AIR QUALITY, HEALTH RISK, GREENHOUSE GAS, AND ENERGY IMPACT REPORT

REDLANDS AVENUE AND PLACENTIA AVENUE INDUSTRIAL PROJECT

PERRIS, CALIFORNIA

LSA

December 2022

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PERRIS, CALIFORNIA

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LIST OF ABBREVIATIONS AND ACRONYMS

°C	degrees Celsius
°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AAQS	ambient air quality standards
AB	Assembly Bill
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
BTU	British thermal units
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	corporate average fuel economy
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen Code	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan
CARB	California Air Resources Board
CAT	California Climate Action Team
CBC	California Building Code
CBSC	California Building Standards Commission
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
City	City of Perris
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent

County	County of Riverside
CPUC	California Public Utilities Commission
DPM	diesel particulate matter
EIA	Energy Information Administration
EIR	Environmental Impact Report
EMFAC	California Emissions Factor Model
EO	Executive Order
GCC	global climate change
GHG	greenhouse gas
GWh	gigawatt-hours
GWP	global warming potential
H_2S	hydrogen sulfide
HFCs	hydrofluorocarbons
HI	Hazard Index
HRA	Health Risk Assessment
IPCC	Intergovernmental Panel on Climate Change
kWh	kilowatt-hour
lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
MEI	maximally exposed individual
mg/m^3	milligrams per cubic meter
MICR	maximum individual cancer risk
MMT	million metric tons
MMT CO_2e	million metric tons of carbon dioxide equivalent
mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MT	metric tons
MT CO_2e	metric tons of carbon dioxide equivalent
N_2O	nitrous oxide
NAAQS	national ambient air quality standards

ND	no data available
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
O_3	ozone (or smog)
OPR	Governor's Office of Planning and Research
PFCs	perfluorocarbons
PM	particulate matter
$PM_{2.5}$	particulate matter less than 2.5 microns in size
PM_{10}	particulate matter less than 10 microns in size
ppb	parts per billion
ppm	parts per million
PRC	Public Resources Code
project	Redlands Avenue and Placentia Avenue Industrial Project
PVCCSP	Perris Valley Commerce Center Specific Plan
ROCs	reactive organic compounds
ROGs	reactive organic gases
RPS	Renewables Portfolio Standard
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SAFE	Safer, Affordable, Fuel-Efficient (Vehicles)
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SF_6	sulfur hexafluoride
SO_2	sulfur dioxide
SO_X	sulfur oxides

SoCalGas	Southern California Gas Company
sq ft	square foot/feet
TAC	toxic air contaminant
UNFCCC	United Nations Framework Convention on Climate Change
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VMT	vehicle miles traveled
VOCs	volatile organic compounds
ZEV	zero-emission vehicle
ZNE	zero net energy

INTRODUCTION

This air quality, heath risk, greenhouse gas (GHG), and energy impact report has been prepared to evaluate the potential air quality and GHG emissions impacts associated with the proposed Redlands Avenue and Placentia Avenue Industrial Project (project) in the City of Perris (City), California. This report follows the guidelines identified by the South Coast Air Quality Management District (SCAQMD) in its *California Environmental Quality Act (CEQA) Air Quality Handbook*,[1] and associated updates. In keeping with these guidelines, this analysis describes existing air quality, air quality and GHG emissions generated from project-related sources, regional air pollution, and global climate change. In addition, this analysis discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency. In addition, the proposed project site is located within the Perris Valley Commerce Center Specific Plan (PVCCSP) planning area of the City of Perris; therefore, applicable mitigation measures from the PVCCSP Environmental Impact Report (EIR) are identified.

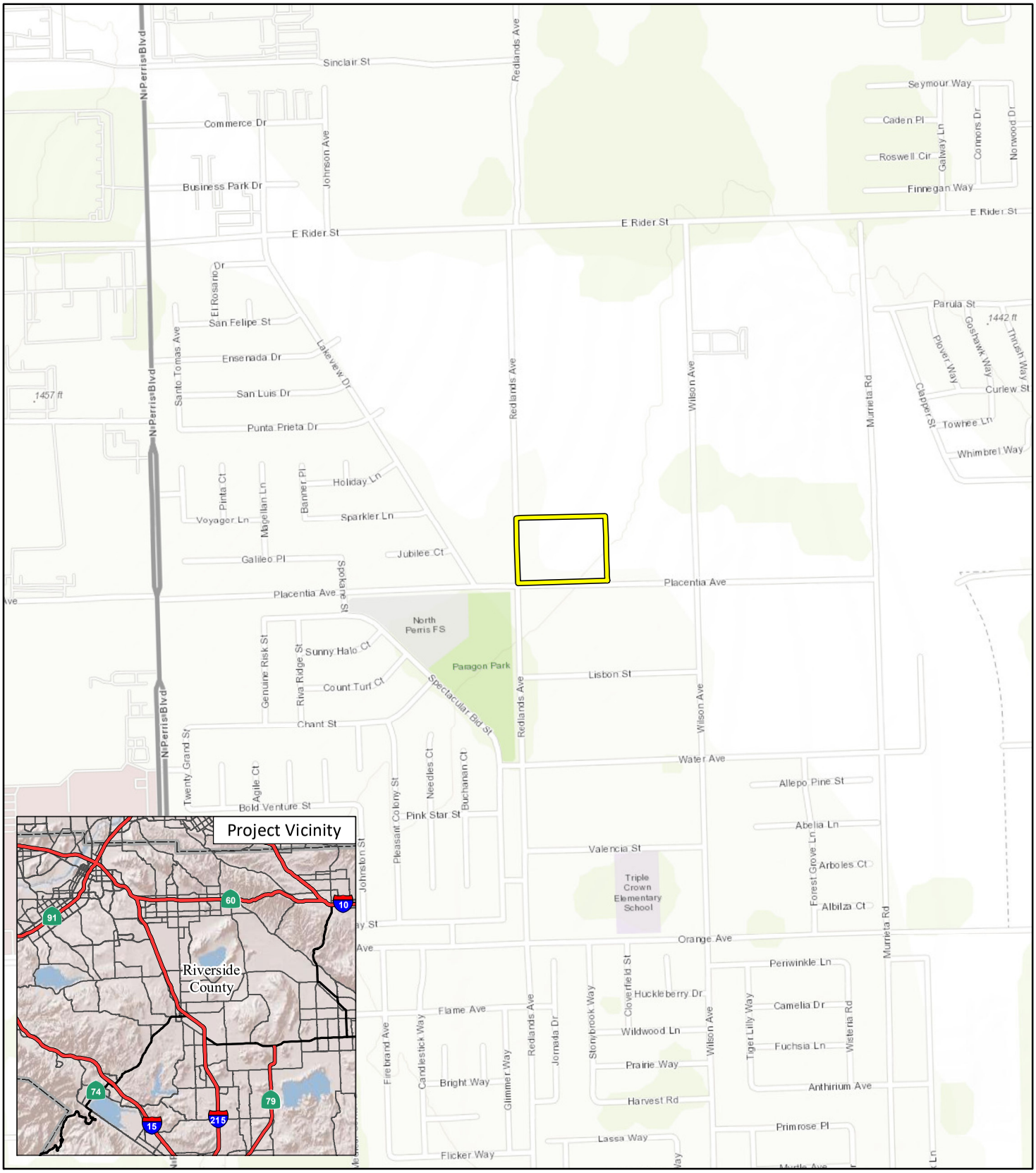
PROJECT LOCATION AND DESCRIPTION

The proposed project site is located on at the northeast corner of Redlands Avenue and Placentia Avenue in the City of Perris, Riverside County, California. The total project site is approximately 5.74 net acres. See Figure 1, Project Location and Vicinity, and Figure 2, Project Site Plan, below. The project site is currently undeveloped, though a trailer home and several cars were previously located on the lot which have been removed.

The proposed project would involve the construction and operation of a 121,000-square-foot (sq-ft) single-story light industrial warehouse building, consisting of 113,000 sq ft of warehouse space, 4,000 sq ft of ground floor office space, and 4,000 sq ft of mezzanine office. The project would include a total of 84 parking spaces including 12 spaces for low emitting, fuel efficient, and carpool/vanpool vehicles, nine of which would be electric vehicle-only spaces. The proposed project would also provide six bicycle spaces, 16 loading docks, and one grade door. In addition, the proposed project would include two outdoor employee break areas, including a bocce ball court and shaded seating area. The project would have approximately 47,507 sq ft of landscape area. The project would be consistent with the City's General Plan and Zoning Ordinance and therefore would not require a change to the General Plan land use designation or the zoning.

Typical operational characteristics include employees traveling to and from the site, delivery of products to the site, and truck loading and unloading. The project is assumed to operate 24 hours per day, 7 days per week; however, this may shift depending on the tenant, as the hours of operation are unknown. The proposed project would generate approximately 590 average daily trips, including 407 passenger vehicle trips, 40 two-axle truck trips, 32 three-axle truck trips, and 110 four+-axle truck trips.

[1] South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed December 2022).



LEGEND

Project Location

FIGURE 1

N

0 500 1000

FEET

SOURCE: ArcGIS Online Topographic Map (2020)

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Redlands and Placentia Industrial

Regional Project Location

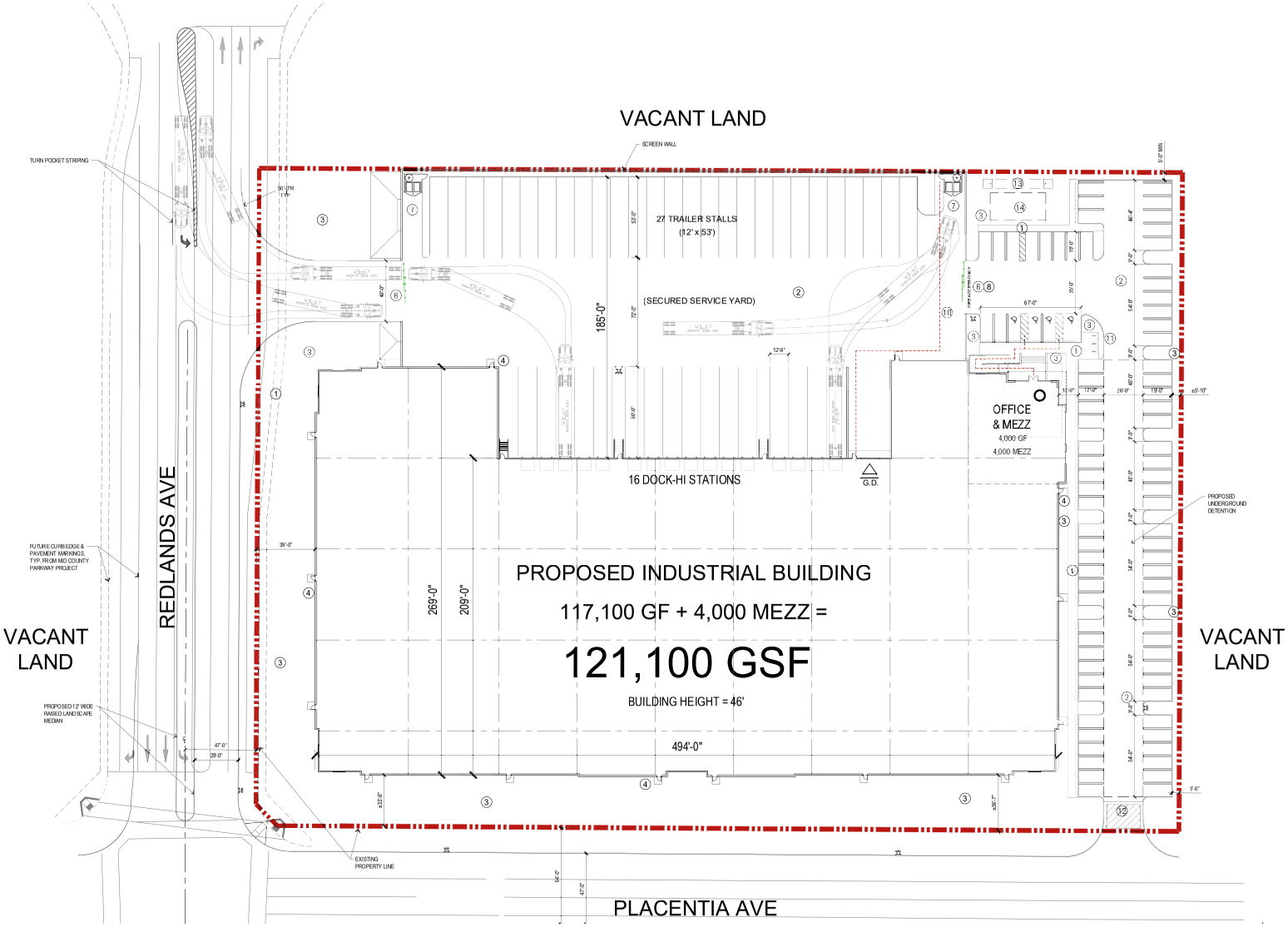

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FIGURE 2

0 15 30
FEET

SOURCE: AO Architecture

Redlands and Placentia Industrial

Site Plan

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Construction is anticipated to begin the fourth quarter of 2023 and would be anticipated to last for approximately 10 months, with project operation beginning in 2024. Based on the preliminary grading plans, the project would require the import of approximately 18,000 cubic yards of soil.

EXISTING LAND USES IN THE PROJECT AREA

For the purposes of this analysis, sensitive receptors are areas of the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, daycare centers, hospitals, parks, and similar uses that are sensitive to air quality. Impacts on sensitive receptors are of particular concern because those receptors are the population most vulnerable to the effects of air pollution.[2] The project site is surrounded primarily by vacant land and residential uses. The areas adjacent to the project site include the following uses: an existing trailer home and vacant land to the north and existing residential areas opposite of Placentia Avenue to the south and opposite Redlands Avenue to the west.

The closest sensitive receptors to the project site are an existing trailer home located on the lot to the immediate north of the project site at approximately 50 feet and residential uses such as single-family homes located approximately 100 feet from the project site southern boundary opposite Placentia Avenue. Other residential receptors are located approximately 400 feet west of the project site. There are no schools or hospitals located within 1,000 feet of the project site.

[2] South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed December 2022).

BACKGROUND

This section provides current background information on air pollutants and GHG emissions and their health effects. It also provides current regulatory background information, including information from the California Air Resources Board's (CARB) Air Quality and Land Use Handbook[3] (CARB Handbook); a description of the general health risks of toxics, and the significance criteria for project evaluation. In addition, this section provides background information on energy usage in the project area and provides regulatory background information, including federal, State, and local energy regulations.

AIR POLLUTANTS AND HEALTH EFFECTS

Both State and federal governments have established health-based ambient air quality standards (California Ambient Air Quality Standards [CAAQS] and National Ambient Air Quality Standards [NAAQS], respectively) for six criteria air pollutants:[4] carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter (PM). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Long-term exposure to elevated levels of criteria pollutants may result in adverse health effects. However, emission thresholds established by an air district are used to manage total regional emissions within an air basin based on the basin's attainment status for criteria pollutants. These emission thresholds were established for individual projects that would contribute to regional emissions and pollutant concentrations and could adversely affect or delay the projected attainment target year for certain criteria pollutants.

Because of the conservative nature of the thresholds and the basin-wide context of individual project emissions, there is no known direct correlation between a single project and localized air quality-related health effects. One individual project that generates emissions exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as ozone precursors like nitrogen oxides (NO_X) and volatile organic compounds (VOCs).

Occupants of facilities such as schools, daycare centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered to be more sensitive than the general public to air pollutants because these population groups have increased susceptibility to respiratory disease. Persons engaged in strenuous outdoor work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions, compared to commercial and industrial areas, because people generally spend longer periods of time at their residences, with greater associated exposure to ambient air quality conditions. Recreational uses

[3] California Air Resources Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April.

[4] Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

are also considered sensitive compared to commercial and industrial uses due to greater exposure to ambient air quality conditions associated with exercise.

Ozone

Rather than being directly emitted, ozone (smog) is formed by photochemical reactions between NO_X and VOC. Ozone is a pungent, colorless gas. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children. Ozone levels peak during the summer and early fall months.

Carbon Monoxide

CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. CO passes through the lungs into the bloodstream, where it interferes with the transfer of oxygen to body tissues.

Particulate Matter

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Respirable particles are those that are 10 microns or less in diameter, or PM_{10}. Fine, suspended particulate matter with an aerodynamic diameter of 2.5 microns or less, or $PM_{2.5}$, is not readily filtered out by the lungs. Nitrates, sulfates, dust, and combustion particulates are major components of PM_{10} and $PM_{2.5}$. These small particles can be directly emitted into the atmosphere as byproducts of fuel combustion; through abrasion, such as tire or brake lining wear; or through fugitive dust (wind or mechanical erosion of soil). They can also be formed in the atmosphere through chemical reactions. Particulates may transport carcinogens and other toxic compounds that adhere to the particle surfaces and can enter the human body through the lungs.

Nitrogen Dioxide

NO_2 is a reddish brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Aside from its contribution to ozone formation, NO_2 also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO_2 may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels. NO_2 decreases lung function and may reduce resistance to infection.

Sulfur Dioxide

SO_2 is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels in the region. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

Lead

Leaded gasoline (phased out in the United States beginning in 1973), paint (on older houses and cars), smelters (metal refineries), and the manufacture of lead storage batteries have been the primary sources of lead released into the atmosphere. Lead has multiple adverse neurotoxic health effects, and children are at special risk. Some lead-containing chemicals cause cancer in animals. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. Ambient lead concentrations are only monitored on an as-warranted, site-specific basis in California. On October 15, 2008, the United States Environmental Protection Agency (USEPA) strengthened the NAAQS for lead by lowering it from 1.5 to 0.15 micrograms per cubic meter ($\mu g/m^3$). The USEPA revised the monitoring requirements for lead in December 2010. These requirements focus on airports and large urban areas, resulting in an increase in 76 monitors nationally.

Volatile Organic Compounds

VOCs (also known as reactive organic gases [ROGs] and reactive organic compounds [ROCs]) are formed from the combustion of fuels and the evaporation of organic solvents. VOCs are not defined as criteria pollutants, however, because VOCs accumulate in the atmosphere more quickly during the winter, when sunlight is limited and photochemical reactions are slower, they are a prime component of the photochemical smog reaction. There are no attainment designations for VOCs.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated by the USEPA and the CARB. Some examples of TACs include benzene, butadiene, formaldehyde, and hydrogen sulfide. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants.

TACs do not have ambient air quality standards, but are regulated by the USEPA, CARB, and the SCAQMD. In 1998, the CARB identified particulate matter from diesel-fueled engines as a TAC. The CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.[5] High-volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (e.g., distribution centers and truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high-volume transit centers, and schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure.

Unlike TACs emitted from industrial and other stationary sources noted above, most diesel particulate matter (DPM) is emitted from mobile sources—primarily "off-road" sources such as construction and mining equipment, agricultural equipment, and truck-mounted refrigeration units, as well as "on-road" sources such as trucks and buses traveling on freeways and local roadways.

[5] CARB. 2000. Stationary Source Division and Mobile Source Control Division. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October.

Although not specifically monitored, recent studies indicate that exposure to diesel particulate matter may contribute significantly to a cancer risk (a risk of approximately 500 to 700 in 1,000,000) that is greater than all other measured TACs combined.[6] The technology for reducing DPM emissions from heavy-duty trucks is well established, and both State and federal agencies are moving aggressively to regulate engines and emission control systems to reduce and remediate diesel emissions. The CARB anticipated that by 2020, average statewide DPM concentrations will decrease by 85 percent from levels in 2000 with full implementation of the CARB's Diesel Risk Reduction Plan,[7] meaning that the statewide health risk from DPM is expected to decrease from 540 cancer cases in 1,000,000 to 21.5 cancer cases in 1,000,000. The CARB 2000 Diesel Risk Reduction Plan is still the most recent version and has not been updated.

Table A summarizes the sources and health effects of air pollutants discussed in this section. Table B presents a summary of CAAQS and NAAQS.

Table A: Sources and Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust • Natural events, such as decomposition of organic matter	• Reduced tolerance for exercise • Impairment of mental function • Impairment of fetal development • Death at high levels of exposure • Aggravation of some heart diseases (angina)
Nitrogen Dioxide (NO_2)	• Motor vehicle exhaust • High temperature stationary combustion • Atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility • Reduced plant growth • Formation of acid rain
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Impairment of cardiopulmonary function • Plant leaf injury
Lead (Pb)	• Contaminated soil	• Impairment of blood functions and nerve construction • Behavioral and hearing problems in children
Suspended Particulate Matter ($PM_{2.5}$ and PM_{10})	• Stationary combustion of solid fuels • Construction activities • Industrial processes • Atmospheric chemical reactions	• Reduced lung function • Aggravation of the effects of gaseous pollutants • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Soiling • Reduced visibility
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels • Smelting of sulfur-bearing metal ores Industrial processes	• Aggravation of respiratory diseases (asthma, emphysema) • Reduced lung function • Irritation of eyes • Reduced visibility • Plant injury • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board (2015).

6 CARB. 2000. Stationary Source Division and Mobile Source Control Division. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October.

7 Ibid.

Table B: Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]		Federal Standards[b]		
		Concentration[c]	Method[d]	Primary[c,e]	Secondary[c,f]	Method[g]
Ozone (O_3)[h]	1-Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM_{10})[i]	24-Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		–		
Fine Particulate Matter ($PM_{2.5}$)[i]	24-Hour	-		35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)	–	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m³)		–	–	
Nitrogen Dioxide (NO_2)[j]	Annual Arithmetic Mean	0.03 ppm (57 µg/m³)	Gas Phase Chemi-luminescence	53 ppb (100 µg/m³)	Same as Primary Standard	Gas Phase Chemi-luminescence
	1-Hour	0.18 ppm (339 µg/m³)		100 ppb (188 µg/m³)	-	
Lead (Pb)[l,m]	30-Day Average	1.5 µg/m³	Atomic Absorption	–	–	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m³ (for certain areas)[l]	Same as Primary Standard	
	Rolling 3-Month Average[i]	–		0.15 µg/m³		
Sulfur Dioxide (SO_2)[k]	24-Hour	0.04 ppm (105 µg/m³)	Ultraviolet Fluorescence	0.14 ppm (for certain areas)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3-Hour	–		–	0.5 ppm (1300 µg/m³)	
	1-Hour	0.25 ppm (655 µg/m³)		75 ppb (196 µg/m³)[k]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[k]	–	
Visibility-Reducing Particles[l]	8-Hour	See footnote n	Beta Attenuation and Transmittance through Filter Tape.	No Federal Standards		
Sulfates	24-Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[j]	24-Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Source: California Air Resources Board (2016) (Website: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf).

Table notes are provided on the following page.

[a] 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.

[b] 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. Contact USEPA for further clarification and current national policies.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

[e] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[f] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[g] Reference method as described by the USEPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the USEPA.

[h] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[i] 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.

[j] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[k] 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.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[l] 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.

[m] 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.

[n] 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.

°C = degrees Celsius
µg/m^3 = micrograms per cubic meter
CARB = California Air Resources Board
mg/m^3 = milligrams per cubic meter
ppb = parts per billion
ppm = parts per million
USEPA = United States Environmental Protection Agency

ENERGY

Electricity

Electricity is a manmade resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).

According to the most recent data available, in 2020, California's electricity was generated primarily by natural gas (37.06 percent), renewable sources (33.09 percent), large hydroelectric (12.21 percent), nuclear (9.33 percent), coal (2.74 percent), and other and unspecified sources. Total electric generation in California in 2020 was 272,576 gigawatt-hours (GWh), down 2 percent from the 2019 total generation of 277,704 GWh.[8]

The project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000-square-mile (sq mi) area of Central, Coastal, and Southern California.[9] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2020 was 83,532.6 GWh (32,475 GWh for the residential sector and 51,057 GWh for the non-residential sector). Total electricity consumption in Riverside County in 2020 was 16,857.9 GWh (16,857,930,966 kilowatt-hours (kWh).[10]

Natural Gas

Natural gas is a non-renewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[11]

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8 California Energy Commission (CEC). 2021a. *2020 Total System Electric Generation*. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation (accessed December 2022).

9 Southern California Edison (SCE). 2020. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed December 2022).

10 CEC. 2020b. Electricity Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/elecbycounty.aspx and http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed December 2022).

11 CEC. 2021d. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed December 2022).

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000 sq mi service area throughout Central and Southern California, from Visalia to the Mexican border.[12] According to the CEC, total natural gas consumption in the SoCalGas service area in 2020 was 5,231 million therms (2,426 million therms for the residential sector). Total natural gas consumption in Riverside County in 2020 was 436.9 million therms (436,941,555 therms).[13]

Fuel

Petroleum is also a non-renewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil, gasoline, and diesel.

The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2020.[14] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. The Act, which originally mandated a national fuel economy standard of 35 mpg by year 2020[15], applies to cars and light trucks of Model Years 2011 through 2020. In March 2020, the USEPA and National Highway Traffic Safety Administration (NHTSA) finalized the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks, further detailed below.

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. According to the most recent data available, total gasoline consumption in California was 289,918 thousand barrels or 1,464.7 trillion British thermal units (BTU) in 2020.[16] Of the total gasoline consumption, 273,289 thousand barrels or 1,380.7 trillion BTU were consumed for transportation.[17] Based on fuel consumption obtained from CARB's California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 295.2 million gallons of diesel and approximately 758.6 million gallons of gasoline will be consumed from vehicle trips in Riverside County in 2022.

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12 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: https://www3.socalgas.com/about-us/company-profile (accessed December 2022).

13 CEC. 2020c. Gas Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx and http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed December 2022).

14 U.S. Department of Transportation (USDOT). "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.dot.gov/bts/bts/content/average-fuel-efficiency-us-light-duty-vehicles (accessed December 2022).

15 U.S. Department of Energy. 2007. "Energy Independence & Security Act of 2007." Website: https://www.afdc.energy.gov/laws/eisa (accessed December 2022).

16 A British Thermal Unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

17 U.S. Department of Energy, EIA. 2021a. California State Profile and Energy Estimates. Table F3: Motor gasoline consumption, price, and expenditure estimates, 2020. Website: eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed December 2022).

GREENHOUSE GASES AND GLOBAL CLIMATE CHANGE

Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. The Earth's average near-surface atmospheric temperature rose 0.6 ± 0.2° Celsius (°C) or 1.1 ± 0.4° Fahrenheit (°F) in the 20th century. The prevailing scientific opinion on climate change is that most of the warming observed over the last 50 years is attributable to human activities. The increased amounts of carbon dioxide (CO_2) and other GHGs are the primary causes of the human-induced component of warming. GHGs are released by the burning of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect.[18]

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- CO_2
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF_6)

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO_2, methane, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this air quality analysis, the term "GHGs" will refer collectively to the six gases listed above.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The global warming potential is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere

[18] The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets heat from sunlight in and reduces the heat escaping, greenhouse gases like carbon dioxide, methane, and nitrous oxide in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of greenhouse gas results in global warming, the naturally occurring greenhouse effect is necessary to keep our planet at a comfortable temperature.

("atmospheric lifetime"). The GWP of each gas is measured relative to carbon dioxide, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e). Table C shows the GWP for each type of GHG. For example, SF_6 is 23,900 times more potent at contributing to global warming than CO_2.

Table C: Global Warming Potential of Greenhouse Gases

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-Year Time Horizon)
Carbon Dioxide	50-200	1
Methane	12	21
Nitrous Oxide	120	310
HFC-23	260	11,700
HFC-134a	1	140
HFC-152a	1	140
PFC: Tetrafluoromethane (CF_4)	50,000	6,500
PFC: Hexafluoromethane (C_2F_6)	10,000	9,200
Sulfur Hexafluoride (SF_6)	3,200	23,900

Source: *Second Update to the Climate Change Scoping Plan: Building on the Framework* (CARB 2017). Website: www.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents (accessed December 2022).

The following discussion summarizes the characteristics of the six GHGs and black carbon.

Carbon Dioxide

In the atmosphere, carbon generally exists in its oxidized form, as CO_2. Natural sources of CO_2 include the respiration (breathing) of humans, animals and plants, volcanic out gassing, decomposition of organic matter and evaporation from the oceans. Human caused sources of CO_2 include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Natural sources release approximately 150 billion tons of CO_2 each year, far outweighing the 7 billion tons of man-made emissions of CO_2 each year. Nevertheless, natural removal processes, such as photosynthesis by land- and ocean-dwelling plant species, cannot keep pace with this extra input of man-made CO_2, and consequently, the gas is building up in the atmosphere.

In 2019, total annual CO_2 accounted for approximately 83 percent of California's overall GHG emissions.[19] Transportation is the single largest source of CO_2 in California, which is primarily comprised of on-road travel. Electricity production, industrial and residential sources also make important contributions to CO_2 emissions in California.

Methane

Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Decomposition occurring in landfills

[19] CARB. 2021. GHGs Descriptions & Sources in California. Website: ww2.arb.ca.gov/ghg-descriptions-sources (accessed December 2022).

accounts for the majority of human-generated CH_4 emissions in California and in the United States as a whole. Agricultural processes such as intestinal fermentation, manure management, and rice cultivation are also significant sources of CH_4 in California. Total annual emissions of CH_4 accounted for approximately 9 percent of GHG emissions in California.[20]

Nitrous Oxide

Nitrous oxide is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. Nitrous oxide is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit N_2O, and the quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N_2O emissions in California. Nitrous oxide emissions accounted for approximately 3 percent of GHG emissions in California in 2019.[21]

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride

HFCs are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol.[22] PFCs and SF_6 are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry leads to greater use of PFCs. HFCs, PFCs, and SF_6 accounted for about 5 percent of GHG emissions in California in 2019.[23]

Black Carbon

Black carbon is the most strongly light-absorbing component of PM formed by burning fossil fuels such as coal, diesel, and biomass. Black carbon is emitted directly into the atmosphere in the form of $PM_{2.5}$ and is the most effective form of PM, by mass, at absorbing solar energy. Per unit of mass in the atmosphere, black carbon can absorb one million times more energy than CO_2.[24] Black carbon contributes to climate change both directly, such as absorbing sunlight, and indirectly, such as affecting cloud formation. However, because black carbon is short-lived in the atmosphere, it can be difficult to quantify its effect on global warming.

Most U.S. emissions of black carbon come from mobile sources (52 percent), particularly from diesel-fueled vehicles. The other major source of black carbon is open biomass burning, including wildfires,

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20 CARB. 2021. GHGs Descriptions & Sources in California. Website: ww2.arb.ca.gov/ghg-descriptions-sources (accessed December 2022).

21 Ibid.

22 The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion.

23 CARB. 2021, op. cit.

24 U.S. Environmental Protection Agency (USEPA). 2015. Black Carbon, Basic Information. February 14, 2017. Website: 19january2017snapshot.epa.gov/www3/airquality/blackcarbon/basic.html (accessed December 2022).

although residential heating and industry also contribute. The CARB estimates that the annual black carbon emissions in California will be reduced approximately 50 percent below 2013 levels by 2030.[25]

Effects of Global Climate Change

Effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme weather events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems. Heat-related problems include heat rash and heat stroke. In addition, climate-sensitive diseases may increase, such as those spread by mosquitoes and other disease-carrying insects. Such diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture. Global climate change may also contribute to air quality problems from increased frequency of smog and particulate air pollution.[26]

Additionally, according to the 2006 California Climate Action Team (CAT) Report,[27] the following applicable climate change effects, which are based on trends established by the United Nations Intergovernmental Panel on Climate Change (IPCC), can be expected in California over the course of the next century:

- The loss of sea ice and mountain snow-pack, resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures.[28]
- Rise in global average sea level, primarily due to thermal expansion and melting of glaciers and ice caps in the Greenland and Antarctic ice sheets.[29]
- Changes in weather that include widespread changes in precipitation, ocean salinity, wind patterns, and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones.[30]
- Decline of the Sierra snowpack, which accounts for approximately one-half of the surface water storage in California by 70 percent to as much as 90 percent over the next 100 years.[31]

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25 CARB. 2017. *Short-Lived Climate Pollutant Reduction Strategy.* March. Website: https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf (accessed December 2022).

26 USEPA. 2016. Climate Impacts on Human Health. April. Website: https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-human-health_.html, last updated on February 24, 2017 (accessed December 2022).

27 California Environmental Protection Agency (CalEPA). 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March.

28 Ibid.

29 Ibid.

30 Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis, Summary for Policymakers*. February.

31 CalEPA. 2006, op. cit.

- Increase in the number of days conducive to O_3 formation by 25–85 percent (depending on the future temperature scenario) in high O_3 areas by the end of the 21st century.[32]
- High potential for erosion of California's coastlines and seawater intrusion into the Delta and levee systems due to the rise in sea level.[33]

A summary of these potential effects is identified in Table D.

Table D: Potential Impacts of Global Warming and Expected Consequences for California

Potential Water Resource Impacts	Anticipated Consequences Statewide
Reduction of the State's average annual snowpack	• Specifically, the decline of the Sierra snowpack would lead to a loss in half of the surface water storage in California by 70% to 90% over the next 100 years • Potential loss of 5 million acre-feet or more of average annual water storage in the State's snowpack • Increased challenges for reservoir management and balancing the competing concerns of flood protection and water supply • Higher surface evaporation rates with a corresponding increase in tropospheric water vapor
Rise in average sea level	• Potential economic impacts related to coastal tourism, commercial fisheries, coastal agriculture, and ports • Increased risk of flooding, coastal erosion along the State's coastline, seawater intrusion into the Delta and levee systems
Changes in weather	• Changes in precipitation, ocean salinity, and wind patterns • Increased likelihood for extreme weather events, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones
Changes in the timing, intensity, location, amount, and variability of precipitation	• Potential increased storm intensity and increased potential for flooding • Possible increased potential for droughts • Long-term changes in vegetation and increased incidence of wildfires • Changes in the intensity and timing of runoff • Possible increased incidence of flooding and increased sedimentation • Sea level rise and inundation of coastal marshes and estuaries • Increased potential for salinity intrusion into coastal aquifers (groundwater) • Increased potential for flooding near the mouths of rivers due to backwater effects
Increased water temperatures	• Increased environmental water demand for temperature control • Possible increased problems with foreign invasive species in aquatic ecosystems • Potential adverse changes in water quality, including the reduction of dissolved oxygen levels • Possible critical effects on listed and endangered aquatic species
Changes in urban and agricultural water demand	• Changes in demand patterns and evapotranspiration
Increase in the number of days conducive to O_3 formation	• Increased temperatures • Potential health effects, including adverse impacts to respiratory systems

Source: United States Department of the Interior, Environmental Water Account, Draft Supplemental EIS/EIR to the Environmental Water Account Final EIS/EIR, Bureau of Reclamation Mid-Pacific Region, Sacramento, California (October 2007).
EIR = Environmental Impact Report
EIS = Environmental Impact Statement
O_3 = ozone

32 CalEPA. 2006, op. cit.
33 Ibid.

REGULATORY SETTING

AIR QUALITY REGULATIONS

The USEPA and the CARB regulate direct emissions from motor vehicles. The SCAQMD is the regional agency primarily responsible for regulating air pollution emissions from stationary sources (e.g., factories) and indirect sources (e.g., traffic associated with new development), as well as monitoring ambient pollutant concentrations.

Federal Regulations

Federal Clean Air Act

The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and also set deadlines for their attainment. The federal Clean Air Act Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required of areas of the nation that exceed the standards. Under the Clean Air Act, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

State Regulations

California Clean Air Act

In 1988, the California Clean Air Act (CCAA) required that all air districts in the State endeavor to achieve and maintain CAAQS for CO, O_3, SO_2, and NO_2 by the earliest practical date. The California Clean Air Act provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

California Air Resources Board

The CARB is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Assembly Bill 2588 Air Toxics "Hot Spots" Information and Assessment Act. Under Assembly Bill (AB) 2588, stationary sources of air pollutants are required to report the types and quantities of certain substances their facilities routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, determine health risks, and notify nearby residents of significant risks.

The California Air Resources Board Handbook. The CARB has developed an Air Quality and Land Use Handbook[34] which is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. According to the CARB Handbook, air pollution studies have shown an association between respiratory and other non-cancer health effects and proximity to high traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. The CARB Handbook recommends that county and city planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools, and playgrounds.

Land uses that can produce air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the CARB Handbook include taking steps to avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day;
- Within 1,000 feet of a major service and maintenance rail yard;
- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries;
- Within 300 feet of any dry cleaning operation (for operations with two or more machines, provide 500 feet); and
- Within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater).

The CARB Handbook specifically states that its recommendations are advisory and acknowledges land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

The recommendations are generalized and do not consider site-specific meteorology, freeway truck percentages, or other factors that influence risk for a particular project site. The purpose of this guidance is to help land use agencies determine when to further examine project sites for actual health risk associated with the location of new sensitive land uses.

Regional Regulations

South Coast Air Quality Management District

The SCAQMD has jurisdiction over most air quality matters in the South Coast Air Basin (Basin). This area includes all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of

[34] CARB. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* April.

Riverside County. The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin and is tasked with implementing certain programs and regulations required by the CAA and the CCAA. The SCAQMD prepares plans to attain CAAQS and NAAQS. The SCAQMD is directly responsible for reducing emissions from stationary (area and point) sources. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures though educational programs or fines, when necessary.

The proposed project could be subject to the following SCAQMD rules and regulations:

- **Regulation IV - Prohibitions:** This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air pollutant emissions, fuel contaminants, start-up/shutdown exemptions, and breakdown events.
    - **Rule 402 - Nuisance:** This rule restricts the discharge of any contaminant in quantities that cause or have a natural ability to cause injury, damage, nuisance, or annoyance to businesses, property, or the public.
    - **Rule 403 - Fugitive Dust:** This rule requires the prevention, reduction, or mitigation of fugitive dust emissions from a project site. Rule 403 restricts visible fugitive dust to a project property line, restricts the net PM_{10} emissions to less than 50 µg/m^3 and restricts the tracking out of bulk materials onto public roads. Additionally, Rule 403 requires an applicant to utilize one or more of the best available control measures (identified in the tables within the rule). Control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers, and/or ceasing all activities. Finally, Rule 403 requires that a contingency plan be prepared if so determined by the USEPA. In addition, SCAQMD Rule 403(e), Additional Requirements for Large Operations, includes requirements to provide Large Operation Notification Form 403 N, appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control training class in the South Coast Air Basin.
- **Regulation XI - Source Specific Standards:** Regulation XI sets emissions standards for different sources.
    - **Rule 1113 - Architectural Coatings:** This rule limits the amount of VOCs from architectural coatings and solvents, which lowers the emissions of odorous compounds.
    - **Rule 2305 –Warehouse Indirect Source Rule:** This rule requires the owners and operators of warehouses greater than 100,000 square feet to directly reduce NO_x and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. The warehouse rule is a menu-based points system requiring warehouse operators to annually earn a specified number of points. These points can be earned by completing actions from a menu that can include acquiring and using natural gas, Near-Zero Emissions and/or Zero Emissions on-road trucks, zero-emission cargo handling equipment, solar panels or zero-emission charging and fueling infrastructure, or other options. The SCAQMD expects this rule to reduce emissions from warehouse uses by 10-15 percent.

The SCAQMD is responsible for demonstrating regional compliance with ambient air quality standards but has limited indirect involvement in reducing emissions from fugitive, mobile, and natural sources. To that end, the SCAQMD works cooperatively with the CARB, the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and other federal and State government agencies. It has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs) to meet CAAQS and NAAQS. SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. Every 3 years, SCAQMD prepares a new AQMP, updating the previous plan and 20-year horizon.[35]

The SCAQMD approved the 2016 AQMP on March 3, 2017, and submitted the plan to the CARB on March 10, 2017. Key elements of the 2016 AQMP include the following:

- Calculating and taking credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation)
- A strategy with fair-share emission reductions at the federal, State, and local levels
- Investment in strategies and technologies meeting multiple air quality objectives
- Seeking new partnerships and significant funding for incentives to accelerate deployment of zero-emission and near-zero emission technologies
- Enhanced socioeconomic assessment, including an expanded environmental justice analysis
- Attainment of the 24-hour $PM_{2.5}$ standard in 2019 with no additional measures
- Attainment of the annual $PM_{2.5}$ standard by 2025 with implementation of a portion of the O_3 strategy
- Attainment of the 1-hour O_3 standard by 2022 with no reliance on "black box" future technology (CAA Section 182(e)(5) measures)

The SCAQMD is currently preparing the 2022 AQMP, which will address the requirements for meeting the 2015 O_3 standard. A Control Measures Workshop was held on November 10, 2021, to provide an overview of the control measures and strategies that are being developed/considered for the 2022 AQMP. The control measures include updated 2016 AQMP control measures and new control measures related to area, mobile, and stationary sources.

Southern California Association of Governments

SCAG is a council of governments for Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment. SCAG is the

[35] SCAQMD. 2016. *Final 2016 Air Quality Management Plan*. March.

federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With regard to air quality planning, SCAG prepares the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the AQMP and are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. The RTP, RTIP, and AQMP are based on projections originating within local jurisdictions.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan (RCP) provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the SCAQMD. The RCP is a framework for decision-making for local governments, assisting them in meeting federal and State mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes. Policies within the RCP include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal) on September 3, 2020. Connect SoCal is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding and takes into account operations and maintenance costs, to ensure reliability, longevity, and cost effectiveness. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in Connect SoCal, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels).

Local Regulations

City of Perris General Plan

Air quality is addressed in the Environmental Justice Element of the City of Perris General Plan.[36] The Environmental Justice Element includes goals, policies, and implementing actions that aim to address the impacts of pollutants and hazards in the community, regardless of residents' income, ethnicity, or race. The following policies from the General Plan would be applicable to the proposed project.

Policies

- Provide educational information about air quality issues and their health effects, including best practices for reducing and/or eliminating sources of indoor pollution.

[36] Perris, City of. 2022. *Perris General Plan Environmental Justice Element*. January. Website: Microsoft Word - Perris EJ Element_FINAL111921 (cityofperris.org) (accessed December 2022).

- Participate in air quality planning efforts with local, regional, and State agencies that improve local air quality to protect human health, minimize the disproportionate impacts on sensitive population groups and ensure that City concern are resolved early in the process.

- Transition the City's existing car fleet to clean air vehicles.

- Discourage development of sensitive land uses, including schools, hospitals, homes, and elder and childcare facilities, in close proximity to air pollution sources that pose health risks (freeways, airports, flood zones, and pollutant industrial sites).

- Inform existing industries of the State 5-minute maximum idling limitation and condition new industrial projects to enforce the State's 5-minute maximum idling limitation for stationary diesel trucks.

ENERGY REGULATORY SETTING

Federal and State agencies regulate energy use and consumption through various means and programs. On the federal level, the U.S. Department of Transportation (USDOT), the United States Department of Energy, and the USEPA are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. On the State level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy.

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies and serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

The CEC is the State's primary energy policy and planning agency. The CEC forecasts future energy needs, promotes energy efficiency, supports energy research, develops renewable energy resources, and plans for/directs state response to energy emergencies. The applicable federal, State, regional, and local regulatory framework is discussed below.

Federal Regulations

Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under this Act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Safer Affordable Fuel-Efficient Vehicles Rule

On March 21, 2020, the USEPA and NHTSA finalized the SAFE Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule). The SAFE Vehicles Rule amends certain existing corporate average fuel economy (CAFE) and tailpipe CO_2 emissions standards for passenger cars and light trucks and establishes new standards, all covering model years 2021 through 2026. More specifically, the NHTSA set new Corporate Average Fuel Economy standards for model years 2022 through 2026 and amended its 2021 model year Corporate Average Fuel Economy standards, and the USEPA amended its CO_2 emissions standards for model years 2021 and later.

The current administration withdrew portions of the SAFE Rule, concluding that the SAFE Rule overstepped the agency's legal authority and finalized updated CAFE Standards for model years 2024 through 2026. The final rule establishes standards that would require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024 and 2025, and 10 percent annually for model years 2026. The agency projects the final standards will save consumers nearly $1,400 in total fuel expenses over the lifetimes of vehicles produced in these model years and avoid the consumption of about 234 billion gallons of gas between model years 2030 to 2050. The NHTSA also projects that the standards will cut greenhouse gases from the atmosphere, reduce air pollution, and reduce the country's dependence on oil.

State Regulations

Assembly Bill 1575, Warren-Alquist Act

In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) or larger; develop energy technologies and renewable energy resources; plan for and direct State responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code (PRC) Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require EIRs to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

Senate Bill 1389, Energy: Planning and Forecasting

In 2002, the State Legislature passed Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies

a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles (ZEVs) and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted report includes the *2021 Integrated Energy Policy Report*[37] and the *2022 Integrated Energy Policy Report Update.*[38] The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

Renewable Portfolio Standard

SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the State's electricity come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[39]

Title 24, California Building Code

Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CEC first adopted the Building Energy Efficiency Standards for Residential and Non-residential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The CBC is updated every 3 years. The current 2019 CBC went into effect on January 1, 2020 and the 2022 CBC will go into effect on January 1, 2023. The efficiency standards apply to both new construction and rehabilitation of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local

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37 CEC. 2021. *2021 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 21-IEPR-01.

38 CEC. 2022. *2020 Integrated Energy Policy Report Update*. California Energy Commission. Docket Number: 22-IEPR-01.

39 California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard Program. Website: cpuc.ca.gov/rps (accessed December 2022).

government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in CCR Title 24.

California Green Building Standards Code (CALGreen Code)

In 2010, the California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis. The current update consisting of the 2019 CALGreen Code standards became effective January 1, 2020 and the 2022 CALGreen Code will become effective on January 1, 2023. The CALGreen Code established mandatory measures for residential and non-residential building construction and encouraged sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce GHG emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and non-residential buildings subject to the standard.

California Energy Efficiency Strategic Plan.

On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Strategic Plan was subsequently updated in January 2011 to include a lighting chapter. This comprehensive plan for 2009-2020 is the State's first integrated framework of goals and strategies for saving energy, covering government, utility, and private sector actions. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- Heating, Ventilation and Air Conditioning (HVAC) will be transformed to ensure that its energy performance is optimal for California's climate; and

All eligible low-income customers will be given the opportunity to participate in the low-income energy efficient program by 2020.

Regional Regulations

There are no regional regulations that apply to the proposed project.

Local Regulations

City of Perris General Plan

Energy is addressed in the Conservation Element in the City of Perris General Plan[40]. The Conservation Element includes goals, policies, and implementing actions that work to improve energy efficiency in City operations and structures. The following goals and policies from the General Plan would be applicable to the proposed project.

Goal X. Encourage improved energy performance standards above and beyond the California Title 24 requirements

Policy X.A. Establish density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who exceed current Title 24 requirements for new development.

Policy X.B. Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.

Policy X.C. Encourage strategic shape and placement of new structures within new commercial and industrial projects.

Goal XI. The community shall lead the development by example in green building, and energy and resource conservation practices.

Policy XI. A. The City shall support LEED development standards and gray water usage for all new and refurbished public buildings and facilities. All projects undertaken by the City, or that receive funding from the City or the Redevelopment Agency should be encouraged to utilize green building practices.

Policy XI. B. The City shall actively reduce greenhouse gas emissions from public facilities throughout the community.

Policy XI. C. The City shall encourage Green Building and Sustainable Community actions whenever possible through subsidy funding.

GLOBAL CLIMATE CHANGE REGULATORY SETTING

This section describes regulations related to Global Climate Change at the federal, State, and local level.

Federal Regulations

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO_2 emissions under the CAA. While there currently are no adopted federal regulations for

[40] Perris, City of. 2005. *City of Perris General Plan Conservation Element.* July. Website: Microsoft Word - FINAL Merge Conserv + Sustain Com Element 1-7-09.doc (cityofperris.org) (accessed December 2022).

the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change.

This includes the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the Clean Air Act, finding that six GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

In October 2012, the USEPA and the NHTSA, on behalf of the U.S. Department of Transportation, issued final rules to further reduce GHG emissions and improve the CAFE standards for light-duty vehicles for model years 2017 and beyond (77 *Federal Register* 62624). The NHTSA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program would increase fuel economy to the equivalent of 54.5 miles per gallon, limiting vehicle emissions to 163 grams of CO_2 per mile for the fleet of cars and light-duty trucks by model year 2025 (77 *Federal Register* 62630).

