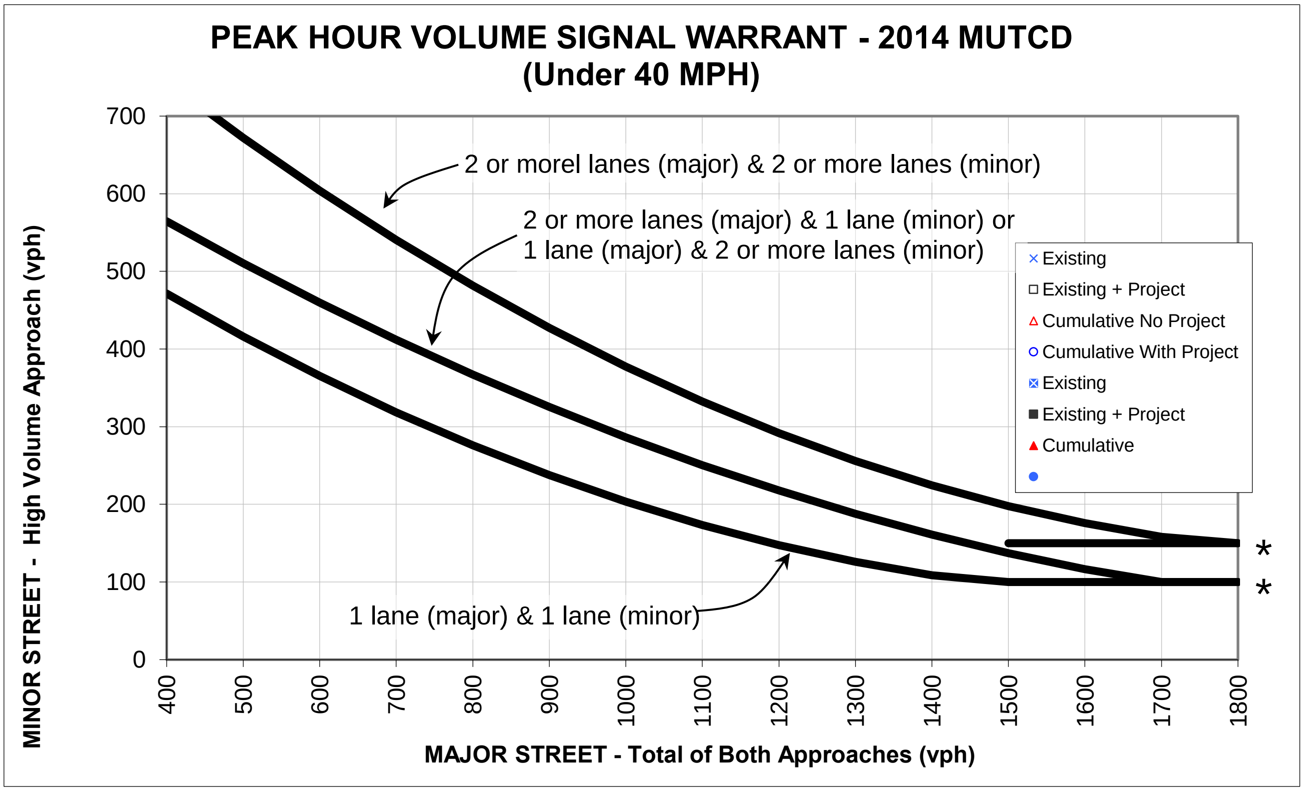
AM Peak Hour Volumes

		Approach Lanes				Cumulative	
		One	2 or More	Existing	Existing + Project	No Project	With Project
Major Street - Both Approaches	Martin Street	x		34	43	51	60
Minor Street - Highest Approach	New 'B' Street	x		0	42	0	42
			Warrant Met?	N	N	N	N

PM Peak Hour Volumes

		Approach Lanes				Cumulative	
		One	2 or More	Existing	Existing + Project	No Project	With Project
Major Street - Both Approaches	Martin Street	x		36	75	60	103
Minor Street - Highest Approach	New 'B' Street	x		0	21	0	22
			Warrant Met?	N	N	N	N

#13 Linda Vista Drive and Martin Street extension



* NOTE: 150 vph applies as the lower threshold volume for a minor street approach with 2 or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with 1 lane.

Peak Hour Volume Warrant Per 2012 MUTCD- Under 40 MPH

AM Peak Hour Volumes

		Approach Lanes One	Approach Lanes 2 or More	Existing	Existing + Project	Cumulative No Project	Cumulative With Project
Major Street - Both Approaches	Linda Vista Drive	x		93	112	72	89
Minor Street - Highest Approach	Martin Street ext	x		0	39	15	43
		Warrant Met?		N	N	N	N

PM Peak Hour Volumes

		Approach Lanes One	Approach Lanes 2 or More	Existing	Existing + Project	Cumulative No Project	Cumulative With Project
Major Street - Both Approaches	Linda Vista Drive	x		125	179	147	175
Minor Street - Highest Approach	Martin Street ext	x		0	21	8	22
		Warrant Met?		N	N	N	N