On March 21, 2020, the USEPA and NHTSA finalized the SAFE Vehicles Rule. The SAFE Vehicles Rule amends certain existing CAFE and tailpipe CO_2 emissions standards for passenger cars and light trucks and establish new standards, all covering model years 2021 through 2026. More specifically, NHTSA set new CAFE standards for model years 2022 through 2026 and amended its 2021 model year CAFE standards, and the USEPA amended its CO_2 emissions standards for model years 2021 and later. On May 12, 2021, the NHTSA published a notice of proposed rulemaking in the *Federal Register*, proposing to repeal key portions of the SAFE Vehicles Rule that would have reduced CAFE standards. The final rule repealing portions of the SAFE Vehicles Rule was published on December 29, 2021. The repeal will allow California to set its own GHG standards if it chooses, even if the emissions standards conflict with CAFE standards enacted by the U.S. Department of Transportation.

State Regulations

The CARB is the lead agency for implementing climate change regulations in the State. Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 1493 (2002)

In a response to the transportation sector's significant contribution to California's CO_2 emissions, AB 1493 was enacted on July 22, 2002. AB 1493 requires the CARB to set GHG emission standards for passenger vehicles and light duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. These standards (starting in model years 2009 to 2016) were approved by the CARB in 2004, but the needed waiver of CCAA Preemption was not granted by the USEPA until June 30, 2009. The CARB responded by amending its original regulation, now referred to as Low Emission Vehicle III, to take effect for model years starting in 2017 to 2025. The Trump administration revoked California's waiver in 2019; however, the Biden administration restored California's waiver in 2021.

Executive Order S-3-05 (2005)

Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05 on June 1, 2005, which proclaimed that California is vulnerable to the impacts of climate change. To combat those concerns, the executive order established California's GHG emissions reduction targets, which established the following goals:

- GHG emissions should be reduced to 2000 levels by 2010;
- GHG emissions should be reduced to 1990 levels by 2020; and
- GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

The Secretary of the California Environmental Protection Agency (CalEPA) is required to coordinate efforts of various State agencies in order to collectively and efficiently reduce GHGs. A biannual progress report must be submitted to the Governor and State Legislature disclosing the progress made toward GHG emission reduction targets. In addition, another biannual report must be submitted illustrating the impacts of global warming on California's water supply, public health, agriculture, the coastline, and forestry, and report possible mitigation and adaptation plans to address these impacts.

The Secretary of CalEPA leads this CAT made up of representatives from State agencies as well as numerous other boards and departments. The CAT members work to coordinate statewide efforts to implement global warming emission reduction programs and the State's Climate Adaptation Strategy. The CAT is also responsible for reporting on the progress made toward meeting the statewide GHG targets that were established in the executive order and further defined under AB 32, the "Global Warming Solutions Act of 2006." The first CAT Report to the Governor and the Legislature was released in March 2006, which it laid out 46 specific emission reduction strategies for reducing GHG emissions and reaching the targets established in the Executive Order. The most recent report was released in December 2020.

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

California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of CO_2e. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by the CARB on December 11, 2008, and contains the main strategies California will implement to achieve the reduction of approximately 169 MMT CO_2e, or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e);
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

The Scoping Plan identifies 18 emission reduction measures that address cap-and-trade programs, vehicle gas standards, energy efficiency, low carbon fuel standards, renewable energy, regional transportation-related GHG targets, vehicle efficiency measures, goods movement, solar roof programs, industrial emissions, high speed rail, green building strategies, recycling, sustainable forests, water, and air. The measures would result in a total reduction of 174 MMT CO_2e by 2020.

On August 24, 2011, the CARB unanimously approved both the new supplemental assessment and reapproved its Scoping Plan, which provides the overall roadmap and rule measures to carry out AB 32. The CARB also approved a more robust CEQA equivalent document supporting the supplemental analysis of the cap-and-trade program. The cap-and-trade took effect on January 1, 2012, with an enforceable compliance obligation that began January 1, 2013.

The CARB has not yet determined what amount of GHG reductions it recommends from local government operations and local land use decisions; however, the Scoping Plan states that land use planning and urban growth decisions will play an important role in the State's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions (meanwhile, CARB is also developing an additional protocol for community emissions). The CARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The Scoping Plan states that the ultimate GHG reduction assignment to local government operations is to be determined. With regard to land use planning, the Scoping Plan expects an approximately 5.0 MMT CO_2e reduction due to implementation of SB 375.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed the CARB and the CAT to identify a list of "discrete early action GHG reduction measures" that could be adopted and made enforceable by January 1, 2010. On January 18, 2007, Governor Schwarzenegger signed EO S-1-07, further solidifying California's dedication to reducing GHGs by setting a new Low Carbon Fuel Standard (LCFS). This executive order sets a target to reduce the carbon intensity of California transportation fuels by at least 10 percent by 2020 and directs the CARB to consider the LCFS as a discrete early action measure. In 2011, U.S. District Court Judge Lawrence O'Neil issued an injunction preventing implementation of the LCFS, ruling that it is unconstitutional. In 2012, the Ninth Circuit Court of Appeal stayed the District Court's injunction, allowing implementation of the LCFS. The Ninth Circuit decided to uphold the LCFS.

In June 2007, the CARB approved a list of 37 early action measures, including three discrete early action measures (LCFS, Restrictions on GWP Refrigerants, and Landfill CH_4 Capture).[41] Discrete early action measures are measures that were required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code Section 38560.5. The CARB adopted additional early action measures in October 2007 that tripled the number of discrete early action measures. These measures relate to truck efficiency, port electrification, reduction of PFCs from the semiconductor industry, reduction of propellants in consumer products, proper tire inflation, and SF_6 reductions from the non-electricity sector. The combination of early action measures is estimated to reduce statewide GHG emissions by nearly 16 MMT.[42]

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020, and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[43] to reflect the 2030 target set by EO B-30-15 and codified by SB 32.

The 2022 Scoping Plan[44] assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

Senate Bill 97 (2007)

SB 97, signed by the Governor in August 2007 (Chapter 185, Statutes of 2007; Public Resources Code [PRC], Sections 21083.05 and 21097), acknowledges climate change is a prominent environmental issue that requires analysis under CEQA. This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Resources Agency guidelines for mitigating GHG emissions or the effects of GHG emissions, as required by CEQA.

The California Natural Resources Agency adopted the amendments to the *State CEQA Guidelines* in November 2018, which went into effect in December 2018. The amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or

41 CARB. 2007. *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration*. October.

42 CARB. 2007. "ARB approves tripling of early action measures required under AB 32" News Release 07-46. October 25.

43 CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

44 CARB. 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. November 16. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed December 2022).

specific mitigation measures. The amendments encourage lead agencies to consider many factors in performing a CEQA analysis, but preserve the discretion granted by CEQA to lead agencies in making their own determinations based on substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs when they perform individual project analyses.

Senate Bill 375 (2008)

SB 375, the Sustainable Communities and Climate Protection Act, which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions, was adopted by the State on September 30, 2008. On September 23, 2010, the CARB adopted the vehicular GHG emissions reduction targets that had been developed in consultation with the Metropolitan Planning Organization (MPOs); the targets require a 6 to 15 percent reduction by 2020 and between 13 to 19 percent reduction by 2035 for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs such as the Fresno Council of Governments will work with local jurisdictions in the development of Sustainable Communities Strategy (SCS) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions while meeting housing needs and other regional planning objectives. Pursuant to SB 375, the Los Angeles/Southern California reduction targets for per capita vehicular emissions were 8 percent by 2020 and are 19 percent by 2035 as shown in Table E.

Table E: Senate Bill 375 Regional Greenhouse Gas Emissions Reduction Targets

Metropolitan Planning Organization	By 2020 (percent)	By 2035 (percent)
San Francisco Bay Area	10	19
San Diego	15	19
Sacramento	7	19
Central Valley/San Joaquin	6-13	13-16
Los Angeles/Southern California	8	19

Source: California Air Resources Board (2018).

Executive Order B-30-15 (2015)

Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act

SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increasing energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the CPUC for the private utilities and by the CEC for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other non-renewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to state energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197

In summer 2016 the Legislature passed, and the Governor signed, SB 32, and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an IPCC analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million CO_2e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, which raises California's Renewables Portfolio Standard (RPS) requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18

EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to

80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Title 24, Part 11, Building Standards Code and CALGreen Code

In November 2008, the California Building Standards Commission established the California Green Building Standards Code (CALGreen Code), which sets performance standards for residential and non-residential development to reduce environmental impacts and encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code is updated every 3 years and was most recently updated in 2019 to include new mandatory measures for residential as well as non-residential uses; the new measures took effect on January 1, 2020. The next set of standards were adopted in 2022 and apply to projects seeking building permits on or after January 1, 2023.

California Building Efficiency Standards (Title 24, Part 6)

The California Building Standards Code, or Title 24 of the California Code of Regulations (CCR) contains the regulations that govern the construction of buildings in California. Within the Building Standards Code, two parts pertain to the incorporation of both energy efficient and green building elements into land use development. Part 6 is California's Energy Efficiency Standards for Residential and Non-Residential Buildings. These standards were first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption and are updated on an approximately 3-year cycle to allow consideration and possible incorporation of new energy efficient technologies and methods. All buildings for which an application for a building permit is submitted on or after January 1, 2020, must follow the 2019 standards. The next set of standards was adopted in 2022 and become effective on January 1, 2023. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

Cap and Trade

The development of a cap-and-trade program was included as a key reduction measure of the CARB AB 32 Climate Change Scoping Plan. The cap-and-trade program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by 2020 and ultimately achieving an 80 percent reduction from 1990 levels by 2050. The cap-and-trade emissions trading program developed by the CARB took effect on January 1, 2012, with enforceable compliance obligations beginning January 1, 2013. The cap-and-trade program aims to regulate GHG emissions from the largest producers in the State by setting a statewide firm limit, or cap, on allowable annual GHG emissions. The cap was set in 2013 at approximately 2 percent below the emissions forecast for 2020. In 2014, the cap declined approximately 2 percent. Beginning in 2015 and continuing through 2020, the cap has been declining approximately 3 percent annually. The CARB administered the first auction on November 14, 2012, with many of the qualified bidders representing corporations or organizations that produce large amounts of GHG emissions, including energy companies, agriculture and food industries, steel mills, cement companies, and universities. On January 1, 2015, compliance obligation began for distributors of transportation fuels, natural gas, and other fuels.

The cap-and-trade program was initially slated to sunset in 2020 but the passage of SB 398 in 2017 extended the program through 2030.

Executive Order N-79-20

EO N-79-20, which was signed by the Governor on September 23, 2020, sets the following goals for the State: 100 percent of in-state sales of new passenger cars and trucks shall be zero-emission by 2035; 100 percent of medium- and heavy-duty vehicles in the State shall be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and 100 percent of off-road vehicles and equipment in the State shall be zero-emission by 2035, where feasible.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Through other statutes and regulations, this 50 percent diversion rate also applies to State agencies. In order of priority, waste reduction efforts must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal. In 2011, AB 341 modified the California Integrated Waste Management Act and directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. The resulting 2012 Mandatory Commercial Recycling Regulation requires that on and after July 1, 2012, certain businesses that generate four cubic yards or more of commercial solid waste per week shall arrange recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to a recycling service that includes mixed waste processing. AB 341 also established a statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939, the Integrated Waste Management Act. In April 2016, AB 1826 further modified the California Integrated Waste Management Act, requiring businesses that generate a specified amount of organic waste per week to arrange for recycling services for that organic waste in a specified manner. If CalRecycle determines that statewide disposal of organic waste has not been reduced by 50 percent below 2014 levels by 2020, businesses generating more than two cubic yards of organic waste per week would be subject to these waste collection requirements. CalRecycle plans to make this assessment in the fall of 2020. Diverting organic waste from landfills reduces emissions of CH_4. This is equivalent to reducing anaerobic decomposition of organic waste that would have otherwise occurred in landfills where organic waste is often buried with other inorganic waste.

Low Carbon Fuel Standard

In January 2007, EO S-01-07 established an LCFS. This executive order calls for a statewide goal to be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020, and that an LCFS for transportation fuels be established for California. The LCFS applies to all refiners, blenders, producers, or importers ("Providers") of transportation fuels in California, including fuels used by off-road construction equipment. In June 2007, CARB adopted the LCFS under AB 32 pursuant to Health and Safety Code Section 38560.5, and, in April 2009, CARB approved the new rules and carbon intensity reference values with new regulatory requirements taking effect

in January 2011. The standards require providers of transportation fuels to report on the mix of fuels they provide and demonstrate they meet the LCFS intensity standards annually. This is accomplished by ensuring that the number of "credits" earned by providing fuels with a lower carbon intensity than the established baseline (or obtained from another party) is equal to or greater than the "deficits" earned from selling higher intensity fuels. In response to certain court rulings, CARB re-adopted the LCFS regulation in September 2015, and the LCFS went into effect on January 1, 2016. In 2018, CARB approved amendments to the regulation to readjust carbon intensity benchmarks to meet California's 2030 GHG reductions targets under SB 32. These amendments include opportunities to promote zero emission vehicle (ZEV) adoption, carbon capture and sequestration, and advanced technologies for decarbonization of the transportation sector.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of ZEVs, into a single package of regulatory standards for vehicle model years 2017 through 2025. The new regulations strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's ZEVs regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the State. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 40 percent fewer GHGs and 75 percent fewer smog-forming emissions than 2012 model year vehicles.

Executive Order B-48-18

In January 2018, Governor Brown signed EO B-48-18 requiring all State entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential land uses, through the LCFS Program, and recommend how to ensure affordability and accessibility for all drivers.

Regional Regulations

South Coast Air Quality Management District

In 2008, the SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the Basin. The Working Group developed several different options that are contained in the SCAQMD 2008 draft guidance document titled Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans[45] that could be applied by lead agencies. On September 28, 2010, SCAQMD Working Group Meeting No. 15 provided further guidance, including a tiered approach for evaluating GHG emissions for development projects where the SCAQMD is not the lead agency. The SCAQMD has not presented a finalized version of these thresholds to the governing board.

The SCAQMD identifies the emissions level for which a project would not be expected to substantially conflict with any State legislation adopted to reduce statewide GHG emissions. As such, the utilization of a service population represents the rates of emissions needed to achieve a fair share of the State's mandated emissions reductions. Overall, the SCAQMD identifies a GHG efficiency level that, when applied statewide or to a defined geographic area, would meet the year 2020 and post-2020 emissions targets as required by AB 32 and SB 32. If projects are able to achieve targeted rates of emissions per the service population, the State will be able to accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target and future post-2020 targets.

Southern California Association of Governments

On September 3, 2020, SCAG adopted Connect SoCal–The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS).[46] In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. The RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high-quality transit areas and livable corridors, and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles.[47] However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; SCAG is required to consider local land use controls when drafting the SCS.

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45 SCAQMD. 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans.

46 Southern California Association of Governments (SCAG). 2020. Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176 (accessed December 2022).

47 SCAG. 2020. Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176 (accessed December 2022).

Local Regulations

The City of Perris Climate Action Plan (CAP)[48] was adopted in February 2016. The CAP includes goals, policies, and implementing actions that work to reduce GHG emissions and global climate change at a community level. The following reduction measures from the Climate Action Plan would be applicable to the proposed project.

- **E-1**. *Energy Action Plans:* Improve municipal and community-wide energy efficiency and reduce energy consumption through the adoption of local Energy Action Plans (EAP).
- **T-1.** *Bicycle Infrastructure Improvements*: Expand on-street and off-street bicycle lanes and bicycle trails.
- **T-2.** *Bicycle Parking*: Provide additional options for bicycle parking.
- **T-3**. *End of trip facilities*: Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters
- **T-4**. *Transit Frequency Expansion*: Collaborate with local and regional transit providers to provide more frequent transit in the subregion.
- **T-5.** *Traffic Signal Coordination:* Incorporate technology to synchronize and coordinate traffic signals along local arterials.
- **T-6.** *Density:* Improve job-housing balance and reduce vehicle miles traveled by increasing household and employment densities.
- **T-7.** *Mixed-Use Development*: Provide for a variety of development types and uses.
- **T-8.** *Design/Site Planning*: Design neighborhood and sites to reduce VMT.
- **T-9**. *Pedestrian Only Areas:* Encourage walking by providing pedestrian only community areas.
- **T-10**. *Limit Parking Requirements for New Development:* Reduce requirements for vehicle parking in new development projects.
- **T-11.** *Voluntary Transportation Demand Management:* Reduce demand for roadway travel through incentives for alternative modes of transportation and disincentives for driving.
- **T-12.** *Accelerated Bike Plan Implementation:* Accelerate the implementation of all or specified components of a jurisdiction's adopted bike plan.

[48] Perris, City of. 2016. City of Perris Climate Action Plan. February. Website: https://www.cityofperris.org/Home/ShowDocument?id=12935 (accessed December 2022).

SETTING

This section provides the current SCAQMD attainment status, climate and air quality, ambient air quality monitoring results, and GHG emissions inventory.

ATTAINMENT STATUS

The CARB is required to designate areas of the state as attainment, nonattainment, or unclassified for all State standards. An *attainment* designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A *nonattainment* designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An *unclassified* designation signifies that data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The USEPA designates areas for O_3, CO, and NO_2 as either does not meet the primary standards, or cannot be classified, or better than national standards. For SO_2, areas are designated as does not meet the primary standards, does not meet the secondary standards, cannot be classified, or better than national standards.

Table F provides a summary of the attainment status for the Basin with respect to NAAQS and CAAQS.

Table F: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1 hour	Nonattainment	Extreme Nonattainment
O_3 8 hour	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	N/A	Attainment/Unclassified
Lead	Attainment	Attainment[1]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: South Coast Air Quality Management District (2018).
[1] Except in Los Angeles County.
CO = carbon monoxide
N/A = not applicable
NO_2 = nitrogen dioxide
O_3 = ozone
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SO_2 = sulfur dioxide

EXISTING CLIMATE AND AIR QUALITY

Air quality in the planning area is not only affected by various emission sources (e.g., mobile and industry), but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The combination of topography, low mixing height, abundant sunshine, and emissions from the second-largest urban area in the United States gives the Basin some of the worst air pollution in the nation.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s°F. With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the site is located on Perris, California[49] The monthly average maximum temperature recorded at this station ranged from 64.5°F in December to 96.9°F in August, with an annual average maximum of 78.7°F. The monthly average minimum temperature recorded at this station ranged from 34.7°F in January to 58.7°F in August, with an annual average minimum of 45.3°F. These levels are representative of the project area.

The majority of annual rainfall in the Basin occurs between December and March. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. Average monthly rainfall at the Perris station varied from 0.06 inches in June to 1.97 inches in November, with an annual total of 10.42 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid-afternoon to late afternoon on hot summer days when the air appears to clear up suddenly. Winter inversions frequently break by midmorning.

Winds in the project area blow predominantly from the south-southwest, with relatively low velocities. Wind speeds in the project area average about 5 miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion, limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry, north or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly on shore into Riverside and San Bernardino

[49] Western Regional Climate Center. Recent Climate in the West. Website: http://www.wrcc.dri.edu (accessed December 2022).

Counties. In the winter, the greatest pollution problems are CO and NO_X because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and brighter sunshine combine to cause a reaction between hydrocarbons and NO_x to form photochemical smog. Smog is a general term that is naturally occurring fog that has become mixed with smoke or pollution. In this context it is better described as a form of air pollution produced by the photochemical reaction of sunlight with pollutants that have been released into the atmosphere, especially by automotive emissions.

AIR QUALITY MONITORING RESULTS

Air quality monitoring stations are located throughout the nation and are maintained by the local air pollution control district and State air quality regulating agencies. The SCAQMD, together with the CARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring stations closest to the project site located at 237 ½ North D Street in Perris, 506 W. Flint in Lake Elsinore, and 5888 Mission Boulevard in Rubidoux, Riverside.

Pollutant monitoring results for years 2019 to 2021 are shown in Table G. As indicated in the monitoring results, the federal PM_{10} standard had no exceedances during the 3-year period. The State PM_{10} standard had 4 exceedances in 2019, 6 exceedances in 2020, and unknown number of exceedances in 2021. The federal $PM_{2.5}$ levels had no exceedances in 2019 and an unknown number of exceedances in 2020 and 2021. The State 1-hour O_3 standards were exceeded 28 times in 2019, 34 times in 2020, and had an unknown number of exceedances in 2021. The State 8-hour O_3 standards were exceeded 66 times in 2019, 77 times in 2020, and an unknown number of times in 2021. The Federal 8-hour O_3 standards were exceeded 64 times in 2019, 74 times in 2020, and 55 times in 2021. The CO, SO_2, and NO_2 standards were not exceeded in this area during the 3-year period.

GREENHOUSE GAS EMISSIONS INVENTORY

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, United States, and California GHG emission inventories.

Global Emissions

Worldwide emissions of GHGs in 2018 totaled 25.6 billion metric tons of CO_2e. Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change.[50]

[50] United Nations Framework Convention on Climate Change (UNFCCC). 2021. GHG Data from UNFCCC. Website: unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc/ghg-data-from-unfccc (accessed December 2022).

Table G: Ambient Air Quality at Nearby Monitoring Stations

Pollutant	Standard	2019	2020	2021
Carbon Monoxide (CO)[1]				
Maximum 1-hour concentration (ppm)		1.6	0.9	0.9
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8-hour concentration (ppm)		0.7	0.7	0.8
Number of days exceeded:	State: > 9 ppm	0	0	0
	Federal: > 9 ppm	0	0	0
Ozone (O_3)[2]				
Maximum 1-hour concentration (ppm)		0.118	0.125	0.117
Number of days exceeded:	State: > 0.09 ppm	28	34	ND
Maximum 8-hour concentration (ppm)		0.096	0.106	0.094
Number of days exceeded:	State: > 0.07 ppm	66	77	ND
	Federal: > 0.07 ppm	64	74	55
Particulate Matter < 10 micrometers (PM_{10})[2]				
Maximum 24-hour concentration (µg/m^3)		92.1	87.6	77
Number of days exceeded:	State: > 50 µg/m^3	4	6	ND
	Federal: > 150 µg/m^3	0	0	0
Annual arithmetic average concentration (µg/m^3)		24.4	ND	ND
Exceeded for the year:	State: > 20 µg/m^3	Yes	ND	ND
	Federal: > 50 µg/m^3	No	ND	ND
Fine Particulate Matter ($PM_{2.5}$)[1]				
Maximum 24-hour concentration (µg/m^3)		17.6	41.6	44.4
Number of days exceeded:	Federal: > 35 µg/m^3	0	ND	ND
Annual arithmetic average concentration (µg/m^3)		ND	7.2	13.2
Exceeded for the year:	State: > 12 µg/m^3	ND	No	Yes
	Federal: > 15 µg/m^3	ND	No	No
Nitrogen Dioxide (NO_2)[2]				
Maximum 1-hour concentration (ppm)		0.038	0.043	0.044
Number of days exceeded:	State: > 0.250 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.006	0.007	0.007
Exceeded for the year:	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2)[3]				
Maximum 1-hour concentration (ppm)		0.0018	0.0022	0.0021
Number of days exceeded:	State: > 0.25 ppm	0	0	0
Maximum 24-hour concentration (ppm)		0.0009	0.001	0.0011
Number of days exceeded:	State: > 0.04 ppm	0	0	0
	Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.00042	0.00034	0.00051
Exceeded for the year:	Federal: > 0.030 ppm	No	No	No

Sources: CARB (2021) and USEPA (2022).

[1] Data were taken from the 506 W. Flint, Lake Elsinore monitoring station.

[2] Data were taken from the 237 ½ North D Street, Perris monitoring station.

[3] Data were taken from the 5888 Mission Boulevard, Rubidoux monitoring station.

µg/m^3 = micrograms per cubic meter

CARB = California Air Resources Board

ND = No data. There were insufficient (or no) data to determine the value.

ppm = parts per million

USEPA = United States Environmental Protection Agency

United States Emissions

In 2019, the year for which the most recent data are available, the United States emitted about 6,558 MMT CO_2e. Overall, emissions in 2019 decreased by 1.7 percent since 2018 and were 13 percent 2005 levels. This decrease was driven largely by a decrease in emissions from fossil fuel combustion resulting from a decrease in total energy use in 2019 compared to 2018 and a continued shift from coal to natural gas and renewables in the electric power sector. Of the six major sectors – residential, commercial, agricultural, industry, transportation, and electricity generation – transportation accounted for the highest amount of GHG emissions in 2019 (approximately 29 percent), with electricity generation second at 25 percent and emissions from industry third at 23 percent.[51]

State of California Emissions

The State emitted approximately 418.2 MMT CO_2e emissions in 2019, 7.2 MMT CO_2e lower than 2018 levels and almost 13 MMT CO_2e below the 2020 GHG Limit of 431 MMT CO_2e.[52] The CARB estimates that transportation was the source of approximately 40 percent of the State's GHG emissions in 2019, followed by industrial sources at approximately 21 percent and electricity generation at 14 percent. The remaining sources of GHG emissions were agriculture at 8 percent, residential activities at 7 percent, commercial activities at 4 percent, high GWP at 5 percent, and waste at 2 percent.[53]

City of Perris Emissions

The City of Perris is projected to emit 690,648 metric tons of carbon dioxide equivalent (MT CO_2e) in the year of 2035. The 2035 emissions are estimated based on the projected growth in Perris from 2010 to 2035. The largest portion of the project 2035 City's emissions would be from the transportation sector (60 percent), followed by residential energy use (20 percent), commercial energy use (15 percent), community waste (2 percent), and wastewater (2 percent). Table H summarizes the total amount of community wide GHG emissions for Perris in 2035 by sector.

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51 USEPA. 2021. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019. Website: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019 (accessed December 2022).

52 CARB. 2021. *California Greenhouse Gas Emissions for 2000 to 2019, Trends of Emissions and Other Indicators Report*. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf (accessed December 2022).

53 Ibid.

Table H: 2035 Community Emissions BAU Forecast by Sector

Sector	2010 MT CO_2e	2035 MT CO_2e	% Change from 2010 to 2035	Proxy data Indicator
Residential	73,879	139,497	80	Households
Commercial/Industrial	57,258	120,998	111	Commercial Employment
Transportation	228,578	398,094	74	RIVTAM
Community Waste	8,936	15,584	74	Service Population
Wastewater and Sewer Systems	9,447	16,475	74	Service Population
TOTAL	**378,099**	**690,648**	**82**	-

Source: Perris Climate Action Plan, Table 2-21 (accessed December 2022).
BAU = business as usual MT CO_2e = metric tons of carbon dioxide equivalent

METHODOLOGY

The methodology used to estimate air quality, health risk, GHG, and energy impacts is described below.

CONSTRUCTION EMISSIONS

Construction activities can generate a substantial amount of air pollution. Construction activities are considered temporary; however, short-term impacts can contribute to exceedances of air quality standards. Construction activities include demolition, site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel and gasoline powered equipment, portable auxiliary equipment, and worker commute trips.

The California Emissions Estimator Model version 2022.1 (CalEEMod) computer program was used to calculate emissions from on-site construction equipment and emissions from worker and vehicle trips to the site. This analysis assumes that construction would begin the fourth quarter of 2023 and occur for approximately 10 months, ending in 2024. Based on the preliminary grading plans, the project would require the import of approximately 18,000 cubic yards of soil, which was included in CalEEMod. This analysis assumes the use of Tier 3 construction equipment as required by PVCCSP MM Air 6 and that the proposed project would comply with SCAQMD Rule 403 measures. This analysis also assumes the overlapping of building construction and architectural phases as part of the construction phase schedule. All other construction details are not yet known; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used.

OPERATIONAL EMISSIONS

The air quality analysis includes estimating emissions associated with long-term operation of the proposed project. Consistent with the SCAQMD guidance for estimating emissions associated with land use development projects, the CalEEMod computer program was used to calculate the long-term operational emissions associated with the project. As discussed in the Project Description section, the proposed project would develop a 121,000 sq ft warehouse building with a 4,000 sq ft ground floor office space and 4,000 sq ft of mezzanine office space, as well as associated parking, landscaping, and infrastructure improvements. The analysis was conducted using land use codes *Unrefrigerated Warehouse-No Rail*, *City Park*, and *Parking Lot.* Trip generation rates used in CalEEMod for the project were based on the project's *Traffic Impact Analysis,* [54] which identifies that the proposed project would generate a total of approximately 590 average daily trips, including 407 passenger vehicle trips, 40 two-axle truck trips, 32 three-axle truck trips, and 110 four+-axle truck trips. This analysis assumes that the four+-axle truck trips would travel approximately 40 miles. To be conservative, separate CalEEMod analyses were prepared for the operational analysis. One

[54] Environment Planning Development Solutions, Inc. 2022. *Traffic Impact Analysis for Redlands and Placentia Industrial Project*. August 31.

CalEEMod run evaluated operational and vehicle trip emissions and another CalEEMod run evaluated four+-axle truck trip emissions.

CONSTRUCTION HEALTH RISK ASSESSMENT

A construction health risk assessment (HRA), which evaluates construction-period health risk to off-site receptors, was performed for the proposed project. 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 a concentration at the receptor location of interest (i.e., a nearby residence and worksites). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using the CARB exposure methodology with the air dispersion modeling performed using the USEPA dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data.

OPERATIONAL HEALTH RISK ASSESSMENT

To determine the potential health risk to people living and working near the proposed project associated with the exhaust of diesel-powered trucks and equipment, an operational Health Risk Assessment (HRA) was conducted for the proposed project. This HRA has been conducted using three models: (1) EMFAC2021 for on-road vehicle emissions factors and percentages of fuel type within the overall vehicle fleet; (2) the USEPA AERMOD air dispersion model to determine how the TACs would move through the atmosphere after release from sources both on site and on surrounding roadways; and (3) the CARB's HARP2 model to translate the pollutant concentrations from AERMOD into individual health risks at any sensitive receptor locations surrounding the project site.

The first step of an HRA is to characterize the project-related emissions of TACs. The proposed project would generate approximately 590 average daily trips, including 407 passenger vehicle trips, 40 two-axle truck trips, 32 three-axle truck trips, and 110 four+-axle truck trips. The trucks would access the site by Redlands Avenue and Placentia Avenue. The proposed project would provide 16 dock-high doors; as the project would contain multiple loading docks, off-site queuing of trucks is not anticipated. While the TAC emissions from gasoline-powered vehicles have a small health effect compared to DPM, this HRA includes both gasoline- and diesel-powered vehicle emissions. For the diesel exhaust emissions, it is sufficient to only consider the DPM (PM_{10} and $PM_{2.5}$) portions of the exhaust; all the TACs for the gasoline exhaust emissions are contained in the ROG emissions. Using speciation data from the CARB, the emission rates of the TAC components are derived from the total ROG emissions. These data are attached.

Project trucks would operate in two modes: stationary idling and moving on and off the site. The emissions from trucks while idling result in a much higher concentration of TACs at nearby sensitive receptors compared to the emissions from moving trucks. This is due to the dispersion of emissions that occurs with distance and with travel of the vehicle. For this HRA, the truck travel emissions were modeled as a series of volume sources along the on-site driveway, along Redlands Avenue going north and south and Placentia Avenue going east and west. LSA assumed vehicles traveling on

site would maneuver slowly, averaging approximately 5–15 miles per hour (mph), and that vehicles traveling on roadways would average 5–55 mph.

The idling emissions of trucks operating on the project site were modeled as point sources within the area sources representing the planned loading docks. EMFAC2021 was used to determine the emissions factors of idling and operating diesel trucks to determine the total emissions of DPM. While it is expected that the truck emissions rate will continue to reduce over time, an HRA only allows for a single emission rate to represent the entire 30-year exposure period. The use of emissions factors for the year 2022, was used as a conservative estimate of emissions, although, the project is not expected to be fully operational until 2024.

ENERGY USE

The analysis of electricity/natural gas usage is based on the CalEEMod modeling, which quantifies energy use for project operations. Fuel consumption (diesel fuel and gasoline) from vehicle trips during operation was estimated for the opening year (2024) of the proposed project based on trip estimates from the CalEEMod model and fuel efficiencies from the CARB's EMFAC2021 model. Estimates of fuel consumption (diesel fuel and gasoline) from construction trucks and construction worker vehicles were based on trip estimates from the CalEEMod model and fuel efficiencies from the CARB EMFAC2021 model.

The analysis focuses on the four sources of energy that are relevant to the proposed project: electricity, natural gas, project construction equipment fuel, and vehicle fuel necessary for project operations. For the purposes of this analysis, the amount of electricity, natural gas, construction fuel, and fuel use from operations are quantified and compared to that consumed in Riverside County. The electricity/natural gas use of the proposed project is analyzed as a whole on an annual basis.

GREENHOUSE GAS ANALYSIS

Recognizing that the field of global climate change analysis is rapidly evolving, the approaches advocated most recently indicate that for determining a project's contribution to GHG emissions, lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, construction activities, and any other significant source of emissions within the project area. The CalEEMod results were used to quantify GHG emissions generated by the project.

THRESHOLDS OF SIGNIFICANCE

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under applicable federal or state ambient air quality standards;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) affecting a substantial number of people.

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse energy impact if the project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse greenhouse gas emission impact if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reduction the emissions of greenhouse gases.

Certain air districts (e.g., SCAQMD) have created guidelines and requirements to conduct air quality analysis. The SCAQMD's current guidelines, the *CEQA Air Quality Handbook* with associated updates, were followed in this assessment of air quality and GHG impacts for the proposed project.

CRITERIA POLLUTANT THRESHOLDS

The SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Table I lists the CEQA significance thresholds for construction and operational emissions established for the Basin. Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which the SCAQMD developed and that apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

Table I: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOC	NO_x	CO	PM_{10}	$PM_{2.5}$	SO_x
Construction	75	100	550	150	55	150
Operations	55	55	550	150	55	150

Source: SCAQMD. Air Quality Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf (accessed December 2022).

CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

HEALTH RISK THRESHOLDS

The following limits for maximum individual cancer risk (MICR) and noncancer acute and chronic Hazard Index (HI) from project emissions of TACs are considered appropriate for use in determining the health risk for projects in the Basin:

- **MICR:** MICR is the estimated probability of a maximally exposed individual (MEI) contracting cancer as a result of exposure to TACs over a period of 30 years for adults and 9 years for children in residential locations and over a period of 25 years for workers. The MICR calculations include multipathway consideration, when applicable.

  The cumulative increase in MICR that is the sum of the calculated MICR values for all TACs would be considered significant if it would result in an increased MICR greater than 10 in 1 million (1×10^{-5}) at any receptor location.

- **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a TAC for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multipathway consideration, when applicable.

  The project would be considered significant if the cumulative increase in total chronic HI for any target organ system would exceed 1.0 at any receptor location.

- **Acute HI:** Acute HI is the ratio of the estimated maximum 1-hour concentration of a TAC for a potential MEI to its acute reference exposure level.

  The project would be considered significant if the cumulative increase in total acute HI for any target organ system would exceed 1.0 at any receptor location.

The SCAQMD *CEQA Air Quality Handbook*[55] states that emissions of TACs are considered significant if an HRA shows an increased risk of greater than 10 in 1 million. Based on guidance from SCAQMD in the document *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*[56], for the purposes of this analysis, the threshold of 10 in 1 million was used as the cancer risk threshold for the proposed project.

LOCALIZED IMPACTS ANALYSIS

The SCAQMD published its Final Localized Significance Threshold Methodology in July 2008, recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.[57] This guidance was used to analyze potential localized air quality impacts associated with construction of the proposed project. Localized significance thresholds (LST) are developed based on the size or total area of the emission source, the ambient air quality in the source receptor area, and the distance to the project. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality.

LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is the nearby Perris Valley area (SRA 24). SCAQMD provides LST screening tables for 25, 50, 100, 200, and 500-meter source-receptor distances. As identified above, the closest sensitive receptor to the project site is an existing trailer home located on the lot to the immediate north of the project site at approximately 50 feet (15 meters). In cases where receptors may be closer than 82 feet (25 meters), any distances within the 82-foot (25-meter) buffer zone can be used. As such, the minimum distance of 82 feet was used. Based on the anticipated construction equipment, it is assumed that the maximum daily disturbed acreage for the proposed project would be 3.5 acres.[58] Table J lists the emissions thresholds that apply during project construction and operation.

Table J: SCAQMD LSTs (lbs/day)

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Construction	220.0	1,230.0	10.0	6.0
Operations	220.0	1,230.0	3.0	1.5

Source: South Coast Air Quality Management District (2008b).
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District

55 SCAQMD. 1993. *CEQA Air Quality Handbook* (currently under revision).

56 SCAQMD. 2003. *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*. August.

57 South Coast Air Quality Management District. 2008b. *Final Localized Significance Threshold Methodology.* July.

58 South Coast Air Quality Management District. n.d. *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf (accessed December 2022).

LOCAL MICROSCALE CONCENTRATION STANDARDS

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 parts per million (ppm)
- California State 8-hour CO standard of 9 ppm

GLOBAL CLIMATE CHANGE

Currently, there is no Statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. While the CRAB published draft thresholds in 2008, they were never adopted, and the CARB recommended that local air districts and lead agencies adopt their own thresholds for GHG impacts. Threshold methodology and thresholds are still being developed and revised by air districts in California.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, the SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group) in 2008. In December 2008, the SCAQMD Governing Board adopted an interim 10,000 MT CO_2e per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. The Working Group also considered a range of thresholds for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. The most recent proposal issued in September 2010 uses the following tiered approach to evaluate potential GHG impacts from various uses:

- **Tier 1. Exemptions:** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2. Consistency with a locally adopted GHG Reduction Plan:** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

- **Tier 3. Numerical Screening Threshold:** If GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. The 10,000 MT CO_2e/year threshold for industrial uses would be recommended for use by all lead agencies. Under Option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e/year),

commercial projects (1,400 MT CO_2e/year), and mixed-use projects (3,000 MT CO_2e/year). Under Option 2, a single numerical screening-level threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects.

- **Tier 4. Performance Standards:** If emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold. The current recommended approach is per capita efficiency targets. SCAQMD is not recommending use of a percent emissions reduction target. Instead, SCAQMD proposes a 2020 efficiency target of 4.8 MT CO_2e/yr per service population (for project-level analyses and 6.6 MT CO_2e/yr per service population for plan-level projects (e.g., program-level projects such as general plans). The GHG efficiency metric divides annualized GHG emissions by the service population, which is the sum of residents and employees, per the following equation:

  Rate of Emission: GHG Emissions (MT CO_2e/yr) ÷ Service Population

  The efficiency evaluation consists of comparing the project's efficiency metric to efficiency targets. Efficiency targets represent the maximum quantity of emissions each resident and employee in the State of California could emit in various years based on emissions levels necessary to achieve the statewide GHG emissions reduction goals. A project that results in a lower rate of emissions would be more efficient than a project with a higher rate of emissions, based on the same service population. The metric considers GHG reduction measures integrated into a project's design and operation (or through mitigation). The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for the CARB's 2008 Scoping Plan.

- **Tier 5. Mitigation:** Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

The thresholds identified above have not been adopted by the SCAQMD or distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain. If the CARB adopts statewide significance thresholds, SCAQMD staff plan to report back to the SCAQMD Governing Board regarding any recommended changes or additions to the SCAQMD's interim threshold.

In the absence of other thresholds of significance promulgated by the SCAQMD, the City of Perris has been using the SCAQMD's 10,000 MT CO_2e threshold for industrial projects and the draft thresholds for non-industrial projects the purpose of evaluating the GHG impacts associated with proposed general development projects. Other lead agencies through the Basin have also been using these adopted and draft thresholds. The City's evaluation of impacts under the 10,000 MT CO_2e/year threshold is also considered to be conservative since it is being applied to all of the GHG emissions generated by the project (i.e., area sources, energy sources, vehicular sources, solid waste sources, and water sources) whereas the SCAQMD's 10,000 MT CO_2e/year threshold applies only to the new stationary sources generated at industrial facilities.

For the purpose of this analysis, the proposed project will be compared to the screening-level Tier 3 Numerical Screening Threshold of 10,000 MT CO_2e/yr for industrial projects. The project is also evaluated for compliance with the City of Perris CAP and the Scoping Plan.

IMPACTS ANALYSIS

This section identifies the air quality, energy, and GHG emissions impacts associated with implementation of the proposed project.

AIR QUALITY IMPACTS

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from operational activities associated with the proposed land uses.

Consistency with Applicable Air Quality Plans

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The AQMP is based on regional growth projections developed by SCAG. The proposed project would include 121,000 sq ft of warehouse uses. The proposed project would not house more than 1,000 persons, occupy more than 40 acres of land, or encompass more than 650,000 sf of floor area. Thus, the proposed project would not be defined as a regionally significant project under CEQA; therefore, it does not meet SCAG's Intergovernmental Review criteria.

The City's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD AQMP. Pursuant to the methodology provided in the SCAQMD *CEQA Air Quality Handbook*, consistency with the Basin 2016 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented as follows:

1. The project would result in short-term construction and long-term operational pollutant emissions that are all less than the CEQA significance emissions thresholds established by SCAQMD, as demonstrated below; therefore, the project in would not result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standard violation.

2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, the proposed project is not defined as significant. In addition, the proposed project would not require a change to the General Plan land use designation or the current zoning, and would be consistent with the City's General Plan and Zoning Ordinance.

Based on the consistency analysis presented above, the proposed project would be consistent with the regional AQMP.

Criteria Pollutant Analysis

The Basin is designated as non-attainment for O_3 and $PM_{2.5}$ for federal standards and non-attainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards. The SCAQMD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Construction Emissions

During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, building, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, ROG, directly-emitted particulate matter ($PM_{2.5}$ and PM_{10}), and TACs such as diesel exhaust particulate matter.

Project construction activities would include grading, site preparation, building, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SCAQMD has established Rule 403: Fugitive Dust, which would require the applicant to implement measures that would reduce the amount of particulate matter generated during the construction period.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, VOCs and some soot particulate ($PM_{2.5}$

and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod. Table K lists the tentative project construction schedule based on a 10-month duration project. Table L lists the potential construction equipment to be used during project construction under each phase of construction. Other precise details of construction activities are unknown at this time; therefore, default settings (e.g., construction equipment) from CalEEMod were assumed. Table M identifies the total annual emissions associated with construction activities. CalEEMod output sheets are included in Appendix A.

Table K: Tentative Project Construction Schedule

Phase Number	Phase Name	Phase Start Date	Phase End Date	Number of Days/Week	Number of Days
1	Site Preparation	10/9/2023	10/27/2023	5	15
2	Grading	10/30/2023	11/24/2023	5	20
3	Building Construction[1]	11/27/2023	8/2/2024	5	180
4	Paving	8/5/2024	8/16/2024	5	10
5	Architectural Coating[1]	4/1/2024	8/2/2024	5	90

Source: Compiled by LSA (December 2022).
[1] Overlap between building construction and architectural coating phases.

Table L: Diesel Construction Equipment Utilized by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	3	8	367	0.40
	Tractors/Loaders/Backhoes	4	8	84	0.37
Grading	Excavators	1	8	36	0.38
	Graders	1	8	148	0.41
	Rubber Tired Dozers	1	8	367	0.4
	Tractors/Loaders/Backhoes	3	8	84	0.37
Building Construction	Cranes	1	7	367	0.29
	Forklifts	3	8	82	0.2
	Generator Sets	1	8	14	0.74
	Tractors/Loaders/Backhoes	3	7	84	0.37
	Welders	1	8	46	0.45
Paving	Pavers	2	8	81	0.42
	Paving Equipment	2	8	89	0.36
	Rollers	2	8	36	0.38
Architectural Coating	Air Compressors	1	6	37	0.48

Source: Compiled by LSA using CalEEMod defaults (December 2022).
CalEEMod = California Emissions Estimator Model

Table M: Project Construction Emissions

Project Construction	Maximum Pollutant Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Site Preparation	1.0	24.1	29.5	<0.1	8.8	4.8
Grading	0.7	23.8	21.0	0.1	5.8	2.6
Building Construction	0.7	12.9	18.0	<0.1	1.3	0.7
Paving	0.9	8.7	11.9	<0.1	0.6	0.4
Architectural Coating	0.1	1.0	2.6	<0.1	0.2	0.1
Maximum (lbs/day)	**1.0**	**24.1**	**29.5**	**0.1**	**8.8**	**4.8**
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (December 2022).
Note: Maximum emissions of VOC and CO occurred during the overlapping building construction and architectural coating phases.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

As shown in Table M, construction emissions associated with the project would not exceed the SCAQMD thresholds for VOC, NO_x, CO, sulfur oxides (SO_X), $PM_{2.5,}$ or PM_{10} emissions. In addition to the construction period thresholds of significance, the project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Even though the project's construction would not exceed any of the emissions thresholds as noted in Table M, compliance with Rule 403 dust suppression techniques can further reduce the fugitive dust generation (and thus, the PM_{10} component). With compliance with Rule 403, construction of the proposed project would not result in emissions that would cause a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under an applicable federal or State ambient air quality standard. Therefore, the proposed project would not lead to new or substantially more severe significant impacts associated with construction-related air quality.

Operational Air Quality Impacts

Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment) related to the proposed project.

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement, and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of PM emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source. Major sources of energy demand for the proposed project could include building mechanical systems, such as heating and air conditioning.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings, consumer products, and the use of landscape maintenance equipment.

Long-term operation emissions associated with the proposed project were calculated using CalEEMod. Model results are shown in Table N below. CalEEMod output sheets are included in Appendix A.

Table N: Project Operational Emissions

Emission Type	Pollutant Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	3.5	<0.1	5.3	<0.1	<0.1	<0.1
Energy Sources	<0.1	0.6	0.5	<0.1	0.1	0.1
Mobile Sources – Vehicle Trips and Light Duty Trucks	1.9	2.7	21.6	0.1	1.8	0.4
Mobile Sources – Heavy Heavy Duty Truck Trips	0.2	16.7	3.2	0.2	2.3	0.3
Total Project Emissions	**5.6**	**20.0**	**30.6**	**0.3**	**4.2**	**0.8**
SCAQMD Thresholds	**55.0**	**55.0**	**550.0**	**150.0**	**150.0**	**55.0**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (December 2022).
CO = carbon monoxide
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_x = sulfur oxides
ROG = volatile organic compounds

The results shown in Table N indicate the project would not exceed the significance criteria for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ emissions; thus, the proposed project would not have a significant effect on regional air quality. Therefore, operation of the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under an applicable federal or State AAQS.

Localized Significance Analysis

Project construction and operation emissions were compared to the LST screening tables in SRA 24, based on a 25-meter source-receptor distance and a disturbed acreage of 3.5-acres. The results of the LST analysis, summarized in Table O and Table P, indicate that the project would not result in an exceedance of the SCAQMD LST during project construction or operation.

Table O: Project Localized Construction Emissions in Pounds Per Day

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
On-Site Project Emissions	24.1	29.5	8.8	4.8
Localized Significance Threshold	220.0	1,230.0	10.0	6.0
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (December2022).
Note: Source Receptor Area 24, based on a 3.5-acre construction disturbance daily area, at a distance of 25 meters from the project boundary.
CO= carbon monoxide
NO_x= nitrogen oxides
$PM_{2.5}$= particulate matter less than 2.5 microns in size
PM_{10}= particulate matter less than 10 microns in size

Table P: Project Localized Operational Emissions in Pounds Per Day

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
On-Site Project Emissions	<1.0	1.1	<1.0	<1.0
Localized Significance Threshold	220.0	1,230.0	3.0	1.5
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (December 2022).
Note: Source Receptor Area 24, based on a 3.5-acre construction disturbance daily area, at a distance of 25 meters from the project boundary.
CO= carbon monoxide
NO_x= nitrogen oxides
$PM_{2.5}$= particulate matter less than 2.5 microns in size
PM_{10}= particulate matter less than 10 microns in size

Health Risk on Nearby Sensitive Receptors

Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptor to the project site is an existing trailer home located on the lot to the immediate north of the project site at approximately 50 feet.

The following section describes the potential impacts on sensitive receptors from construction and operation of the proposed project. The HRA analysis and results are presented below; data outputs are included in Appendix B.

Construction Health Risk Assessment

A construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for the proposed project. Table Q, below, identifies the results of the analysis assuming the use of Tier 3 construction equipment, as proposed by the project and required by PVCCSP EIR MM AIR 6, at the MEI, which is the nearest sensitive receptor. Model snap shots of the sources are shown in Appendix B.

Table Q: Unmitigated Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Worker Receptor Risk	0.71	0.038	0.000
Sensitive Receptor Risk	33.42	0.032	0.000
SCAQMD Significance Threshold	**10.0 in one million**	**1.0**	**1.0**
Significant?	**Yes**	**No**	**No**

Source: LSA (December 2022).
SCAQMD = South Coast Air Quality Management District

As shown in Table Q, the maximum cancer risk for the sensitive receptor MEI would be 33.42 in one million, which would exceed the SCAQMD cancer risk threshold of 10 in one million. The worker receptor risk would be lower at 0.71 in one million, which would not exceed the threshold. The total chronic hazard index would be 0.038 for the worker receptor MEI and 0.032 for the sensitive receptor MEI, which would both be below the threshold of 1.0. In addition, the total acute hazard index would be nominal (0.000), which would also not exceed the threshold of 1.0. As indicated above, the cancer risk of 33.42 in one million would exceed SCAQMD thresholds. Therefore, mitigation is required to reduce this potential impact. Project-specific mitigation measure MM AIR 1 is recommended to ensure that the project applicant complies with more stringent mitigation standards to continue to reduce impacts to a less-than-significant level. Project-specific mitigation measure MM AIR 1 replaces mitigation measure MM Air 6 from the PVCCSP EIR for the proposed project.

MM AIR 1: The project developer shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the CARB in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) and/or meets or exceeds Tier 3 standards equipped with Level 3 diesel particulate filters. Diesel equipment shall use water emulsified diesel fuel such as PuriNO$_x$ unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit.

Table R identifies the results of the analysis with implementation of project-specific mitigation measure MM AIR 1.

Table R: Mitigated Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Worker Receptor Risk	0.13	0.006	0.000
Sensitive Receptor Risk	6.04	0.005	0.000
SCAQMD Significance Threshold	**10.0 in one million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: LSA (December 2022).
SCAQMD = South Coast Air Quality Management District

As shown in Table R, the mitigated cancer risk at the sensitive receptor MEI would be 6.04 in one million, which would not exceed the SCAQMD cancer risk of 10 in one million. Therefore, with implementation of project specific mitigation measure MM AIR 1, construction of the proposed project would not exceed SCAQMD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations.

Operational Health Risk Assessment

To determine the potential health risk to people living and working near the proposed project associated with the exhaust of diesel-powered trucks and equipment, an operational HRA was conducted for the proposed project. The carcinogenic and chronic health risks from the proposed project are shown in Table S. The residential risk incorporates both the risk for a child living in a nearby residence for 9 years (the standard period of time for child risk) and an adult living in a nearby residence for 30 years (considered a conservative period of time for an individual to live in any one residence). The HRA model snapshots and outputs are included in Appendix B.

Table S: Health Risks from Project Operation to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Worker Receptor Risk	0.44	0.001	0.000
Sensitive Receptor Risk	4.27	0.001	0.000
SCAQMD Significance Threshold	**10.0 in one million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: LSA (December 2022).
SCAQMD = South Coast Air Quality Management District

As shown in Table S, the maximum cancer risk for the sensitive receptor MEI would be 4.27 in one million, less than the threshold of 10 in one million. The worker receptor risk would be lower at 0.44 in one million. The total chronic hazard index would be 0.001 for both the sensitive and worker receptor MEI, which is below the threshold of 1.0. In addition, the total acute hazard index would be nominal (0.000), which would also not exceed the threshold of 1.0 As these results show, all health

risk levels to nearby residents from operation-related emissions of TACs would be well below the SCAQMD's HRA thresholds. No significant health risk would occur from project operation emissions.

Odors

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed project would not include any activities or operations that would generate objectionable odors and once operational, the project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) affecting a substantial number of people.

ENERGY IMPACTS

The following describes the potential impacts regarding energy resources that could result from implementation of the proposed project.

Energy Consumption

The proposed project would increase the demand for energy through day-to-day operations and fuel consumption associated with project construction. This section discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

Construction Energy Use

Construction of the proposed project is anticipated to begin in the fourth quarter of 2023 and occur for 10 months, ending in 2024. The project would require energy for activities such as the manufacture and transportation of building materials, grading activities, and building construction. Construction of the proposed project would require electricity to power construction-related equipment. Construction of the proposed project would not involve the consumption of natural gas. The construction-related equipment would not be powered by natural gas, and no natural gas demand is anticipated during construction.

Transportation energy represents the largest energy use during construction and would occur from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). Therefore, the analysis of energy use during construction focuses on fuel consumption. Construction trucks and vendor trucks hauling materials to and from the project site would be anticipated to use diesel fuel, whereas construction workers traveling to and from the project site would be anticipated to use gasoline-powered vehicles. Fuel consumption from transportation uses depends on the type and number of trips, VMT, the fuel efficiency of the vehicles, and the travel mode.

Estimates of fuel consumption (diesel fuel and gasoline) from construction equipment, construction trucks, and construction worker vehicles were based on default construction equipment assumptions and trip estimates from CalEEMod and fuel efficiencies from EMFAC2021. Fuel consumption estimates are presented in Table T. CalEEMod output sheets are included in Appendix A and detailed energy calculations are included in Appendix C.

Table T: Proposed Project Energy Consumption Estimates during Construction

Energy Type	Total Energy Consumption	Percentage Increase Countywide
Diesel Fuel (total gallons)	36,052.6	0.01
Gasoline (total gallons)	15,451.8	<0.01

Source: Compiled by LSA (December2022).

As indicated in Table T, the project would consume approximately 36,052.6 gallons of diesel fuel and approximately 15,451.8 gallons of gasoline during construction Based on fuel consumption obtained from EMFAC2021, approximately 295.2 million gallons of diesel and approximately 758.6 million gallons of gasoline will be consumed from vehicle trips in Riverside County in 2022. Therefore, construction of the proposed project would increase the annual construction generated fuel use in Riverside County by approximately 0.01 percent for diesel fuel usage and by less than 0.01 percent for gasoline fuel usage. As such, project construction would have a negligible effect on local and regional energy supplies. Furthermore, impacts related to energy use during construction would be temporary and relatively small in comparison to Riverside County's overall use of the State's available energy resources. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. The project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system. For these reasons, fuel consumption during construction would not be inefficient, wasteful, or unnecessary.

Operational Energy Usage

Operational energy use is typically associated with natural gas use, electricity consumption, and fuel used for vehicle trips associated with a project. Energy consumption was estimated for the proposed project using default energy intensities by land use type in CalEEMod.

The proposed project would also result in energy usage associated with gasoline and diesel fuel consumed by project-related vehicle and truck trips. Fuel use associated with vehicle and truck trips generated by the proposed project was calculated based on the project's Traffic Impact Analysis [59], which identifies that the proposed project would generate approximately 590 average daily trips, including 407 passenger vehicle trips, 40 two-axle truck trips, 32 three-axle truck trips, and 110 four+-axle truck trips. The amount of operational fuel use was estimated using CARB's EMFAC2021 model, which provided projections for typical daily fuel usage in Los Angeles County.

Electricity, natural gas, and fuel usage estimates associated with the proposed project are shown in Table U.

[59] Environment Planning Development Solutions, Inc. 2022. *Traffic Impact Analysis for Redlands and Placentia Industrial Project*. August 31.

Table U: Proposed Project Energy Consumption Estimates during Operation

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Electricity Consumption (kWh/year)	628,242.0	<0.01
Natural Gas Consumption (therms/year)	23,106.0	<0.01
Automotive Fuel Consumption		
Gasoline (gallons/year)	81,600.5	0.01
Diesel Fuel (gallons/year)	283,238.6	0.10

Source: Compiled by LSA (December 2022).
kWh = kilowatt-hours

As shown in Table U, the estimated potential increase in electricity demand associated with the operation of the proposed project is 628,242 kilowatt-hours (kWh) per year. Total electricity consumption in Riverside County in 2020 was 16,857.9 GWh (16,857,930,966 kWh). Therefore, operation of the proposed project would increase the annual electricity consumption in Riverside County by less than 0.01 percent.

As shown in Table U, the estimated potential increase in natural gas demand associated with the proposed project is 23,106 therms per year. Total natural gas consumption in Riverside County in 2020 was 436.9 million therms (436,941,555 therms). Therefore, operation of the proposed project would negligibly increase the annual natural gas consumption in Riverside County by less than 0.01 percent.

Electrical and natural gas demand associated with project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The project would be required to adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. Title 24 building energy efficiency standards establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage.

As shown in Table U, fuel use associated with the vehicle trips generated by the proposed project is estimated at 81,600.5 gallons of gasoline and 283,238.6 gallons of diesel fuel per year. This analysis conservatively assumes that all vehicle trips generated as a result of project operation would be new to Riverside County. Based on fuel consumption obtained from EMFAC2021, approximately 295.2 million gallons of diesel and approximately 758.6 million gallons of gasoline will be consumed from vehicle trips in Riverside County in 2022. Therefore, vehicle and truck trips associated with the proposed project would increase the annual fuel use in Riverside County by approximately 0.01 percent for gasoline fuel usage and approximately 0.10 percent for diesel fuel usage. Fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Conflict with Renewable Energy or Energy Efficiency Plans

In 2002, the Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels for the Integrated Energy

Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for ZEVs and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC's *2021 Integrated Energy Policy Report* and *2022 Integrated Energy Policy Report Update* provide the results of the CEC's assessments of a variety of energy issues facing California. As indicated above, energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the overall use in the County. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the overall use in Riverside County, and the State's available energy resources. Therefore, energy impacts at the regional level would be negligible. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's Integrated Energy Policy Report. Additionally, as demonstrated above, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of energy. Potential impacts related to conflict with or obstruction of a State or local plan for renewable energy or energy efficiency would be less than significant, and no mitigation is required.

GREENHOUSE GAS IMPACTS

This section describes the potential GHG impacts associated with implementation the proposed project.

Generation of Greenhouse Gas Emissions

This section describes the proposed project's construction- and operational-related GHG emissions and contribution to global climate change. The SCAQMD has not addressed emission thresholds for construction in their CEQA Handbook; however, the SCAQMD requires quantification and disclosure. Thus, an evaluation of the project's impacts related to the release of GHG emissions for both construction and operational phases of the project is described below.

Short-Term Greenhouse Gas Emissions

Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As indicated above, the SCAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. The SCAQMD then requires the construction

GHG emissions to be amortized over the life of the project, defined by the SCAQMD as 30 years[60], added to the operational emissions, and compared to the applicable interim GHG significance threshold tier.

Using CalEEMod, it is estimated that the project would generate approximately 464.0 MT CO_2e during construction of the project. When annualized over the 30-year life of the project, annual emissions would be 15.5 MT CO_2e. Table V lists the construction GHG emissions (details are provided in the CalEEMod output in Appendix A). Construction emissions would be temporary in nature and would only occur for the duration of the construction period.

Table V: Construction Greenhouse Gas Emissions

Construction Year	Annual Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	CO_2e
2023	181.0	<0.1	<0.1	185.0
2024	276.0	<0.1	<0.1	279.0
Total Construction GHG Emissions				**464.0**
Amortized Construction Emissions				**15.5**

Source: Compiled by LSA (December 2022).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide

Long-Term Greenhouse Gas Emissions

Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers because of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

Following guidance from the SCAQMD, GHG emissions were estimated for the operational year of 2024 using CalEEMod. Table W shows the calculated GHG emissions for the proposed project.

As discussed above, a project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than 10,000 MT CO_2e/yr. Based on the analysis results, the proposed project would result in approximately 4,492.7 MT CO_2e/yr. Therefore, operation of the

[60] The SCAQMD has identified the average operational lifespan of buildings to be 30 years. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf (accessed December 2022).

proposed project would not generate significant GHG emissions that would have a significant effect on the environment.

Table W: Greenhouse Gas Emissions

Emissions Source	Operational Emissions (MT/yr)				
	CO_2	CH_4	N_2O	CO_2e	Percent of Total
Area Sources	2.5	<0.1	<0.1	2.5	<1
Energy Sources	274.0	<0.1	<0.1	275.0	6
Mobile Sources – Vehicle and Light Duty Truck Trips	882.0	<0.1	0.1	899.0	20
Mobile Sources – Heavy Heavy Duty Truck Trips	2,525	0.1	0.4	2,647.0	59
Waste Sources	10.2	1.0	0.0	35.5	1
Water Sources	54.8	1.0	<0.1	84.2	2
Refrigerants	0.0	0.0	0.0	534.0	12
Total Project Operational Emissions				**4,477.2**	**100**
Amortized Construction Emissions				15.5	-
Total Annual Emissions				**4,492.7**	**-**
SCAQMD Threshold				10,000	-
Exceed?				**No**	**-**

Source: Compiled by LSA (December 2022).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide
SCAQMD = South Coast Air Quality Management District

Consistency with Greenhouse Gas Emissions Reduction Plans

Climate Action Plan

As described above, the City adopted a CAP in February 2016. The consistency of the project with the goals of this CAP fulfills the CEQA goal of fully informing local-agency decision-makers of the environmental impact of the project under consideration at a stage early enough to ensure that GHG emissions are addressed. The proposed project would be consistent with the transportation goals of the CAP by providing additional parking options for bicycles, electric vehicles, and carpool/vanpool vehicles. The tenant is unknown at this time, however the proposed project would consist of a job-generating use located within close proximity to existing residences which would reduce VMT and promote alternative modes of transportation for employees. The project would be consistent with the CAP goal by helping improve the job-housing balance and reduce vehicle miles traveled by increasing household and employment densities. The proposed project would also be consistent with the CAP goal of increasing energy efficiency in new buildings by complying with the latest California Building Code (Title 24), including the latest CALGreen Code standards. Construction of the project would include a diversion of construction waste from landfills to recycling consistent with current local and State standards and CAP goals to increase diversion and reduction of waste. As such, the proposed project would be consistent with applicable CAP goals.

The proposed project was also analyzed for consistency with the goals the Scoping Plan, EO B-30-15, SB 32, and AB 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan, to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps the State on the path toward achieving the 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The Scoping Plan contains GHG reduction measures that work towards reducing GHG emissions, consistent with the targets set by EO B-30-15 and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The proposed project would be required to comply with the latest Title 24 standards of the CCR, established by the CEC, regarding energy conservation and green building standards.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the proposed project would be required to comply with the latest Title 24 standards of the CCR, which includes a variety of different measures, including reduction of wastewater and water use. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

As such, the proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

CONCLUSIONS

Based on the analysis presented above, the proposed project would not conflict with or obstruct implementation of SCAQMD air quality plans. In addition, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed SCAQMD thresholds of significance. With implementation of project-specific mitigation measure MM AIR 1, the proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. In addition, the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation and would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The project would also not result in objectionable odors affecting a substantial number of people. With regard to GHGs, the project would not result in substantial emissions during construction or operation. Additionally, the proposed project would not conflict with the objectives embodied in EO B-30-15, SB 32, or AB 197. Therefore, the proposed project's incremental contribution to cumulative GHG emissions would not be cumulatively considerable

APPENDIX A

CALEEMOD OUTPUT SHEETS

Redlands and Placentia Industrial Project Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Redlands and Placentia Industrial Project
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	0.20
Location	33.823543074886615, -117.21661056450773
County	Riverside-South Coast
City	Perris
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5501
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	121	1000sqft	2.78	121,000	0.00	—	—	—
Parking Lot	84.0	Space	1.87	0.00	0.00	—	—	—
City Park	1.00	Acre	1.09	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-6	Use Diesel Particulate Filters

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.88	13.9	20.6	0.03	0.58	0.97	1.55	0.53	0.23	0.76	4,025	0.15	0.14	4,076
Mit.	0.88	13.9	20.6	0.03	0.09	0.97	1.06	0.09	0.23	0.32	4,025	0.15	0.14	4,076
% Reduced	—	—	—	—	84%	—	31%	84%	—	58%	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.98	24.1	29.5	0.08	0.94	7.89	8.84	0.84	3.99	4.83	11,153	0.27	1.30	11,548
Mit.	0.98	24.1	29.5	0.08	0.24	7.89	8.04	0.23	3.99	4.12	11,153	0.27	1.30	11,548
% Reduced	—	—	—	—	75%	—	9%	73%	—	15%	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	5.92	8.25	0.01	0.24	0.66	0.77	0.22	0.29	0.39	1,668	0.06	0.08	1,688
Mit.	0.34	5.92	8.25	0.01	0.04	0.66	0.68	0.04	0.29	0.31	1,668	0.06	0.08	1,688
% Reduced	—	—	—	—	84%	—	12%	84%	—	21%	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	1.08	1.51	< 0.005	0.04	0.12	0.14	0.04	0.05	0.07	276	0.01	0.01	279

Mit.	0.06	1.08	1.51	< 0.005	0.01	0.12	0.12	0.01	0.05	0.06	276	0.01	0.01	279
% Reduced	—	—	—	—	84%	—	12%	84%	—	21%	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	150	150	150	55.0	55.0	55.0	—	—	—	—
Unmit.	No	No	No	No	No	No	No	No	No	No	—	—	—	—
Mit.	No	No	No	No	No	No	No	No	No	No	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.88	13.9	20.6	0.03	0.58	0.97	1.55	0.53	0.23	0.76	4,025	0.15	0.14	4,076
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.98	24.1	29.5	0.08	0.94	7.89	8.84	0.84	3.99	4.83	11,153	0.27	1.30	11,548
2024	0.70	12.8	17.7	0.03	0.51	0.83	1.35	0.47	0.20	0.67	3,686	0.14	0.14	3,731
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.13	3.18	3.62	0.01	0.11	0.66	0.77	0.10	0.29	0.39	1,093	0.03	0.08	1,119
2024	0.34	5.92	8.25	0.01	0.24	0.39	0.63	0.22	0.09	0.32	1,668	0.06	0.06	1,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.02	0.58	0.66	< 0.005	0.02	0.12	0.14	0.02	0.05	0.07	181	0.01	0.01	185
2024	0.06	1.08	1.51	< 0.005	0.04	0.07	0.12	0.04	0.02	0.06	276	0.01	0.01	279

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.88	13.9	20.6	0.03	0.09	0.97	1.06	0.09	0.23	0.32	4,025	0.15	0.14	4,076
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.98	24.1	29.5	0.08	0.24	7.89	8.04	0.23	3.99	4.12	11,153	0.27	1.30	11,548
2024	0.70	12.8	17.7	0.03	0.08	0.83	0.92	0.08	0.20	0.28	3,686	0.14	0.14	3,731
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.13	3.18	3.62	0.01	0.02	0.66	0.68	0.02	0.29	0.31	1,093	0.03	0.08	1,119
2024	0.34	5.92	8.25	0.01	0.04	0.39	0.43	0.04	0.09	0.13	1,668	0.06	0.06	1,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.02	0.58	0.66	< 0.005	< 0.005	0.12	0.12	< 0.005	0.05	0.06	181	0.01	0.01	185
2024	0.06	1.08	1.51	< 0.005	0.01	0.07	0.08	0.01	0.02	0.02	276	0.01	0.01	279

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.38	3.20	27.4	0.06	0.09	1.74	1.83	0.09	0.31	0.40	7,672	11.9	0.42	11,345
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.43	3.34	18.5	0.06	0.08	1.74	1.83	0.08	0.31	0.39	7,328	11.9	0.43	10,980

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.01	3.42	22.8	0.06	0.09	1.74	1.83	0.09	0.31	0.40	7,389	12.0	0.43	11,052
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.91	0.62	4.16	0.01	0.02	0.32	0.33	0.02	0.06	0.07	1,223	1.98	0.07	1,830
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	150	150	150	55.0	55.0	55.0	—	—	—	—
Unmit.	No	No	No	No	No	No	No	No	No	No	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.89	2.54	21.6	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,602	0.17	0.28	5,714
Area	3.46	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	5.38	3.20	27.4	0.06	0.09	1.74	1.83	0.09	0.31	0.40	7,672	11.9	0.42	11,345
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.80	2.72	18.0	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,279	0.18	0.29	5,371
Area	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662

Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	4.43	3.34	18.5	0.06	0.08	1.74	1.83	0.08	0.31	0.39	7,328	11.9	0.43	10,980
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.79	2.77	18.6	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,326	0.18	0.29	5,428
Area	3.19	0.03	3.60	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	14.8	< 0.005	< 0.005	14.9
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	5.01	3.42	22.8	0.06	0.09	1.74	1.83	0.09	0.31	0.40	7,389	12.0	0.43	11,052
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.33	0.51	3.40	0.01	0.01	0.32	0.32	0.01	0.06	0.06	882	0.03	0.05	899
Area	0.58	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46
Energy	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	274	0.02	< 0.005	275
Water	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2
Waste	—	—	—	—	—	—	—	—	—	—	10.2	1.02	0.00	35.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	534
Total	0.91	0.62	4.16	0.01	0.02	0.32	0.33	0.02	0.06	0.07	1,223	1.98	0.07	1,830

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	1.89	2.54	21.6	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,602	0.17	0.28	5,714
Area	3.46	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	5.38	3.20	27.4	0.06	0.09	1.74	1.83	0.09	0.31	0.40	7,672	11.9	0.42	11,345
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.80	2.72	18.0	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,279	0.18	0.29	5,371
Area	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	4.43	3.34	18.5	0.06	0.08	1.74	1.83	0.08	0.31	0.39	7,328	11.9	0.43	10,980
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.79	2.77	18.6	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,326	0.18	0.29	5,428
Area	3.19	0.03	3.60	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	14.8	< 0.005	< 0.005	14.9
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	5.01	3.42	22.8	0.06	0.09	1.74	1.83	0.09	0.31	0.40	7,389	12.0	0.43	11,052
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.33	0.51	3.40	0.01	0.01	0.32	0.32	0.01	0.06	0.06	882	0.03	0.05	899
Area	0.58	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46

Energy	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	274	0.02	< 0.005	275
Water	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2
Waste	—	—	—	—	—	—	—	—	—	—	10.2	1.02	0.00	35.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	534
Total	0.91	0.62	4.16	0.01	0.02	0.32	0.33	0.02	0.06	0.07	1,223	1.98	0.07	1,830

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	24.0	28.3	0.05	0.94	—	0.94	0.84	—	0.84	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.99	1.16	< 0.005	0.04	—	0.04	0.03	—	0.03	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.16	0.16	—	—	—	—

Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.18	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	36.0	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.20	0.00	0.00	0.01	0.01	0.00	0.00	0.00	236	0.01	0.01	239
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	9.83	< 0.005	< 0.005	9.97
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.63	< 0.005	< 0.005	1.65
Vendor	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
Hauling	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

3.2. Site Preparation (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	24.0	28.3	0.05	0.14	—	0.14	0.13	—	0.13	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.99	1.16	< 0.005	0.01	—	0.01	0.01	—	0.01	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.16	0.16	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.18	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	36.0	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.20	0.00	0.00	0.01	0.01	0.00	0.00	0.00	236	0.01	0.01	239
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	9.83	< 0.005	< 0.005	9.97
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.63	< 0.005	< 0.005	1.65
Vendor	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
Hauling	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

3.3. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	14.1	17.8	0.03	0.60	—	0.60	0.54	—	0.54	2,958	0.12	0.02	2,968
Dust From Material Movement	—	—	—	—	—	2.78	2.78	—	1.34	1.34	—	—	—	—

Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.77	0.97	< 0.005	0.03	—	0.03	0.03	—	0.03	162	0.01	< 0.005	163
Dust From Material Movement	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.14	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	26.8	< 0.005	< 0.005	26.9
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	202	0.01	0.01	205
Vendor	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
Hauling	0.12	9.59	2.23	0.05	0.15	0.55	0.69	0.15	0.20	0.35	7,993	0.14	1.27	8,375
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	11.2	< 0.005	< 0.005	11.4
Vendor	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
Hauling	0.01	0.53	0.12	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	438	0.01	0.07	459
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.86	< 0.005	< 0.005	1.89
Vendor	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
Hauling	< 0.005	0.10	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	72.5	< 0.005	0.01	76.0

3.4. Grading (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	14.1	17.8	0.03	0.09	—	0.09	0.08	—	0.08	2,958	0.12	0.02	2,968
Dust From Material Movement	—	—	—	—	—	2.78	2.78	—	1.34	1.34	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.77	0.97	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	162	0.01	< 0.005	163
Dust From Material Movement	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.14	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	26.8	< 0.005	< 0.005	26.9

Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	202	0.01	0.01	205
Vendor	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
Hauling	0.12	9.59	2.23	0.05	0.15	0.55	0.69	0.15	0.20	0.35	7,993	0.14	1.27	8,375
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	11.2	< 0.005	< 0.005	11.4
Vendor	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
Hauling	0.01	0.53	0.12	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	438	0.01	0.07	459
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.86	< 0.005	< 0.005	1.89
Vendor	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
Hauling	< 0.005	0.10	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	72.5	< 0.005	0.01	76.0

3.5. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	11.8	14.3	0.02	0.50	—	0.50	0.46	—	0.46	2,397	0.10	0.02	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.81	0.98	< 0.005	0.03	—	0.03	0.03	—	0.03	164	0.01	< 0.005	165
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.15	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	27.2	< 0.005	< 0.005	27.3
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.31	3.49	0.00	0.00	0.04	0.04	0.00	0.00	0.00	686	0.03	0.03	694
Vendor	0.02	0.76	0.23	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	623	0.01	0.09	651
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.25	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	47.6	< 0.005	< 0.005	48.3
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	42.7	< 0.005	0.01	44.6

Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	7.88	< 0.005	< 0.005	7.99
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.07	< 0.005	< 0.005	7.39
Hauling	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

3.6. Building Construction (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	11.8	14.3	0.02	0.08	—	0.08	0.07	—	0.07	2,397	0.10	0.02	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.81	0.98	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	164	0.01	< 0.005	165
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.15	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	27.2	< 0.005	< 0.005	27.3
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.31	3.49	0.00	0.00	0.04	0.04	0.00	0.00	0.00	686	0.03	0.03	694
Vendor	0.02	0.76	0.23	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	623	0.01	0.09	651
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.25	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	47.6	< 0.005	< 0.005	48.3
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	42.7	< 0.005	0.01	44.6
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	7.88	< 0.005	< 0.005	7.99
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.07	< 0.005	< 0.005	7.39
Hauling	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

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	11.8	14.3	0.02	0.50	—	0.50	0.46	—	0.46	2,398	0.10	0.02	2,406
Onsite truck	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	11.8	14.3	0.02	0.50	—	0.50	0.46	—	0.46	2,398	0.10	0.02	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	4.97	6.02	0.01	0.21	—	0.21	0.19	—	0.19	1,009	0.04	0.01	1,012
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.91	1.10	< 0.005	0.04	—	0.04	0.04	—	0.04	167	0.01	< 0.005	168
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	4.24	0.00	0.00	0.04	0.04	0.00	0.00	0.00	731	0.03	0.03	743
Vendor	0.02	0.70	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	616	0.01	0.09	645
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.29	3.21	0.00	0.00	0.04	0.04	0.00	0.00	0.00	672	0.03	0.03	681
Vendor	0.02	0.73	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	616	0.01	0.09	644
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.12	1.42	0.00	0.00	0.02	0.02	0.00	0.00	0.00	286	0.01	0.01	290
Vendor	0.01	0.31	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	259	0.01	0.04	271

Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	47.4	< 0.005	< 0.005	48.1
Vendor	< 0.005	0.06	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	42.9	< 0.005	0.01	44.9
Hauling	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

3.8. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	11.8	14.3	0.02	0.08	—	0.08	0.07	—	0.07	2,398	0.10	0.02	2,406
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	11.8	14.3	0.02	0.08	—	0.08	0.07	—	0.07	2,398	0.10	0.02	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	4.97	6.02	0.01	0.03	—	0.03	0.03	—	0.03	1,009	0.04	0.01	1,012
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.91	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	167	0.01	< 0.005	168

Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	4.24	0.00	0.00	0.04	0.04	0.00	0.00	0.00	731	0.03	0.03	743
Vendor	0.02	0.70	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	616	0.01	0.09	645
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.29	3.21	0.00	0.00	0.04	0.04	0.00	0.00	0.00	672	0.03	0.03	681
Vendor	0.02	0.73	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	616	0.01	0.09	644
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.12	1.42	0.00	0.00	0.02	0.02	0.00	0.00	0.00	286	0.01	0.01	290
Vendor	0.01	0.31	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	259	0.01	0.04	271
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	47.4	< 0.005	< 0.005	48.1
Vendor	< 0.005	0.06	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	42.9	< 0.005	0.01	44.9
Hauling	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

3.9. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	8.62	10.6	0.01	0.39	—	0.39	0.36	—	0.36	1,512	0.06	0.01	1,517
Paving	0.49	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.24	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	41.4	< 0.005	< 0.005	41.6
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.86	< 0.005	< 0.005	6.88
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.25	0.00	0.00	0.01	0.01	0.00	0.00	0.00	216	0.01	0.01	219
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	5.51	< 0.005	< 0.005	5.58
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.91	< 0.005	< 0.005	0.92
Vendor	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
Hauling	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

3.10. Paving (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	8.62	10.6	0.01	0.06	—	0.06	0.05	—	0.05	1,512	0.06	0.01	1,517
Paving	0.49	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.24	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	41.4	< 0.005	< 0.005	41.6
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.86	< 0.005	< 0.005	6.88
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.25	0.00	0.00	0.01	0.01	0.00	0.00	0.00	216	0.01	0.01	219
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	5.51	< 0.005	< 0.005	5.58
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.91	< 0.005	< 0.005	0.92
Vendor	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
Hauling	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

3.11. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.27	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	32.9	< 0.005	< 0.005	33.0
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.45	< 0.005	< 0.005	5.47
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.85	0.00	0.00	0.01	0.01	0.00	0.00	0.00	146	0.01	0.01	149
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	33.6	< 0.005	< 0.005	34.0
Vendor	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

Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	5.56	< 0.005	< 0.005	5.64
Vendor	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
Hauling	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

3.12. Architectural Coating (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.01	—	0.01	0.01	—	0.01	134	0.01	< 0.005	134
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.27	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	32.9	< 0.005	< 0.005	33.0
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.45	< 0.005	< 0.005	5.47
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.85	0.00	0.00	0.01	0.01	0.00	0.00	0.00	146	0.01	0.01	149
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	33.6	< 0.005	< 0.005	34.0
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	5.56	< 0.005	< 0.005	5.64
Vendor	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
Hauling	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. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	1.89	2.54	21.6	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,602	0.17	0.28	5,714
Parking Lot	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
City Park	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
Total	1.89	2.54	21.6	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,602	0.17	0.28	5,714
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.80	2.72	18.0	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,279	0.18	0.29	5,371
Parking Lot	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
City Park	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
Total	1.80	2.72	18.0	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,279	0.18	0.29	5,371
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.33	0.51	3.40	0.01	0.01	0.32	0.32	0.01	0.06	0.06	882	0.03	0.05	899
Parking Lot	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
City Park	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
Total	0.33	0.51	3.40	0.01	0.01	0.32	0.32	0.01	0.06	0.06	882	0.03	0.05	899

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	1.89	2.54	21.6	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,602	0.17	0.28	5,714
Parking Lot	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
City Park	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
Total	1.89	2.54	21.6	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,602	0.17	0.28	5,714
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.80	2.72	18.0	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,279	0.18	0.29	5,371
Parking Lot	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
City Park	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
Total	1.80	2.72	18.0	0.05	0.04	1.74	1.78	0.04	0.31	0.35	5,279	0.18	0.29	5,371
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.33	0.51	3.40	0.01	0.01	0.32	0.32	0.01	0.06	0.06	882	0.03	0.05	899
Parking Lot	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
City Park	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
Total	0.33	0.51	3.40	0.01	0.01	0.32	0.32	0.01	0.06	0.06	882	0.03	0.05	899

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	812	0.05	0.01	815
Parking Lot	—	—	—	—	—	—	—	—	—	—	104	0.01	< 0.005	104
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	916	0.06	0.01	919
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	812	0.05	0.01	815
Parking Lot	—	—	—	—	—	—	—	—	—	—	104	0.01	< 0.005	104
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	916	0.06	0.01	919
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	134	0.01	< 0.005	135
Parking Lot	—	—	—	—	—	—	—	—	—	—	17.2	< 0.005	< 0.005	17.3
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	152	0.01	< 0.005	152

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	812	0.05	0.01	815
Parking Lot	—	—	—	—	—	—	—	—	—	—	104	0.01	< 0.005	104
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	916	0.06	0.01	919
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	812	0.05	0.01	815
Parking Lot	—	—	—	—	—	—	—	—	—	—	104	0.01	< 0.005	104
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	916	0.06	0.01	919
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	134	0.01	< 0.005	135
Parking Lot	—	—	—	—	—	—	—	—	—	—	17.2	< 0.005	< 0.005	17.3
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	152	0.01	< 0.005	152

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	123	0.01	< 0.005	123
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Total	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	123	0.01	< 0.005	123

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	123	0.01	< 0.005	123

Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	123	0.01	< 0.005	123

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.86	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Total	3.46	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46
Total	0.58	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46

4.3.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.86	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Total	3.46	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46
Total	0.58	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2

4.4.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	214
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.05	< 0.005	0.00	0.16
Total	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	214
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.05	< 0.005	0.00	0.16
Total	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	10.1	1.01	0.00	35.5

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.01	< 0.005	0.00	0.03
Total	—	—	—	—	—	—	—	—	—	—	10.2	1.02	0.00	35.5

4.5.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	214
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.05	< 0.005	0.00	0.16
Total	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	214
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.05	< 0.005	0.00	0.16
Total	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	10.1	1.01	0.00	35.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.01	< 0.005	0.00	0.03
Total	—	—	—	—	—	—	—	—	—	—	10.2	1.02	0.00	35.5

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	534
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	534

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerat Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	534
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	534

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	10/9/2023	10/27/2023	5.00	15.0	—
Grading	Grading	10/30/2023	11/24/2023	5.00	20.0	—
Building Construction	Building Construction	11/27/2023	8/2/2024	5.00	180	—

Paving	Paving	8/5/2024	8/16/2024	5.00	10.0	—
Architectural Coating	Architectural Coating	4/1/2024	8/2/2024	5.00	90.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 3	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 3	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 3	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 3	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 3	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 3	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 3	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 3	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 3	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 3	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 3	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 3	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 3	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 3	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Site Preparation	Rubber Tired Dozers	Diesel	Tier 3	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 3	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 3	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 3	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 3	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 3	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 3	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 3	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 3	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 3	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 3	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 3	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 3	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 3	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	113	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	50.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	19.8	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	113	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	50.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	19.8	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%

Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	22.5	0.00	—
Grading	18,000	0.00	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.87

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	1.87	100%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	532	0.03	< 0.005
2024	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	480	480	480	175,335	6,255	6,255	6,255	2,282,952
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	480	480	480	175,335	6,255	6,255	6,255	2,282,952
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
—	—	—	—	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	556,885	532	0.0330	0.0040	2,310,154
Parking Lot	71,357	532	0.0330	0.0040	0.00
City Park	0.00	532	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Unrefrigerated Warehouse-No Rail	556,885	532	0.0330	0.0040	2,310,154
Parking Lot	71,357	532	0.0330	0.0040	0.00
City Park	0.00	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	27,981,250	0.00
Parking Lot	0.00	0.00
City Park	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	27,981,250	0.00
Parking Lot	0.00	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	114	0.00
Parking Lot	0.00	0.00
City Park	0.09	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	114	0.00
Parking Lot	0.00	0.00
City Park	0.09	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	29.1	annual days of extreme heat

Extreme Precipitation	1.95	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	6.36	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.0
AQ-PM	53.3
AQ-DPM	13.7
Drinking Water	10.2
Lead Risk Housing	33.4
Pesticides	35.2

Toxic Releases	36.2
Traffic	42.2
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	26.7
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	65.8
Cardio-vascular	91.1
Low Birth Weights	41.5
Socioeconomic Factor Indicators	—
Education	92.2
Housing	75.3
Linguistic	61.1
Poverty	90.2
Unemployment	78.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	11.61298601
Employed	7.173104068
Median HI	34.63364558
Education	—

Bachelor's or higher	3.605800077
High school enrollment	14.38470422
Preschool enrollment	20.05646093
Transportation	—
Auto Access	81.29090209
Active commuting	17.74669575
Social	—
2-parent households	21.22417554
Voting	4.144745284
Neighborhood	—
Alcohol availability	63.15924548
Park access	81.35506224
Retail density	48.73604517
Supermarket access	65.55883485
Tree canopy	1.770819967
Housing	—
Homeownership	67.59912742
Housing habitability	18.02900038
Low-inc homeowner severe housing cost burden	11.06120878
Low-inc renter severe housing cost burden	3.37482356
Uncrowded housing	14.42320031
Health Outcomes	—
Insured adults	22.41755422
Arthritis	48.2
Asthma ER Admissions	42.5
High Blood Pressure	39.5
Cancer (excluding skin)	82.6

Asthma	16.4
Coronary Heart Disease	43.7
Chronic Obstructive Pulmonary Disease	29.1
Diagnosed Diabetes	22.3
Life Expectancy at Birth	19.2
Cognitively Disabled	58.3
Physically Disabled	60.6
Heart Attack ER Admissions	7.4
Mental Health Not Good	14.3
Chronic Kidney Disease	27.1
Obesity	8.0
Pedestrian Injuries	57.7
Physical Health Not Good	15.6
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	58.7
Current Smoker	15.0
No Leisure Time for Physical Activity	10.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	20.9
Elderly	91.7
English Speaking	32.2
Foreign-born	65.8
Outdoor Workers	20.1
Climate Change Adaptive Capacity	—

Impervious Surface Cover	67.4
Traffic Density	16.8
Traffic Access	23.0
Other Indices	—
Hardship	90.9
Other Decision Support	—
2016 Voting	12.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0
Healthy Places Index Score for Project Location (b)	9.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Total project site is 5.74 acres
Construction: Construction Phases	Construction is expected to begin in the fourth quarter of 2023 and last for 10 months. Assuming overlap of architectural coating and building construction phases.
Construction: Off-Road Equipment	Default construction equipment with Tier 3 engines
Operations: Vehicle Data	Based on a trip generation of 480 ADT (excludes 110 4+-axle truckS9
Operations: Fleet Mix	Passenger, 2-axle trucks and 3-axle trucks only. Based on a total of 480 ADT of which 32 are medium trucks.

Redlands and Placentia Industrial Project - Heavy Heavy Duty Truck Trips Only Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Redlands and Placentia Industrial Project - Heavy Heavy Duty Truck Trips Only
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	0.20
Location	33.823543074886615, -117.21661056450773
County	Riverside-South Coast
City	Perris
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5501
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	121	1000sqft	2.78	121,000	0.00	—	—	—
Parking Lot	84.0	Space	1.87	0.00	0.00	—	—	—
City Park	1.00	Acre	1.09	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.07	21.0	20.6	0.03	0.76	0.97	1.73	0.71	0.23	0.95	4,025	0.15	0.14	4,076
Mit.	1.07	21.0	20.6	0.03	0.76	0.97	1.73	0.71	0.23	0.95	4,025	0.15	0.14	4,076
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.16	40.0	29.5	0.08	1.12	19.9	21.0	1.02	10.2	11.2	11,153	0.27	1.30	11,548
Mit.	1.16	40.0	29.5	0.08	1.12	7.89	9.01	1.02	3.99	5.01	11,153	0.27	1.30	11,548
% Reduced	—	—	—	—	—	60%	57%	—	61%	55%	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.42	9.02	8.25	0.01	0.33	1.39	1.53	0.30	0.65	0.79	1,668	0.06	0.08	1,688
Mit.	0.42	9.02	8.25	0.01	0.33	0.66	0.80	0.30	0.29	0.42	1,668	0.06	0.08	1,688
% Reduced	—	—	—	—	—	53%	48%	—	56%	47%	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.08	1.65	1.51	< 0.005	0.06	0.25	0.28	0.06	0.12	0.14	276	0.01	0.01	279
Mit.	0.08	1.65	1.51	< 0.005	0.06	0.12	0.15	0.06	0.05	0.08	276	0.01	0.01	279
% Reduced	—	—	—	—	—	53%	48%	—	56%	47%	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	150	150	150	55.0	55.0	55.0	—	—	—	—
Unmit.	No	No	No	No	No	No	No	No	No	No	—	—	—	—
Mit.	No	No	No	No	No	No	No	No	No	No	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.07	21.0	20.6	0.03	0.76	0.97	1.73	0.71	0.23	0.95	4,025	0.15	0.14	4,076
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.16	40.0	29.5	0.08	1.12	19.9	21.0	1.02	10.2	11.2	11,153	0.27	1.30	11,548
2024	0.88	19.9	17.7	0.03	0.70	0.83	1.53	0.65	0.20	0.85	3,686	0.14	0.14	3,731
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.16	4.81	3.62	0.01	0.14	1.39	1.53	0.13	0.65	0.79	1,093	0.03	0.08	1,119
2024	0.42	9.02	8.25	0.01	0.33	0.39	0.71	0.30	0.09	0.40	1,668	0.06	0.06	1,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.03	0.88	0.66	< 0.005	0.03	0.25	0.28	0.02	0.12	0.14	181	0.01	0.01	185
2024	0.08	1.65	1.51	< 0.005	0.06	0.07	0.13	0.06	0.02	0.07	276	0.01	0.01	279

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.07	21.0	20.6	0.03	0.76	0.97	1.73	0.71	0.23	0.95	4,025	0.15	0.14	4,076
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.16	40.0	29.5	0.08	1.12	7.89	9.01	1.02	3.99	5.01	11,153	0.27	1.30	11,548
2024	0.88	19.9	17.7	0.03	0.70	0.83	1.53	0.65	0.20	0.85	3,686	0.14	0.14	3,731
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.16	4.81	3.62	0.01	0.14	0.66	0.80	0.13	0.29	0.42	1,093	0.03	0.08	1,119
2024	0.42	9.02	8.25	0.01	0.33	0.39	0.71	0.30	0.09	0.40	1,668	0.06	0.06	1,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.03	0.88	0.66	< 0.005	0.03	0.12	0.15	0.02	0.05	0.08	181	0.01	0.01	185
2024	0.08	1.65	1.51	< 0.005	0.06	0.07	0.13	0.06	0.02	0.07	276	0.01	0.01	279

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.70	16.5	8.90	0.15	0.32	2.07	2.39	0.31	0.49	0.80	17,317	12.0	2.56	21,638
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	2.82	17.2	3.67	0.15	0.31	2.07	2.39	0.30	0.49	0.79	17,300	12.0	2.56	21,588
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.42	17.4	7.25	0.15	0.32	2.07	2.39	0.31	0.49	0.80	17,312	12.0	2.56	21,614
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.62	3.17	1.32	0.03	0.06	0.38	0.44	0.06	0.09	0.15	2,866	1.99	0.42	3,578
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	150	150	150	55.0	55.0	55.0	—	—	—	—
Unmit.	No	No	No	No	No	No	No	No	No	No	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20	15.9	3.11	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,247	0.28	2.42	16,006
Area	3.46	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	3.70	16.5	8.90	0.15	0.32	2.07	2.39	0.31	0.49	0.80	17,317	12.0	2.56	21,638
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.19	16.5	3.15	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,251	0.28	2.42	15,979
Area	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—

Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	2.82	17.2	3.67	0.15	0.31	2.07	2.39	0.30	0.49	0.79	17,300	12.0	2.56	21,588
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20	16.7	3.13	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,249	0.28	2.42	15,990
Area	3.19	0.03	3.60	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	14.8	< 0.005	< 0.005	14.9
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	3.42	17.4	7.25	0.15	0.32	2.07	2.39	0.31	0.49	0.80	17,312	12.0	2.56	21,614
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	3.05	0.57	0.03	0.05	0.38	0.43	0.05	0.09	0.14	2,525	0.05	0.40	2,647
Area	0.58	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46
Energy	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	274	0.02	< 0.005	275
Water	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2
Waste	—	—	—	—	—	—	—	—	—	—	10.2	1.02	0.00	35.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	534
Total	0.62	3.17	1.32	0.03	0.06	0.38	0.44	0.06	0.09	0.15	2,866	1.99	0.42	3,578

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20	15.9	3.11	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,247	0.28	2.42	16,006
Area	3.46	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	3.70	16.5	8.90	0.15	0.32	2.07	2.39	0.31	0.49	0.80	17,317	12.0	2.56	21,638
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.19	16.5	3.15	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,251	0.28	2.42	15,979
Area	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	2.82	17.2	3.67	0.15	0.31	2.07	2.39	0.30	0.49	0.79	17,300	12.0	2.56	21,588
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20	16.7	3.13	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,249	0.28	2.42	15,990
Area	3.19	0.03	3.60	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	14.8	< 0.005	< 0.005	14.9
Energy	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	1,656	0.12	0.01	1,662
Water	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Waste	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Total	3.42	17.4	7.25	0.15	0.32	2.07	2.39	0.31	0.49	0.80	17,312	12.0	2.56	21,614

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	3.05	0.57	0.03	0.05	0.38	0.43	0.05	0.09	0.14	2,525	0.05	0.40	2,647
Area	0.58	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46
Energy	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	274	0.02	< 0.005	275
Water	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2
Waste	—	—	—	—	—	—	—	—	—	—	10.2	1.02	0.00	35.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	534
Total	0.62	3.17	1.32	0.03	0.06	0.38	0.44	0.06	0.09	0.15	2,866	1.99	0.42	3,578

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	1.64	1.16	< 0.005	0.05	—	0.05	0.04	—	0.04	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.81	0.81	—	0.42	0.42	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	36.0	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.15	0.15	—	0.08	0.08	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.20	0.00	0.00	0.01	0.01	0.00	0.00	0.00	236	0.01	0.01	239
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	9.83	< 0.005	< 0.005	9.97
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.63	< 0.005	< 0.005	1.65
Vendor	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
Hauling	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

3.2. Site Preparation (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.64	1.16	< 0.005	0.05	—	0.05	0.04	—	0.04	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.16	0.16	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	36.0	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.20	0.00	0.00	0.01	0.01	0.00	0.00	0.00	236	0.01	0.01	239
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	9.83	< 0.005	< 0.005	9.97
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.63	< 0.005	< 0.005	1.65
Vendor	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
Hauling	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

3.3. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	23.2	17.8	0.03	0.75	—	0.75	0.69	—	0.69	2,958	0.12	0.02	2,968

Dust From Material Movement	—	—	—	—	—	7.13	7.13	—	3.43	3.43	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.27	0.97	< 0.005	0.04	—	0.04	0.04	—	0.04	162	0.01	< 0.005	163
Dust From Material Movement	—	—	—	—	—	0.39	0.39	—	0.19	0.19	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.23	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	26.8	< 0.005	< 0.005	26.9
Dust From Material Movement	—	—	—	—	—	0.07	0.07	—	0.03	0.03	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	202	0.01	0.01	205
Vendor	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
Hauling	0.12	9.59	2.23	0.05	0.15	0.55	0.69	0.15	0.20	0.35	7,993	0.14	1.27	8,375
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	11.2	< 0.005	< 0.005	11.4
Vendor	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

Hauling	0.01	0.53	0.12	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	438	0.01	0.07	459
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.86	< 0.005	< 0.005	1.89
Vendor	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
Hauling	< 0.005	0.10	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	72.5	< 0.005	0.01	76.0

3.4. Grading (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	23.2	17.8	0.03	0.75	—	0.75	0.69	—	0.69	2,958	0.12	0.02	2,968
Dust From Material Movement	—	—	—	—	—	2.78	2.78	—	1.34	1.34	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.27	0.97	< 0.005	0.04	—	0.04	0.04	—	0.04	162	0.01	< 0.005	163
Dust From Material Movement	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.23	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	26.8	< 0.005	< 0.005	26.9
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	202	0.01	0.01	205
Vendor	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
Hauling	0.12	9.59	2.23	0.05	0.15	0.55	0.69	0.15	0.20	0.35	7,993	0.14	1.27	8,375
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	11.2	< 0.005	< 0.005	11.4
Vendor	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
Hauling	0.01	0.53	0.12	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	438	0.01	0.07	459
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	1.86	< 0.005	< 0.005	1.89
Vendor	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
Hauling	< 0.005	0.10	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	72.5	< 0.005	0.01	76.0

3.5. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,397	0.10	0.02	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.29	0.98	< 0.005	0.05	—	0.05	0.04	—	0.04	164	0.01	< 0.005	165
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.24	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	27.2	< 0.005	< 0.005	27.3
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.31	3.49	0.00	0.00	0.04	0.04	0.00	0.00	0.00	686	0.03	0.03	694
Vendor	0.02	0.76	0.23	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	623	0.01	0.09	651
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.25	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	47.6	< 0.005	< 0.005	48.3
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	42.7	< 0.005	0.01	44.6

Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	7.88	< 0.005	< 0.005	7.99
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.07	< 0.005	< 0.005	7.39
Hauling	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

3.6. Building Construction (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,397	0.10	0.02	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.29	0.98	< 0.005	0.05	—	0.05	0.04	—	0.04	164	0.01	< 0.005	165
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.24	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	27.2	< 0.005	< 0.005	27.3
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.31	3.49	0.00	0.00	0.04	0.04	0.00	0.00	0.00	686	0.03	0.03	694
Vendor	0.02	0.76	0.23	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	623	0.01	0.09	651
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.25	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	47.6	< 0.005	< 0.005	48.3
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	42.7	< 0.005	0.01	44.6
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	7.88	< 0.005	< 0.005	7.99
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.07	< 0.005	< 0.005	7.39
Hauling	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

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	7.94	6.02	0.01	0.29	—	0.29	0.27	—	0.27	1,009	0.04	0.01	1,012
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.45	1.10	< 0.005	0.05	—	0.05	0.05	—	0.05	167	0.01	< 0.005	168
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	4.24	0.00	0.00	0.04	0.04	0.00	0.00	0.00	731	0.03	0.03	743
Vendor	0.02	0.70	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	616	0.01	0.09	645
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.29	3.21	0.00	0.00	0.04	0.04	0.00	0.00	0.00	672	0.03	0.03	681
Vendor	0.02	0.73	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	616	0.01	0.09	644
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.12	1.42	0.00	0.00	0.02	0.02	0.00	0.00	0.00	286	0.01	0.01	290
Vendor	0.01	0.31	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	259	0.01	0.04	271

Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	47.4	< 0.005	< 0.005	48.1
Vendor	< 0.005	0.06	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	42.9	< 0.005	0.01	44.9
Hauling	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

3.8. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	7.94	6.02	0.01	0.29	—	0.29	0.27	—	0.27	1,009	0.04	0.01	1,012
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.45	1.10	< 0.005	0.05	—	0.05	0.05	—	0.05	167	0.01	< 0.005	168

Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	4.24	0.00	0.00	0.04	0.04	0.00	0.00	0.00	731	0.03	0.03	743
Vendor	0.02	0.70	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	616	0.01	0.09	645
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.29	3.21	0.00	0.00	0.04	0.04	0.00	0.00	0.00	672	0.03	0.03	681
Vendor	0.02	0.73	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	616	0.01	0.09	644
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.12	1.42	0.00	0.00	0.02	0.02	0.00	0.00	0.00	286	0.01	0.01	290
Vendor	0.01	0.31	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	259	0.01	0.04	271
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	47.4	< 0.005	< 0.005	48.1
Vendor	< 0.005	0.06	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	42.9	< 0.005	0.01	44.9
Hauling	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

3.9. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	1,512	0.06	0.01	1,517
Paving	0.49	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.36	0.29	< 0.005	0.02	—	0.02	0.01	—	0.01	41.4	< 0.005	< 0.005	41.6
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.86	< 0.005	< 0.005	6.88
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.25	0.00	0.00	0.01	0.01	0.00	0.00	0.00	216	0.01	0.01	219
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	5.51	< 0.005	< 0.005	5.58
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.91	< 0.005	< 0.005	0.92
Vendor	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
Hauling	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

3.10. Paving (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	1,512	0.06	0.01	1,517
Paving	0.49	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.36	0.29	< 0.005	0.02	—	0.02	0.01	—	0.01	41.4	< 0.005	< 0.005	41.6
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.86	< 0.005	< 0.005	6.88
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.25	0.00	0.00	0.01	0.01	0.00	0.00	0.00	216	0.01	0.01	219
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	5.51	< 0.005	< 0.005	5.58
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.91	< 0.005	< 0.005	0.92
Vendor	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
Hauling	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

3.11. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.27	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	32.9	< 0.005	< 0.005	33.0
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.45	< 0.005	< 0.005	5.47
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.85	0.00	0.00	0.01	0.01	0.00	0.00	0.00	146	0.01	0.01	149
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	33.6	< 0.005	< 0.005	34.0
Vendor	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

Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	5.56	< 0.005	< 0.005	5.64
Vendor	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
Hauling	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

3.12. Architectural Coating (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.27	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	32.9	< 0.005	< 0.005	33.0
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.45	< 0.005	< 0.005	5.47
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.85	0.00	0.00	0.01	0.01	0.00	0.00	0.00	146	0.01	0.01	149
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	33.6	< 0.005	< 0.005	34.0
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	5.56	< 0.005	< 0.005	5.64
Vendor	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
Hauling	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. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	0.20	15.9	3.11	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,247	0.28	2.42	16,006
Parking Lot	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
City Park	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
Total	0.20	15.9	3.11	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,247	0.28	2.42	16,006
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.19	16.5	3.15	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,251	0.28	2.42	15,979
Parking Lot	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
City Park	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
Total	0.19	16.5	3.15	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,251	0.28	2.42	15,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.04	3.05	0.57	0.03	0.05	0.38	0.43	0.05	0.09	0.14	2,525	0.05	0.40	2,647
Parking Lot	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
City Park	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
Total	0.04	3.05	0.57	0.03	0.05	0.38	0.43	0.05	0.09	0.14	2,525	0.05	0.40	2,647

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerat Warehouse-No Rail	0.20	15.9	3.11	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,247	0.28	2.42	16,006
Parking Lot	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
City Park	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
Total	0.20	15.9	3.11	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,247	0.28	2.42	16,006
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.19	16.5	3.15	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,251	0.28	2.42	15,979
Parking Lot	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
City Park	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
Total	0.19	16.5	3.15	0.14	0.27	2.07	2.34	0.25	0.49	0.74	15,251	0.28	2.42	15,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.04	3.05	0.57	0.03	0.05	0.38	0.43	0.05	0.09	0.14	2,525	0.05	0.40	2,647
Parking Lot	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
City Park	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
Total	0.04	3.05	0.57	0.03	0.05	0.38	0.43	0.05	0.09	0.14	2,525	0.05	0.40	2,647

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	812	0.05	0.01	815
Parking Lot	—	—	—	—	—	—	—	—	—	—	104	0.01	< 0.005	104
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	916	0.06	0.01	919
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	812	0.05	0.01	815
Parking Lot	—	—	—	—	—	—	—	—	—	—	104	0.01	< 0.005	104
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	916	0.06	0.01	919
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	134	0.01	< 0.005	135
Parking Lot	—	—	—	—	—	—	—	—	—	—	17.2	< 0.005	< 0.005	17.3
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	152	0.01	< 0.005	152

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	812	0.05	0.01	815
Parking Lot	—	—	—	—	—	—	—	—	—	—	104	0.01	< 0.005	104
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	916	0.06	0.01	919
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	812	0.05	0.01	815
Parking Lot	—	—	—	—	—	—	—	—	—	—	104	0.01	< 0.005	104
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	916	0.06	0.01	919
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	134	0.01	< 0.005	135
Parking Lot	—	—	—	—	—	—	—	—	—	—	17.2	< 0.005	< 0.005	17.3
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	152	0.01	< 0.005	152

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	123	0.01	< 0.005	123
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Total	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	123	0.01	< 0.005	123

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.62	0.52	< 0.005	0.05	—	0.05	0.05	—	0.05	740	0.07	< 0.005	742
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	123	0.01	< 0.005	123

Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.11	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	123	0.01	< 0.005	123

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.86	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Total	3.46	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46
Total	0.58	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46

4.3.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.86	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Total	3.46	0.04	5.26	< 0.005	0.01	—	0.01	0.01	—	0.01	21.6	< 0.005	< 0.005	21.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46
Total	0.58	0.01	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.45	< 0.005	< 0.005	2.46

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2

4.4.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	331	5.52	0.13	509
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	54.8	0.91	0.02	84.2

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	214
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.05	< 0.005	0.00	0.16
Total	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	214
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.05	< 0.005	0.00	0.16
Total	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	10.1	1.01	0.00	35.5

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.01	< 0.005	0.00	0.03
Total	—	—	—	—	—	—	—	—	—	—	10.2	1.02	0.00	35.5

4.5.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	214
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.05	< 0.005	0.00	0.16
Total	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	214
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.05	< 0.005	0.00	0.16
Total	—	—	—	—	—	—	—	—	—	—	61.3	6.13	0.00	215
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	10.1	1.01	0.00	35.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.01	< 0.005	0.00	0.03
Total	—	—	—	—	—	—	—	—	—	—	10.2	1.02	0.00	35.5

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	534
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	534

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	3,225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerat Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	534
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	534

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	10/9/2023	10/27/2023	5.00	15.0	—
Grading	Grading	10/30/2023	11/24/2023	5.00	20.0	—
Building Construction	Building Construction	11/27/2023	8/2/2024	5.00	180	—

Paving	Paving	8/5/2024	8/16/2024	5.00	10.0	—
Architectural Coating	Architectural Coating	4/1/2024	8/2/2024	5.00	90.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	113	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	50.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	19.8	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	113	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	50.8	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	19.8	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.2	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	22.5	0.00	—
Grading	18,000	0.00	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.87

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	1.87	100%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	532	0.03	< 0.005
2024	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	110	110	110	40,190	4,404	4,404	4,404	1,607,606
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	110	110	110	40,190	4,404	4,404	4,404	1,607,606
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
—	—	—	—	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	556,885	532	0.0330	0.0040	2,310,154
Parking Lot	71,357	532	0.0330	0.0040	0.00
City Park	0.00	532	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	556,885	532	0.0330	0.0040	2,310,154
Parking Lot	71,357	532	0.0330	0.0040	0.00
City Park	0.00	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	27,981,250	0.00
Parking Lot	0.00	0.00
City Park	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	27,981,250	0.00
Parking Lot	0.00	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	114	0.00
Parking Lot	0.00	0.00
City Park	0.09	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	114	0.00
Parking Lot	0.00	0.00

City Park	0.09	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	29.1	annual days of extreme heat
Extreme Precipitation	1.95	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	6.36	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	4	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.0
AQ-PM	53.3
AQ-DPM	13.7
Drinking Water	10.2
Lead Risk Housing	33.4
Pesticides	35.2
Toxic Releases	36.2
Traffic	42.2
Effect Indicators	—

CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	26.7
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	65.8
Cardio-vascular	91.1
Low Birth Weights	41.5
Socioeconomic Factor Indicators	—
Education	92.2
Housing	75.3
Linguistic	61.1
Poverty	90.2
Unemployment	78.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	11.61298601
Employed	7.173104068
Median HI	34.63364558
Education	—
Bachelor's or higher	3.605800077
High school enrollment	14.38470422
Preschool enrollment	20.05646093

Transportation	—
Auto Access	81.29090209
Active commuting	17.74669575
Social	—
2-parent households	21.22417554
Voting	4.144745284
Neighborhood	—
Alcohol availability	63.15924548
Park access	81.35506224
Retail density	48.73604517
Supermarket access	65.55883485
Tree canopy	1.770819967
Housing	—
Homeownership	67.59912742
Housing habitability	18.02900038
Low-inc homeowner severe housing cost burden	11.06120878
Low-inc renter severe housing cost burden	3.37482356
Uncrowded housing	14.42320031
Health Outcomes	—
Insured adults	22.41755422
Arthritis	48.2
Asthma ER Admissions	42.5
High Blood Pressure	39.5
Cancer (excluding skin)	82.6
Asthma	16.4
Coronary Heart Disease	43.7
Chronic Obstructive Pulmonary Disease	29.1

Diagnosed Diabetes	22.3
Life Expectancy at Birth	19.2
Cognitively Disabled	58.3
Physically Disabled	60.6
Heart Attack ER Admissions	7.4
Mental Health Not Good	14.3
Chronic Kidney Disease	27.1
Obesity	8.0
Pedestrian Injuries	57.7
Physical Health Not Good	15.6
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	58.7
Current Smoker	15.0
No Leisure Time for Physical Activity	10.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	20.9
Elderly	91.7
English Speaking	32.2
Foreign-born	65.8
Outdoor Workers	20.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	67.4
Traffic Density	16.8
Traffic Access	23.0

Other Indices	—
Hardship	90.9
Other Decision Support	—
2016 Voting	12.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0
Healthy Places Index Score for Project Location (b)	9.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

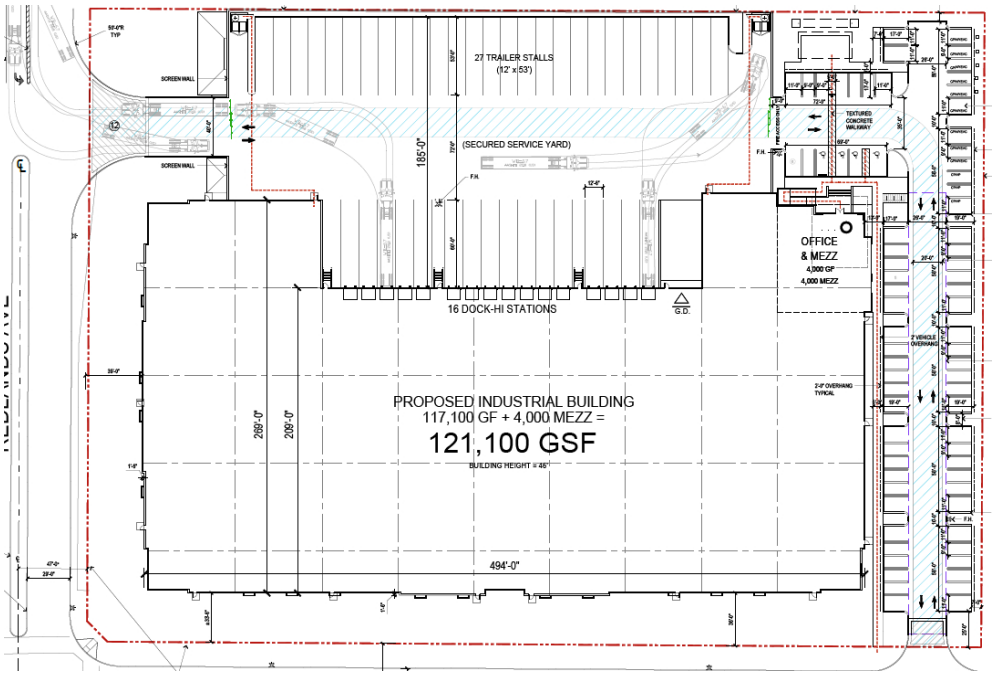
Screen	Justification
Land Use	Total project site is 5.74 acres
Construction: Construction Phases	Construction is expected to begin in the fourth quarter of 2023 and last for 10 months. Assuming overlap of architectural coating and building construction phases.

Construction: Off-Road Equipment	Default construction equipment with Tier 2 engines
Operations: Vehicle Data	Based on a trip generation of 110 4+-axle truck trips and a trip length of 40 miles.
Operations: Fleet Mix	Heavy heavy duty trucks only

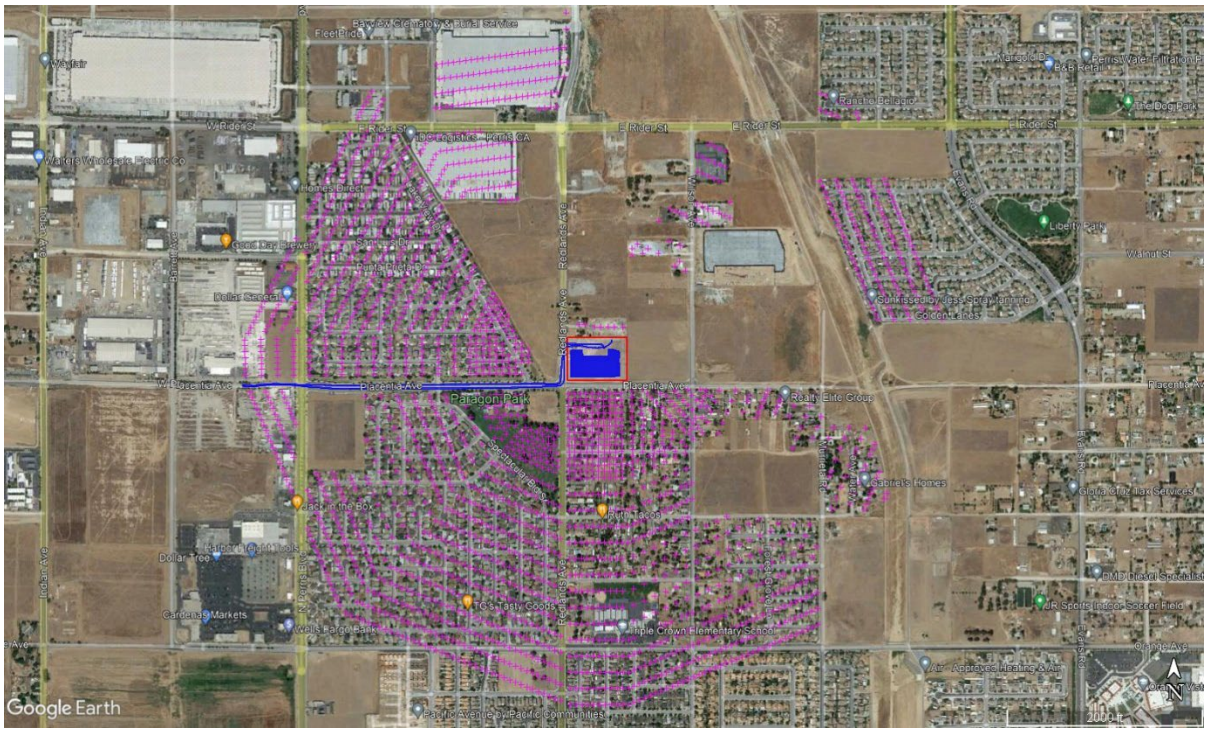
APPENDIX B

HRA MODEL SNAPSHOTS AND OUTPUTS

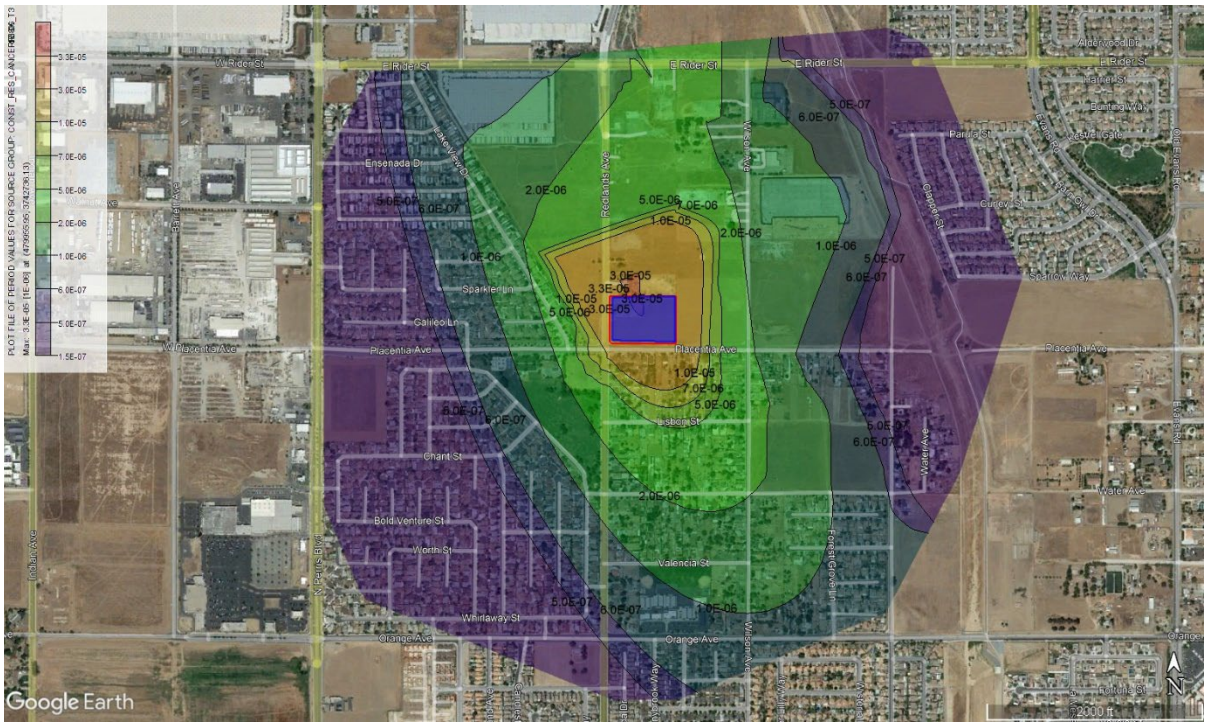
Project Site Location



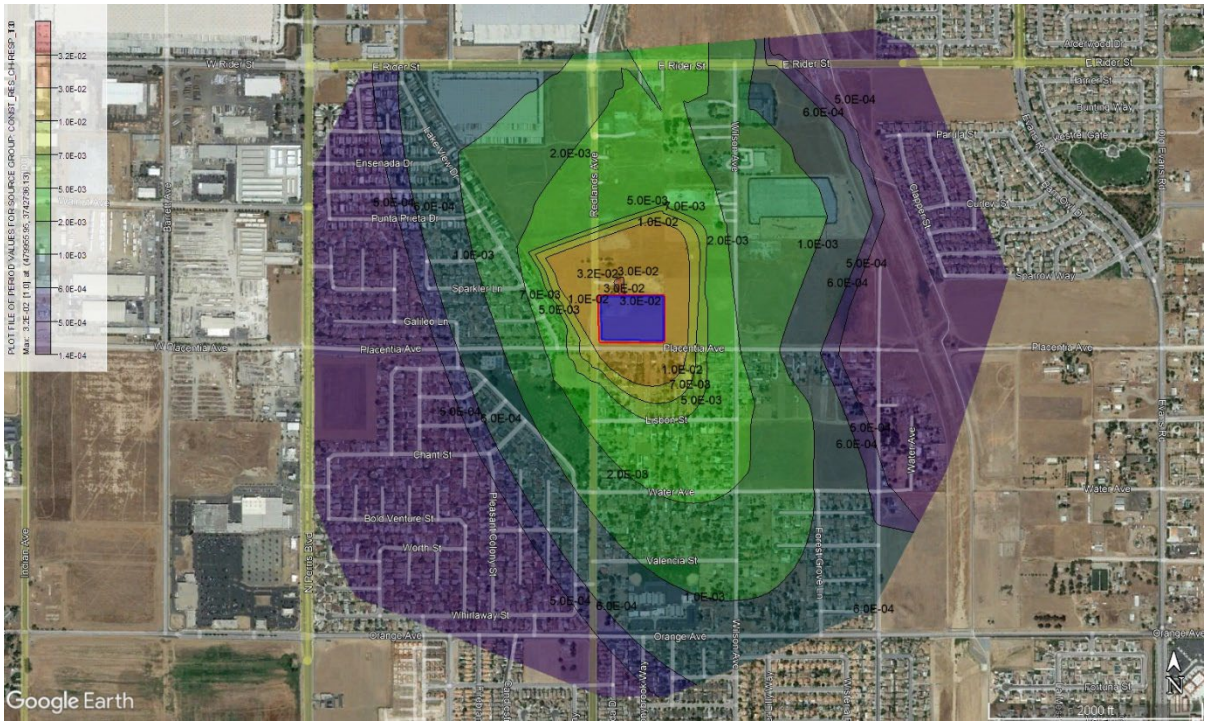
Receptor Grid



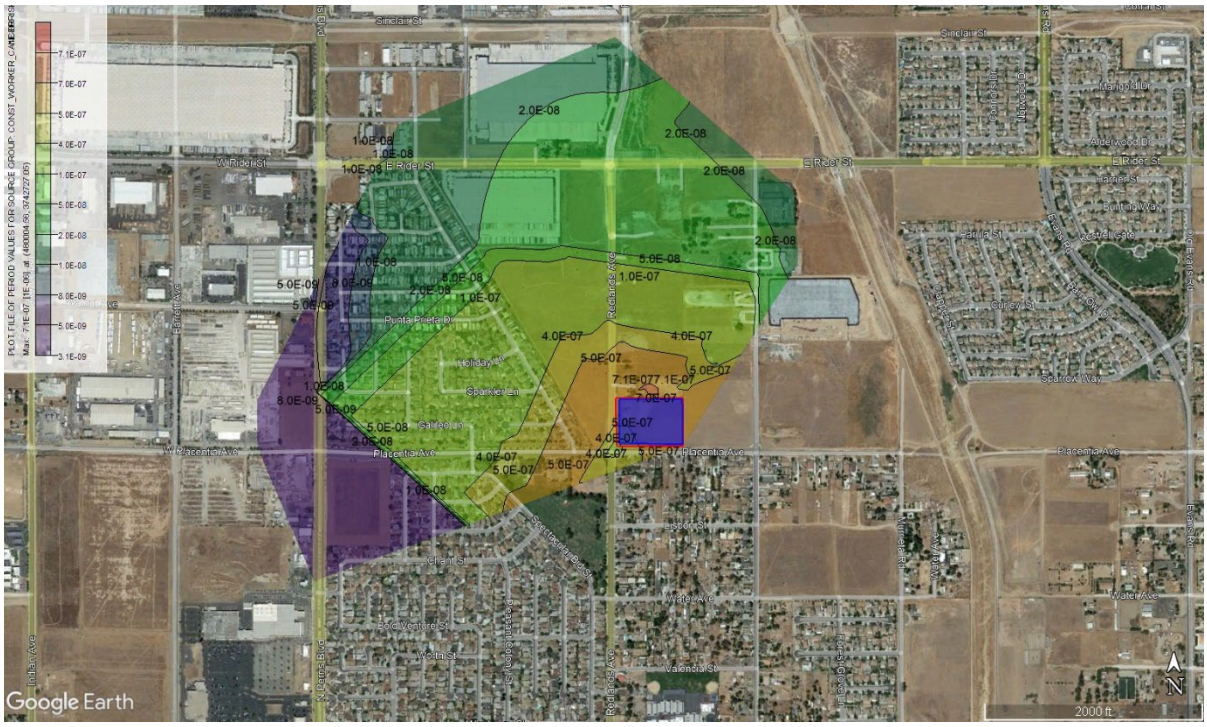
Unmitigated Construction Cancer Risk – Sensitive Receptor



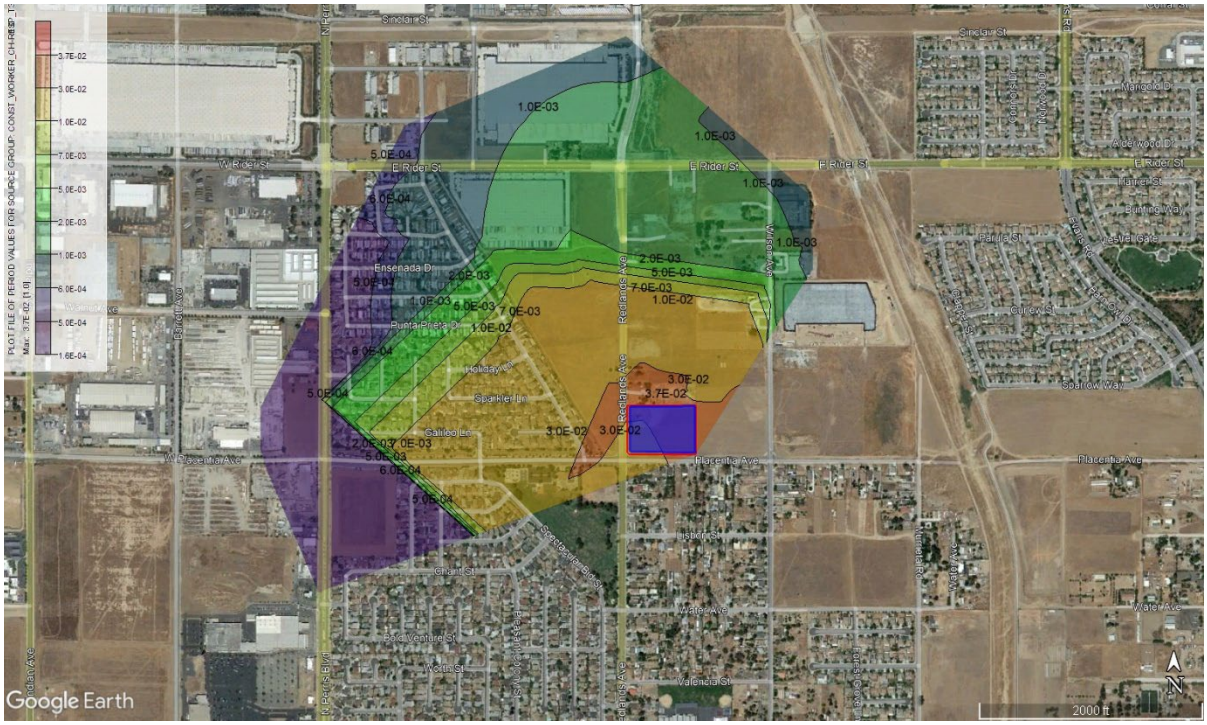
Unmitigated Construction Chronic Hazard Index – Sensitive Receptor



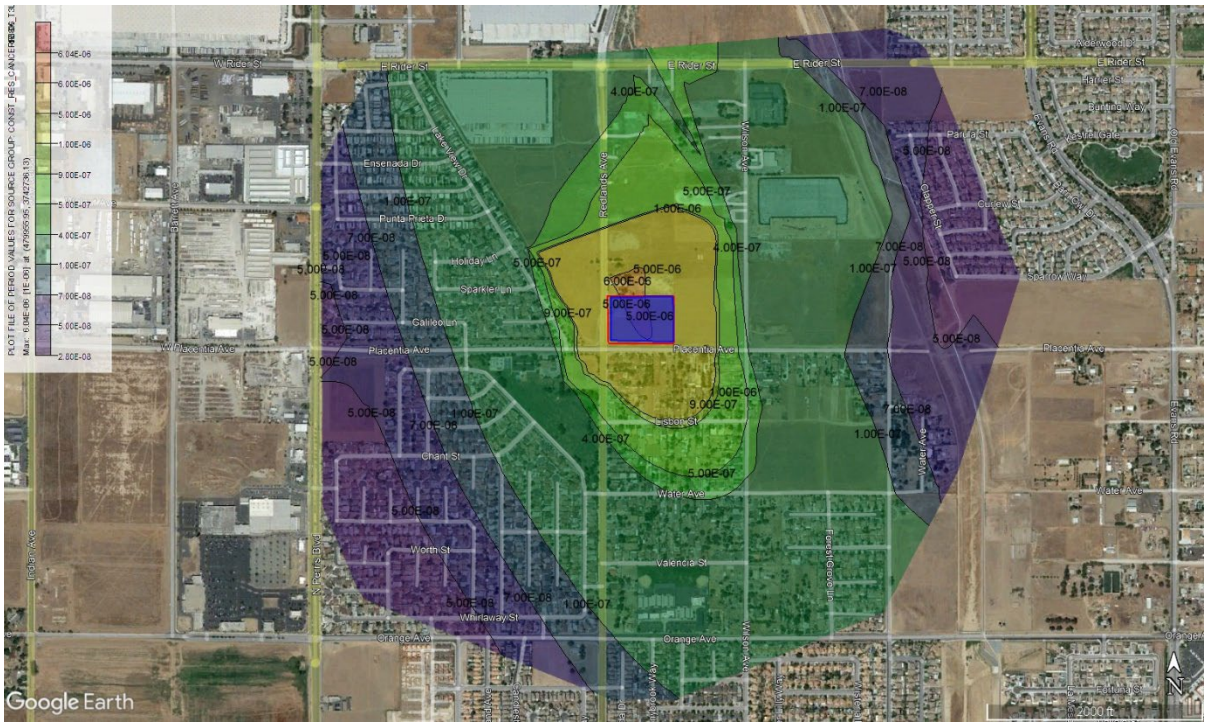
Unmitigated Construction Cancer Risk – Worker Receptor



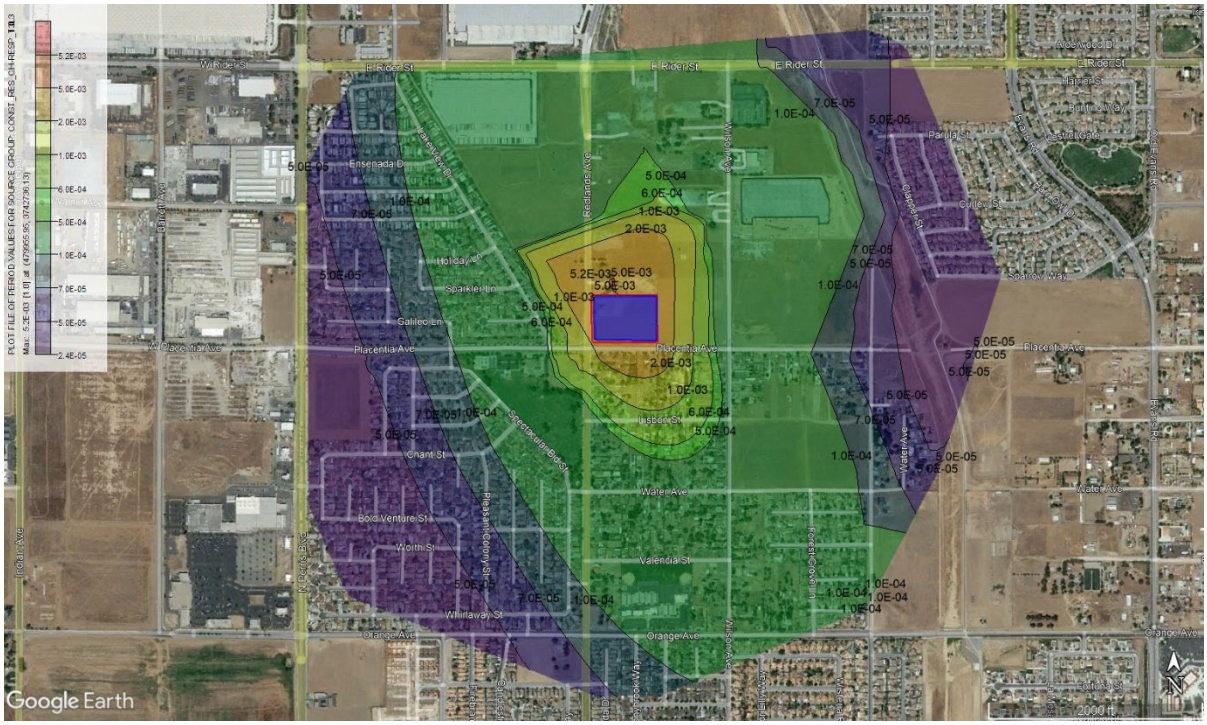
Unmitigated Construction Chronic Hazard Index – Worker Receptor



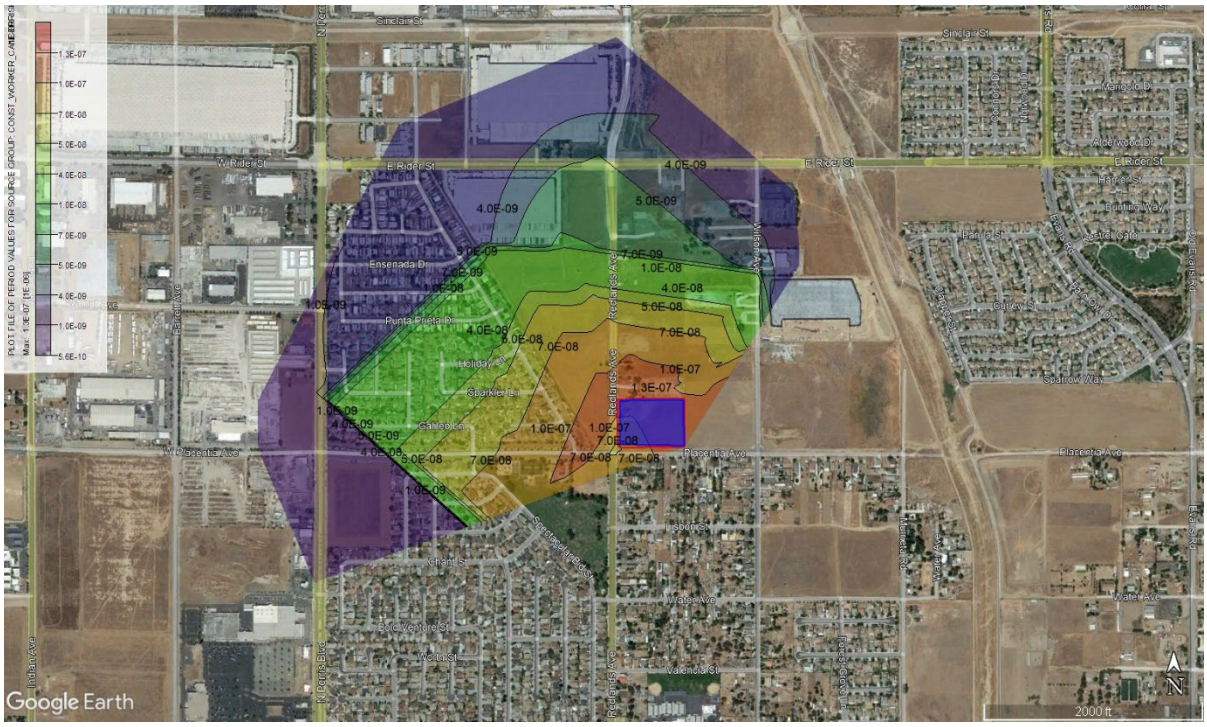
Mitigated Construction Cancer Risk – Sensitive Receptor



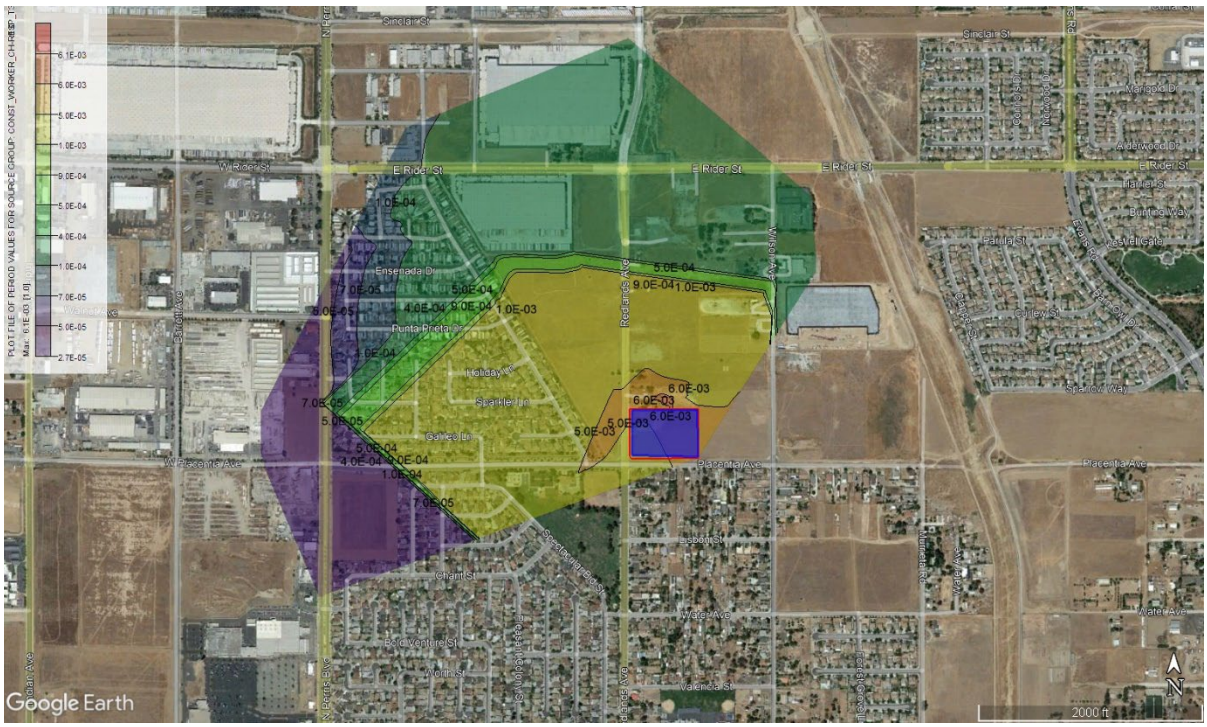
Mitigated Construction Chronic Hazard Index – Sensitive Receptor



Mitigated Construction Cancer Risk – Worker Receptor



Mitigated Construction Chronic Hazard Index – Worker Receptor



Construction (T3)	Worker Receptor	Sensitive Receptor
Cancer Risk (in a Million)	0.71	33.42
Chronic HI	3.75E-02	3.17E-02
Acute HI	0.0	0.0
PM 2.5	0.171	0.144

Construction (T3L3)	Worker Receptor	Sensitive Receptor
Cancer Risk (in a Million)	0.13	6.04
Chronic HI	6.12E-03	5.17E-03
Acute HI	0.0	0.0
PM 2.5	0.028	0.024

Operational	Worker Receptor	Sensitive Receptor
30Yr Cancer Risk (in a Million)	---	3.67
70Yr Cancer Risk (in a Million)	---	4.27
25Yr Cancer Risk (in a Million)	0.44	---
Chronic HI	1.43E-03	1.28E-03
Acute HI	7.59E-05	7.10E-05
PM 2.5	0.0071	0.0061

PM 10						
Tons/Yr	UM	T2	T2L3	T3	T3L3	T4
Year 1	0.0275					
Year 2	0.0537					
Year 3	0	0	0			0

PM 2.5						
Tons/Yr	UM	T2	T2L3	T3	T3L3	T4
Year 1	0.0256					
Year 2	0.0506					
Year 3	0	0	0			0

PM 10						
Lbs /Yr	UM	T2	T2L3	T3	T3L3	T4
Year 1	55	52.18	10.55	41.88	9.002	6.881
Year 2	107.4	118.8	18.98	88.57	14.45	8.488
Year 3	0	0	0	0	0	0

PM 2.5						
Lbs /Yr	UM	T2	T2L3	T3	T3L3	T4
Year 1	51.2	48.36	9.974	38.06	8.428	6.881
Year 2	101.2	110.8	17.79	80.63	13.26	8.488
Year 3	0	0	0			0

PM 10						
% Chng	UM	M	T2L3	T3	T3L3	T4
Year 1	100%	95%	19%	76%	16%	13%
Year 2	100%	111%	18%	82%	13%	8%
Year 3	0%	0%	0%	0%	0%	0%

PM 2.5						
g/sec	UM	T2	T2L3	T3	T3L3	T4
Year 1	0.000736	0.000696	0.000143	0.000547	0.000121	9.9E-05
Year 2	0.001456	0.001594	0.000256	0.00116	0.000191	0.000122
Year 3	0	0	0			0

			UnMitigated				T2				T2L3				T3				T3L3				T4			
						4.17E-05				4.37E-05				7.59E-06				3.34E-05				6.04E-06				3.98E-06
			Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total
1	480103.3	3742949	1.93E-06	3.48E-06	0.00E+00	5.41E-06	1.83E-06	3.85E-06	0.00E+00	5.68E-06	3.70E-07	6.15E-07	0.00E+00	9.86E-07	1.47E-06	2.87E-06	0.00E+00	4.34E-06	3.16E-07	4.68E-07	0.00E+00	7.84E-07	2.42E-07	2.75E-07	0.00E+00	5.17E-07
2	480268	3742901	8.78E-07	1.58E-06	0.00E+00	2.46E-06	8.33E-07	1.75E-06	0.00E+00	2.59E-06	1.69E-07	2.80E-07	0.00E+00	4.48E-07	6.69E-07	1.31E-06	0.00E+00	1.98E-06	1.44E-07	2.13E-07	0.00E+00	3.57E-07	1.10E-07	1.25E-07	0.00E+00	2.35E-07
3	480235	3742915	1.05E-06	1.90E-06	0.00E+00	2.95E-06	9.99E-07	2.10E-06	0.00E+00	3.10E-06	2.02E-07	3.36E-07	0.00E+00	5.38E-07	8.02E-07	1.57E-06	0.00E+00	2.37E-06	1.72E-07	2.56E-07	0.00E+00	4.28E-07	1.32E-07	1.50E-07	0.00E+00	2.82E-07
4	480136.1	3742956	1.63E-06	2.93E-06	0.00E+00	4.56E-06	1.54E-06	3.25E-06	0.00E+00	4.79E-06	3.12E-07	5.19E-07	0.00E+00	8.31E-07	1.24E-06	2.42E-06	0.00E+00	3.66E-06	2.66E-07	3.95E-07	0.00E+00	6.61E-07	2.04E-07	2.32E-07	0.00E+00	4.35E-07
5	480103.1	3742969	1.78E-06	3.22E-06	0.00E+00	5.00E-06	1.69E-06	3.56E-06	0.00E+00	5.25E-06	3.42E-07	5.68E-07	0.00E+00	9.11E-07	1.36E-06	2.65E-06	0.00E+00	4.01E-06	2.92E-07	4.33E-07	0.00E+00	7.25E-07	2.23E-07	2.54E-07	0.00E+00	4.77E-07
6	480249.7	3742929	9.48E-07	1.71E-06	0.00E+00	2.66E-06	9.00E-07	1.89E-06	0.00E+00	2.79E-06	1.82E-07	3.02E-07	0.00E+00	4.84E-07	7.22E-07	1.41E-06	0.00E+00	2.13E-06	1.55E-07	2.30E-07	0.00E+00	3.85E-07	1.19E-07	1.35E-07	0.00E+00	2.54E-07
7	480184.5	3742956	1.28E-06	2.31E-06	0.00E+00	3.60E-06	1.22E-06	2.56E-06	0.00E+00	3.78E-06	2.46E-07	4.09E-07	0.00E+00	6.55E-07	9.77E-07	1.91E-06	0.00E+00	2.88E-06	2.10E-07	3.11E-07	0.00E+00	5.21E-07	1.61E-07	1.83E-07	0.00E+00	3.43E-07
8	480151.9	3742969	1.45E-06	2.61E-06	0.00E+00	4.06E-06	1.37E-06	2.89E-06	0.00E+00	4.26E-06	2.78E-07	4.61E-07	0.00E+00	7.39E-07	1.10E-06	2.15E-06	0.00E+00	3.25E-06	2.37E-07	3.51E-07	0.00E+00	5.88E-07	1.81E-07	2.06E-07	0.00E+00	3.87E-07
9	480119.2	3742983	1.59E-06	2.87E-06	0.00E+00	4.46E-06	1.51E-06	3.18E-06	0.00E+00	4.69E-06	3.05E-07	5.07E-07	0.00E+00	8.13E-07	1.21E-06	2.37E-06	0.00E+00	3.58E-06	2.61E-07	3.86E-07	0.00E+00	6.47E-07	1.99E-07	2.27E-07	0.00E+00	4.26E-07
10	480251.5	3742978	8.74E-07	1.58E-06	0.00E+00	2.45E-06	8.29E-07	1.74E-06	0.00E+00	2.57E-06	1.68E-07	2.79E-07	0.00E+00	4.46E-07	6.66E-07	1.30E-06	0.00E+00	1.97E-06	1.43E-07	2.12E-07	0.00E+00	3.55E-07	1.09E-07	1.25E-07	0.00E+00	2.34E-07
11	480218.5	3742992	1.00E-06	1.80E-06	0.00E+00	2.80E-06	9.49E-07	1.99E-06	0.00E+00	2.94E-06	1.92E-07	3.19E-07	0.00E+00	5.11E-07	7.61E-07	1.49E-06	0.00E+00	2.25E-06	1.64E-07	2.43E-07	0.00E+00	4.06E-07	1.25E-07	1.43E-07	0.00E+00	2.68E-07
12	480186.4	3743055	9.91E-07	1.79E-06	0.00E+00	2.78E-06	9.40E-07	1.98E-06	0.00E+00	2.92E-06	1.90E-07	3.16E-07	0.00E+00	5.06E-07	7.55E-07	1.47E-06	0.00E+00	2.23E-06	1.62E-07	2.41E-07	0.00E+00	4.03E-07	1.24E-07	1.41E-07	0.00E+00	2.65E-07
13	480270.7	3743070	6.96E-07	1.26E-06	0.00E+00	1.95E-06	6.60E-07	1.39E-06	0.00E+00	2.05E-06	1.34E-07	2.22E-07	0.00E+00	3.55E-07	5.30E-07	1.04E-06	0.00E+00	1.57E-06	1.14E-07	1.69E-07	0.00E+00	2.83E-07	8.71E-08	9.92E-08	0.00E+00	1.86E-07
14	480254	3743077	7.34E-07	1.32E-06	0.00E+00	2.06E-06	6.96E-07	1.46E-06	0.00E+00	2.16E-06	1.41E-07	2.34E-07	0.00E+00	3.75E-07	5.59E-07	1.09E-06	0.00E+00	1.65E-06	1.20E-07	1.78E-07	0.00E+00	2.98E-07	9.18E-08	1.05E-07	0.00E+00	1.96E-07
15	480237.2	3743084	7.72E-07	1.39E-06	0.00E+00	2.16E-06	7.32E-07	1.54E-06	0.00E+00	2.27E-06	1.48E-07	2.46E-07	0.00E+00	3.94E-07	5.87E-07	1.15E-06	0.00E+00	1.73E-06	1.26E-07	1.87E-07	0.00E+00	3.13E-07	9.65E-08	1.10E-07	0.00E+00	2.06E-07
16	480220.5	3743091	8.08E-07	1.46E-06	0.00E+00	2.27E-06	7.67E-07	1.61E-06	0.00E+00	2.38E-06	1.55E-07	2.58E-07	0.00E+00	4.13E-07	6.16E-07	1.20E-06	0.00E+00	1.82E-06	1.32E-07	1.96E-07	0.00E+00	3.28E-07	1.01E-07	1.15E-07	0.00E+00	2.16E-07
17	480865.3	3742749	9.90E-08	1.79E-07	0.00E+00	2.78E-07	9.40E-08	1.98E-07	0.00E+00	2.92E-07	1.90E-08	3.16E-08	0.00E+00	5.06E-08	7.54E-08	1.47E-07	0.00E+00	2.23E-07	1.62E-08	2.40E-08	0.00E+00	4.02E-08	1.24E-08	1.41E-08	0.00E+00	2.65E-08
18	480858.2	3742766	1.00E-07	1.81E-07	0.00E+00	2.81E-07	9.52E-08	2.00E-07	0.00E+00	2.95E-07	1.93E-08	3.20E-08	0.00E+00	5.12E-08	7.64E-08	1.49E-07	0.00E+00	2.26E-07	1.64E-08	2.44E-08	0.00E+00	4.08E-08	1.26E-08	1.43E-08	0.00E+00	2.69E-08
19	480851.1	3742783	1.02E-07	1.84E-07	0.00E+00	2.85E-07	9.66E-08	2.03E-07	0.00E+00	3.00E-07	1.95E-08	3.25E-08	0.00E+00	5.20E-08	7.75E-08	1.51E-07	0.00E+00	2.29E-07	1.67E-08	2.47E-08	0.00E+00	4.14E-08	1.27E-08	1.45E-08	0.00E+00	2.73E-08
20	480844	3742800	1.03E-07	1.87E-07	0.00E+00	2.90E-07	9.81E-08	2.06E-07	0.00E+00	3.04E-07	1.98E-08	3.30E-08	0.00E+00	5.28E-08	7.87E-08	1.54E-07	0.00E+00	2.33E-07	1.69E-08	2.51E-08	0.00E+00	4.20E-08	1.29E-08	1.47E-08	0.00E+00	2.77E-08
21	480836.9	3742817	1.05E-07	1.90E-07	0.00E+00	2.95E-07	9.97E-08	2.10E-07	0.00E+00	3.09E-07	2.02E-08	3.35E-08	0.00E+00	5.37E-08	8.01E-08	1.56E-07	0.00E+00	2.36E-07	1.72E-08	2.55E-08	0.00E+00	4.27E-08	1.32E-08	1.50E-08	0.00E+00	2.81E-08
22	480829.8	3742834	1.07E-07	1.93E-07	0.00E+00	3.00E-07	1.02E-07	2.13E-07	0.00E+00	3.15E-07	2.05E-08	3.41E-08	0.00E+00	5.46E-08	8.15E-08	1.59E-07	0.00E+00	2.41E-07	1.75E-08	2.60E-08	0.00E+00	4.35E-08	1.34E-08	1.52E-08	0.00E+00	2.86E-08
23	480822.7	3742851	1.09E-07	1.97E-07	0.00E+00	3.06E-07	1.03E-07	2.17E-07	0.00E+00	3.21E-07	2.09E-08	3.47E-08	0.00E+00	5.56E-08	8.30E-08	1.62E-07	0.00E+00	2.45E-07	1.78E-08	2.64E-08	0.00E+00	4.43E-08	1.36E-08	1.55E-08	0.00E+00	2.92E-08
24	480815.5	3742869	1.11E-07	2.00E-07	0.00E+00	3.11E-07	1.05E-07	2.22E-07	0.00E+00	3.27E-07	2.13E-08	3.54E-08	0.00E+00	5.67E-08	8.46E-08	1.65E-07	0.00E+00	2.50E-07	1.82E-08	2.70E-08	0.00E+00	4.51E-08	1.39E-08	1.58E-08	0.00E+00	2.97E-08
25	480808.4	3742886	1.13E-07	2.04E-07	0.00E+00	3.18E-07	1.08E-07	2.26E-07	0.00E+00	3.34E-07	2.17E-08	3.61E-08	0.00E+00	5.79E-08	8.63E-08	1.69E-07	0.00E+00	2.55E-07	1.85E-08	2.75E-08	0.00E+00	4.60E-08	1.42E-08	1.62E-08	0.00E+00	3.03E-08
26	480801.3	3742903	1.16E-07	2.09E-07	0.00E+00	3.24E-07	1.10E-07	2.31E-07	0.00E+00	3.41E-07	2.22E-08	3.69E-08	0.00E+00	5.91E-08	8.81E-08	1.72E-07	0.00E+00	2.60E-07	1.89E-08	2.81E-08	0.00E+00	4.70E-08	1.45E-08	1.65E-08	0.00E+00	3.10E-08
27	480794.2	3742920	1.18E-07	2.13E-07	0.00E+00	3.31E-07	1.12E-07	2.36E-07	0.00E+00	3.48E-07	2.27E-08	3.77E-08	0.00E+00	6.03E-08	9.00E-08	1.76E-07	0.00E+00	2.66E-07	1.93E-08	2.87E-08	0.00E+00	4.80E-08	1.48E-08	1.68E-08	0.00E+00	3.16E-08
28	480787.1	3742937	1.21E-07	2.18E-07	0.00E+00	3.38E-07	1.15E-07	2.41E-07	0.00E+00	3.55E-07	2.32E-08	3.85E-08	0.00E+00	6.16E-08	9.19E-08	1.80E-07	0.00E+00	2.72E-07	1.98E-08	2.93E-08	0.00E+00	4.91E-08	1.51E-08	1.72E-08	0.00E+00	3.23E-08
29	480780	3742954	1.23E-07	2.23E-07	0.00E+00	3.46E-07	1.17E-07	2.46E-07	0.00E+00	3.63E-07	2.37E-08	3.93E-08	0.00E+00	6.30E-08	9.40E-08	1.84E-07	0.00E+00	2.78E-07	2.02E-08	3.00E-08	0.00E+00	5.02E-08	1.54E-08	1.76E-08	0.00E+00	3.30E-08
30	480772.9	3742971	1.26E-07	2.28E-07	0.00E+00	3.54E-07	1.20E-07	2.52E-07	0.00E+00	3.72E-07	2.42E-08	4.02E-08	0.00E+00	6.44E-08	9.61E-08	1.88E-07	0.00E+00	2.84E-07	2.07E-08	3.06E-08	0.00E+00	5.13E-08	1.58E-08	1.80E-08	0.00E+00	3.38E-08
31	480765.7	3742988	1.29E-07	2.33E-07	0.00E+00	3.62E-07	1.23E-07	2.58E-07	0.00E+00	3.80E-07	2.48E-08	4.12E-08	0.00E+00	6.59E-08	9.83E-08	1.92E-07	0.00E+00	2.90E-07	2.11E-08	3.13E-08	0.00E+00	5.25E-08	1.62E-08	1.84E-08	0.00E+00	3.46E-08
32	480758.6	3743006	1.32E-07	2.38E-07	0.00E+00	3.70E-07	1.25E-07	2.64E-07	0.00E+00	3.89E-07	2.53E-08	4.21E-08	0.00E+00	6.74E-08	1.01E-07	1.96E-07	0.00E+00	2.97E-07	2.16E-08	3.21E-08	0.00E+00	5.37E-08	1.65E-08	1.88E-08	0.00E+00	3.54E-08
33	480751.5	3743023	1.35E-07	2.44E-07	0.00E+00	3.79E-07	1.28E-07	2.70E-07	0.00E+00	3.98E-07	2.59E-08	4.31E-08	0.00E+00	6.90E-08	1.03E-07	2.01E-07	0.00E+00	3.04E-07	2.21E-08	3.28E-08	0.00E+00	5.49E-08	1.69E-08	1.93E-08	0.00E+00	3.62E-08
34	480744.4	3743040	1.38E-07	2.49E-07	0.00E+00	3.88E-07	1.31E-07	2.76E-07	0.00E+00	4.07E-07	2.65E-08	4.41E-08	0.00E+00	7.06E-08	1.05E-07	2.06E-07	0.00E+00	3.11E-07	2.26E-08	3.36E-08	0.00E+00	5.62E-08	1.73E-08	1.97E-08	0.00E+00	3.70E-08
35	480737.3	3743057	1.42E-07	2.55E-07	0.00E+00	3.97E-07	1.34E-07	2.82E-07	0.00E+00	4.17E-07	2.71E-08	4.51E-08	0.00E+00	7.22E-08	1.08E-07	2.10E-07	0.00E+00	3.18E-07	2.32E-08	3.43E-08	0.00E+00	5.75E-08	1.77E-08	2.02E-08	0.00E+00	3.79E-08
36	480730.2	3743074	1.45E-07	2.61E-07	0.00E+00	4.06E-07	1.37E-07	2.89E-07	0.00E+00	4.26E-07	2.78E-08	4.61E-08	0.00E+00	7.39E-08	1.10E-07	2.15E-07	0.00E+00	3.26E-07	2.37E-08	3.51E-08	0.00E+00	5.88E-08	1.81E-08	2.06E-08	0.00E+00	3.87E-08
37	480723	3743091	1.48E-07	2.67E-07	0.00E+00	4.15E-07	1.40E-07	2.95E-07	0.00E+00	4.36E-07	2.84E-08	4.72E-08	0.00E+00	7.56E-08	1.13E-07	2.20E-07	0.00E+00	3.33E-07	2.42E-08	3.59E-08	0.00E+00	6.02E-08	1.85E-08	2.11E-08	0.00E+00	3.96E-08
38	480715.9	3743108	1.51E-07	2.73E-07	0.00E+00	4.24E-07	1.44E-07	3.02E-07	0.00E+00	4.46E-07	2.90E-08	4.83E-08	0.00E+00	7.73E-08	1.15E-07	2.25E-07	0.00E+00	3.40E-07	2.48E-08	3.67E-08	0.00E+00	6.15E-08	1.89E-08	2.16E-08	0.00E+00	4.05E-08
39	480708.8	3743125	1.55E-07	2.79E-07	0.00E+00	4.34E-07	1.47E-07	3.09E-07	0.00E+00	4.56E-07	2.97E-08	4.93E-08	0.00E+00	7.90E-08	1.18E-07	2.30E-07	0.00E+00	3.48E-07	2.53E-08	3.76E-08	0.00E+00	6.29E-08	1.94E-08	2.21E-08	0.00E+00	4.14E-08
40	480701.7	3743142	1.58E-07	2.85E-07	0.00E+00	4.43E-07	1.50E-07	3.16E-07	0.00E+00	4.66E-07	3.03E-08	5.04E-08	0.00E+00	8.08E-08	1.20E-07	2.35E-07	0.00E+00	3.56E-07	2.59E-08	3.84E-08	0.00E+00	6.43E-08	1.98E-08	2.25E-08	0.00E+00	4.23E-08
41	480694.6	3743160	1.62E-07	2.91E-07	0.00E+00	4.53E-07	1.53E-07	3.22E-07	0.00E+00	4.76E-07	3.10E-08	5.15E-08	0.00E+00	8.25E-08	1.23E-07	2.40E-07	0.00E+00	3.63E-07	2.64E-08	3.92E-08	0.00E+00	6.56E-08	2.02E-08	2.30E-08	0.00E+00	4.32E-08
42	480687.5	3743177	1.65E-07	2.97E-07	0.00E+00	4.62E-07	1.56E-07	3.29E-07	0.00E+00	4.86E-07	3.16E-08	5.26E-08	0.00E+00	8.42E-08	1.26E-07	2.45E-07	0.00E+00	3.71E-07	2.70E-08	4.00E-08	0.00E+00	6.70E-08	2.06E-08	2.35E-08	0.00E+00	4.41E-08
43	480915.3	3742749	8.98E-08	1.62E-07	0.00E+00	2.52E-07	8.52E-08	1.79E-07	0.00E+00	2.64E-07	1.72E-08	2.86E-08	0.00E+00	4.58E-08	6.84E-08	1.34E-07	0.00E+00	2.02E-07	1.47E-08	2.18E-08	0.00E+00	3.65E-08	1.12E-08	1.28E-08	0.00E+00	2.40E-08
44	480908.2	3742766	9.09E-08	1.64E-07	0.00E+00	2.55E-07	8.62E-08	1.81E-07	0.00E+00	2.68E-07	1.74E-08	2.90E-08	0.00E+00	4.64E-08	6.92E-08	1.35E-07	0.00E+00	2.04E-07	1.49E-08	2.21E-08	0.00E+00	3.69E-08	1.14E-08	1.30E-08	0.00E+00	2.43E-08
45	480901.1	3742783	9.21E-08	1.66E-07	0.00E+00	2.58E-07	8.74E-08	1.84E-07	0.00E+00	2.71E-07	1.77E-08	2.94E-08	0.00E+00	4.70E-08	7.01E-08	1.37E-07	0.00E+00	2.07E-07	1.51E-08	2.24E-08	0.00E+00	3.74E-08	1.15E-08	1.31E-08	0.00E+00	2.47E-08
46	480893.9	3742800	9.35E-08	1.69E-07	0.00E+00	2.62E-07	8.87E-08	1.86E-07	0.00E+00	2.75E-07	1.79E-08	2.98E-08	0.00E+00	4.77E-08	7.12E-08	1.39E-07	0.00E+00	2.10E-07	1.53E-08	2.27E-08	0.00E+00	3.80E-08	1.17E-08	1.33E-08	0.00E+00	2.50E-08
47	480886.8	3742817	9.49E-08	1.71E-07	0.00E+00	2.66E-07	9.00E-08	1.89E-07	0.00E+00	2.79E-07	1.82E-08	3.02E-08	0.00E+00	4.84E-08	7.22E-08	1.41E-07	0.00E+00	2.13E-07	1.55E-08	2.30E-08	0.00E+00	3.86E-08	1.19E-08	1.35E-08	0.00E+00	2.54E-08
48	480879.7	3742835	9.64E-08	1.74E-07	0.00E+00	2.70E-07	9.15E-08	1.92E-07	0.00E+00	2.84E-07	1.85E-08	3.07E-08	0.00E+00	4.92E-08	7.34E-08	1.43E-07	0.00E+00	2.17E-07	1.58E-08	2.34E-08	0.00E+00	3.92E-08	1.21E-08	1.37E-08	0.00E+00	2.58E-08
49	480872.5	3742852	9.81E-08	1.77E-07	0.00E+00	2.75E-07	9.31E-08	1.96E-07	0.00E+00	2.89E-07	1.88E-08	3.13E-08	0.00E+00	5.01E-08	7.47E-08	1.46E-07	0.00E+00	2.21E-07	1.61E-08	2.38E-08	0.00E+00	3.99E-08	1.23E-08	1.40E-08	0.00E+00	2.62E-08
50	480865.4	3742869	9.98E-08	1.80E-07	0.00E+00	2.80E-07	9.47E-08	1.99E-07	0.00E+00	2.94E-07	1.92E-08	3.18E-08	0.00E+00	5.10E-08	7.60E-08	1.48E-07	0.00E+00	2.25E-07	1.63E-08	2.42E-08	0.00E+00	4.06E-08	1.25E-08	1.42E-08	0.00E+00	2.67E-08
51	480858.3	3742886	1.02E-07	1.83E-07	0.00E+00	2.85E-07	9.65E-08	2.03E-07	0.00E+00	2.99E-07	1.95E-08	3.24E-08	0.00E+00	5.19E-08	7.74E-08	1.51E-07	0.00E+00	2.29E-07	1.66E-08	2.47E-08	0.00E+00	4.13E-08	1.27E-08	1.45E-08	0.00E+00	2.72E-08
52	480851.2	3742903	1.04E-07	1.87E-07	0.00E+00	2.91E-07	9.84E-08	2.07E-07	0.00E+00	3.05E-07	1.99E-08	3.30E-08	0.00E+00	5.29E-08	7.89E-08	1.54E-07	0.00E+00	2.33E-07	1.70E-08	2.52E-08	0.00E+00	4.21E-08	1.30E-08	1.48E-08	0.00E+00	2.77E-08
53	480844	3742920	1.06E-07	1.91E-07	0.00E+00	2.96E-07	1.00E-07	2.11E-07	0.00E+00	3.11E-07	2.03E-08	3.37E-08	0.00E+00	5.40E-08	8.05E-08	1.57E-07	0.00E+00	2.38E-07	1.73E-08	2.57E-08	0.00E+00	4.30E-08	1.32E-08	1.51E-08	0.00E+00	2.83E-08
54	480836.9	3742938	1.08E-07	1.95E-07	0.00E+00	3.02E-07	1.02E-07	2.15E-07	0.00E+00	3.18E-07	2.07E-08	3.44E-08	0.00E+00	5.51E-08	8.22E-08	1.60E-07	0.00E+00	2.43E-07	1.77E-08	2.62E-08	0.00E+00	4.38E-08	1.35E-08	1.54E-08	0.00E+00	2.89E-08
55	480829.8	3742955	1.10E-07	1.99E-07	0.00E+00	3.09E-07	1.04E-07	2.20E-07	0.00E+00	3.24E-07	2.11E-08	3.51E-08	0.00E+00	5.62E-08	8.39E-08	1.64E-07	0.00E+00	2.48E-07	1.80E-08	2.67E-08	0.00E+00	4.48E-08	1.38E-08	1.57E-08	0.00E+00	2.95E-08
56	480822.7	3742972	1.12E-07	2.03E-07	0.00E+00	3.15E-07	1.07E-07	2.24E-07	0.00E+00	3.31E-07	2.16E-08	3.58E-08	0.00E+00	5.74E-08	8.56E-08	1.67E-07	0.00E+00	2.53E-07	1.84E-08	2.73E-08	0.00E+00	4.57E-08	1.41E-08	1.60E-08	0.00E+00	3.01E-08
57	480815.5	3742989	1.15E-07	2.07E-07	0.00E+00	3.22E-07	1.09E-07	2.29E-07	0.00E+00	3.38E-07	2.20E-08	3.66E-08	0.00E+00	5.87E-08	8.75E-08	1.71E-07	0.00E+00	2.58E-07	1.88E-08	2.79E-08	0.00E+00	4.67E-08	1.44E-08	1.64E-08	0.00E+00	3.07E-08
58	480808.4	3743006	1.17E-07	2.12E-07	0.00E+00	3.29E-07	1.11E-07	2.34E-07	0.00E+00	3.46E-07	2.25E-08	3.74E-08	0.00E+00	5.99E-08	8.94E-08	1.75E-07	0.00E+00	2.64E-07	1.92E-08	2.85E-08	0.00E+00	4.77E-08	1.47E-08	1.67E-08	0.00E+00	3.14E-08
59	480801.3	3743023	1.20E-07	2.16E-07	0.00E+00	3.36E-07	1.14E-07	2.39E-07	0.00E+00	3.53E-07	2.30E-08	3.82E-08	0.00E+00	6.12E-08	9.13E-08	1.78E-07	0.00E+00	2.70E-07	1.96E-08	2.91E-08	0.00E+00	4.87E-08	1.50E-08	1.71E-08	0.00E+00	3.21E-08
60	480794.1	3743040	1.23E-07	2.21E-07	0.00E+00	3.44E-07	1.16E-07	2.45E-07	0.00E+00	3.61E-07	2.35E-08	3.91E-08	0.00E+00	6.26E-08	9.33E-08	1.82E-07	0.00E+00	2.76E-07	2.01E-08	2.97E-08	0.00E+00	4.98E-08	1.53E-08	1.75E-08	0.00E+00	3.28E-08
61	480787	3743058	1.25E-07	2.26E-07	0.00E+00	3.51E-07	1.19E-07	2.50E-07	0.00E+00	3.69E-07	2.40E-08	3.99E-08	0.00E+00	6.40E-08	9.54E-08	1.86E-07	0.00E+00	2.82E-07	2.05E-08	3.04E-08	0.00E+00	5.09E-08	1.57E-08	1.79E-08	0.00E+00	3.35E-08
62	480779.9	3743075	1.28E-07	2.31E-07	0.00E+00	3.59E-07	1.21E-07	2.55E-07	0.00E+00	3.77E-07	2.46E-08	4.08E-08	0.00E+00	6.54E-08	9.75E-08	1.90E-07	0.00E+00	2.88E-07	2.10E-08	3.11E-08	0.00E+00	5.20E-08	1.60E-08	1.82E-08	0.00E+00	3.43E-08
63	480772.8	3743092	1.31E-07	2.36E-07	0.00E+00	3.67E-07	1.24E-07	2.61E-07	0.00E+00	3.85E-07	2.51E-08	4.17E-08	0.00E+00	6.68E-08	9.96E-08	1.95E-07	0.00E+00	2.94E-07	2.14E-08	3.17E-08	0.00E+00	5.32E-08	1.64E-08	1.86E-08	0.00E+00	3.50E-08
64	480765.6	3743109	1.34E-07	2.41E-07	0.00E+00	3.75E-07	1.27E-07	2.67E-07	0.00E+00	3.93E-07	2.56E-08	4.26E-08	0.00E+00	6.82E-08	1.02E-07	1.99E-07	0.00E+00	3.01E-07	2.19E-08	3.24E-08	0.00E+00	5.43E-08	1.67E-08	1.91E-08	0.00E+00	3.58E-08
65	480758.5	3743126	1.37E-07	2.46E-07	0.00E+00	3.83E-07	1.30E-07	2.72E-07	0.00E+00	4.02E-07	2.62E-08	4.35E-08	0.00E+00	6.97E-08	1.04E-07	2.03E-07	0.00E+00	3.07E-07	2.23E-08	3.31E-08	0.00E+00	5.55E-08	1.71E-08	1.95E-08	0.00E+00	3.65E-08
66	480751.4	3743143	1.39E-07	2.51E-07	0.00E+00	3.91E-07	1.32E-07	2.78E-07	0.00E+00	4.10E-07	2.67E-08	4.44E-08	0.00E+00	7.12E-08	1.06E-07	2.07E-07	0.00E+00	3.14E-07	2.28E-08	3.38E-08	0.00E+00	5.67E-08	1.74E-08	1.99E-08	0.00E+00	3.73E-08
67	480744.2	3743161	1.42E-07	2.57E-07	0.00E+00	3.99E-07	1.35E-07	2.84E-07	0.00E+00	4.19E-07	2.73E-08	4.54E-08	0.00E+00	7.27E-08	1.08E-07	2.12E-07	0.00E+00	3.20E-07	2.33E-08

156	480724.2	3743432	1.49E-07	2.69E-07	0.00E+00	4.18E-07	1.42E-07	2.98E-07	0.00E+00	4.39E-07	2.86E-08	4.75E-08	0.00E+00	7.62E-08	1.14E-07	2.22E-07	0.00E+00	3.35E-07	2.44E-08	3.62E-08	0.00E+00	6.06E-08	1.87E-08	2.13E-08	0.00E+00	3.99E-08
157	480707	3743440	1.55E-07	2.79E-07	0.00E+00	4.34E-07	1.47E-07	3.09E-07	0.00E+00	4.55E-07	2.97E-08	4.93E-08	0.00E+00	7.90E-08	1.18E-07	2.30E-07	0.00E+00	3.48E-07	2.53E-08	3.75E-08	0.00E+00	6.28E-08	1.93E-08	2.20E-08	0.00E+00	4.14E-08
158	480689.8	3743447	1.60E-07	2.89E-07	0.00E+00	4.49E-07	1.52E-07	3.20E-07	0.00E+00	4.72E-07	3.07E-08	5.11E-08	0.00E+00	8.18E-08	1.22E-07	2.38E-07	0.00E+00	3.60E-07	2.62E-08	3.89E-08	0.00E+00	6.51E-08	2.01E-08	2.28E-08	0.00E+00	4.29E-08
159	480101.1	3742529	8.70E-06	1.57E-05	0.00E+00	2.44E-05	8.25E-06	1.74E-05	0.00E+00	2.56E-05	1.67E-06	2.77E-06	0.00E+00	4.44E-06	6.62E-06	1.29E-05	0.00E+00	1.96E-05	1.42E-06	2.11E-06	0.00E+00	3.53E-06	1.09E-06	1.24E-06	0.00E+00	2.33E-06
160	480068.8	3742523	1.07E-05	1.92E-05	0.00E+00	2.99E-05	1.01E-05	2.12E-05	0.00E+00	3.14E-05	2.04E-06	3.39E-06	0.00E+00	5.44E-06	8.11E-06	1.58E-05	0.00E+00	2.40E-05	1.74E-06	2.58E-06	0.00E+00	4.33E-06	1.33E-06	1.52E-06	0.00E+00	2.85E-06
161	480050.6	3742523	1.13E-05	2.04E-05	0.00E+00	3.17E-05	1.07E-05	2.26E-05	0.00E+00	3.33E-05	2.17E-06	3.61E-06	0.00E+00	5.78E-06	8.62E-06	1.68E-05	0.00E+00	2.54E-05	1.85E-06	2.75E-06	0.00E+00	4.60E-06	1.42E-06	1.61E-06	0.00E+00	3.03E-06
162	480032.4	3742523	1.15E-05	2.08E-05	0.00E+00	3.23E-05	1.09E-05	2.30E-05	0.00E+00	3.39E-05	2.21E-06	3.67E-06	0.00E+00	5.89E-06	8.78E-06	1.71E-05	0.00E+00	2.59E-05	1.89E-06	2.80E-06	0.00E+00	4.68E-06	1.44E-06	1.64E-06	0.00E+00	3.09E-06
163	480014.2	3742523	1.14E-05	2.06E-05	0.00E+00	3.20E-05	1.08E-05	2.27E-05	0.00E+00	3.36E-05	2.19E-06	3.63E-06	0.00E+00	5.82E-06	8.68E-06	1.70E-05	0.00E+00	2.56E-05	1.87E-06	2.77E-06	0.00E+00	4.63E-06	1.43E-06	1.62E-06	0.00E+00	3.05E-06
164	479996	3742523	1.10E-05	1.98E-05	0.00E+00	3.08E-05	1.04E-05	2.19E-05	0.00E+00	3.23E-05	2.10E-06	3.50E-06	0.00E+00	5.60E-06	8.35E-06	1.63E-05	0.00E+00	2.47E-05	1.80E-06	2.66E-06	0.00E+00	4.46E-06	1.37E-06	1.56E-06	0.00E+00	2.94E-06
165	479977.7	3742523	1.02E-05	1.85E-05	0.00E+00	2.87E-05	9.72E-06	2.04E-05	0.00E+00	3.02E-05	1.97E-06	3.26E-06	0.00E+00	5.23E-06	7.80E-06	1.52E-05	0.00E+00	2.30E-05	1.68E-06	2.49E-06	0.00E+00	4.16E-06	1.28E-06	1.46E-06	0.00E+00	2.74E-06
166	479959.5	3742523	9.21E-06	1.66E-05	0.00E+00	2.58E-05	8.73E-06	1.84E-05	0.00E+00	2.71E-05	1.77E-06	2.93E-06	0.00E+00	4.70E-06	7.01E-06	1.37E-05	0.00E+00	2.07E-05	1.51E-06	2.23E-06	0.00E+00	3.74E-06	1.15E-06	1.31E-06	0.00E+00	2.46E-06
167	479941.3	3742523	7.86E-06	1.42E-05	0.00E+00	2.20E-05	7.46E-06	1.57E-05	0.00E+00	2.31E-05	1.51E-06	2.51E-06	0.00E+00	4.01E-06	5.99E-06	1.17E-05	0.00E+00	1.77E-05	1.29E-06	1.91E-06	0.00E+00	3.19E-06	9.84E-07	1.12E-06	0.00E+00	2.10E-06
168	479923.1	3742523	6.31E-06	1.14E-05	0.00E+00	1.77E-05	5.99E-06	1.26E-05	0.00E+00	1.86E-05	1.21E-06	2.01E-06	0.00E+00	3.22E-06	4.80E-06	9.38E-06	0.00E+00	1.42E-05	1.03E-06	1.53E-06	0.00E+00	2.56E-06	7.89E-07	8.99E-07	0.00E+00	1.69E-06
169	479904.9	3742523	4.80E-06	8.65E-06	0.00E+00	1.34E-05	4.55E-06	9.57E-06	0.00E+00	1.41E-05	9.20E-07	1.53E-06	0.00E+00	2.45E-06	3.65E-06	7.13E-06	0.00E+00	1.08E-05	7.85E-07	1.16E-06	0.00E+00	1.95E-06	6.00E-07	6.84E-07	0.00E+00	1.28E-06
170	480101.2	3742509	7.28E-06	1.31E-05	0.00E+00	2.04E-05	6.90E-06	1.45E-05	0.00E+00	2.14E-05	1.40E-06	2.32E-06	0.00E+00	3.71E-06	5.54E-06	1.08E-05	0.00E+00	1.64E-05	1.19E-06	1.77E-06	0.00E+00	2.96E-06	9.10E-07	1.04E-06	0.00E+00	1.95E-06
171	480135.2	3742535	5.62E-06	1.01E-05	0.00E+00	1.58E-05	5.33E-06	1.12E-05	0.00E+00	1.65E-05	1.08E-06	1.79E-06	0.00E+00	2.87E-06	4.28E-06	8.36E-06	0.00E+00	1.26E-05	9.20E-07	1.36E-06	0.00E+00	2.28E-06	7.03E-07	8.01E-07	0.00E+00	1.50E-06
172	480068.9	3742503	8.35E-06	1.51E-05	0.00E+00	2.34E-05	7.92E-06	1.66E-05	0.00E+00	2.46E-05	1.60E-06	2.66E-06	0.00E+00	4.26E-06	6.35E-06	1.24E-05	0.00E+00	1.88E-05	1.37E-06	2.02E-06	0.00E+00	3.39E-06	1.04E-06	1.19E-06	0.00E+00	2.23E-06
173	480050.7	3742503	8.73E-06	1.57E-05	0.00E+00	2.45E-05	8.28E-06	1.74E-05	0.00E+00	2.57E-05	1.68E-06	2.78E-06	0.00E+00	4.46E-06	6.65E-06	1.30E-05	0.00E+00	1.96E-05	1.43E-06	2.12E-06	0.00E+00	3.55E-06	1.09E-06	1.24E-06	0.00E+00	2.34E-06
174	480032.4	3742503	8.82E-06	1.59E-05	0.00E+00	2.47E-05	8.37E-06	1.76E-05	0.00E+00	2.60E-05	1.69E-06	2.81E-06	0.00E+00	4.50E-06	6.72E-06	1.31E-05	0.00E+00	1.98E-05	1.44E-06	2.14E-06	0.00E+00	3.58E-06	1.10E-06	1.26E-06	0.00E+00	2.36E-06
175	480014.2	3742503	8.65E-06	1.56E-05	0.00E+00	2.43E-05	8.21E-06	1.73E-05	0.00E+00	2.55E-05	1.66E-06	2.76E-06	0.00E+00	4.42E-06	6.59E-06	1.29E-05	0.00E+00	1.95E-05	1.42E-06	2.10E-06	0.00E+00	3.52E-06	1.08E-06	1.23E-06	0.00E+00	2.32E-06
176	479996	3742503	8.26E-06	1.49E-05	0.00E+00	2.32E-05	7.83E-06	1.65E-05	0.00E+00	2.43E-05	1.58E-06	2.63E-06	0.00E+00	4.22E-06	6.29E-06	1.23E-05	0.00E+00	1.86E-05	1.35E-06	2.00E-06	0.00E+00	3.36E-06	1.03E-06	1.18E-06	0.00E+00	2.21E-06
177	479977.8	3742503	7.64E-06	1.38E-05	0.00E+00	2.14E-05	7.25E-06	1.52E-05	0.00E+00	2.25E-05	1.47E-06	2.44E-06	0.00E+00	3.90E-06	5.82E-06	1.14E-05	0.00E+00	1.72E-05	1.25E-06	1.85E-06	0.00E+00	3.11E-06	9.56E-07	1.09E-06	0.00E+00	2.05E-06
178	479959.6	3742503	6.83E-06	1.23E-05	0.00E+00	1.91E-05	6.48E-06	1.36E-05	0.00E+00	2.01E-05	1.31E-06	2.18E-06	0.00E+00	3.49E-06	5.20E-06	1.02E-05	0.00E+00	1.54E-05	1.12E-06	1.66E-06	0.00E+00	2.77E-06	8.54E-07	9.73E-07	0.00E+00	1.83E-06
179	479941.4	3742503	5.85E-06	1.06E-05	0.00E+00	1.64E-05	5.55E-06	1.17E-05	0.00E+00	1.72E-05	1.12E-06	1.86E-06	0.00E+00	2.99E-06	4.46E-06	8.70E-06	0.00E+00	1.32E-05	9.58E-07	1.42E-06	0.00E+00	2.38E-06	7.32E-07	8.34E-07	0.00E+00	1.57E-06
180	479923.2	3742503	4.81E-06	8.67E-06	0.00E+00	1.35E-05	4.56E-06	9.59E-06	0.00E+00	1.42E-05	9.22E-07	1.53E-06	0.00E+00	2.45E-06	3.66E-06	7.15E-06	0.00E+00	1.08E-05	7.87E-07	1.17E-06	0.00E+00	1.95E-06	6.02E-07	6.85E-07	0.00E+00	1.29E-06
181	479905	3742503	3.83E-06	6.90E-06	0.00E+00	1.07E-05	3.63E-06	7.63E-06	0.00E+00	1.13E-05	7.34E-07	1.22E-06	0.00E+00	1.95E-06	2.91E-06	5.69E-06	0.00E+00	8.61E-06	6.26E-07	9.29E-07	0.00E+00	1.55E-06	4.79E-07	5.45E-07	0.00E+00	1.02E-06
182	480101.2	3742489	6.18E-06	1.11E-05	0.00E+00	1.73E-05	5.86E-06	1.23E-05	0.00E+00	1.82E-05	1.19E-06	1.97E-06	0.00E+00	3.16E-06	4.71E-06	9.19E-06	0.00E+00	1.39E-05	1.01E-06	1.50E-06	0.00E+00	2.51E-06	7.73E-07	8.81E-07	0.00E+00	1.65E-06
183	480129.5	3742501	5.28E-06	9.53E-06	0.00E+00	1.48E-05	5.01E-06	1.05E-05	0.00E+00	1.55E-05	1.01E-06	1.68E-06	0.00E+00	2.70E-06	4.02E-06	7.86E-06	0.00E+00	1.19E-05	8.65E-07	1.28E-06	0.00E+00	2.15E-06	6.61E-07	7.53E-07	0.00E+00	1.41E-06
184	480149.4	3742521	4.51E-06	8.14E-06	0.00E+00	1.27E-05	4.28E-06	9.01E-06	0.00E+00	1.33E-05	8.66E-07	1.44E-06	0.00E+00	2.30E-06	3.44E-06	6.71E-06	0.00E+00	1.02E-05	7.39E-07	1.10E-06	0.00E+00	1.83E-06	5.65E-07	6.43E-07	0.00E+00	1.21E-06
185	480068.9	3742483	6.79E-06	1.22E-05	0.00E+00	1.90E-05	6.44E-06	1.35E-05	0.00E+00	2.00E-05	1.30E-06	2.16E-06	0.00E+00	3.47E-06	5.17E-06	1.01E-05	0.00E+00	1.53E-05	1.11E-06	1.65E-06	0.00E+00	2.76E-06	8.50E-07	9.68E-07	0.00E+00	1.82E-06
186	480050.7	3742483	7.01E-06	1.26E-05	0.00E+00	1.96E-05	6.65E-06	1.40E-05	0.00E+00	2.06E-05	1.34E-06	2.23E-06	0.00E+00	3.58E-06	5.34E-06	1.04E-05	0.00E+00	1.58E-05	1.15E-06	1.70E-06	0.00E+00	2.85E-06	8.77E-07	9.99E-07	0.00E+00	1.88E-06
187	480032.5	3742483	7.02E-06	1.27E-05	0.00E+00	1.97E-05	6.66E-06	1.40E-05	0.00E+00	2.07E-05	1.35E-06	2.24E-06	0.00E+00	3.58E-06	5.34E-06	1.04E-05	0.00E+00	1.58E-05	1.15E-06	1.70E-06	0.00E+00	2.85E-06	8.78E-07	1.00E-06	0.00E+00	1.88E-06
188	480014.3	3742483	6.83E-06	1.23E-05	0.00E+00	1.91E-05	6.48E-06	1.36E-05	0.00E+00	2.01E-05	1.31E-06	2.18E-06	0.00E+00	3.49E-06	5.20E-06	1.02E-05	0.00E+00	1.54E-05	1.12E-06	1.66E-06	0.00E+00	2.78E-06	8.55E-07	9.74E-07	0.00E+00	1.83E-06
189	479996.1	3742483	6.47E-06	1.17E-05	0.00E+00	1.81E-05	6.14E-06	1.29E-05	0.00E+00	1.91E-05	1.24E-06	2.06E-06	0.00E+00	3.30E-06	4.93E-06	9.63E-06	0.00E+00	1.46E-05	1.06E-06	1.57E-06	0.00E+00	2.63E-06	8.10E-07	9.22E-07	0.00E+00	1.73E-06
190	479977.9	3742483	5.96E-06	1.07E-05	0.00E+00	1.67E-05	5.65E-06	1.19E-05	0.00E+00	1.75E-05	1.14E-06	1.90E-06	0.00E+00	3.04E-06	4.54E-06	8.86E-06	0.00E+00	1.34E-05	9.75E-07	1.45E-06	0.00E+00	2.42E-06	7.46E-07	8.49E-07	0.00E+00	1.59E-06
191	479959.7	3742483	5.32E-06	9.59E-06	0.00E+00	1.49E-05	5.05E-06	1.06E-05	0.00E+00	1.57E-05	1.02E-06	1.70E-06	0.00E+00	2.72E-06	4.05E-06	7.91E-06	0.00E+00	1.20E-05	8.71E-07	1.29E-06	0.00E+00	2.16E-06	6.66E-07	7.58E-07	0.00E+00	1.42E-06
192	479941.4	3742483	4.60E-06	8.29E-06	0.00E+00	1.29E-05	4.36E-06	9.17E-06	0.00E+00	1.35E-05	8.82E-07	1.46E-06	0.00E+00	2.35E-06	3.50E-06	6.84E-06	0.00E+00	1.03E-05	7.52E-07	1.12E-06	0.00E+00	1.87E-06	5.75E-07	6.55E-07	0.00E+00	1.23E-06
193	479923.2	3742483	3.85E-06	6.95E-06	0.00E+00	1.08E-05	3.66E-06	7.69E-06	0.00E+00	1.13E-05	7.39E-07	1.23E-06	0.00E+00	1.97E-06	2.93E-06	5.73E-06	0.00E+00	8.67E-06	6.31E-07	9.35E-07	0.00E+00	1.57E-06	4.82E-07	5.49E-07	0.00E+00	1.03E-06
194	479905	3742483	3.16E-06	5.71E-06	0.00E+00	8.87E-06	3.00E-06	6.31E-06	0.00E+00	9.31E-06	6.07E-07	1.01E-06	0.00E+00	1.62E-06	2.41E-06	4.71E-06	0.00E+00	7.11E-06	5.18E-07	7.68E-07	0.00E+00	1.29E-06	3.96E-07	4.51E-07	0.00E+00	8.47E-07
195	480101.3	3742469	5.32E-06	9.59E-06	0.00E+00	1.49E-05	5.04E-06	1.06E-05	0.00E+00	1.57E-05	1.02E-06	1.69E-06	0.00E+00	2.71E-06	4.05E-06	7.91E-06	0.00E+00	1.20E-05	8.70E-07	1.29E-06	0.00E+00	2.16E-06	6.65E-07	7.58E-07	0.00E+00	1.42E-06
196	480129.5	3742481	4.77E-06	8.60E-06	0.00E+00	1.34E-05	4.52E-06	9.51E-06	0.00E+00	1.40E-05	9.15E-07	1.52E-06	0.00E+00	2.43E-06	3.63E-06	7.09E-06	0.00E+00	1.07E-05	7.81E-07	1.16E-06	0.00E+00	1.94E-06	5.97E-07	6.80E-07	0.00E+00	1.28E-06
197	480163.6	3742507	3.74E-06	6.74E-06	0.00E+00	1.05E-05	3.54E-06	7.45E-06	0.00E+00	1.10E-05	7.17E-07	1.19E-06	0.00E+00	1.91E-06	2.85E-06	5.56E-06	0.00E+00	8.40E-06	6.12E-07	9.07E-07	0.00E+00	1.52E-06	4.67E-07	5.33E-07	0.00E+00	1.00E-06
198	480175.2	3742535	3.26E-06	5.88E-06	0.00E+00	9.14E-06	3.09E-06	6.51E-06	0.00E+00	9.60E-06	6.26E-07	1.04E-06	0.00E+00	1.66E-06	2.48E-06	4.85E-06	0.00E+00	7.33E-06	5.34E-07	7.91E-07	0.00E+00	1.33E-06	4.08E-07	4.65E-07	0.00E+00	8.73E-07
199	480069	3742463	5.66E-06	1.02E-05	0.00E+00	1.59E-05	5.37E-06	1.13E-05	0.00E+00	1.67E-05	1.09E-06	1.80E-06	0.00E+00	2.89E-06	4.31E-06	8.41E-06	0.00E+00	1.27E-05	9.26E-07	1.37E-06	0.00E+00	2.30E-06	7.08E-07	8.06E-07	0.00E+00	1.51E-06
200	480050.8	3742463	5.77E-06	1.04E-05	0.00E+00	1.62E-05	5.47E-06	1.15E-05	0.00E+00	1.70E-05	1.11E-06	1.84E-06	0.00E+00	2.95E-06	4.39E-06	8.58E-06	0.00E+00	1.30E-05	9.44E-07	1.40E-06	0.00E+00	2.34E-06	7.22E-07	8.22E-07	0.00E+00	1.54E-06
201	480032.6	3742463	5.73E-06	1.03E-05	0.00E+00	1.61E-05	5.43E-06	1.14E-05	0.00E+00	1.69E-05	1.10E-06	1.82E-06	0.00E+00	2.92E-06	4.36E-06	8.51E-06	0.00E+00	1.29E-05	9.37E-07	1.39E-06	0.00E+00	2.33E-06	7.16E-07	8.16E-07	0.00E+00	1.53E-06
202	480014.4	3742463	5.54E-06	9.99E-06	0.00E+00	1.55E-05	5.25E-06	1.10E-05	0.00E+00	1.63E-05	1.06E-06	1.76E-06	0.00E+00	2.83E-06	4.22E-06	8.24E-06	0.00E+00	1.25E-05	9.06E-07	1.34E-06	0.00E+00	2.25E-06	6.93E-07	7.89E-07	0.00E+00	1.48E-06
203	479996.1	3742463	5.22E-06	9.42E-06	0.00E+00	1.46E-05	4.95E-06	1.04E-05	0.00E+00	1.54E-05	1.00E-06	1.66E-06	0.00E+00	2.67E-06	3.98E-06	7.77E-06	0.00E+00	1.17E-05	8.55E-07	1.27E-06	0.00E+00	2.12E-06	6.53E-07	7.44E-07	0.00E+00	1.40E-06
204	479977.9	3742463	4.80E-06	8.65E-06	0.00E+00	1.35E-05	4.55E-06	9.57E-06	0.00E+00	1.41E-05	9.20E-07	1.53E-06	0.00E+00	2.45E-06	3.65E-06	7.14E-06	0.00E+00	1.08E-05	7.85E-07	1.16E-06	0.00E+00	1.95E-06	6.00E-07	6.84E-07	0.00E+00	1.28E-06
205	479959.7	3742463	4.29E-06	7.74E-06	0.00E+00	1.20E-05	4.07E-06	8.56E-06	0.00E+00	1.26E-05	8.23E-07	1.37E-06	0.00E+00	2.19E-06	3.27E-06	6.38E-06	0.00E+00	9.65E-06	7.03E-07	1.04E-06	0.00E+00	1.74E-06	5.37E-07	6.12E-07	0.00E+00	1.15E-06
206	479941.5	3742463	3.74E-06	6.75E-06	0.00E+00	1.05E-05	3.55E-06	7.46E-06	0.00E+00	1.10E-05	7.18E-07	1.19E-06	0.00E+00	1.91E-06	2.85E-06	5.57E-06	0.00E+00	8.41E-06	6.12E-07	9.08E-07	0.00E+00	1.52E-06	4.68E-07	5.33E-07	0.00E+00	1.00E-06
207	479923.3	3742463	3.19E-06	5.75E-06	0.00E+00	8.94E-06	3.03E-06	6.36E-06	0.00E+00	9.39E-06	6.12E-07	1.02E-06	0.00E+00	1.63E-06	2.43E-06	4.74E-06	0.00E+00	7.17E-06	5.22E-07	7.74E-07	0.00E+00	1.30E-06	3.99E-07	4.55E-07	0.00E+00	8.54E-07
208	479905.1	3742463	2.68E-06	4.83E-06	0.00E+00	7.51E-06	2.54E-06	5.34E-06	0.00E+00	7.89E-06	5.14E-07	8.54E-07	0.00E+00	1.37E-06	2.04E-06	3.98E-06	0.00E+00	6.02E-06	4.38E-07	6.50E-07	0.00E+00	1.09E-06	3.35E-07	3.82E-07	0.00E+00	7.17E-07
209	480101.4	3742449	4.62E-06	8.33E-06	0.00E+00	1.29E-05	4.38E-06	9.21E-06	0.00E+00	1.36E-05	8.86E-07	1.47E-06	0.00E+00	2.36E-06	3.52E-06	6.87E-06	0.00E+00	1.04E-05	7.56E-07	1.12E-06	0.00E+00	1.88E-06	5.78E-07	6.58E-07	0.00E+00	1.24E-06
210	480129.6	3742461	4.29E-06	7.74E-06	0.00E+00	1.20E-05	4.07E-06	8.56E-06	0.00E+00	1.26E-05	8.23E-07	1.37E-06	0.00E+00	2.19E-06	3.27E-06	6.38E-06	0.00E+00	9.65E-06	7.03E-07	1.04E-06	0.00E+00	1.74E-06	5.37E-07	6.12E-07	0.00E+00	1.15E-06
211	480157.8	3742473	3.65E-06	6.58E-06	0.00E+00	1.02E-05	3.46E-06	7.28E-06	0.00E+00	1.07E-05	7.00E-07	1.16E-06	0.00E+00	1.86E-06	2.78E-06	5.43E-06	0.00E+00	8.21E-06	5.98E-07	8.86E-07	0.00E+00	1.48E-06	4.57E-07	5.20E-07	0.00E+00	9.77E-07
212	480177.8	3742493	3.16E-06	5.70E-06	0.00E+00	8.87E-06	3.00E-06	6.31E-06	0.00E+00	9.31E-06	6.07E-07	1.01E-06	0.00E+00	1.61E-06	2.41E-06	4.70E-06	0.00E+00	7.11E-06	5.18E-07	7.67E-07	0.00E+00	1.28E-06	3.96E-07	4.51E-07	0.00E+00	8.46E-07
213	480189.4	3742521	2.79E-06	5.03E-06	0.00E+00	7.82E-06	2.65E-06	5.57E-06	0.00E+00	8.21E-06	5.35E-07	8.89E-07	0.00E+00	1.42E-06	2.12E-06	4.15E-06	0.00E+00	6.27E-06	4.57E-07	6.77E-07	0.00E+00	1.13E-06	3.49E-07	3.98E-07	0.00E+00	7.47E-07
214	480069	3742443	4.79E-06	8.64E-06	0.00E+00	1.34E-05	4.55E-06	9.56E-06	0.00E+00	1.41E-05	9.19E-07	1.53E-06	0.00E+00	2.45E-06	3.65E-06	7.13E-06	0.00E+00	1.08E-05	7.84E-07	1.16E-06	0.00E+00	1.95E-06	6.00E-07	6.83E-07	0.00E+00	1.28E-06
215	480050.8	3742443	4.84E-06	8.72E-06	0.00E+00	1.36E-05	4.59E-06	9.65E-06	0.00E+00	1.42E-05	9.28E-07	1.54E-06	0.00E+00	2.47E-06	3.68E-06	7.19E-06	0.00E+00	1.09E-05	7.92E-07	1.17E-06	0.00E+00	1.97E-06	6.05E-07	6.89E-07	0.00E+00	1.29E-06
216	480032.6	3742443	4.76E-06	8.59E-06	0.00E+00	1.34E-05	4.52E-06	9.50E-06	0.00E+00	1.40E-05	9.14E-07	1.52E-06	0.00E+00	2.43E-06	3.63E-06	7.09E-06	0.00E+00	1.07E-05	7.80E-07	1.16E-06	0.00E+00	1.94E-06	5.96E-07	6.79E-07	0.00E+00	1.28E-06
217	480014.4	3742443	4.58E-06	8.27E-06	0.00E+00	1.29E-05	4.35E-06	9.14E-06	0.00E+00	1.35E-05	8.79E-07	1.46E-06	0.00E+00	2.34E-06	3.49E-06	6.82E-06	0.00E+00	1.03E-05	7.50E-07	1.11E-06	0.00E+00	1.86E-06	5.73E-07	6.53E-07	0.00E+00	1.23E-06
218	479996.2	3742443	4.31E-06	7.77E-06	0.00E+00	1.21E-05	4.09E-06	8.60E-06	0.00E+00	1.27E-05	8.27E-07	1.37E-06	0.00E+00	2.20E-06	3.28E-06	6.41E-06	0.00E+00	9.69E-06	7.05E-07	1.05E-06	0.00E+00	1.75E-06	5.39E-07	6.14E-07	0.00E+00	1.15E-06
219	479978	3742443	3.96E-06	7.14E-06	0.00E+00	1.11E-05	3.76E-06	7.90E-06	0.00E+00	1.17E-05	7.59E-07	1.26E-06	0.00E+00	2.02E-06	3.01E-06	5.89E-06	0.00E+00	8.90E-06	6.48E-07	9.60E-07	0.00E+00	1.61E-06	4.95E-07	5.64E-07	0.00E+00	1.06E-06
220	479959.8	3742443	3.55E-06	6.41E-06	0.00E+00	9.97E-06	3.37E-06	7.09E-06	0.00E+00	1.05E-05	6.82E-07	1.13E-06	0.00E+00	1.81E-06	2.71E-06	5.29E-06	0.00E+00	7.99E-06	5.82E-07	8.63E-07	0.00E+00	1.44E-06	4.45E-07	5.07E-07	0.00E+00	9.51E-07
221	479941.6	3742443	3.13E-06	5.64E-06	0.00E+00	8.76E-06	2.97E-06	6.24E-06	0.00E+00	9.20E-06	6.00E-07	9.96E-07	0.00E+00	1.60E-06	2.38E-06	4.65E-06	0.00E+00	7.03E-06	5.12E-07	7.59E-07	0.00E+00	1.27E-06	3.91E-07	4.46E-07	0.00E+00	8.37E-07
222	479923.4	3742443	2.70E-06	4.87E-06	0.00E+00	7.58E-06	2.56E-06	5.39E-06	0.00E+00	7.95E-06	5.18E-07	8.61E-07	0.00E+00	1.38E-06	2.06E-06	4.02E-06	0.00E+00	6.08E-06	4.42E-07	6.56E-07	0.00E+00	1.10E-06	3.38E-07	3.85E-07	0.00E+00	7.23E-07
223	479905.2	3742443	2.31E-06	4.16E-06	0.00E+00	6.47E-06	2.19E-06	4.61E-06	0.00E+00	6.80E-06	4.43E-07	7.36E-07	0.00E+00	1.18E-06	1.76E-06	3.43E-06	0.00E+00	5.19E-06	3.78E-07	5.60E-07	0.00E+00	9.38E-07	2.89E-07	3.29E-07	0.00E+00	6.18E-07
224	480103.8	3742430	4.04E-06	7.28E-06	0.00E+00	1.13E-05	3.83E-06	8.06E-06	0.00E+00	1.19E-05	7.75E-07	1.29E-06	0.00E+00	2.06E-06	3.08E-06	6.01E-06	0.00E+00	9.08E-06	6.61E-07	9.80E-07	0.00E+00	1.64E-06	5.05E-07	5.76E-07	0.00E+00	1.08E-06
225	480136.7	3742444	3.77E-06	6.80E-06	0.00E+00	1.06E-05	3.58E-06	7.52E-06	0.00E+00	1.11E-05	7.23E-07	1.20E-06	0.00E+00	1.92E-06	2.87E-06	5.61E-06	0.00E+00	8.48E-06	6.17E-07	9.15E-07	0.00E+00	1.53E-06	4.72E-07	5.37E-07	0.00E+00	1.01E-06
226	480169.6	3742458	3.17E-06	5.72E-06	0.00E+00	8.90E-06	3.01E-06	6.33E-06	0.00E+00	9.34E-06	6.09E-07	1.01E-06	0.00E+00	1.62E-06	2.42E-06	4.72E-06	0.00E+00	7.14E-06	5.19E-07	7.70E-07	0.00E+00	1.29E-06	3.97E-07	4.52E-07	0.00E+00	8.49E-07
227	480192.9	3742481	2.70E-06	4.87E-06	0.00E+00	7.58E-06	2.56E-06	5.39E-06	0.00E+00	7.95E-06	5.18E-07	8.61E-07	0.00E+00	1.38E-06	2.06E-06	4.02E-06	0.00E+00	6.08E-06	4.42E-07	6.56E-07	0.00E+00	1.10E-06	3.38E-07	3.85E-07	0.00E+00	7.23E-07
228	480206.5	3742514	2.33E-06	4.20E-06	0.00E+00	6.53E-06	2.21E-06	4.65E-06	0.00E+00	6.86E-06	4.47E-07	7.43E-07	0.00E+00	1.19E-06	1.77E-06	3.47E-06	0.00E+00	5.24E-06	3.81E-07	5.66E-07	0.00E+00	9.47E-07	2.92E-07	3.32E-07	0.00E+00	6.24E-07
229	480069.1	3742423	4.11E-06	7.41E-06	0.00E+00	1.15E-05	3.90E-06	8.20E-06	0.00E+00	1.21E-05	7.89E-07	1.31E-06	0.00E+00	2.10E-06	3.13E-06	6.11E-06	0.00E+00	9.25E-06	6.73E-07	9.98E-07	0.00E+00	1.67E-06	5.14E-07	5.86E-07	0.00E+00	1.10E-06
230	480050.9	3742423	4.11E-06	7.42E-06	0.00E+00	1.15E-05	3.90E-06	8.21E-06	0.00E+00	1.21E-05	7.89E-07	1.31E-06	0.00E+00	2.10E-06	3.13E-06	6.12E-06	0.00E+00	9.25E-06	6.73E-07	9.98E-07	0.00E+00	1.67E-06	5.15E-07	5.86E-07	0.00E+00	1.10E-06
231	480032.7	3742423	4.03E-06	7.26E-06	0.00E+00	1.13E-05	3.82E-06	8.03E-06	0.00E+00	1.19E-05	7.72E-07	1.28E-06	0.00E+00	2.06E-06	3.07E-06	5.99E-06	0.00E+00	9.06E-06	6.59E-07	9.77E-07	0.00E+00	1.64E-06	5.04E-07	5.74E-07	0.00E+00	1.08E-06
232	480014.5	3742423	3.86E-06	6.96E-06	0.00E+00	1.08E-05	3.66E-06	7.70E-06	0.00E+00	1.14E-05	7.40E-07	1.23E-06	0.00E+00	1.97E-06	2.94E-06	5.74E-06	0.00E+00	8.68E-06	6.32E-07	9.36E-07	0.00E+00	1.57E-06	4.83E-07	5.50E-07	0.00E+00	1.03E-06
233	479996.3	3742423	3.62E-06	6.53E-06	0.00E+00	1.02E-05	3.44E-06	7.22E-06	0.00E+00	1.07E-05	6.95E-07	1.15E-06	0.00E+00	1.85E-06	2.76E-06	5.39E-06	0.00E+00	8.14E-06	5.93E-07	8.79E-07	0.00E+00	1.47E-06	4.53E-07	5.16E-07	0.00E+00	9.69E-07
234	479978.1	3742423	3.33E-06	6.01E-06	0.00E+00	9.34E-06	3.16E-06	6.64E-06	0.00E+00	9.80E-06	6.39E-07	1.06E-06	0.00E+00	1.70E-06	2.54E-06	4.95E-06	0.00E+00	7.49E-06	5.45E-07	8.08E-07	0.00E+00	1.35E-06	4.17E-07	4.75E-07	0.00E+00	8.91E-07
235	479959.8	3742423	3.00E-06	5.42E-06	0.00E+00	8.42E-06	2.85E-06	5.99E-06	0.00E+00	8.84E-06	5.76E-07	9.57E-07	0.00E+00	1.53E-06	2.29E-06	4.47E-06	0.00E+00	6.75E-06	4.92E-07	7.29E-07	0.00E+00	1.22E-06	3.76E-07	4.28E-07	0.00E+00	8.04E-07
236	479941.6	3742423	2.66E-06	4.80E-06	0.00E+00	7.47E-06	2.53E-06	5.31E-06	0.00E+00	7.84E-06	5.11E-07	8.49E-07	0.00E+00	1.36E-06	2.03E-06	3.96E-06	0.00E+00	5.99E-06	4.36E-07	6.46E-07	0.00E+00	1.08E-06	3.33E-07	3.80E-07	0.00E+00	7.13E-07
237	479923.4	3742423	2.33E-06	4.20E-06	0.00E+00	6.53E-06	2.21E-06	4.65E-06	0.00E+00	6.85E-06	4.47E-07	7.42E-07	0.00E+00	1.19E-06	1.77E-06	3.46E-06	0.00E+00	5.24E-06	3.81E-07	5.65E-07	0.00E+00	9.46E-07	2.91E-07	3.32E-07	0.00E+00	6.23E-07
238	479905.2	3742423	2.02E-06	3.64E-06	0.00E+00	5.66E-06	1.91E-06	4.02E-06	0.00E+00	5.94E-06	3.87E-07	6.43E-07	0.00E+00	1.03E-06	1.54E-06	3.00E-06	0.00E+00	4.54E-06	3.30E-07	4.90E-07	0.00E+00	8.20E-07	2.52E-07	2.88E-07	0.00E+00	5.40E-07
239	480103.5	3742410	3.56E-06	6.43E-06	0.00E+00	9.99E-06	3.38E-06	7.11E-06	0.00E+00	1.05E-05	6.84E-07	1.14E-06	0.00E+00	1.82E-06	2.71E-06	5.30E-06	0.00E+00	8.01E-06	5.83E-07	8.65E-07	0.00E+00	1.45E-06	4.46E-07	5.08E-07	0.00E+00	9.54E-07
240	480135.8	3742423	3.43E-06	6.18E-06	0.00E+00	9.61E-06	3.25E-06	6.84E-06	0.00E+00	1.01E-05	6.58E-07	1.09E-06	0.00E+00	1.75E-06	2.61E-06	5.10E-06	0.00E+00	7.71E-06	5.61E-07	8.32E-07	0.00E+00	1.39E-06	4.29E-07	4.89E-07	0.00E+00	9.17E-07
241	480168	3742437	3.02E-06	5.44E-06	0.00E+00	8.46E-06	2.86E-06	6.02E-06	0.00E+00	8.88E-06	5.79E-07	9.61E-07	0.00E+00	1.54E-06	2.30E-06	4.49E-06	0.00E+00	6.78E-06	4.94E-07	7.32E-07	0.00E+00	1.23E-06	3.77E-07	4.30E-07	0.00E+00	8.07E-07
242	480206.9	3742467	2.36E-06	4.26E-06	0.00E+00	6.62E-06	2.24E-06	4.71E-06	0.00E+00	6.95E-06	4.53E-07	7.52E-07	0.00E+00	1.21E-06	1.80E-06	3.51E-06	0.00E+00	5.31E-06	3.86E-07	5.73E-07	0.00E+00	9.59E-07	2.95E-07	3.36E-07	0.00E+00	6.32E-07
243	480220.3	3742499	2.07E-06	3.73E-06	0.00E+00	5.79E-06	1.96E-06	4.12E-06	0.00E+00	6.08E-06	3.96E-07	6.58E-07	0.00E+00	1.05E-06	1.57E-06	3.07E-06	0.00E+00	4.65E-06	3.38E-07	5.01E-07	0.00E+00	8.39E-07	2.58E-07	2.94E-07	0.00E+00	5.53E-07
244	480233.6	3742531	1.70E-06	3.06E-06	0.00E+00	4.76E-06	1.61E-06	3.39E-06	0.00E+00	5.00E-06	3.26E-07	5.42E-07	0.00E+00	8.68E-07	1.29E-06	2.53E-06	0.00E+00	3.82E-06	2.78E-07	4.12E-07	0.00E+00	6.91E-07	2.13E-07	2.42E-07	0.00E+00	4.55E-07
245	480069.2	3742403	3.56E-06	6.43E-06	0.00E+00	9.99E-06	3.38E-06	7.11E-06	0.00E+00	1.05E-05	6.84E-07	1.14E-06	0.00E+00	1.82E-06	2.71E-06	5.30E-06	0.00E+00	8.01E-06	5.83E-07	8.65E-07	0.00E+00	1.45E-06	4.46E-07	5.08E-07	0.00E+00	9.54E-07
246	480051	3742403	3.54E-06	6.38E-06	0.00E+00	9.92E-06	3.36E-06	7.06E-06	0.00E+00	1.04E-05	6.79E-07	1.13E-06	0.00E+00	1.81E-06	2.70E-06	5.26E-06	0.00E+00	7.96E-06	5.79E-07	8.59E-07	0.00E+00	1.44E-06	4.43E-07	5.05E-07	0.00E+00	9.47E-07
247	480032.8	3742403	3.45E-06	6.22E-06	0.00E+00	9.67E-06	3.27E-06	6.88E-06	0.00E+00	1.02E-05	6.61E-07	1.10E-06	0.00E+00	1.76E-06	2.63E-06	5.13E-06	0.00E+00	7.75E-06	5.64E-07	8.37E-07	0.00E+00	1.40E-06	4.31E-07	4.91E-07	0.00E+00	9.23E-07
248	480014.5	3742403	3.29E-06	5.94E-06	0.00E+00	9.24E-06	3.13E-06	6.57E-06	0.00E+00	9.70E-06	6.32E-07	1.05E-06	0.00E+00	1.68E-06	2.51E-06	4.90E-06	0.00E+00	7.41E-06	5.39E-07	7.99E-07	0.00E+00	1.34E-06	4.12E-07	4.70E-07	0.00E+00	8.82E-07
249	479996.3	3742403	3.09E-06	5.57E-06	0.00E+00	8.66E-06	2.93E-06	6.16E-06	0.00E+00	9.10E-06	5.93E-07	9.85E-07	0.00E+00	1.58E-06	2.35E-06	4.60E-06	0.00E+00	6.95E-06	5.06E-07	7.50E-07	0.00E+00	1.26E-06	3.87E-07	4.40E-07	0.00E+00	8.27E-07
250	479978.1	3742403	2.85E-06	5.13E-06	0.00E+00	7.98E-06	2.70E-06	5.68E-06	0.00E+00	8.38E-06	5.46E-07	9.07E-07	0.00E+00	1.45E-06	2.17E-06	4.23E-06	0.00E+00	6.40E-06	4.66E-07	6.91E-07	0.00E+00	1.16E-06	3.56E-07	4.06E-07	0.00E+00	7.62E-07
251	479959.9	3742403	2.58E-06	4.65E-06	0.00E+00	7.23E-06	2.45E-06	5.15E-06	0.00E+00	7.59E-06	4.95E-07	8.22E-07	0.00E+00	1.32E-06	1.96E-06	3.84E-06	0.00E+00	5.80E-06	4.22E-07	6.26E-07	0.00E+00	1.05E-06	3.23E-07	3.68E-07	0.00E+00	6.90E-07
252	479941.7	3742403	2.30E-06	4.15E-06	0.00E+00	6.46E-06	2.19E-06	4.60E-06	0.00E+00	6.78E-06	4.42E-07	7.34E-07	0.00E+00	1.18E-06	1.75E-06	3.43E-06	0.00E+00	5.18E-06	3.77E-07	5.59E-07	0.00E+00	9.36E-07	2.88E-07	3.28E-07	0.00E+00	6.17E-07
253	479923.5	3742403	2.03E-06	3.67E-06	0.00E+00	5.70E-06	1.93E-06	4.06E-06	0.00E+00	5.99E-06	3.90E-07	6.48E-07	0.00E+00	1.04E-06	1.55E-06	3.03E-06	0.00E+00	4.57E-06	3.33E-07	4.94E-07	0.00E+00	8.27E-07	2.54E-07	2.90E-07	0.00E+00	5.44E-07
254	479905.3	3742403	1.78E-06	3.22E-06	0.00E+00	5.00E-06	1.69E-06	3.56E-06	0.00E+00	5.25E-06	3.42E-07	5.68E-07	0.00E+00	9.10E-07	1.36E-06	2.65E-06	0.00E+00	4.01E-06	2.92E-07	4.33E-07	0.00E+00	7.24E-07	2.23E-07	2.54E-07	0.00E+00	4.77E-07
255	480103.3	3742390	3.16E-06	5.70E-06	0.00E+00	8.86E-06	3.00E-06	6.31E-06	0.00E+00	9.31E-06	6.07E-07	1.01E-06	0.00E+00	1.61E-06	2.41E-06	4.70E-06	0.00E+00	7.11E-06	5.18E-07	7.67E-07	0.00E+00	1.28E-06	3.96E-07	4.51E-07	0.00E+00	8.46E-07
256	480135.1	3742403	3.11E-06	5.61E-06	0.00E+00	8.72E-06	2.95E-06	6.21E-06	0.00E+00	9.16E-06	5.97E-07	9.91E-07	0.00E+00	1.59E-06	2.37E-06	4.63E-06	0.00E+00	6.99E-06	5.09E-07	7.55E-07	0.00E+00	1.26E-06	3.89E-07	4.43E-07	0.00E+00	8.33E-07
257	480166.8	3742416	2.83E-06	5.11E-06	0.00E+00	7.94E-06	2.69E-06	5.65E-06	0.00E+00	8.34E-06	5.44E-07	9.03E-07	0.00E+00	1.45E-06	2.16E-06	4.21E-06	0.00E+00	6.37E-06	4.64E-07	6.88E-07	0.00E+00	1.15E-06	3.55E-07	4.04E-07	0.00E+00	7.58E-07
258	480198.6	3742430	2.40E-06	4.34E-06	0.00E+00	6.74E-06	2.28E-06	4.80E-06	0.00E+00	7.08E-06	4.61E-07	7.66E-07	0.00E+00	1.23E-06	1.83E-06	3.57E-06	0.00E+00	5.41E-06	3.93E-07	5.83E-07	0.00E+00	9.77E-07	3.01E-07	3.43E-07	0.00E+00	6.43E-07
259	480221	3742452	2.08E-06	3.76E-06	0.00E+00	5.84E-06	1.98E-06	4.16E-06	0.00E+00	6.14E-06	4.00E-07	6.64E-07	0.00E+00	1.06E-06	1.59E-06	3.10E-06	0.00E+00	4.69E-06	3.41E-07	5.06E-07	0.00E+00	8.47E-07	2.61E-07	2.97E-07	0.00E+00	5.58E-07
260	480234.1	3742484	1.85E-06	3.33E-06	0.00E+00	5.17E-06	1.75E-06	3.68E-06	0.00E+00	5.43E-06	3.54E-07	5.88E-07	0.00E+00	9.42E-07	1.41E-06	2.74E-06	0.00E+00	4.15E-06	3.02E-07	4.48E-07	0.00E+00	7.50E-07	2.31E-07	2.63E-07	0.00E+00	4.94E-07
261	480247.2	3742516	1.55E-06	2.79E-06	0.00E+00	4.34E-06	1.47E-06	3.09E-06	0.00E+00	4.56E-06	2.97E-07	4.93E-07	0.00E+00	7.90E-07	1.18E-06	2.30E-06	0.00E+00	3.48E-06	2.53E-07	3.76E-07	0.00E+00	6.29E-07	1.94E-07	2.21E-07	0.00E+00	4.14E-07
262	480069.2	3742383	3.12E-06	5.62E-06	0.00E+00	8.74E-06	2.96E-06	6.22E-06	0.00E+00	9.17E-06	5.98E-07	9.93E-07	0.00E+00	1.59E-06	2.37E-06	4.63E-06	0.00E+00	7.01E-06	5.10E-07	7.56E-07	0.00E+00	1.27E-06	3.90E-07	4.44E-07	0.00E+00	8.34E-07
263	480051	3742383	3.08E-06	5.55E-06	0.00E+00	8.63E-06	2.92E-06	6.14E-06	0.00E+00	9.06E-06	5.90E-07	9.81E-07	0.00E+00	1.57E-06	2.34E-06	4.58E-06	0.00E+00	6.92E-06	5.04E-07	7.47E-07	0.00E+00	1.25E-06	3.85E-07	4.39E-07	0.00E+00	8.24E-07
264	480032.8	3742383	2.99E-06	5.39E-06	0.00E+00	8.37E-06	2.83E-06	5.96E-06	0.00E+00	8.79E-06	5.73E-07	9.52E-07	0.00E+00	1.52E-06	2.27E-06	4.44E-06	0.00E+00	6.71E-06	4.89E-07	7.25E-07	0.00E+00	1.21E-06	3.74E-07	4.26E-07	0.00E+00	7.99E-07
265	480014.6	3742383	2.85E-06	5.14E-06	0.00E+00	7.98E-06	2.70E-06	5.68E-06	0.00E+00	8.38E-06	5.46E-07	9.08E-07	0.00E+00	1.45E-06	2.17E-06	4.23E-06	0.00E+00	6.40E-06	4.66E-07	6.91E-07	0.00E+00	1.16E-06	3.56E-07	4.06E-07	0.00E+00	7.62E-07
266	479996.4	3742383	2.67E-06	4.82E-06	0.00E+00	7.49E-06	2.53E-06	5.33E-06	0.00E+00	7.86E-06	5.12E-07	8.51E-07	0.00E+00	1.36E-06	2.03E-06	3.97E-06	0.00E+00	6.01E-06	4.37E-07	6.48E-07	0.00E+00	1.09E-06	3.34E-07	3.81E-07	0.00E+00	7.15E-07
267	479978.2	3742383	2.47E-06	4.45E-06	0.00E+00	6.91E-06	2.34E-06	4.92E-06	0.00E+00	7.26E-06	4.73E-07	7.86E-07	0.00E+00	1.26E-06	1.88E-06	3.67E-06	0.00E+00	5.54E-06	4.04E-07	5.98E-07	0.00E+00	1.00E-06	3.08E-07	3.51E-07	0.00E+00	6.60E-07
268	479960	3742383	2.24E-06	4.05E-06	0.00E+00	6.29E-06	2.13E-06	4.48E-06	0.00E+00	6.61E-06	4.30E-07	7.15E-07	0.00E+00	1.15E-06	1.71E-06	3.34E-06	0.00E+00	5.05E-06	3.67E-07	5.44E-07	0.00E+00	9.12E-07	2.81E-07	3.20E-07	0.00E+00	6.01E-07
269	479941.8	3742383	2.02E-06	3.64E-06	0.00E+00	5.66E-06	1.91E-06	4.02E-06	0.00E+00	5.94E-06	3.87E-07	6.43E-07	0.00E+00	1.03E-06	1.54E-06	3.00E-06	0.00E+00	4.54E-06	3.30E-07	4.90E-07	0.00E+00	8.20E-07	2.52E-07	2.88E-07	0.00E+00	5.40E-07
270	479923.5	3742383	1.80E-06	3.24E-06	0.00E+00	5.04E-06	1.70E-06	3.58E-06	0.00E+00	5.29E-06	3.45E-07	5.73E-07	0.00E+00	9.17E-07	1.37E-06	2.67E-06	0.00E+00	4.04E-06	2.94E-07	4.36E-07	0.00E+00	7.30E-07	2.25E-07	2.56E-07	0.00E+00	4.81E-07
271	479905.3	3742383	1.59E-06	2.87E-06	0.00E+00	4.46E-06	1.51E-06	3.17E-06	0.00E+00	4.68E-06	3.05E-07	5.07E-07	0.00E+00	8.12E-07	1.21E-06	2.36E-06	0.00E+00	3.58E-06	2.60E-07	3.86E-07	0.00E+00	6.46E-07	1.99E-07	2.27E-07	0.00E+00	4.26E-07
272	480103.2	3742370	2.82E-06	5.08E-06	0.00E+00	7.90E-06	2.67E-06	5.62E-06	0.00E+00	8.30E-06	5.41E-07	8.98E-07	0.00E+00	1.44E-06	2.15E-06	4.19E-06	0.00E+00	6.34E-06	4.61E-07	6.84E-07	0.00E+00	1.15E-06	3.53E-07	4.02E-07	0.00E+00	7.55E-07
273	480134.6	3742383	2.82E-06	5.09E-06	0.00E+00	7.91E-06	2.68E-06	5.63E-06	0.00E+00	8.31E-06	5.41E-07	9.00E-07	0.00E+00	1.44E-06	2.15E-06	4.20E-06	0.00E+00	6.35E-06	4.62E-07	6.85E-07	0.00E+00	1.15E-06	3.53E-07	4.02E-07	0.00E+00	7.56E-07
274	480165.9	3742396	2.64E-06	4.77E-06	0.00E+00	7.41E-06	2.51E-06	5.27E-06	0.00E+00	7.78E-06	5.07E-07	8.42E-07	0.00E+00	1.35E-06	2.01E-06	3.93E-06	0.00E+00	5.94E-06	4.33E-07	6.41E-07	0.00E+00	1.07E-06	3.31E-07	3.77E-07	0.00E+00	7.07E-07
275	480197.3	3742409	2.32E-06	4.18E-06	0.00E+00	6.50E-06	2.20E-06	4.63E-06	0.00E+00	6.83E-06	4.45E-07	7.39E-07	0.00E+00	1.18E-06	1.77E-06	3.45E-06	0.00E+00	5.21E-06	3.80E-07	5.63E-07	0.00E+00	9.42E-07	2.90E-07	3.31E-07	0.00E+00	6.21E-07
276	480235.1	3742438	1.86E-06	3.35E-06	0.00E+00	5.21E-06	1.76E-06	3.71E-06	0.00E+00	5.47E-06	3.56E-07	5.92E-07	0.00E+00	9.48E-07	1.41E-06	2.76E-06	0.00E+00	4.18E-06	3.04E-07	4.51E-07	0.00E+00	7.55E-07	2.32E-07	2.65E-07	0.00E+00	4.97E-07
277	480248	3742469	1.66E-06	2.99E-06	0.00E+00	4.65E-06	1.57E-06	3.31E-06	0.00E+00	4.89E-06	3.18E-07	5.29E-07	0.00E+00	8.47E-07	1.26E-06	2.47E-06	0.00E+00	3.73E-06	2.72E-07	4.03E-07	0.00E+00	6.74E-07	2.08E-07	2.37E-07	0.00E+00	4.44E-07
278	480261	3742501	1.41E-06	2.55E-06	0.00E+00	3.96E-06	1.34E-06	2.82E-06	0.00E+00	4.16E-06	2.71E-07	4.51E-07	0.00E+00	7.22E-07	1.08E-06	2.10E-06	0.00E+00	3.18E-06	2.31E-07	3.43E-07	0.00E+00	5.75E-07	1.77E-07	2.02E-07	0.00E+00	3.78E-07
279	480273.9	3742532	1.17E-06	2.11E-06	0.00E+00	3.27E-06	1.11E-06	2.33E-06	0.00E+00	3.44E-06	2.24E-07	3.72E-07	0.00E+00	5.96E-07	8.89E-07	1.74E-06	0.00E+00	2.63E-06	1.91E-07	2.83E-07	0.00E+00	4.74E-07	1.46E-07	1.66E-07	0.00E+00	3.13E-07
280	480069.3	3742363	2.75E-06	4.95E-06	0.00E+00	7.70E-06	2.61E-06	5.48E-06	0.00E+00	8.08E-06	5.27E-07	8.75E-07	0.00E+00	1.40E-06	2.09E-06	4.08E-06	0.00E+00	6.18E-06	4.50E-07	6.66E-07	0.00E+00	1.12E-06	3.44E-07	3.91E-07	0.00E+00	7.35E-07
281	480051.1	3742363	2.70E-06	4.87E-06	0.00E+00	7.57E-06	2.56E-06	5.38E-06	0.00E+00	7.95E-06	5.18E-07	8.60E-07	0.00E+00	1.38E-06	2.06E-06	4.01E-06	0.00E+00	6.07E-06	4.42E-07	6.55E-07	0.00E+00	1.10E-06	3.38E-07	3.85E-07	0.00E+00	7.22E-07
282	480032.9	3742363	2.61E-06	4.71E-06	0.00E+00	7.32E-06	2.48E-06	5.21E-06	0.00E+00	7.69E-06	5.01E-07	8.32E-07	0.00E+00	1.33E-06	1.99E-06	3.88E-06	0.00E+00	5.87E-06	4.27E-07	6.34E-07	0.00E+00	1.06E-06	3.27E-07	3.72E-07	0.00E+00	6.99E-07
283	480014.7	3742363	2.49E-06	4.48E-06	0.00E+00	6.97E-06	2.36E-06	4.96E-06	0.00E+00	7.32E-06	4.77E-07	7.93E-07	0.00E+00	1.27E-06	1.89E-06	3.70E-06	0.00E+00	5.59E-06	4.07E-07	6.03E-07	0.00E+00	1.01E-06	3.11E-07	3.54E-07	0.00E+00	6.66E-07
284	479996.5	3742363	2.33E-06	4.21E-06	0.00E+00	6.54E-06	2.21E-06	4.66E-06	0.00E+00	6.87E-06	4.48E-07	7.44E-07	0.00E+00	1.19E-06	1.78E-06	3.47E-06	0.00E+00	5.25E-06	3.82E-07	5.66E-07	0.00E+00	9.48E-07	2.92E-07	3.33E-07	0.00E+00	6.25E-07
285	479978.2	3742363	2.16E-06	3.89E-06	0.00E+00	6.05E-06	2.05E-06	4.31E-06	0.00E+00	6.36E-06	4.14E-07	6.88E-07	0.00E+00	1.10E-06	1.64E-06	3.21E-06	0.00E+00	4.86E-06	3.53E-07	5.24E-07	0.00E+00	8.77E-07	2.70E-07	3.08E-07	0.00E+00	5.78E-07
286	479960	3742363	1.97E-06	3.56E-06	0.00E+00	5.53E-06	1.87E-06	3.94E-06	0.00E+00	5.81E-06	3.79E-07	6.29E-07	0.00E+00	1.01E-06	1.50E-06	2.94E-06	0.00E+00	4.44E-06	3.23E-07	4.79E-07	0.00E+00	8.02E-07	2.47E-07	2.81E-07	0.00E+00	5.28E-07
287	479941.8	3742363	1.79E-06	3.22E-06	0.00E+00	5.00E-06	1.69E-06	3.56E-06	0.00E+00	5.26E-06	3.42E-07	5.69E-07	0.00E+00	9.11E-07	1.36E-06	2.66E-06	0.00E+00	4.01E-06	2.92E-07	4.33E-07	0.00E+00	7.25E-07	2.23E-07	2.54E-07	0.00E+00	4.78E-07
288	479923.6	3742363	1.60E-06	2.89E-06	0.00E+00	4.49E-06	1.52E-06	3.20E-06	0.00E+00	4.71E-06	3.07E-07	5.10E-07	0.00E+00	8.18E-07	1.22E-06	2.38E-06	0.00E+00	3.60E-06	2.62E-07	3.89E-07	0.00E+00	6.51E-07	2.00E-07	2.28E-07	0.00E+00	4.29E-07
289	479905.4	3742363	1.43E-06	2.58E-06	0.00E+00	4.01E-06	1.36E-06	2.85E-06	0.00E+00	4.21E-06	2.74E-07	4.55E-07	0.00E+00	7.30E-07	1.09E-06	2.13E-06	0.00E+00	3.21E-06	2.34E-07	3.47E-07	0.00E+00	5.81E-07	1.79E-07	2.04E-07	0.00E+00	3.82E-07
290	480103.1	3742350	2.53E-06	4.55E-06	0.00E+00	7.08E-06	2.40E-06	5.04E-06	0.00E+00	7.43E-06	4.84E-07	8.05E-07	0.00E+00	1.29E-06	1.92E-06	3.76E-06	0.00E+00	5.68E-06	4.13E-07	6.13E-07	0.00E+00	1.03E-06	3.16E-07	3.60E-07	0.00E+00	6.76E-07
291	480134.1	3742363	2.56E-06	4.62E-06	0.00E+00	7.19E-06	2.43E-06	5.12E-06	0.00E+00	7.55E-06	4.92E-07	8.17E-07	0.00E+00	1.31E-06	1.95E-06	3.81E-06	0.00E+00	5.77E-06	4.20E-07	6.22E-07	0.00E+00	1.04E-06	3.21E-07	3.65E-07	0.00E+00	6.86E-07
292	480165.2	3742376	2.45E-06	4.43E-06	0.00E+00	6.88E-06	2.33E-06	4.90E-06	0.00E+00	7.22E-06	4.71E-07	7.82E-07	0.00E+00	1.25E-06	1.87E-06	3.65E-06	0.00E+00	5.52E-06	4.02E-07	5.96E-07	0.00E+00	9.97E-07	3.07E-07	3.50E-07	0.00E+00	6.57E-07
293	480196.2	3742389	2.21E-06	3.99E-06	0.00E+00	6.21E-06	2.10E-06	4.42E-06	0.00E+00	6.52E-06	4.25E-07	7.06E-07	0.00E+00	1.13E-06	1.69E-06	3.29E-06	0.00E+00	4.98E-06	3.63E-07	5.37E-07	0.00E+00	9.00E-07	2.77E-07	3.16E-07	0.00E+00	5.93E-07
294	480227.3	3742402	1.90E-06	3.42E-06	0.00E+00	5.32E-06	1.80E-06	3.79E-06	0.00E+00	5.59E-06	3.64E-07	6.05E-07	0.00E+00	9.69E-07	1.45E-06	2.82E-06	0.00E+00	4.27E-06	3.11E-07	4.60E-07	0.00E+00	7.71E-07	2.37E-07	2.70E-07	0.00E+00	5.08E-07
295	480249.2	3742424	1.67E-06	3.01E-06	0.00E+00	4.68E-06	1.58E-06	3.33E-06	0.00E+00	4.91E-06	3.20E-07	5.32E-07	0.00E+00	8.52E-07	1.27E-06	2.48E-06	0.00E+00	3.75E-06	2.73E-07	4.05E-07	0.00E+00	6.78E-07	2.09E-07	2.38E-07	0.00E+00	4.47E-07
296	480262	3742455	1.50E-06	2.71E-06	0.00E+00	4.21E-06	1.42E-06	3.00E-06	0.00E+00	4.42E-06	2.88E-07	4.79E-07	0.00E+00	7.67E-07	1.14E-06	2.23E-06	0.00E+00	3.38E-06	2.46E-07	3.64E-07	0.00E+00	6.10E-07	1.88E-07	2.14E-07	0.00E+00	4.02E-07
297	480274.8	3742486	1.30E-06	2.34E-06	0.00E+00	3.64E-06	1.23E-06	2.59E-06	0.00E+00	3.82E-06	2.49E-07	4.13E-07	0.00E+00	6.62E-07	9.88E-07	1.93E-06	0.00E+00	2.92E-06	2.12E-07	3.15E-07	0.00E+00	5.27E-07	1.62E-07	1.85E-07	0.00E+00	3.47E-07
298	480287.7	3742517	1.09E-06	1.96E-06	0.00E+00	3.05E-06	1.03E-06	2.17E-06	0.00E+00	3.20E-06	2.09E-07	3.46E-07	0.00E+00	5.55E-07	8.28E-07	1.62E-06	0.00E+00	2.44E-06	1.78E-07	2.64E-07	0.00E+00	4.42E-07	1.36E-07	1.55E-07	0.00E+00	2.91E-07
299	480069.4	3742343	2.44E-06	4.40E-06	0.00E+00	6.83E-06	2.31E-06	4.86E-06	0.00E+00	7.17E-06	4.68E-07	7.77E-07	0.00E+00	1.24E-06	1.86E-06	3.63E-06	0.00E+00	5.48E-06	3.99E-07	5.91E-07	0.00E+00	9.90E-07	3.05E-07	3.47E-07	0.00E+00	6.52E-07
300	480051.2	3742343	2.39E-06	4.30E-06	0.00E+00	6.69E-06	2.26E-06	4.76E-06	0.00E+00	7.02E-06	4.58E-07	7.61E-07	0.00E+00	1.22E-06	1.82E-06	3.55E-06	0.00E+00	5.37E-06	3.91E-07	5.79E-07	0.00E+00	9.70E-07	2.99E-07	3.40E-07	0.00E+00	6.39E-07
301	480032.9	3742343	2.30E-06	4.15E-06	0.00E+00	6.46E-06	2.19E-06	4.59E-06	0.00E+00	6.78E-06	4.42E-07	7.34E-07	0.00E+00	1.18E-06	1.75E-06	3.43E-06	0.00E+00	5.18E-06	3.77E-07	5.59E-07	0.00E+00	9.36E-07	2.88E-07	3.28E-07	0.00E+00	6.16E-07
302	480014.7	3742343	2.19E-06	3.95E-06	0.00E+00	6.14E-06	2.08E-06	4.37E-06	0.00E+00	6.45E-06	4.20E-07	6.99E-07	0.00E+00	1.12E-06	1.67E-06	3.26E-06	0.00E+00	4.93E-06	3.59E-07	5.32E-07	0.00E+00	8.91E-07	2.74E-07	3.12E-07	0.00E+00	5.87E-07
303	479996.5	3742343	2.06E-06	3.71E-06	0.00E+00	5.77E-06	1.95E-06	4.11E-06	0.00E+00	6.06E-06	3.95E-07	6.56E-07	0.00E+00	1.05E-06	1.57E-06	3.06E-06	0.00E+00	4.63E-06	3.37E-07	4.99E-07	0.00E+00	8.36E-07	2.58E-07	2.93E-07	0.00E+00	5.51E-07
304	479978.3	3742343	1.91E-06	3.44E-06	0.00E+00	5.35E-06	1.81E-06	3.81E-06	0.00E+00	5.62E-06	3.66E-07	6.09E-07	0.00E+00	9.75E-07	1.45E-06	2.84E-06	0.00E+00	4.29E-06	3.13E-07	4.63E-07	0.00E+00	7.76E-07	2.39E-07	2.72E-07	0.00E+00	5.11E-07
305	479960.1	3742343	1.75E-06	3.16E-06	0.00E+00	4.91E-06	1.66E-06	3.50E-06	0.00E+00	5.16E-06	3.36E-07	5.59E-07	0.00E+00	8.95E-07	1.33E-06	2.61E-06	0.00E+00	3.94E-06	2.87E-07	4.25E-07	0.00E+00	7.12E-07	2.19E-07	2.50E-07	0.00E+00	4.69E-07
306	479941.9	3742343	1.59E-06	2.87E-06	0.00E+00	4.47E-06	1.51E-06	3.18E-06	0.00E+00	4.69E-06	3.06E-07	5.08E-07	0.00E+00	8.14E-07	1.21E-06	2.37E-06	0.00E+00	3.58E-06	2.61E-07	3.87E-07	0.00E+00	6.48E-07	1.99E-07	2.27E-07	0.00E+00	4.27E-07
307	479923.7	3742343	1.44E-06	2.60E-06	0.00E+00	4.03E-06	1.37E-06	2.87E-06	0.00E+00	4.24E-06	2.76E-07	4.59E-07	0.00E+00	7.35E-07	1.10E-06	2.14E-06	0.00E+00	3.24E-06	2.36E-07	3.49E-07	0.00E+00	5.85E-07	1.80E-07	2.05E-07	0.00E+00	3.85E-07
308	479905.5	3742343	1.29E-06	2.33E-06	0.00E+00	3.63E-06	1.23E-06	2.58E-06	0.00E+00	3.81E-06	2.48E-07	4.12E-07	0.00E+00	6.60E-07	9.85E-07	1.92E-06	0.00E+00	2.91E-06	2.12E-07	3.14E-07	0.00E+00	5.25E-07	1.62E-07	1.84E-07	0.00E+00	3.46E-07
309	480103	3742330	2.27E-06	4.10E-06	0.00E+00	6.37E-06	2.16E-06	4.53E-06	0.00E+00	6.69E-06	4.36E-07	7.24E-07	0.00E+00	1.16E-06	1.73E-06	3.38E-06	0.00E+00	5.11E-06	3.72E-07	5.51E-07	0.00E+00	9.23E-07	2.84E-07	3.24E-07	0.00E+00	6.08E-07
310	480133.8	3742343	2.33E-06	4.20E-06	0.00E+00	6.53E-06	2.21E-06	4.65E-06	0.00E+00	6.86E-06	4.47E-07	7.43E-07	0.00E+00	1.19E-06	1.77E-06	3.47E-06	0.00E+00	5.24E-06	3.81E-07	5.66E-07	0.00E+00	9.47E-07	2.92E-07	3.32E-07	0.00E+00	6.24E-07
311	480164.6	3742355	2.27E-06	4.10E-06	0.00E+00	6.37E-06	2.16E-06	4.53E-06	0.00E+00	6.69E-06	4.36E-07	7.24E-07	0.00E+00	1.16E-06	1.73E-06	3.38E-06	0.00E+00	5.11E-06	3.72E-07	5.51E-07	0.00E+00	9.23E-07	2.84E-07	3.24E-07	0.00E+00	6.08E-07
312	480195.4	3742368	2.10E-06	3.79E-06	0.00E+00	5.89E-06	1.99E-06	4.19E-06	0.00E+00	6.18E-06	4.03E-07	6.69E-07	0.00E+00	1.07E-06	1.60E-06	3.12E-06	0.00E+00	4.72E-06	3.44E-07	5.10E-07	0.00E+00	8.54E-07	2.63E-07	2.99E-07	0.00E+00	5.62E-07
313	480226.2	3742381	1.85E-06	3.33E-06	0.00E+00	5.18E-06	1.75E-06	3.69E-06	0.00E+00	5.44E-06	3.54E-07	5.89E-07	0.00E+00	9.43E-07	1.41E-06	2.75E-06	0.00E+00	4.16E-06	3.02E-07	4.48E-07	0.00E+00	7.51E-07	2.31E-07	2.63E-07	0.00E+00	4.95E-07

314	480263.3	3742409	1.51E-06	2.72E-06	0.00E+00	4.23E-06	1.43E-06	3.01E-06	0.00E+00	4.44E-06	2.89E-07	4.81E-07	0.00E+00	7.70E-07	1.15E-06	2.24E-06	0.00E+00	3.39E-06	2.47E-07	3.66E-07	0.00E+00	6.13E-07	1.89E-07	2.15E-07	0.00E+00	4.04E-07
315	480276	3742440	1.37E-06	2.47E-06	0.00E+00	3.83E-06	1.30E-06	2.73E-06	0.00E+00	4.02E-06	2.62E-07	4.36E-07	0.00E+00	6.98E-07	1.04E-06	2.03E-06	0.00E+00	3.07E-06	2.24E-07	3.32E-07	0.00E+00	5.55E-07	1.71E-07	1.95E-07	0.00E+00	3.66E-07
316	480288.8	3742471	1.19E-06	2.15E-06	0.00E+00	3.35E-06	1.13E-06	2.38E-06	0.00E+00	3.51E-06	2.29E-07	3.80E-07	0.00E+00	6.09E-07	9.09E-07	1.78E-06	0.00E+00	2.68E-06	1.95E-07	2.90E-07	0.00E+00	4.85E-07	1.49E-07	1.70E-07	0.00E+00	3.19E-07
317	480301.5	3742502	1.01E-06	1.83E-06	0.00E+00	2.84E-06	9.62E-07	2.02E-06	0.00E+00	2.98E-06	1.94E-07	3.23E-07	0.00E+00	5.18E-07	7.72E-07	1.51E-06	0.00E+00	2.28E-06	1.66E-07	2.46E-07	0.00E+00	4.12E-07	1.27E-07	1.44E-07	0.00E+00	2.71E-07
318	480314.2	3742533	8.50E-07	1.53E-06	0.00E+00	2.38E-06	8.07E-07	1.70E-06	0.00E+00	2.50E-06	1.63E-07	2.71E-07	0.00E+00	4.34E-07	6.47E-07	1.26E-06	0.00E+00	1.91E-06	1.39E-07	2.06E-07	0.00E+00	3.45E-07	1.06E-07	1.21E-07	0.00E+00	2.28E-07
319	480069.4	3742323	2.18E-06	3.92E-06	0.00E+00	6.10E-06	2.06E-06	4.34E-06	0.00E+00	6.40E-06	4.17E-07	6.93E-07	0.00E+00	1.11E-06	1.66E-06	3.23E-06	0.00E+00	4.89E-06	3.56E-07	5.28E-07	0.00E+00	8.84E-07	2.72E-07	3.10E-07	0.00E+00	5.82E-07
320	480051.2	3742323	2.12E-06	3.83E-06	0.00E+00	5.95E-06	2.01E-06	4.24E-06	0.00E+00	6.25E-06	4.07E-07	6.77E-07	0.00E+00	1.08E-06	1.62E-06	3.16E-06	0.00E+00	4.77E-06	3.47E-07	5.15E-07	0.00E+00	8.63E-07	2.66E-07	3.03E-07	0.00E+00	5.68E-07
321	480033	3742323	2.05E-06	3.69E-06	0.00E+00	5.74E-06	1.94E-06	4.08E-06	0.00E+00	6.02E-06	3.92E-07	6.52E-07	0.00E+00	1.04E-06	1.56E-06	3.04E-06	0.00E+00	4.60E-06	3.35E-07	4.96E-07	0.00E+00	8.31E-07	2.56E-07	2.92E-07	0.00E+00	5.48E-07
322	480014.8	3742323	1.95E-06	3.51E-06	0.00E+00	5.46E-06	1.85E-06	3.88E-06	0.00E+00	5.73E-06	3.74E-07	6.21E-07	0.00E+00	9.94E-07	1.48E-06	2.90E-06	0.00E+00	4.38E-06	3.19E-07	4.72E-07	0.00E+00	7.91E-07	2.44E-07	2.78E-07	0.00E+00	5.21E-07
323	479996.6	3742323	1.83E-06	3.30E-06	0.00E+00	5.13E-06	1.74E-06	3.65E-06	0.00E+00	5.39E-06	3.51E-07	5.84E-07	0.00E+00	9.35E-07	1.39E-06	2.72E-06	0.00E+00	4.12E-06	3.00E-07	4.44E-07	0.00E+00	7.44E-07	2.29E-07	2.61E-07	0.00E+00	4.90E-07
324	479978.4	3742323	1.70E-06	3.07E-06	0.00E+00	4.77E-06	1.62E-06	3.40E-06	0.00E+00	5.01E-06	3.27E-07	5.43E-07	0.00E+00	8.69E-07	1.30E-06	2.53E-06	0.00E+00	3.83E-06	2.79E-07	4.13E-07	0.00E+00	6.92E-07	2.13E-07	2.43E-07	0.00E+00	4.56E-07
325	479960.2	3742323	1.57E-06	2.83E-06	0.00E+00	4.40E-06	1.49E-06	3.13E-06	0.00E+00	4.62E-06	3.01E-07	5.00E-07	0.00E+00	8.01E-07	1.19E-06	2.33E-06	0.00E+00	3.53E-06	2.57E-07	3.81E-07	0.00E+00	6.37E-07	1.96E-07	2.24E-07	0.00E+00	4.20E-07
326	479941.9	3742323	1.43E-06	2.59E-06	0.00E+00	4.02E-06	1.36E-06	2.86E-06	0.00E+00	4.22E-06	2.75E-07	4.57E-07	0.00E+00	7.32E-07	1.09E-06	2.13E-06	0.00E+00	3.22E-06	2.35E-07	3.48E-07	0.00E+00	5.82E-07	1.79E-07	2.04E-07	0.00E+00	3.84E-07
327	479923.7	3742323	1.30E-06	2.35E-06	0.00E+00	3.65E-06	1.24E-06	2.60E-06	0.00E+00	3.83E-06	2.50E-07	4.15E-07	0.00E+00	6.65E-07	9.91E-07	1.94E-06	0.00E+00	2.93E-06	2.13E-07	3.16E-07	0.00E+00	5.29E-07	1.63E-07	1.86E-07	0.00E+00	3.48E-07
328	479905.5	3742323	1.18E-06	2.12E-06	0.00E+00	3.30E-06	1.12E-06	2.35E-06	0.00E+00	3.47E-06	2.26E-07	3.75E-07	0.00E+00	6.01E-07	8.96E-07	1.75E-06	0.00E+00	2.65E-06	1.93E-07	2.86E-07	0.00E+00	4.78E-07	1.47E-07	1.68E-07	0.00E+00	3.15E-07
329	480104.4	3742310	2.06E-06	3.71E-06	0.00E+00	5.76E-06	1.95E-06	4.10E-06	0.00E+00	6.05E-06	3.94E-07	6.55E-07	0.00E+00	1.05E-06	1.57E-06	3.06E-06	0.00E+00	4.62E-06	3.36E-07	4.99E-07	0.00E+00	8.35E-07	2.57E-07	2.93E-07	0.00E+00	5.50E-07
330	480121.1	3742317	2.11E-06	3.8E-06	0.00E+00	5.90E-06	2.00E-06	4.20E-06	0.00E+00	6.20E-06	4.04E-07	6.71E-07	0.00E+00	1.08E-06	1.60E-06	3.13E-06	0.00E+00	4.74E-06	3.45E-07	5.11E-07	0.00E+00	8.56E-07	2.63E-07	3.00E-07	0.00E+00	5.64E-07
331	480154.4	3742331	2.12E-06	3.82E-06	0.00E+00	5.94E-06	2.01E-06	4.23E-06	0.00E+00	6.24E-06	4.07E-07	6.75E-07	0.00E+00	1.08E-06	1.61E-06	3.15E-06	0.00E+00	4.77E-06	3.47E-07	5.14E-07	0.00E+00	8.61E-07	2.65E-07	3.02E-07	0.00E+00	5.67E-07
332	480171.1	3742338	2.08E-06	3.75E-06	0.00E+00	5.84E-06	1.97E-06	4.15E-06	0.00E+00	6.13E-06	3.99E-07	6.63E-07	0.00E+00	1.06E-06	1.59E-06	3.10E-06	0.00E+00	4.68E-06	3.41E-07	5.05E-07	0.00E+00	8.46E-07	2.60E-07	2.97E-07	0.00E+00	5.57E-07
333	480187.8	3742345	2.02E-06	3.64E-06	0.00E+00	5.65E-06	1.91E-06	4.02E-06	0.00E+00	5.93E-06	3.87E-07	6.42E-07	0.00E+00	1.03E-06	1.54E-06	3.00E-06	0.00E+00	4.53E-06	3.30E-07	4.89E-07	0.00E+00	8.19E-07	2.52E-07	2.87E-07	0.00E+00	5.40E-07
334	480204.4	3742352	1.93E-06	3.47E-06	0.00E+00	5.40E-06	1.83E-06	3.84E-06	0.00E+00	5.67E-06	3.69E-07	6.14E-07	0.00E+00	9.83E-07	1.47E-06	2.86E-06	0.00E+00	4.33E-06	3.15E-07	4.67E-07	0.00E+00	7.82E-07	2.41E-07	2.74E-07	0.00E+00	5.15E-07
335	480221.1	3742359	1.81E-06	3.27E-06	0.00E+00	5.09E-06	1.72E-06	3.62E-06	0.00E+00	5.34E-06	3.48E-07	5.78E-07	0.00E+00	9.26E-07	1.38E-06	2.70E-06	0.00E+00	4.08E-06	2.97E-07	4.40E-07	0.00E+00	7.37E-07	2.27E-07	2.59E-07	0.00E+00	4.86E-07
336	480254.5	3742373	1.56E-06	2.8E-06	0.00E+00	4.36E-06	1.48E-06	3.10E-06	0.00E+00	4.58E-06	2.98E-07	4.96E-07	0.00E+00	7.94E-07	1.18E-06	2.31E-06	0.00E+00	3.50E-06	2.55E-07	3.77E-07	0.00E+00	6.32E-07	1.95E-07	2.22E-07	0.00E+00	4.16E-07
337	480278	3742397	1.37E-06	2.47E-06	0.00E+00	3.83E-06	1.30E-06	2.73E-06	0.00E+00	4.03E-06	2.62E-07	4.36E-07	0.00E+00	6.98E-07	1.04E-06	2.03E-06	0.00E+00	3.08E-06	2.24E-07	3.32E-07	0.00E+00	5.56E-07	1.71E-07	1.95E-07	0.00E+00	3.66E-07
338	480284.9	3742413	1.30E-06	2.35E-06	0.00E+00	3.66E-06	1.24E-06	2.60E-06	0.00E+00	3.84E-06	2.50E-07	4.16E-07	0.00E+00	6.66E-07	9.93E-07	1.94E-06	0.00E+00	2.93E-06	2.13E-07	3.17E-07	0.00E+00	5.30E-07	1.63E-07	1.86E-07	0.00E+00	3.49E-07
339	480291.8	3742430	1.23E-06	2.22E-06	0.00E+00	3.45E-06	1.17E-06	2.46E-06	0.00E+00	3.62E-06	2.36E-07	3.92E-07	0.00E+00	6.29E-07	9.38E-07	1.83E-06	0.00E+00	2.77E-06	2.02E-07	2.99E-07	0.00E+00	5.00E-07	1.54E-07	1.75E-07	0.00E+00	3.30E-07
340	480298.7	3742447	1.15E-06	2.08E-06	0.00E+00	3.23E-06	1.09E-06	2.30E-06	0.00E+00	3.39E-06	2.21E-07	3.67E-07	0.00E+00	5.88E-07	8.76E-07	1.71E-06	0.00E+00	2.59E-06	1.88E-07	2.79E-07	0.00E+00	4.68E-07	1.44E-07	1.64E-07	0.00E+00	3.08E-07
341	480312.5	3742480	9.82E-07	1.77E-06	0.00E+00	2.75E-06	9.32E-07	1.96E-06	0.00E+00	2.89E-06	1.88E-07	3.13E-07	0.00E+00	5.01E-07	7.48E-07	1.46E-06	0.00E+00	2.21E-06	1.61E-07	2.38E-07	0.00E+00	3.99E-07	1.23E-07	1.40E-07	0.00E+00	2.63E-07
342	480319.3	3742497	8.99E-07	1.62E-06	0.00E+00	2.52E-06	8.53E-07	1.79E-06	0.00E+00	2.65E-06	1.73E-07	2.87E-07	0.00E+00	4.59E-07	6.85E-07	1.34E-06	0.00E+00	2.02E-06	1.47E-07	2.18E-07	0.00E+00	3.65E-07	1.13E-07	1.28E-07	0.00E+00	2.41E-07
343	480326.2	3742513	8.21E-07	1.48E-06	0.00E+00	2.30E-06	7.79E-07	1.64E-06	0.00E+00	2.42E-06	1.58E-07	2.62E-07	0.00E+00	4.19E-07	6.25E-07	1.22E-06	0.00E+00	1.85E-06	1.34E-07	1.99E-07	0.00E+00	3.34E-07	1.03E-07	1.17E-07	0.00E+00	2.20E-07
344	480333.1	3742530	7.50E-07	1.35E-06	0.00E+00	2.10E-06	7.12E-07	1.50E-06	0.00E+00	2.21E-06	1.44E-07	2.39E-07	0.00E+00	3.83E-07	5.71E-07	1.12E-06	0.00E+00	1.69E-06	1.23E-07	1.82E-07	0.00E+00	3.05E-07	9.38E-08	1.07E-07	0.00E+00	2.01E-07
345	480087.7	3742303	1.98E-06	3.57E-06	0.00E+00	5.55E-06	1.88E-06	3.95E-06	0.00E+00	5.83E-06	3.80E-07	6.31E-07	0.00E+00	1.01E-06	1.51E-06	2.95E-06	0.00E+00	4.45E-06	3.24E-07	4.81E-07	0.00E+00	8.05E-07	2.48E-07	2.82E-07	0.00E+00	5.30E-07
346	480069.5	3742303	1.95E-06	3.52E-06	0.00E+00	5.47E-06	1.85E-06	3.89E-06	0.00E+00	5.74E-06	3.74E-07	6.22E-07	0.00E+00	9.96E-07	1.49E-06	2.90E-06	0.00E+00	4.39E-06	3.19E-07	4.74E-07	0.00E+00	7.93E-07	2.44E-07	2.78E-07	0.00E+00	5.22E-07
347	480051.3	3742303	1.90E-06	3.43E-06	0.00E+00	5.33E-06	1.80E-06	3.79E-06	0.00E+00	5.59E-06	3.64E-07	6.06E-07	0.00E+00	9.70E-07	1.45E-06	2.83E-06	0.00E+00	4.27E-06	3.11E-07	4.61E-07	0.00E+00	7.72E-07	2.38E-07	2.71E-07	0.00E+00	5.09E-07
348	480033.1	3742303	1.83E-06	3.3E-06	0.00E+00	5.13E-06	1.74E-06	3.65E-06	0.00E+00	5.38E-06	3.51E-07	5.83E-07	0.00E+00	9.34E-07	1.39E-06	2.72E-06	0.00E+00	4.11E-06	2.99E-07	4.44E-07	0.00E+00	7.43E-07	2.29E-07	2.61E-07	0.00E+00	4.90E-07
349	480014.9	3742303	1.74E-06	3.14E-06	0.00E+00	4.88E-06	1.65E-06	3.48E-06	0.00E+00	5.13E-06	3.34E-07	5.55E-07	0.00E+00	8.89E-07	1.33E-06	2.59E-06	0.00E+00	3.92E-06	2.85E-07	4.23E-07	0.00E+00	7.08E-07	2.18E-07	2.48E-07	0.00E+00	4.66E-07
350	479996.6	3742303	1.64E-06	2.96E-06	0.00E+00	4.60E-06	1.56E-06	3.27E-06	0.00E+00	4.83E-06	3.15E-07	5.23E-07	0.00E+00	8.37E-07	1.25E-06	2.44E-06	0.00E+00	3.69E-06	2.68E-07	3.98E-07	0.00E+00	6.66E-07	2.05E-07	2.34E-07	0.00E+00	4.39E-07
351	479978.4	3742303	1.53E-06	2.76E-06	0.00E+00	4.29E-06	1.45E-06	3.05E-06	0.00E+00	4.50E-06	2.93E-07	4.87E-07	0.00E+00	7.81E-07	1.16E-06	2.27E-06	0.00E+00	3.44E-06	2.50E-07	3.71E-07	0.00E+00	6.21E-07	1.91E-07	2.18E-07	0.00E+00	4.09E-07
352	479960.2	3742303	1.41E-06	2.55E-06	0.00E+00	3.96E-06	1.34E-06	2.82E-06	0.00E+00	4.16E-06	2.71E-07	4.51E-07	0.00E+00	7.22E-07	1.08E-06	2.10E-06	0.00E+00	3.18E-06	2.31E-07	3.43E-07	0.00E+00	5.74E-07	1.77E-07	2.01E-07	0.00E+00	3.78E-07
353	479942	3742303	1.30E-06	2.34E-06	0.00E+00	3.64E-06	1.23E-06	2.59E-06	0.00E+00	3.82E-06	2.49E-07	4.14E-07	0.00E+00	6.62E-07	9.88E-07	1.93E-06	0.00E+00	2.92E-06	2.12E-07	3.15E-07	0.00E+00	5.27E-07	1.62E-07	1.85E-07	0.00E+00	3.47E-07
354	479923.8	3742303	1.18E-06	2.14E-06	0.00E+00	3.32E-06	1.12E-06	2.36E-06	0.00E+00	3.49E-06	2.27E-07	3.78E-07	0.00E+00	6.05E-07	9.02E-07	1.76E-06	0.00E+00	2.66E-06	1.94E-07	2.87E-07	0.00E+00	4.81E-07	1.48E-07	1.69E-07	0.00E+00	3.17E-07
355	479905.6	3742303	1.08E-06	1.94E-06	0.00E+00	3.02E-06	1.02E-06	2.15E-06	0.00E+00	3.17E-06	2.07E-07	3.43E-07	0.00E+00	5.50E-07	8.20E-07	1.60E-06	0.00E+00	2.42E-06	1.76E-07	2.61E-07	0.00E+00	4.38E-07	1.35E-07	1.54E-07	0.00E+00	2.88E-07
356	480104.2	3742290	1.86E-06	3.36E-06	0.00E+00	5.23E-06	1.77E-06	3.72E-06	0.00E+00	5.49E-06	3.58E-07	5.94E-07	0.00E+00	9.52E-07	1.42E-06	2.77E-06	0.00E+00	4.19E-06	3.05E-07	4.52E-07	0.00E+00	7.58E-07	2.33E-07	2.66E-07	0.00E+00	4.99E-07
357	480137.2	3742304	1.95E-06	3.51E-06	0.00E+00	5.46E-06	1.85E-06	3.88E-06	0.00E+00	5.73E-06	3.73E-07	6.21E-07	0.00E+00	9.94E-07	1.48E-06	2.90E-06	0.00E+00	4.38E-06	3.19E-07	4.72E-07	0.00E+00	7.91E-07	2.44E-07	2.77E-07	0.00E+00	5.21E-07
358	480170.1	3742318	1.93E-06	3.49E-06	0.00E+00	5.42E-06	1.83E-06	3.86E-06	0.00E+00	5.69E-06	3.71E-07	6.16E-07	0.00E+00	9.87E-07	1.47E-06	2.88E-06	0.00E+00	4.35E-06	3.16E-07	4.69E-07	0.00E+00	7.86E-07	2.42E-07	2.76E-07	0.00E+00	5.18E-07
359	480203	3742331	1.82E-06	3.29E-06	0.00E+00	5.11E-06	1.73E-06	3.64E-06	0.00E+00	5.37E-06	3.50E-07	5.81E-07	0.00E+00	9.31E-07	1.39E-06	2.71E-06	0.00E+00	4.10E-06	2.99E-07	4.43E-07	0.00E+00	7.41E-07	2.28E-07	2.60E-07	0.00E+00	4.88E-07
360	480235.9	3742345	1.64E-06	2.96E-06	0.00E+00	4.60E-06	1.56E-06	3.27E-06	0.00E+00	4.83E-06	3.15E-07	5.23E-07	0.00E+00	8.37E-07	1.25E-06	2.44E-06	0.00E+00	3.69E-06	2.68E-07	3.98E-07	0.00E+00	6.66E-07	2.05E-07	2.34E-07	0.00E+00	4.39E-07
361	480268.9	3742359	1.41E-06	2.55E-06	0.00E+00	3.96E-06	1.34E-06	2.82E-06	0.00E+00	4.16E-06	2.71E-07	4.51E-07	0.00E+00	7.22E-07	1.08E-06	2.10E-06	0.00E+00	3.18E-06	2.31E-07	3.43E-07	0.00E+00	5.74E-07	1.77E-07	2.01E-07	0.00E+00	3.78E-07
362	480292.1	3742382	1.25E-06	2.26E-06	0.00E+00	3.51E-06	1.19E-06	2.50E-06	0.00E+00	3.68E-06	2.40E-07	3.99E-07	0.00E+00	6.39E-07	9.53E-07	1.86E-06	0.00E+00	2.81E-06	2.05E-07	3.04E-07	0.00E+00	5.08E-07	1.57E-07	1.78E-07	0.00E+00	3.35E-07
363	480305.7	3742415	1.13E-06	2.04E-06	0.00E+00	3.18E-06	1.08E-06	2.26E-06	0.00E+00	3.34E-06	2.18E-07	3.61E-07	0.00E+00	5.79E-07	8.63E-07	1.69E-06	0.00E+00	2.55E-06	1.86E-07	2.75E-07	0.00E+00	4.61E-07	1.42E-07	1.62E-07	0.00E+00	3.03E-07
364	480319.3	3742448	9.93E-07	1.79E-06	0.00E+00	2.78E-06	9.42E-07	1.98E-06	0.00E+00	2.92E-06	1.91E-07	3.17E-07	0.00E+00	5.07E-07	7.56E-07	1.48E-06	0.00E+00	2.23E-06	1.63E-07	2.41E-07	0.00E+00	4.04E-07	1.24E-07	1.42E-07	0.00E+00	2.66E-07
365	480332.9	3742481	8.48E-07	1.53E-06	0.00E+00	2.38E-06	8.04E-07	1.69E-06	0.00E+00	2.50E-06	1.63E-07	2.70E-07	0.00E+00	4.33E-07	6.46E-07	1.26E-06	0.00E+00	1.91E-06	1.39E-07	2.06E-07	0.00E+00	3.45E-07	1.06E-07	1.21E-07	0.00E+00	2.27E-07
366	480346.5	3742514	7.15E-07	1.29E-06	0.00E+00	2.00E-06	6.78E-07	1.43E-06	0.00E+00	2.11E-06	1.37E-07	2.28E-07	0.00E+00	3.65E-07	5.45E-07	1.06E-06	0.00E+00	1.61E-06	1.17E-07	1.74E-07	0.00E+00	2.91E-07	8.95E-08	1.02E-07	0.00E+00	1.91E-07
367	480069.6	3742283	1.76E-06	3.18E-06	0.00E+00	4.94E-06	1.67E-06	3.52E-06	0.00E+00	5.19E-06	3.38E-07	5.62E-07	0.00E+00	9.00E-07	1.34E-06	2.62E-06	0.00E+00	3.96E-06	2.88E-07	4.28E-07	0.00E+00	7.16E-07	2.20E-07	2.51E-07	0.00E+00	4.72E-07
368	480051.3	3742283	1.71E-06	3.09E-06	0.00E+00	4.80E-06	1.62E-06	3.42E-06	0.00E+00	5.04E-06	3.28E-07	5.46E-07	0.00E+00	8.74E-07	1.30E-06	2.55E-06	0.00E+00	3.85E-06	2.80E-07	4.15E-07	0.00E+00	6.96E-07	2.14E-07	2.44E-07	0.00E+00	4.58E-07
369	480033.1	3742283	1.65E-06	2.97E-06	0.00E+00	4.62E-06	1.56E-06	3.28E-06	0.00E+00	4.85E-06	3.16E-07	5.25E-07	0.00E+00	8.41E-07	1.25E-06	2.45E-06	0.00E+00	3.70E-06	2.69E-07	4.00E-07	0.00E+00	6.69E-07	2.06E-07	2.35E-07	0.00E+00	4.41E-07
370	480014.9	3742283	1.57E-06	2.83E-06	0.00E+00	4.39E-06	1.49E-06	3.13E-06	0.00E+00	4.61E-06	3.01E-07	5.00E-07	0.00E+00	8.00E-07	1.19E-06	2.33E-06	0.00E+00	3.52E-06	2.57E-07	3.80E-07	0.00E+00	6.37E-07	1.96E-07	2.23E-07	0.00E+00	4.19E-07
371	479996.7	3742283	1.48E-06	2.66E-06	0.00E+00	4.14E-06	1.40E-06	2.95E-06	0.00E+00	4.35E-06	2.83E-07	4.71E-07	0.00E+00	7.54E-07	1.13E-06	2.20E-06	0.00E+00	3.32E-06	2.42E-07	3.59E-07	0.00E+00	6.00E-07	1.85E-07	2.11E-07	0.00E+00	3.95E-07
372	479978.5	3742283	1.38E-06	2.49E-06	0.00E+00	3.87E-06	1.31E-06	2.75E-06	0.00E+00	4.06E-06	2.65E-07	4.40E-07	0.00E+00	7.05E-07	1.05E-06	2.05E-06	0.00E+00	3.10E-06	2.26E-07	3.35E-07	0.00E+00	5.61E-07	1.73E-07	1.97E-07	0.00E+00	3.70E-07
373	479960.3	3742283	1.28E-06	2.31E-06	0.00E+00	3.59E-06	1.21E-06	2.55E-06	0.00E+00	3.77E-06	2.46E-07	4.08E-07	0.00E+00	6.54E-07	9.75E-07	1.90E-06	0.00E+00	2.88E-06	2.10E-07	3.11E-07	0.00E+00	5.20E-07	1.60E-07	1.83E-07	0.00E+00	3.43E-07
374	479942.1	3742283	1.18E-06	2.13E-06	0.00E+00	3.31E-06	1.12E-06	2.36E-06	0.00E+00	3.48E-06	2.26E-07	3.76E-07	0.00E+00	6.03E-07	8.99E-07	1.76E-06	0.00E+00	2.65E-06	1.93E-07	2.86E-07	0.00E+00	4.80E-07	1.48E-07	1.68E-07	0.00E+00	3.16E-07
375	479923.9	3742283	1.08E-06	1.95E-06	0.00E+00	3.04E-06	1.03E-06	2.16E-06	0.00E+00	3.19E-06	2.08E-07	3.45E-07	0.00E+00	5.53E-07	8.25E-07	1.61E-06	0.00E+00	2.44E-06	1.77E-07	2.63E-07	0.00E+00	4.40E-07	1.36E-07	1.54E-07	0.00E+00	2.90E-07
376	479905.7	3742283	9.90E-07	1.79E-06	0.00E+00	2.78E-06	9.40E-07	1.98E-06	0.00E+00	2.92E-06	1.90E-07	3.16E-07	0.00E+00	5.06E-07	7.54E-07	1.47E-06	0.00E+00	2.23E-06	1.62E-07	2.40E-07	0.00E+00	4.02E-07	1.24E-07	1.41E-07	0.00E+00	2.65E-07
377	480104.1	3742270	1.70E-06	3.06E-06	0.00E+00	4.76E-06	1.61E-06	3.39E-06	0.00E+00	5.00E-06	3.26E-07	5.41E-07	0.00E+00	8.67E-07	1.29E-06	2.53E-06	0.00E+00	3.82E-06	2.78E-07	4.12E-07	0.00E+00	6.90E-07	2.13E-07	2.42E-07	0.00E+00	4.55E-07
378	480136.7	3742284	1.79E-06	3.22E-06	0.00E+00	5.01E-06	1.69E-06	3.56E-06	0.00E+00	5.26E-06	3.42E-07	5.69E-07	0.00E+00	9.11E-07	1.36E-06	2.66E-06	0.00E+00	4.01E-06	2.92E-07	4.33E-07	0.00E+00	7.25E-07	2.23E-07	2.54E-07	0.00E+00	4.78E-07
379	480169.2	3742297	1.80E-06	3.24E-06	0.00E+00	5.03E-06	1.70E-06	3.58E-06	0.00E+00	5.28E-06	3.44E-07	5.72E-07	0.00E+00	9.16E-07	1.37E-06	2.67E-06	0.00E+00	4.04E-06	2.94E-07	4.36E-07	0.00E+00	7.29E-07	2.25E-07	2.56E-07	0.00E+00	4.80E-07
380	480201.8	3742311	1.72E-06	3.11E-06	0.00E+00	4.83E-06	1.63E-06	3.44E-06	0.00E+00	5.07E-06	3.30E-07	5.49E-07	0.00E+00	8.80E-07	1.31E-06	2.56E-06	0.00E+00	3.87E-06	2.82E-07	4.18E-07	0.00E+00	7.00E-07	2.16E-07	2.46E-07	0.00E+00	4.61E-07
381	480234.4	3742324	1.58E-06	2.85E-06	0.00E+00	4.43E-06	1.50E-06	3.15E-06	0.00E+00	4.65E-06	3.03E-07	5.04E-07	0.00E+00	8.07E-07	1.20E-06	2.35E-06	0.00E+00	3.55E-06	2.59E-07	3.84E-07	0.00E+00	6.42E-07	1.98E-07	2.25E-07	0.00E+00	4.23E-07
382	480266.9	3742338	1.39E-06	2.51E-06	0.00E+00	3.91E-06	1.32E-06	2.78E-06	0.00E+00	4.10E-06	2.67E-07	4.44E-07	0.00E+00	7.11E-07	1.06E-06	2.07E-06	0.00E+00	3.13E-06	2.28E-07	3.38E-07	0.00E+00	5.66E-07	1.74E-07	1.99E-07	0.00E+00	3.73E-07
383	480319.7	3742401	1.05E-06	1.89E-06	0.00E+00	2.94E-06	9.94E-07	2.09E-06	0.00E+00	3.08E-06	2.01E-07	3.34E-07	0.00E+00	5.35E-07	7.98E-07	1.56E-06	0.00E+00	2.36E-06	1.72E-07	2.54E-07	0.00E+00	4.26E-07	1.31E-07	1.49E-07	0.00E+00	2.80E-07
384	480333.1	3742433	9.26E-07	1.67E-06	0.00E+00	2.60E-06	8.79E-07	1.85E-06	0.00E+00	2.73E-06	1.78E-07	2.95E-07	0.00E+00	4.73E-07	7.05E-07	1.38E-06	0.00E+00	2.08E-06	1.52E-07	2.25E-07	0.00E+00	3.76E-07	1.16E-07	1.32E-07	0.00E+00	2.48E-07
385	480346.6	3742466	8.00E-07	1.44E-06	0.00E+00	2.24E-06	7.59E-07	1.60E-06	0.00E+00	2.35E-06	1.53E-07	2.55E-07	0.00E+00	4.08E-07	6.09E-07	1.19E-06	0.00E+00	1.80E-06	1.31E-07	1.94E-07	0.00E+00	3.25E-07	1.00E-07	1.14E-07	0.00E+00	2.14E-07
386	480360	3742498	6.82E-07	1.23E-06	0.00E+00	1.91E-06	6.47E-07	1.36E-06	0.00E+00	2.01E-06	1.31E-07	2.17E-07	0.00E+00	3.48E-07	5.19E-07	1.01E-06	0.00E+00	1.53E-06	1.12E-07	1.65E-07	0.00E+00	2.77E-07	8.53E-08	9.72E-08	0.00E+00	1.82E-07
387	480373.4	3742531	5.81E-07	1.05E-06	0.00E+00	1.63E-06	5.51E-07	1.16E-06	0.00E+00	1.71E-06	1.11E-07	1.85E-07	0.00E+00	2.97E-07	4.42E-07	8.64E-07	0.00E+00	1.31E-06	9.51E-08	1.41E-07	0.00E+00	2.36E-07	7.27E-08	8.28E-08	0.00E+00	1.55E-07
388	480069.6	3742263	1.60E-06	2.88E-06	0.00E+00	4.48E-06	1.52E-06	3.19E-06	0.00E+00	4.71E-06	3.07E-07	5.10E-07	0.00E+00	8.16E-07	1.22E-06	2.38E-06	0.00E+00	3.60E-06	2.62E-07	3.88E-07	0.00E+00	6.50E-07	2.00E-07	2.28E-07	0.00E+00	4.28E-07
389	480051.4	3742263	1.55E-06	2.8E-06	0.00E+00	4.35E-06	1.47E-06	3.09E-06	0.00E+00	4.57E-06	2.98E-07	4.94E-07	0.00E+00	7.92E-07	1.18E-06	2.31E-06	0.00E+00	3.49E-06	2.54E-07	3.76E-07	0.00E+00	6.30E-07	1.94E-07	2.21E-07	0.00E+00	4.15E-07
390	480033.2	3742263	1.49E-06	2.69E-06	0.00E+00	4.18E-06	1.41E-06	2.97E-06	0.00E+00	4.39E-06	2.86E-07	4.75E-07	0.00E+00	7.61E-07	1.14E-06	2.22E-06	0.00E+00	3.35E-06	2.44E-07	3.62E-07	0.00E+00	6.06E-07	1.87E-07	2.12E-07	0.00E+00	3.99E-07
391	480015	3742263	1.42E-06	2.56E-06	0.00E+00	3.98E-06	1.35E-06	2.83E-06	0.00E+00	4.18E-06	2.72E-07	4.52E-07	0.00E+00	7.25E-07	1.08E-06	2.11E-06	0.00E+00	3.19E-06	2.32E-07	3.44E-07	0.00E+00	5.77E-07	1.78E-07	2.02E-07	0.00E+00	3.80E-07
392	479996.8	3742263	1.34E-06	2.42E-06	0.00E+00	3.76E-06	1.27E-06	2.67E-06	0.00E+00	3.94E-06	2.57E-07	4.27E-07	0.00E+00	6.84E-07	1.02E-06	1.99E-06	0.00E+00	3.01E-06	2.19E-07	3.25E-07	0.00E+00	5.44E-07	1.68E-07	1.91E-07	0.00E+00	3.59E-07
393	479978.6	3742263	1.25E-06	2.26E-06	0.00E+00	3.52E-06	1.19E-06	2.50E-06	0.00E+00	3.69E-06	2.41E-07	4.00E-07	0.00E+00	6.41E-07	9.55E-07	1.87E-06	0.00E+00	2.82E-06	2.05E-07	3.04E-07	0.00E+00	5.10E-07	1.57E-07	1.79E-07	0.00E+00	3.36E-07
394	479960.3	3742263	1.17E-06	2.11E-06	0.00E+00	3.27E-06	1.11E-06	2.33E-06	0.00E+00	3.44E-06	2.24E-07	3.72E-07	0.00E+00	5.96E-07	8.89E-07	1.74E-06	0.00E+00	2.62E-06	1.91E-07	2.83E-07	0.00E+00	4.74E-07	1.46E-07	1.66E-07	0.00E+00	3.12E-07
395	479942.1	3742263	1.08E-06	1.95E-06	0.00E+00	3.03E-06	1.02E-06	2.15E-06	0.00E+00	3.18E-06	2.07E-07	3.44E-07	0.00E+00	5.51E-07	8.22E-07	1.61E-06	0.00E+00	2.43E-06	1.77E-07	2.62E-07	0.00E+00	4.39E-07	1.35E-07	1.54E-07	0.00E+00	2.89E-07
396	479923.9	3742263	9.95E-07	1.79E-06	0.00E+00	2.79E-06	9.44E-07	1.99E-06	0.00E+00	2.93E-06	1.91E-07	3.17E-07	0.00E+00	5.08E-07	7.58E-07	1.48E-06	0.00E+00	2.24E-06	1.63E-07	2.41E-07	0.00E+00	4.04E-07	1.25E-07	1.42E-07	0.00E+00	2.66E-07
397	479905.7	3742263	9.14E-07	1.65E-06	0.00E+00	2.56E-06	8.67E-07	1.82E-06	0.00E+00	2.69E-06	1.75E-07	2.91E-07	0.00E+00	4.66E-07	6.96E-07	1.36E-06	0.00E+00	2.05E-06	1.50E-07	2.22E-07	0.00E+00	3.71E-07	1.14E-07	1.30E-07	0.00E+00	2.45E-07
398	480104.4	3742220	1.37E-06	2.47E-06	0.00E+00	3.83E-06	1.30E-06	2.73E-06	0.00E+00	4.02E-06	2.62E-07	4.36E-07	0.00E+00	6.98E-07	1.04E-06	2.03E-06	0.00E+00	3.07E-06	2.24E-07	3.32E-07	0.00E+00	5.56E-07	1.71E-07	1.95E-07	0.00E+00	3.66E-07
399	480137.4	3742234	1.45E-06	2.62E-06	0.00E+00	4.08E-06	1.38E-06	2.90E-06	0.00E+00	4.28E-06	2.79E-07	4.64E-07	0.00E+00	7.43E-07	1.11E-06	2.16E-06	0.00E+00	3.27E-06	2.38E-07	3.53E-07	0.00E+00	5.91E-07	1.82E-07	2.07E-07	0.00E+00	3.89E-07
400	480170.3	3742248	1.49E-06	2.69E-06	0.00E+00	4.19E-06	1.42E-06	2.98E-06	0.00E+00	4.39E-06	2.86E-07	4.76E-07	0.00E+00	7.62E-07	1.14E-06	2.22E-06	0.00E+00	3.36E-06	2.44E-07	3.62E-07	0.00E+00	6.07E-07	1.87E-07	2.13E-07	0.00E+00	4.00E-07
401	480203.2	3742261	1.47E-06	2.66E-06	0.00E+00	4.13E-06	1.40E-06	2.94E-06	0.00E+00	4.34E-06	2.83E-07	4.70E-07	0.00E+00	7.52E-07	1.12E-06	2.19E-06	0.00E+00	3.31E-06	2.41E-07	3.58E-07	0.00E+00	5.99E-07	1.84E-07	2.10E-07	0.00E+00	3.94E-07
402	480236.2	3742275	1.40E-06	2.52E-06	0.00E+00	3.92E-06	1.33E-06	2.79E-06	0.00E+00	4.12E-06	2.68E-07	4.46E-07	0.00E+00	7.14E-07	1.06E-06	2.08E-06	0.00E+00	3.14E-06	2.29E-07	3.39E-07	0.00E+00	5.68E-07	1.75E-07	1.99E-07	0.00E+00	3.74E-07
403	480269.1	3742289	1.28E-06	2.31E-06	0.00E+00	3.59E-06	1.21E-06	2.55E-06	0.00E+00	3.76E-06	2.45E-07	4.08E-07	0.00E+00	6.53E-07	9.74E-07	1.90E-06	0.00E+00	2.88E-06	2.09E-07	3.10E-07	0.00E+00	5.20E-07	1.60E-07	1.82E-07	0.00E+00	3.42E-07
404	480368.9	3742399	7.78E-07	1.4E-06	0.00E+00	2.18E-06	7.38E-07	1.55E-06	0.00E+00	2.29E-06	1.49E-07	2.48E-07	0.00E+00	3.97E-07	5.93E-07	1.16E-06	0.00E+00	1.75E-06	1.27E-07	1.89E-07	0.00E+00	3.16E-07	9.74E-08	1.11E-07	0.00E+00	2.08E-07
405	480382.5	3742432	6.83E-07	1.23E-06	0.00E+00	1.92E-06	6.48E-07	1.36E-06	0.00E+00	2.01E-06	1.31E-07	2.18E-07	0.00E+00	3.49E-07	5.20E-07	1.02E-06	0.00E+00	1.54E-06	1.12E-07	1.66E-07	0.00E+00	2.78E-07	8.55E-08	9.74E-08	0.00E+00	1.83E-07
406	480396.1	3742465	5.92E-07	1.07E-06	0.00E+00	1.66E-06	5.62E-07	1.18E-06	0.00E+00	1.74E-06	1.14E-07	1.89E-07	0.00E+00	3.02E-07	4.51E-07	8.80E-07	0.00E+00	1.33E-06	9.69E-08	1.44E-07	0.00E+00	2.41E-07	7.41E-08	8.44E-08	0.00E+00	1.58E-07
407	480409.7	3742498	5.11E-07	9.22E-07	0.00E+00	1.43E-06	4.85E-07	1.02E-06	0.00E+00	1.50E-06	9.81E-08	1.63E-07	0.00E+00	2.61E-07	3.89E-07	7.60E-07	0.00E+00	1.15E-06	8.37E-08	1.24E-07	0.00E+00	2.08E-07	6.40E-08	7.29E-08	0.00E+00	1.37E-07
408	480423.3	3742531	4.44E-07	8E-07	0.00E+00	1.24E-06	4.21E-07	8.85E-07	0.00E+00	1.31E-06	8.51E-08	1.41E-07	0.00E+00	2.27E-07	3.38E-07	6.60E-07	0.00E+00	9.98E-07	7.26E-08	1.08E-07	0.00E+00	1.80E-07	5.55E-08	6.33E-08	0.00E+00	1.19E-07
409	480069.8	3742213	1.28E-06	2.3E-06	0.00E+00	3.58E-06	1.21E-06	2.55E-06	0.00E+00	3.76E-06	2.45E-07	4.07E-07	0.00E+00	6.52E-07	9.73E-07	1.90E-06	0.00E+00	2.87E-06	2.09E-07	3.10E-07	0.00E+00	5.19E-07	1.60E-07	1.82E-07	0.00E+00	3.42E-07
410	480051.6	3742213	1.24E-06	2.23E-06	0.00E+00	3.47E-06	1.17E-06	2.47E-06	0.00E+00	3.64E-06	2.37E-07	3.94E-07	0.00E+00	6.31E-07	9.42E-07	1.84E-06	0.00E+00	2.78E-06	2.02E-07	3.00E-07	0.00E+00	5.02E-07	1.55E-07	1.76E-07	0.00E+00	3.31E-07
411	480033.3	3742213	1.19E-06	2.14E-06	0.00E+00	3.33E-06	1.13E-06	2.37E-06	0.00E+00	3.50E-06	2.28E-07	3.79E-07	0.00E+00	6.06E-07	9.04E-07	1.77E-06	0.00E+00	2.67E-06	1.94E-07	2.88E-07	0.00E+00	4.83E-07	1.49E-07	1.69E-07	0.00E+00	3.18E-07
412	480015.1	3742213	1.13E-06	2.04E-06	0.00E+00	3.18E-06	1.07E-06	2.26E-06	0.00E+00	3.33E-06	2.17E-07	3.61E-07	0.00E+00	5.78E-07	8.62E-07	1.68E-06	0.00E+00	2.55E-06	1.85E-07	2.75E-07	0.00E+00	4.60E-07	1.42E-07	1.61E-07	0.00E+00	3.03E-07
413	479996.9	3742213	1.07E-06	1.93E-06	0.00E+00	3.01E-06	1.02E-06	2.14E-06	0.00E+00	3.16E-06	2.06E-07	3.42E-07	0.00E+00	5.48E-07	8.17E-07	1.60E-06	0.00E+00	2.41E-06	1.76E-07	2.60E-07	0.00E+00	4.36E-07	1.34E-07	1.53E-07	0.00E+00	2.87E-07
414	479978.7	3742213	1.01E-06	1.82E-06	0.00E+00	2.83E-06	9.58E-07	2.01E-06	0.00E+00	2.97E-06	1.94E-07	3.22E-07	0.00E+00	5.16E-07	7.69E-07	1.50E-06	0.00E+00	2.27E-06	1.65E-07	2.45E-07	0.00E+00	4.10E-07	1.26E-07	1.44E-07	0.00E+00	2.70E-07
415	479960.5	3742213	9.46E-07	1.71E-06	0.00E+00	2.65E-06	8.97E-07	1.89E-06	0.00E+00	2.78E-06	1.81E-07	3.01E-07	0.00E+00	4.83E-07	7.20E-07	1.41E-06	0.00E+00	2.13E-06	1.55E-07	2.30E-07	0.00E+00	3.84E-07	1.18E-07	1.35E-07	0.00E+00	2.53E-07
416	479942.3	3742213	8.82E-07	1.59E-06	0.00E+00	2.47E-06	8.37E-07	1.76E-06	0.00E+00	2.60E-06	1.69E-07	2.81E-07	0.00E+00	4.50E-07	6.72E-07	1.31E-06	0.00E+00	1.98E-06	1.44E-07	2.14E-07	0.00E+00	3.58E-07	1.10E-07	1.26E-07	0.00E+00	2.36E-07
417	479924.1	3742213	8.19E-07	1.48E-06	0.00E+00	2.30E-06	7.77E-07	1.63E-06	0.00E+00	2.41E-06	1.57E-07	2.61E-07	0.00E+00	4.18E-07	6.24E-07	1.22E-06	0.00E+00	1.84E-06	1.34E-07	1.99E-07	0.00E+00	3.33E-07	1.03E-07	1.17E-07	0.00E+00	2.19E-07
418	479905.9	3742213	7.59E-07	1.37E-06	0.00E+00	2.13E-06	7.20E-07	1.51E-06	0.00E+00	2.24E-06	1.46E-07	2.42E-07	0.00E+00	3.88E-07	5.78E-07	1.13E-06	0.00E+00	1.71E-06	1.24E-07	1.84E-07	0.00E+00	3.09E-07	9.50E-08	1.08E-07	0.00E+00	2.03E-07
419	480104.7	3742170	1.12E-06	2.02E-06	0.00E+00	3.15E-06	1.06E-06	2.24E-06	0.00E+00	3.30E-06	2.15E-07	3.58E-07	0.00E+00	5.73E-07	8.54E-07	1.67E-06	0.00E+00	2.52E-06	1.84E-07	2.72E-07	0.00E+00	4.56E-07	1.40E-07	1.60E-07	0.00E+00	3.00E-07
420	480137.9	3742184	1.20E-06	2.17E-06	0.00E+00	3.37E-06	1.14E-06	2.40E-06	0.00E+00	3.54E-06	2.31E-07	3.83E-07	0.00E+00	6.14E-07	9.16E-07	1.79E-06	0.00E+00	2.71E-06	1.97E-07	2.92E-07	0.00E+00	4.89E-07	1.51E-07	1.71E-07	0.00E+00	3.22E-07
421	480154.5	3742191	1.23E-06	2.22E-06	0.00E+00	3.45E-06	1.17E-06	2.46E-06	0.00E+00	3.63E-06	2.36E-07	3.93E-07	0.00E+00	6.29E-07	9.38E-07	1.83E-06	0.00E+00	2.77E-06	2.02E-07	2.99E-07	0.00E+00	5.01E-07	1.54E-07	1.76E-07	0.00E+00	3.30E-07
422	480187.7	3742205	1.26E-06	2.28E-06	0.00E+00	3.54E-06	1.20E-06	2.52E-06	0.00E+00	3.71E-06	2.42E-07	4.02E-07	0.00E+00	6.44E-07	9.61E-07	1.88E-06	0.00E+00	2.84E-06	2.07E-07	3.06E-07	0.00E+00	5.13E-07	1.58E-07	1.80E-07	0.00E+00	3.38E-07
423	480204.4	3742212	1.26E-06	2.27E-06	0.00E+00	3.54E-06	1.20E-06	2.52E-06	0.00E+00	3.71E-06	2.42E-07	4.02E-07	0.00E+00	6.44E-07	9.60E-07	1.88E-06	0.00E+00	2.84E-06	2.06E-07	3.06E-07	0.00E+00	5.12E-07	1.58E-07	1.80E-07	0.00E+00	3.38E-07
424	480221	3742219	1.25E-06	2.25E-06	0.00E+00	3.50E-06	1.19E-06	2.49E-06	0.00E+00	3.68E-06	2.40E-07	3.98E-07	0.00E+00	6.38E-07	9.52E-07	1.86E-06	0.00E+00	2.81E-06	2.05E-07	3.03E-07	0.00E+00	5.08E-07	1.56E-07	1.78E-07	0.00E+00	3.35E-07
425	480254.2	3742233	1.20E-06	2.16E-06	0.00E+00	3.36E-06	1.14E-06	2.39E-06	0.00E+00	3.52E-06	2.30E-07	3.82E-07	0.00E+00	6.11E-07	9.12E-07	1.78E-06	0.00E+00	2.69E-06	1.96E-07	2.91E-07	0.00E+00	4.86E-07	1.50E-07	1.71E-07	0.00E+00	3.20E-07
426	480270.8	3742239	1.16E-06	2.09E-06	0.00E+00	3.24E-06	1.10E-06	2.31E-06	0.00E+00	3.41E-06	2.22E-07	3.69E-07	0.00E+00	5.91E-07	8.81E-07	1.72E-06	0.00E+00	2.60E-06	1.89E-07	2.81E-07	0.00E+00	4.70E-07	1.45E-07	1.65E-07	0.00E+00	3.10E-07
427	480287.4	3742246	1.11E-06	2E-06	0.00E+00	3.11E-06	1.05E-06	2.21E-06	0.00E+00	3.27E-06	2.13E-07	3.54E-07	0.00E+00	5.67E-07	8.45E-07	1.65E-06	0.00E+00	2.50E-06	1.82E-07	2.69E-07	0.00E+00	4.51E-07	1.39E-07	1.58E-07	0.00E+00	2.97E-07
428	480445.8	3742464	4.55E-07	8.2E-07	0.00E+00	1.28E-06	4.32E-07	9.07E-07	0.00E+00	1.34E-06	8.73E-08	1.45E-07	0.00E+00	2.32E-07	3.46E-07	6.77E-07	0.00E+00	1.02E-06	7.45E-08	1.10E-07	0.00E+00	1.85E-07	5.69E-08	6.48E-08	0.00E+00	1.22E-07
429	480459.5	3742497	3.99E-07	7.19E-07	0.00E+00	1.12E-06	3.78E-07	7.95E-07	0.00E+00	1.17E-06	7.64E-08	1.27E-07	0.00E+00	2.03E-07	3.03E-07	5.93E-07	0.00E+00	8.96E-07	6.52E-08	9.67E-08	0.00E+00	1.62E-07	4.99E-08	5.68E-08	0.00E+00	1.07E-07
430	480466.3	3742514	3.74E-07	6.74E-07	0.00E+00	1.05E-06	3.55E-07	7.46E-07	0.00E+00	1.10E-06	7.17E-08	1.19E-07	0.00E+00	1.91E-07	2.85E-07	5.56E-07	0.00E+00	8.41E-07	6.12E-08	9.07E-08	0.00E+00	1.52E-07	4.68E-08	5.33E-08	0.00E+00	1.00E-07
431	480088.1	3742163	1.07E-06	1.94E-06	0.00E+00	3.01E-06	1.02E-06	2.14E-06	0.00E+00	3.16E-06	2.06E-07	3.42E-07	0.00E+00	5.48E-07	8.17E-07	1.60E-06	0.00E+00	2.41E-06	1.76E-07	2.60E-07	0.00E+00	4.36E-07	1.34E-07	1.53E-07	0.00E+00	2.87E-07
432	480069.9	3742163	1.04E-06	1.88E-06	0.00E+00	2.93E-06	9.91E-07	2.08E-06	0.00E+00	3.07E-06	2.00E-07	3.33E-07	0.00E+00	5.33E-07	7.95E-07	1.55E-06	0.00E+00	2.35E-06	1.71E-07	2.53E-07	0.00E+00	4.24E-07	1.31E-07	1.49E-07	0.00E+00	2.79E-07
433	480051.7	3742163	1.01E-06	1.82E-06	0.00E+00	2.83E-06	9.58E-07	2.01E-06	0.00E+00	2.97E-06	1.94E-07	3.22E-07	0.00E+00	5.16E-07	7.69E-07	1.50E-06	0.00E+00	2.27E-06	1.65E-07	2.45E-07	0.00E+00	4.10E-07	1.26E-07	1.44E-07	0.00E+00	2.70E-07
434	480033.5	3742163	9.71E-07	1.75E-06	0.00E+00	2.72E-06	9.21E-07	1.94E-06	0.00E+00	2.86E-06	1.86E-07	3.09E-07	0.00E+00	4.95E-07	7.39E-07	1.44E-06	0.00E+00	2.18E-06	1.59E-07	2.35E-07	0.00E+00	3.94E-07	1.21E-07	1.38E-07	0.00E+00	2.60E-07
435	480015.3	3742163	9.27E-07	1.67E-06	0.00E+00	2.60E-06	8.80E-07	1.85E-06	0.00E+00	2.73E-06	1.78E-07	2.96E-07	0.00E+00	4.73E-07	7.06E-07	1.38E-06	0.00E+00	2.09E-06	1.52E-07	2.25E-07	0.00E+00	3.77E-07	1.16E-07	1.32E-07	0.00E+00	2.48E-07
436	479997.1	3742163	8.81E-07	1.59E-06	0.00E+00	2.47E-06	8.36E-07	1.76E-06	0.00E+00	2.59E-06	1.69E-07	2.81E-07	0.00E+00	4.50E-07	6.71E-07	1.31E-06	0.00E+00	1.98E-06	1.44E-07	2.14E-07	0.00E+00	3.58E-07	1.10E-07	1.26E-07	0.00E+00	2.36E-07
437	479978.9	3742163	8.33E-07	1.5E-06	0.00E+00	2.34E-06	7.91E-07	1.66E-06	0.00E+00	2.45E-06	1.60E-07	2.66E-07	0.00E+00	4.25E-07	6.35E-07	1.24E-06	0.00E+00	1.87E-06	1.36E-07	2.02E-07	0.00E+00	3.39E-07	1.04E-07	1.19E-07	0.00E+00	2.23E-07
438	479960.7	3742163	7.85E-07	1.42E-06	0.00E+00	2.20E-06	7.45E-07	1.57E-06	0.00E+00	2.31E-06	1.51E-07	2.50E-07	0.00E+00	4.01E-07	5.98E-07	1.17E-06	0.00E+00	1.76E-06	1.28E-07	1.90E-07	0.00E+00	3.19E-07	9.82E-08	1.12E-07	0.00E+00	2.10E-07
439	479942.4	3742163	7.36E-07	1.33E-06	0.00E+00	2.06E-06	6.99E-07	1.47E-06	0.00E+00	2.17E-06	1.41E-07	2.35E-07	0.00E+00	3.76E-07	5.61E-07	1.10E-06	0.00E+00	1.66E-06	1.21E-07	1.79E-07	0.00E+00	2.99E-07	9.21E-08	1.05E-07	0.00E+00	1.97E-07
440	479924.2	3742163	6.89E-07	1.24E-06	0.00E+00	1.93E-06	6.54E-07	1.37E-06	0.00E+00	2.03E-06	1.32E-07	2.20E-07	0.00E+00	3.52E-07	5.25E-07	1.02E-06	0.00E+00	1.55E-06	1.13E-07	1.67E-07	0.00E+00	2.80E-07	8.62E-08	9.82E-08	0.00E+00	1.84E-07
441	479906	3742163	6.44E-07	1.16E-06	0.00E+00	1.80E-06	6.11E-07	1.28E-06	0.00E+00	1.89E-06	1.23E-07	2.05E-07	0.00E+00	3.29E-07	4.90E-07	9.57E-07	0.00E+00	1.45E-06	1.05E-07	1.56E-07	0.00E+00	2.61E-07	8.05E-08	9.17E-08	0.00E+00	1.72E-07
442	480105	3742120	9.36E-07	1.69E-06	0.00E+00	2.63E-06	8.88E-07	1.87E-06	0.00E+00	2.76E-06	1.80E-07	2.98E-07	0.00E+00	4.78E-07	7.13E-07	1.39E-06	0.00E+00	2.11E-06	1.53E-07	2.27E-07	0.00E+00	3.80E-07	1.17E-07	1.33E-07	0.00E+00	2.51E-07
443	480121.7	3742127	9.74E-07	1.76E-06	0.00E+00	2.73E-06	9.25E-07	1.94E-06	0.00E+00	2.87E-06	1.87E-07	3.11E-07	0.00E+00	4.97E-07	7.42E-07	1.45E-06	0.00E+00	2.19E-06	1.59E-07	2.36E-07	0.00E+00	3.96E-07	1.22E-07	1.39E-07	0.00E+00	2.61E-07
444	480138.4	3742134	1.01E-06	1.82E-06	0.00E+00	2.83E-06	9.57E-07	2.01E-06	0.00E+00	2.97E-06	1.93E-07	3.21E-07	0.00E+00	5.15E-07	7.68E-07	1.50E-06	0.00E+00	2.27E-06	1.65E-07	2.45E-07	0.00E+00	4.10E-07	1.26E-07	1.44E-07	0.00E+00	2.70E-07
445	480155.1	3742141	1.04E-06	1.87E-06	0.00E+00	2.91E-06	9.84E-07	2.07E-06	0.00E+00	3.05E-06	1.99E-07	3.30E-07	0.00E+00	5.29E-07	7.90E-07	1.54E-06	0.00E+00	2.33E-06	1.70E-07	2.52E-07	0.00E+00	4.21E-07	1.30E-07	1.48E-07	0.00E+00	2.78E-07
446	480171.8	3742148	1.06E-06	1.91E-06	0.00E+00	2.97E-06	1.01E-06	2.11E-06	0.00E+00	3.12E-06	2.03E-07	3.38E-07	0.00E+00	5.41E-07	8.07E-07	1.58E-06	0.00E+00	2.38E-06	1.73E-07	2.57E-07	0.00E+00	4.31E-07	1.33E-07	1.51E-07	0.00E+00	2.84E-07
447	480188.6	3742155	1.08E-06	1.94E-06	0.00E+00	3.01E-06	1.02E-06	2.14E-06	0.00E+00	3.16E-06	2.06E-07	3.43E-07	0.00E+00	5.49E-07	8.19E-07	1.60E-06	0.00E+00	2.42E-06	1.76E-07	2.61E-07	0.00E+00	4.37E-07	1.35E-07	1.53E-07	0.00E+00	2.88E-07
448	480205.3	3742162	1.08E-06	1.95E-06	0.00E+00	3.04E-06	1.03E-06	2.16E-06	0.00E+00	3.19E-06	2.08E-07	3.45E-07	0.00E+00	5.53E-07	8.25E-07	1.61E-06	0.00E+00	2.44E-06	1.77E-07	2.63E-07	0.00E+00	4.40E-07	1.36E-07	1.54E-07	0.00E+00	2.90E-07
449	480222	3742169	1.08E-06	1.95E-06	0.00E+00	3.04E-06	1.03E-06	2.16E-06	0.00E+00	3.19E-06	2.08E-07	3.45E-07	0.00E+00	5.53E-07	8.25E-07	1.61E-06	0.00E+00	2.44E-06	1.77E-07	2.63E-07	0.00E+00	4.40E-07	1.36E-07	1.54E-07	0.00E+00	2.90E-07
450	480238.7	3742176	1.08E-06	1.94E-06	0.00E+00	3.02E-06	1.02E-06	2.15E-06	0.00E+00	3.17E-06	2.06E-07	3.43E-07	0.00E+00	5.49E-07	8.20E-07	1.60E-06	0.00E+00	2.42E-06	1.76E-07	2.61E-07	0.00E+00	4.37E-07	1.35E-07	1.53E-07	0.00E+00	2.88E-07
451	480255.4	3742183	1.06E-06	1.91E-06	0.00E+00	2.97E-06	1.01E-06	2.12E-06	0.00E+00	3.12E-06	2.04E-07	3.38E-07	0.00E+00	5.42E-07	8.08E-07	1.58E-06	0.00E+00	2.39E-06	1.74E-07	2.57E-07	0.00E+00	4.31E-07	1.33E-07	1.51E-07	0.00E+00	2.84E-07
452	480272.1	3742190	1.04E-06	1.87E-06	0.00E+00	2.91E-06	9.85E-07	2.07E-06	0.00E+00	3.06E-06	1.99E-07	3.31E-07	0.00E+00	5.30E-07	7.91E-07	1.54E-06	0.00E+00	2.34E-06	1.70E-07	2.52E-07	0.00E+00	4.22E-07	1.30E-07	1.48E-07	0.00E+00	2.78E-07
453	480288.8	3742197	1.01E-06	1.82E-06	0.00E+00	2.83E-06	9.57E-07	2.01E-06	0.00E+00	2.97E-06	1.94E-07	3.22E-07	0.00E+00	5.15E-07	7.68E-07	1.50E-06	0.00E+00	2.27E-06	1.65E-07	2.45E-07	0.00E+00	4.10E-07	1.26E-07	1.44E-07	0.00E+00	2.70E-07
454	480488.6	3742447	3.84E-07	6.92E-07	0.00E+00	1.08E-06	3.64E-07	7.65E-07	0.00E+00	1.13E-06	7.36E-08	1.22E-07	0.00E+00	1.96E-07	2.92E-07	5.71E-07	0.00E+00	8.63E-07	6.28E-08	9.31E-08	0.00E+00	1.56E-07	4.80E-08	5.47E-08	0.00E+00	1.03E-07
455	480495.5	3742463	3.61E-07	6.51E-07	0.00E+00	1.01E-06	3.42E-07	7.20E-07	0.00E+00	1.06E-06	6.92E-08	1.15E-07	0.00E+00	1.84E-07	2.75E-07	5.37E-07	0.00E+00	8.11E-07	5.91E-08	8.75E-08	0.00E+00	1.47E-07	4.51E-08	5.14E-08	0.00E+00	9.66E-08
456	480502.4	3742480	3.40E-07	6.13E-07	0.00E+00	9.52E-07	3.22E-07	6.78E-07	0.00E+00	1.00E-06	6.52E-08	1.08E-07	0.00E+00	1.73E-07	2.59E-07	5.05E-07	0.00E+00	7.64E-07	5.56E-08	8.24E-08	0.00E+00	1.38E-07	4.25E-08	4.84E-08	0.00E+00	9.09E-08
457	480509.3	3742497	3.20E-07	5.78E-07	0.00E+00	8.98E-07	3.04E-07	6.39E-07	0.00E+00	9.43E-07	6.15E-08	1.02E-07	0.00E+00	1.64E-07	2.44E-07	4.77E-07	0.00E+00	7.20E-07	5.24E-08	7.77E-08	0.00E+00	1.30E-07	4.01E-08	4.57E-08	0.00E+00	8.58E-08
458	480516.2	3742514	3.03E-07	5.46E-07	0.00E+00	8.49E-07	2.87E-07	6.04E-07	0.00E+00	8.91E-07	5.81E-08	9.65E-08	0.00E+00	1.55E-07	2.31E-07	4.50E-07	0.00E+00	6.81E-07	4.96E-08	7.35E-08	0.00E+00	1.23E-07	3.79E-08	4.32E-08	0.00E+00	8.10E-08
459	480523.1	3742530	2.87E-07	5.17E-07	0.00E+00	8.04E-07	2.72E-07	5.72E-07	0.00E+00	8.44E-07	5.50E-08	9.14E-08	0.00E+00	1.46E-07	2.18E-07	4.27E-07	0.00E+00	6.45E-07	4.70E-08	6.96E-08	0.00E+00	1.17E-07	3.59E-08	4.09E-08	0.00E+00	7.68E-08
460	480088.3	3742113	8.95E-07	1.61E-06	0.00E+00	2.51E-06	8.49E-07	1.79E-06	0.00E+00	2.63E-06	1.72E-07	2.85E-07	0.00E+00	4.57E-07	6.82E-07	1.33E-06	0.00E+00	2.01E-06	1.47E-07	2.17E-07	0.00E+00	3.64E-07	1.12E-07	1.28E-07	0.00E+00	2.40E-07
461	480070.1	3742113	8.70E-07	1.57E-06	0.00E+00	2.44E-06	8.26E-07	1.74E-06	0.00E+00	2.56E-06	1.67E-07	2.77E-07	0.00E+00	4.44E-07	6.63E-07	1.29E-06	0.00E+00	1.96E-06	1.42E-07	2.11E-07	0.00E+00	3.54E-07	1.09E-07	1.24E-07	0.00E+00	2.33E-07
462	480051.9	3742113	8.41E-07	1.52E-06	0.00E+00	2.36E-06	7.98E-07	1.68E-06	0.00E+00	2.48E-06	1.61E-07	2.68E-07	0.00E+00	4.29E-07	6.41E-07	1.25E-06	0.00E+00	1.89E-06	1.38E-07	2.04E-07	0.00E+00	3.42E-07	1.05E-07	1.20E-07	0.00E+00	2.25E-07
463	480033.7	3742113	8.09E-07	1.46E-06	0.00E+00	2.27E-06	7.68E-07	1.61E-06	0.00E+00	2.38E-06	1.55E-07	2.58E-07	0.00E+00	4.13E-07	6.16E-07	1.20E-06	0.00E+00	1.82E-06	1.32E-07	1.96E-07	0.00E+00	3.29E-07	1.01E-07	1.15E-07	0.00E+00	2.17E-07
464	480015.4	3742113	7.75E-07	1.4E-06	0.00E+00	2.17E-06	7.35E-07	1.55E-06	0.00E+00	2.28E-06	1.49E-07	2.47E-07	0.00E+00	3.96E-07	5.90E-07	1.15E-06	0.00E+00	1.74E-06	1.27E-07	1.88E-07	0.00E+00	3.15E-07	9.69E-08	1.10E-07	0.00E+00	2.07E-07
465	479997.2	3742113	7.39E-07	1.33E-06	0.00E+00	2.07E-06	7.01E-07	1.47E-06	0.00E+00	2.17E-06	1.42E-07	2.35E-07	0.00E+00	3.77E-07	5.62E-07	1.10E-06	0.00E+00	1.66E-06	1.21E-07	1.79E-07	0.00E+00	3.00E-07	9.24E-08	1.05E-07	0.00E+00	1.98E-07
466	479979	3742113	7.01E-07	1.26E-06	0.00E+00	1.97E-06	6.65E-07	1.40E-06	0.00E+00	2.06E-06	1.35E-07	2.23E-07	0.00E+00	3.58E-07	5.34E-07	1.04E-06	0.00E+00	1.58E-06	1.15E-07	1.70E-07	0.00E+00	2.85E-07	8.77E-08	9.99E-08	0.00E+00	1.88E-07
467	479960.8	3742113	6.63E-07	1.2E-06	0.00E+00	1.86E-06	6.29E-07	1.32E-06	0.00E+00	1.95E-06	1.27E-07	2.11E-07	0.00E+00	3.39E-07	5.05E-07	9.87E-07	0.00E+00	1.49E-06	1.09E-07	1.61E-07	0.00E+00	2.70E-07	8.30E-08	9.46E-08	0.00E+00	1.78E-07
468	479942.6	3742113	6.26E-07	1.13E-06	0.00E+00	1.75E-06	5.94E-07	1.25E-06	0.00E+00	1.84E-06	1.20E-07	2.00E-07	0.00E+00	3.20E-07	4.77E-07	9.31E-07	0.00E+00	1.41E-06	1.02E-07	1.52E-07	0.00E+00	2.54E-07	7.83E-08	8.92E-08	0.00E+00	1.68E-07
469	479924.4	3742113	5.89E-07	1.06E-06	0.00E+00	1.65E-06	5.59E-07	1.18E-06	0.00E+00	1.73E-06	1.13E-07	1.88E-07	0.00E+00	3.01E-07	4.49E-07	8.76E-07	0.00E+00	1.32E-06	9.64E-08	1.43E-07	0.00E+00	2.39E-07	7.37E-08	8.40E-08	0.00E+00	1.58E-07
470	479906.2	3742113	5.54E-07	9.98E-07	0.00E+00	1.55E-06	5.25E-07	1.10E-06	0.00E+00	1.63E-06	1.06E-07	1.76E-07	0.00E+00	2.83E-07	4.22E-07	8.23E-07	0.00E+00	1.24E-06	9.06E-08	1.34E-07	0.00E+00	2.25E-07	6.93E-08	7.89E-08	0.00E+00	1.48E-07
471	480105.2	3742070	7.93E-07	1.43E-06	0.00E+00	2.22E-06	7.52E-07	1.58E-06	0.00E+00	2.33E-06	1.52E-07	2.53E-07	0.00E+00	4.05E-07	6.04E-07	1.18E-06	0.00E+00	1.78E-06	1.30E-07	1.92E-07	0.00E+00	3.22E-07	9.92E-08	1.13E-07	0.00E+00	2.12E-07

472	480122	3742077	8.26E-07	1.49E-06	0.00E+00	2.31E-06	7.83E-07	1.65E-06	0.00E+00	2.43E-06	1.58E-07	2.63E-07	0.00E+00	4.22E-07	6.29E-07	1.23E-06	0.00E+00	1.86E-06	1.35E-07	2.00E-07	0.00E+00	3.36E-07	1.03E-07	1.18E-07	0.00E+00	2.21E-07
473	480138.8	3742084	8.56E-07	1.54E-06	0.00E+00	2.40E-06	8.12E-07	1.71E-06	0.00E+00	2.52E-06	1.64E-07	2.73E-07	0.00E+00	4.37E-07	6.52E-07	1.27E-06	0.00E+00	1.92E-06	1.40E-07	2.08E-07	0.00E+00	3.48E-07	1.07E-07	1.22E-07	0.00E+00	2.29E-07
474	480155.6	3742091	8.82E-07	1.59E-06	0.00E+00	2.47E-06	8.37E-07	1.76E-06	0.00E+00	2.60E-06	1.69E-07	2.81E-07	0.00E+00	4.51E-07	6.72E-07	1.31E-06	0.00E+00	1.98E-06	1.44E-07	2.14E-07	0.00E+00	3.59E-07	1.10E-07	1.26E-07	0.00E+00	2.36E-07
475	480172.4	3742098	9.05E-07	1.63E-06	0.00E+00	2.54E-06	8.59E-07	1.81E-06	0.00E+00	2.66E-06	1.74E-07	2.88E-07	0.00E+00	4.62E-07	6.89E-07	1.35E-06	0.00E+00	2.04E-06	1.48E-07	2.20E-07	0.00E+00	3.68E-07	1.13E-07	1.29E-07	0.00E+00	2.42E-07
476	480189.2	3742105	9.23E-07	1.66E-06	0.00E+00	2.59E-06	8.76E-07	1.84E-06	0.00E+00	2.72E-06	1.77E-07	2.94E-07	0.00E+00	4.71E-07	7.03E-07	1.37E-06	0.00E+00	2.08E-06	1.51E-07	2.24E-07	0.00E+00	3.75E-07	1.15E-07	1.32E-07	0.00E+00	2.47E-07
477	480206	3742112	9.36E-07	1.69E-06	0.00E+00	2.62E-06	8.88E-07	1.87E-06	0.00E+00	2.75E-06	1.79E-07	2.98E-07	0.00E+00	4.78E-07	7.12E-07	1.39E-06	0.00E+00	2.10E-06	1.53E-07	2.27E-07	0.00E+00	3.80E-07	1.17E-07	1.33E-07	0.00E+00	2.50E-07
478	480222.8	3742119	9.42E-07	1.7E-06	0.00E+00	2.64E-06	8.94E-07	1.88E-06	0.00E+00	2.77E-06	1.81E-07	3.00E-07	0.00E+00	4.81E-07	7.18E-07	1.40E-06	0.00E+00	2.12E-06	1.54E-07	2.29E-07	0.00E+00	3.83E-07	1.18E-07	1.34E-07	0.00E+00	2.52E-07
479	480239.6	3742126	9.43E-07	1.7E-06	0.00E+00	2.64E-06	8.95E-07	1.88E-06	0.00E+00	2.78E-06	1.81E-07	3.01E-07	0.00E+00	4.82E-07	7.18E-07	1.40E-06	0.00E+00	2.12E-06	1.54E-07	2.29E-07	0.00E+00	3.83E-07	1.18E-07	1.34E-07	0.00E+00	2.52E-07
480	480256.4	3742133	9.38E-07	1.69E-06	0.00E+00	2.63E-06	8.90E-07	1.87E-06	0.00E+00	2.76E-06	1.80E-07	2.99E-07	0.00E+00	4.79E-07	7.14E-07	1.40E-06	0.00E+00	2.11E-06	1.54E-07	2.28E-07	0.00E+00	3.81E-07	1.17E-07	1.34E-07	0.00E+00	2.51E-07
481	480273.2	3742140	9.27E-07	1.67E-06	0.00E+00	2.60E-06	8.80E-07	1.85E-06	0.00E+00	2.73E-06	1.78E-07	2.96E-07	0.00E+00	4.73E-07	7.06E-07	1.38E-06	0.00E+00	2.09E-06	1.52E-07	2.25E-07	0.00E+00	3.77E-07	1.16E-07	1.32E-07	0.00E+00	2.48E-07
482	480545.3	3742463	2.94E-07	5.3E-07	0.00E+00	8.24E-07	2.79E-07	5.86E-07	0.00E+00	8.65E-07	5.64E-08	9.36E-08	0.00E+00	1.50E-07	2.24E-07	4.37E-07	0.00E+00	6.61E-07	4.81E-08	7.13E-08	0.00E+00	1.19E-07	3.68E-08	4.19E-08	0.00E+00	7.86E-08
483	480552.2	3742480	2.78E-07	5.02E-07	0.00E+00	7.80E-07	2.64E-07	5.55E-07	0.00E+00	8.19E-07	5.34E-08	8.87E-08	0.00E+00	1.42E-07	2.12E-07	4.14E-07	0.00E+00	6.26E-07	4.55E-08	6.75E-08	0.00E+00	1.13E-07	3.48E-08	3.97E-08	0.00E+00	7.45E-08
484	480559.1	3742497	2.64E-07	4.76E-07	0.00E+00	7.40E-07	2.51E-07	5.27E-07	0.00E+00	7.77E-07	5.07E-08	8.42E-08	0.00E+00	1.35E-07	2.01E-07	3.93E-07	0.00E+00	5.94E-07	4.32E-08	6.41E-08	0.00E+00	1.07E-07	3.30E-08	3.76E-08	0.00E+00	7.07E-08
485	480566.1	3742513	2.51E-07	4.53E-07	0.00E+00	7.04E-07	2.38E-07	5.01E-07	0.00E+00	7.39E-07	4.82E-08	8.00E-08	0.00E+00	1.28E-07	1.91E-07	3.73E-07	0.00E+00	5.65E-07	4.11E-08	6.09E-08	0.00E+00	1.02E-07	3.14E-08	3.58E-08	0.00E+00	6.72E-08
486	480573	3742530	2.39E-07	4.31E-07	0.00E+00	6.71E-07	2.27E-07	4.77E-07	0.00E+00	7.04E-07	4.59E-08	7.63E-08	0.00E+00	1.22E-07	1.82E-07	3.56E-07	0.00E+00	5.38E-07	3.92E-08	5.81E-08	0.00E+00	9.72E-08	2.99E-08	3.41E-08	0.00E+00	6.40E-08
487	480088.4	3742063	7.58E-07	1.37E-06	0.00E+00	2.13E-06	7.19E-07	1.51E-06	0.00E+00	2.23E-06	1.45E-07	2.42E-07	0.00E+00	3.87E-07	5.77E-07	1.13E-06	0.00E+00	1.71E-06	1.24E-07	1.84E-07	0.00E+00	3.08E-07	9.49E-08	1.08E-07	0.00E+00	2.03E-07
488	480070.2	3742063	7.37E-07	1.33E-06	0.00E+00	2.07E-06	6.99E-07	1.47E-06	0.00E+00	2.17E-06	1.41E-07	2.35E-07	0.00E+00	3.76E-07	5.61E-07	1.10E-06	0.00E+00	1.66E-06	1.21E-07	1.79E-07	0.00E+00	2.99E-07	9.22E-08	1.05E-07	0.00E+00	1.97E-07
489	480052	3742063	7.13E-07	1.28E-06	0.00E+00	2.00E-06	6.76E-07	1.42E-06	0.00E+00	2.10E-06	1.37E-07	2.27E-07	0.00E+00	3.64E-07	5.43E-07	1.06E-06	0.00E+00	1.60E-06	1.17E-07	1.73E-07	0.00E+00	2.89E-07	8.91E-08	1.02E-07	0.00E+00	1.91E-07
490	480033.8	3742063	6.86E-07	1.24E-06	0.00E+00	1.92E-06	6.51E-07	1.37E-06	0.00E+00	2.02E-06	1.32E-07	2.19E-07	0.00E+00	3.50E-07	5.23E-07	1.02E-06	0.00E+00	1.54E-06	1.12E-07	1.66E-07	0.00E+00	2.79E-07	8.59E-08	9.78E-08	0.00E+00	1.84E-07
491	480015.6	3742063	6.58E-07	1.19E-06	0.00E+00	1.85E-06	6.25E-07	1.31E-06	0.00E+00	1.94E-06	1.26E-07	2.10E-07	0.00E+00	3.36E-07	5.01E-07	9.79E-07	0.00E+00	1.48E-06	1.08E-07	1.60E-07	0.00E+00	2.67E-07	8.24E-08	9.38E-08	0.00E+00	1.76E-07
492	479997.4	3742063	6.29E-07	1.13E-06	0.00E+00	1.76E-06	5.97E-07	1.26E-06	0.00E+00	1.85E-06	1.21E-07	2.01E-07	0.00E+00	3.21E-07	4.79E-07	9.36E-07	0.00E+00	1.41E-06	1.03E-07	1.53E-07	0.00E+00	2.56E-07	7.87E-08	8.97E-08	0.00E+00	1.68E-07
493	479979.2	3742063	6.00E-07	1.08E-06	0.00E+00	1.68E-06	5.69E-07	1.20E-06	0.00E+00	1.76E-06	1.15E-07	1.91E-07	0.00E+00	3.06E-07	4.57E-07	8.92E-07	0.00E+00	1.35E-06	9.81E-08	1.45E-07	0.00E+00	2.44E-07	7.50E-08	8.54E-08	0.00E+00	1.60E-07
494	479961	3742063	5.70E-07	1.03E-06	0.00E+00	1.60E-06	5.40E-07	1.14E-06	0.00E+00	1.68E-06	1.09E-07	1.82E-07	0.00E+00	2.91E-07	4.34E-07	8.47E-07	0.00E+00	1.28E-06	9.32E-08	1.38E-07	0.00E+00	2.31E-07	7.13E-08	8.12E-08	0.00E+00	1.52E-07
495	479942.8	3742063	5.40E-07	9.74E-07	0.00E+00	1.51E-06	5.12E-07	1.08E-06	0.00E+00	1.59E-06	1.04E-07	1.72E-07	0.00E+00	2.76E-07	4.11E-07	8.03E-07	0.00E+00	1.21E-06	8.84E-08	1.31E-07	0.00E+00	2.19E-07	6.75E-08	7.69E-08	0.00E+00	1.44E-07
496	479924.6	3742063	5.11E-07	9.21E-07	0.00E+00	1.43E-06	4.85E-07	1.02E-06	0.00E+00	1.50E-06	9.80E-08	1.63E-07	0.00E+00	2.61E-07	3.89E-07	7.60E-07	0.00E+00	1.15E-06	8.36E-08	1.24E-07	0.00E+00	2.07E-07	6.39E-08	7.28E-08	0.00E+00	1.37E-07
497	479906.3	3742063	4.82E-07	8.7E-07	0.00E+00	1.35E-06	4.58E-07	9.62E-07	0.00E+00	1.42E-06	9.25E-08	1.54E-07	0.00E+00	2.46E-07	3.67E-07	7.17E-07	0.00E+00	1.08E-06	7.89E-08	1.17E-07	0.00E+00	1.96E-07	6.03E-08	6.87E-08	0.00E+00	1.29E-07
498	480104.8	3742020	6.79E-07	1.22E-06	0.00E+00	1.90E-06	6.44E-07	1.35E-06	0.00E+00	2.00E-06	1.30E-07	2.16E-07	0.00E+00	3.47E-07	5.17E-07	1.01E-06	0.00E+00	1.53E-06	1.11E-07	1.65E-07	0.00E+00	2.76E-07	8.50E-08	9.68E-08	0.00E+00	1.82E-07
499	480137.1	3742033	7.31E-07	1.32E-06	0.00E+00	2.05E-06	6.94E-07	1.46E-06	0.00E+00	2.15E-06	1.40E-07	2.33E-07	0.00E+00	3.73E-07	5.57E-07	1.09E-06	0.00E+00	1.64E-06	1.20E-07	1.77E-07	0.00E+00	2.97E-07	9.15E-08	1.04E-07	0.00E+00	1.96E-07
500	480169.5	3742047	7.76E-07	1.4E-06	0.00E+00	2.18E-06	7.36E-07	1.55E-06	0.00E+00	2.28E-06	1.49E-07	2.47E-07	0.00E+00	3.96E-07	5.91E-07	1.15E-06	0.00E+00	1.74E-06	1.27E-07	1.88E-07	0.00E+00	3.15E-07	9.71E-08	1.11E-07	0.00E+00	2.08E-07
501	480201.8	3742060	8.09E-07	1.46E-06	0.00E+00	2.27E-06	7.67E-07	1.61E-06	0.00E+00	2.38E-06	1.55E-07	2.58E-07	0.00E+00	4.13E-07	6.16E-07	1.20E-06	0.00E+00	1.82E-06	1.32E-07	1.96E-07	0.00E+00	3.29E-07	1.01E-07	1.15E-07	0.00E+00	2.16E-07
502	480234.1	3742074	8.27E-07	1.49E-06	0.00E+00	2.32E-06	7.85E-07	1.65E-06	0.00E+00	2.43E-06	1.59E-07	2.64E-07	0.00E+00	4.22E-07	6.30E-07	1.23E-06	0.00E+00	1.86E-06	1.35E-07	2.01E-07	0.00E+00	3.36E-07	1.03E-07	1.18E-07	0.00E+00	2.21E-07
503	480266.5	3742087	8.29E-07	1.49E-06	0.00E+00	2.32E-06	7.86E-07	1.65E-06	0.00E+00	2.44E-06	1.59E-07	2.64E-07	0.00E+00	4.23E-07	6.31E-07	1.23E-06	0.00E+00	1.86E-06	1.36E-07	2.01E-07	0.00E+00	3.37E-07	1.04E-07	1.18E-07	0.00E+00	2.22E-07
504	480298.8	3742101	8.13E-07	1.47E-06	0.00E+00	2.28E-06	7.72E-07	1.62E-06	0.00E+00	2.39E-06	1.56E-07	2.59E-07	0.00E+00	4.15E-07	6.19E-07	1.21E-06	0.00E+00	1.83E-06	1.33E-07	1.97E-07	0.00E+00	3.30E-07	1.02E-07	1.16E-07	0.00E+00	2.18E-07
505	480331.2	3742114	7.82E-07	1.41E-06	0.00E+00	2.19E-06	7.42E-07	1.56E-06	0.00E+00	2.30E-06	1.50E-07	2.49E-07	0.00E+00	3.99E-07	5.95E-07	1.16E-06	0.00E+00	1.76E-06	1.28E-07	1.90E-07	0.00E+00	3.18E-07	9.78E-08	1.11E-07	0.00E+00	2.09E-07
506	480363.5	3742128	7.37E-07	1.33E-06	0.00E+00	2.07E-06	6.99E-07	1.47E-06	0.00E+00	2.17E-06	1.41E-07	2.35E-07	0.00E+00	3.76E-07	5.61E-07	1.10E-06	0.00E+00	1.66E-06	1.21E-07	1.79E-07	0.00E+00	2.99E-07	9.22E-08	1.05E-07	0.00E+00	1.97E-07
507	480395.8	3742141	6.82E-07	1.23E-06	0.00E+00	1.91E-06	6.47E-07	1.36E-06	0.00E+00	2.01E-06	1.31E-07	2.17E-07	0.00E+00	3.48E-07	5.20E-07	1.01E-06	0.00E+00	1.53E-06	1.12E-07	1.66E-07	0.00E+00	2.77E-07	8.54E-08	9.73E-08	0.00E+00	1.83E-07
508	480590.2	3742451	2.53E-07	4.57E-07	0.00E+00	7.10E-07	2.40E-07	5.05E-07	0.00E+00	7.46E-07	4.86E-08	8.07E-08	0.00E+00	1.29E-07	1.93E-07	3.77E-07	0.00E+00	5.70E-07	4.15E-08	6.15E-08	0.00E+00	1.03E-07	3.17E-08	3.61E-08	0.00E+00	6.78E-08
509	480603.5	3742483	2.30E-07	4.16E-07	0.00E+00	6.46E-07	2.19E-07	4.60E-07	0.00E+00	6.78E-07	4.42E-08	7.34E-08	0.00E+00	1.18E-07	1.75E-07	3.43E-07	0.00E+00	5.18E-07	3.77E-08	5.59E-08	0.00E+00	9.36E-08	2.88E-08	3.28E-08	0.00E+00	6.17E-08
510	480616.9	3742515	2.11E-07	3.81E-07	0.00E+00	5.92E-07	2.00E-07	4.21E-07	0.00E+00	6.21E-07	4.05E-08	6.72E-08	0.00E+00	1.08E-07	1.61E-07	3.14E-07	0.00E+00	4.74E-07	3.45E-08	5.12E-08	0.00E+00	8.57E-08	2.64E-08	3.01E-08	0.00E+00	5.65E-08
511	480070.4	3742013	6.32E-07	1.14E-06	0.00E+00	1.77E-06	6.00E-07	1.26E-06	0.00E+00	1.86E-06	1.21E-07	2.02E-07	0.00E+00	3.23E-07	4.81E-07	9.40E-07	0.00E+00	1.42E-06	1.03E-07	1.53E-07	0.00E+00	2.57E-07	7.91E-08	9.01E-08	0.00E+00	1.69E-07
512	480052.2	3742013	6.12E-07	1.1E-06	0.00E+00	1.72E-06	5.81E-07	1.22E-06	0.00E+00	1.80E-06	1.17E-07	1.95E-07	0.00E+00	3.12E-07	4.66E-07	9.10E-07	0.00E+00	1.38E-06	1.00E-07	1.48E-07	0.00E+00	2.49E-07	7.66E-08	8.72E-08	0.00E+00	1.64E-07
513	480034	3742013	5.90E-07	1.06E-06	0.00E+00	1.65E-06	5.60E-07	1.18E-06	0.00E+00	1.74E-06	1.13E-07	1.88E-07	0.00E+00	3.01E-07	4.49E-07	8.78E-07	0.00E+00	1.33E-06	9.66E-08	1.43E-07	0.00E+00	2.40E-07	7.38E-08	8.41E-08	0.00E+00	1.58E-07
514	480015.8	3742013	5.67E-07	1.02E-06	0.00E+00	1.59E-06	5.38E-07	1.13E-06	0.00E+00	1.67E-06	1.09E-07	1.81E-07	0.00E+00	2.90E-07	4.32E-07	8.44E-07	0.00E+00	1.28E-06	9.28E-08	1.38E-07	0.00E+00	2.30E-07	7.10E-08	8.08E-08	0.00E+00	1.52E-07
515	479997.6	3742013	5.44E-07	9.8E-07	0.00E+00	1.52E-06	5.16E-07	1.08E-06	0.00E+00	1.60E-06	1.04E-07	1.73E-07	0.00E+00	2.78E-07	4.14E-07	8.08E-07	0.00E+00	1.22E-06	8.90E-08	1.32E-07	0.00E+00	2.21E-07	6.80E-08	7.75E-08	0.00E+00	1.45E-07
516	479979.3	3742013	5.20E-07	9.37E-07	0.00E+00	1.46E-06	4.93E-07	1.04E-06	0.00E+00	1.53E-06	9.97E-08	1.66E-07	0.00E+00	2.65E-07	3.96E-07	7.73E-07	0.00E+00	1.17E-06	8.50E-08	1.26E-07	0.00E+00	2.11E-07	6.50E-08	7.40E-08	0.00E+00	1.39E-07
517	479961.1	3742013	4.95E-07	8.93E-07	0.00E+00	1.39E-06	4.70E-07	9.88E-07	0.00E+00	1.46E-06	9.50E-08	1.58E-07	0.00E+00	2.53E-07	3.77E-07	7.37E-07	0.00E+00	1.11E-06	8.11E-08	1.20E-07	0.00E+00	2.01E-07	6.20E-08	7.06E-08	0.00E+00	1.33E-07
518	479942.9	3742013	4.71E-07	8.5E-07	0.00E+00	1.32E-06	4.47E-07	9.40E-07	0.00E+00	1.39E-06	9.04E-08	1.50E-07	0.00E+00	2.41E-07	3.59E-07	7.01E-07	0.00E+00	1.06E-06	7.71E-08	1.14E-07	0.00E+00	1.91E-07	5.90E-08	6.72E-08	0.00E+00	1.26E-07
519	479924.7	3742013	4.48E-07	8.07E-07	0.00E+00	1.26E-06	4.25E-07	8.93E-07	0.00E+00	1.32E-06	8.59E-08	1.43E-07	0.00E+00	2.29E-07	3.41E-07	6.66E-07	0.00E+00	1.01E-06	7.33E-08	1.09E-07	0.00E+00	1.82E-07	5.60E-08	6.38E-08	0.00E+00	1.20E-07
520	479906.5	3742013	4.25E-07	7.66E-07	0.00E+00	1.19E-06	4.03E-07	8.47E-07	0.00E+00	1.25E-06	8.15E-08	1.35E-07	0.00E+00	2.17E-07	3.23E-07	6.32E-07	0.00E+00	9.55E-07	6.95E-08	1.03E-07	0.00E+00	1.73E-07	5.31E-08	6.05E-08	0.00E+00	1.14E-07
521	480105	3741970	5.89E-07	1.06E-06	0.00E+00	1.65E-06	5.59E-07	1.18E-06	0.00E+00	1.73E-06	1.13E-07	1.88E-07	0.00E+00	3.01E-07	4.49E-07	8.76E-07	0.00E+00	1.32E-06	9.64E-08	1.43E-07	0.00E+00	2.39E-07	7.37E-08	8.40E-08	0.00E+00	1.58E-07
522	480137.6	3741984	6.35E-07	1.14E-06	0.00E+00	1.78E-06	6.02E-07	1.27E-06	0.00E+00	1.87E-06	1.22E-07	2.02E-07	0.00E+00	3.24E-07	4.83E-07	9.44E-07	0.00E+00	1.43E-06	1.04E-07	1.54E-07	0.00E+00	2.58E-07	7.94E-08	9.04E-08	0.00E+00	1.70E-07
523	480170.2	3741997	6.75E-07	1.22E-06	0.00E+00	1.89E-06	6.40E-07	1.35E-06	0.00E+00	1.99E-06	1.29E-07	2.15E-07	0.00E+00	3.44E-07	5.14E-07	1.00E-06	0.00E+00	1.52E-06	1.10E-07	1.64E-07	0.00E+00	2.74E-07	8.44E-08	9.61E-08	0.00E+00	1.81E-07
524	480202.7	3742011	7.07E-07	1.27E-06	0.00E+00	1.98E-06	6.70E-07	1.41E-06	0.00E+00	2.08E-06	1.36E-07	2.25E-07	0.00E+00	3.61E-07	5.38E-07	1.05E-06	0.00E+00	1.59E-06	1.16E-07	1.71E-07	0.00E+00	2.87E-07	8.84E-08	1.01E-07	0.00E+00	1.89E-07
525	480235.3	3742024	7.28E-07	1.31E-06	0.00E+00	2.04E-06	6.91E-07	1.45E-06	0.00E+00	2.14E-06	1.40E-07	2.32E-07	0.00E+00	3.72E-07	5.54E-07	1.08E-06	0.00E+00	1.64E-06	1.19E-07	1.77E-07	0.00E+00	2.96E-07	9.11E-08	1.04E-07	0.00E+00	1.95E-07
526	480267.9	3742038	7.37E-07	1.33E-06	0.00E+00	2.07E-06	6.99E-07	1.47E-06	0.00E+00	2.17E-06	1.41E-07	2.35E-07	0.00E+00	3.76E-07	5.61E-07	1.10E-06	0.00E+00	1.66E-06	1.21E-07	1.79E-07	0.00E+00	2.99E-07	9.22E-08	1.05E-07	0.00E+00	1.97E-07
527	480300.4	3742052	7.32E-07	1.32E-06	0.00E+00	2.05E-06	6.95E-07	1.46E-06	0.00E+00	2.16E-06	1.40E-07	2.33E-07	0.00E+00	3.74E-07	5.58E-07	1.09E-06	0.00E+00	1.65E-06	1.20E-07	1.78E-07	0.00E+00	2.98E-07	9.16E-08	1.04E-07	0.00E+00	1.96E-07
528	480333	3742065	7.14E-07	1.29E-06	0.00E+00	2.00E-06	6.78E-07	1.42E-06	0.00E+00	2.10E-06	1.37E-07	2.28E-07	0.00E+00	3.65E-07	5.44E-07	1.06E-06	0.00E+00	1.61E-06	1.17E-07	1.73E-07	0.00E+00	2.90E-07	8.93E-08	1.02E-07	0.00E+00	1.91E-07
529	480365.6	3742079	6.84E-07	1.23E-06	0.00E+00	1.92E-06	6.49E-07	1.36E-06	0.00E+00	2.01E-06	1.31E-07	2.18E-07	0.00E+00	3.49E-07	5.21E-07	1.02E-06	0.00E+00	1.54E-06	1.12E-07	1.66E-07	0.00E+00	2.78E-07	8.56E-08	9.75E-08	0.00E+00	1.83E-07
530	480398.1	3742092	6.44E-07	1.16E-06	0.00E+00	1.80E-06	6.11E-07	1.28E-06	0.00E+00	1.90E-06	1.23E-07	2.05E-07	0.00E+00	3.29E-07	4.90E-07	9.58E-07	0.00E+00	1.45E-06	1.05E-07	1.56E-07	0.00E+00	2.62E-07	8.05E-08	9.18E-08	0.00E+00	1.72E-07
531	480430.7	3742106	5.97E-07	1.08E-06	0.00E+00	1.67E-06	5.66E-07	1.19E-06	0.00E+00	1.76E-06	1.14E-07	1.90E-07	0.00E+00	3.05E-07	4.54E-07	8.87E-07	0.00E+00	1.34E-06	9.77E-08	1.45E-07	0.00E+00	2.42E-07	7.46E-08	8.50E-08	0.00E+00	1.60E-07
532	480463.3	3742120	5.46E-07	9.84E-07	0.00E+00	1.53E-06	5.18E-07	1.09E-06	0.00E+00	1.61E-06	1.05E-07	1.74E-07	0.00E+00	2.78E-07	4.15E-07	8.11E-07	0.00E+00	1.23E-06	8.93E-08	1.32E-07	0.00E+00	2.22E-07	6.82E-08	7.77E-08	0.00E+00	1.46E-07
533	480495.8	3742133	4.93E-07	8.89E-07	0.00E+00	1.38E-06	4.68E-07	9.84E-07	0.00E+00	1.45E-06	9.46E-08	1.57E-07	0.00E+00	2.52E-07	3.75E-07	7.33E-07	0.00E+00	1.11E-06	8.07E-08	1.20E-07	0.00E+00	2.00E-07	6.17E-08	7.03E-08	0.00E+00	1.32E-07
534	480599.5	3742352	2.84E-07	5.12E-07	0.00E+00	7.95E-07	2.69E-07	5.66E-07	0.00E+00	8.35E-07	5.44E-08	9.04E-08	0.00E+00	1.45E-07	2.16E-07	4.22E-07	0.00E+00	6.38E-07	4.64E-08	6.88E-08	0.00E+00	1.15E-07	3.55E-08	4.04E-08	0.00E+00	7.59E-08
535	480612.9	3742385	2.58E-07	4.65E-07	0.00E+00	7.22E-07	2.44E-07	5.14E-07	0.00E+00	7.59E-07	4.94E-08	8.21E-08	0.00E+00	1.32E-07	1.96E-07	3.83E-07	0.00E+00	5.80E-07	4.22E-08	6.25E-08	0.00E+00	1.05E-07	3.22E-08	3.67E-08	0.00E+00	6.90E-08
536	480626.4	3742417	2.35E-07	4.23E-07	0.00E+00	6.57E-07	2.22E-07	4.68E-07	0.00E+00	6.90E-07	4.50E-08	7.47E-08	0.00E+00	1.20E-07	1.79E-07	3.49E-07	0.00E+00	5.27E-07	3.84E-08	5.69E-08	0.00E+00	9.53E-08	2.93E-08	3.34E-08	0.00E+00	6.28E-08
537	480639.8	3742450	2.14E-07	3.86E-07	0.00E+00	6.00E-07	2.03E-07	4.27E-07	0.00E+00	6.30E-07	4.11E-08	6.82E-08	0.00E+00	1.09E-07	1.63E-07	3.18E-07	0.00E+00	4.81E-07	3.50E-08	5.19E-08	0.00E+00	8.70E-08	2.68E-08	3.05E-08	0.00E+00	5.73E-08
538	480653.3	3742483	1.96E-07	3.54E-07	0.00E+00	5.51E-07	1.86E-07	3.92E-07	0.00E+00	5.78E-07	3.77E-08	6.26E-08	0.00E+00	1.00E-07	1.50E-07	2.92E-07	0.00E+00	4.42E-07	3.22E-08	4.77E-08	0.00E+00	7.98E-08	2.46E-08	2.80E-08	0.00E+00	5.26E-08
539	480666.7	3742515	1.81E-07	3.27E-07	0.00E+00	5.08E-07	1.72E-07	3.62E-07	0.00E+00	5.34E-07	3.48E-08	5.78E-08	0.00E+00	9.26E-08	1.38E-07	2.70E-07	0.00E+00	4.08E-07	2.97E-08	4.40E-08	0.00E+00	7.37E-08	2.27E-08	2.58E-08	0.00E+00	4.85E-08
540	480070.6	3741963	5.49E-07	9.9E-07	0.00E+00	1.54E-06	5.21E-07	1.10E-06	0.00E+00	1.62E-06	1.05E-07	1.75E-07	0.00E+00	2.80E-07	4.18E-07	8.17E-07	0.00E+00	1.23E-06	8.99E-08	1.33E-07	0.00E+00	2.23E-07	6.87E-08	7.83E-08	0.00E+00	1.47E-07
541	480052.3	3741963	5.32E-07	9.59E-07	0.00E+00	1.49E-06	5.05E-07	1.06E-06	0.00E+00	1.57E-06	1.02E-07	1.70E-07	0.00E+00	2.72E-07	4.05E-07	7.91E-07	0.00E+00	1.20E-06	8.71E-08	1.29E-07	0.00E+00	2.16E-07	6.65E-08	7.58E-08	0.00E+00	1.42E-07
542	480034.1	3741963	5.14E-07	9.26E-07	0.00E+00	1.44E-06	4.87E-07	1.02E-06	0.00E+00	1.51E-06	9.85E-08	1.64E-07	0.00E+00	2.62E-07	3.91E-07	7.64E-07	0.00E+00	1.15E-06	8.41E-08	1.25E-07	0.00E+00	2.09E-07	6.43E-08	7.32E-08	0.00E+00	1.37E-07
543	480015.9	3741963	4.95E-07	8.92E-07	0.00E+00	1.39E-06	4.69E-07	9.87E-07	0.00E+00	1.46E-06	9.49E-08	1.58E-07	0.00E+00	2.52E-07	3.77E-07	7.36E-07	0.00E+00	1.11E-06	8.09E-08	1.20E-07	0.00E+00	2.01E-07	6.19E-08	7.05E-08	0.00E+00	1.32E-07
544	479997.7	3741963	4.75E-07	8.57E-07	0.00E+00	1.33E-06	4.51E-07	9.48E-07	0.00E+00	1.40E-06	9.11E-08	1.51E-07	0.00E+00	2.43E-07	3.62E-07	7.07E-07	0.00E+00	1.07E-06	7.78E-08	1.15E-07	0.00E+00	1.93E-07	5.94E-08	6.77E-08	0.00E+00	1.27E-07
545	479979.5	3741963	4.55E-07	8.21E-07	0.00E+00	1.28E-06	4.32E-07	9.08E-07	0.00E+00	1.34E-06	8.73E-08	1.45E-07	0.00E+00	2.32E-07	3.47E-07	6.77E-07	0.00E+00	1.02E-06	7.45E-08	1.10E-07	0.00E+00	1.85E-07	5.70E-08	6.49E-08	0.00E+00	1.22E-07
546	479961.3	3741963	4.35E-07	7.85E-07	0.00E+00	1.22E-06	4.13E-07	8.69E-07	0.00E+00	1.28E-06	8.35E-08	1.39E-07	0.00E+00	2.22E-07	3.32E-07	6.48E-07	0.00E+00	9.79E-07	7.13E-08	1.06E-07	0.00E+00	1.77E-07	5.45E-08	6.21E-08	0.00E+00	1.17E-07
547	479943.1	3741963	4.16E-07	7.5E-07	0.00E+00	1.17E-06	3.94E-07	8.29E-07	0.00E+00	1.22E-06	7.97E-08	1.32E-07	0.00E+00	2.12E-07	3.17E-07	6.18E-07	0.00E+00	9.35E-07	6.80E-08	1.01E-07	0.00E+00	1.69E-07	5.20E-08	5.92E-08	0.00E+00	1.11E-07
548	479924.9	3741963	3.96E-07	7.15E-07	0.00E+00	1.11E-06	3.76E-07	7.90E-07	0.00E+00	1.17E-06	7.60E-08	1.26E-07	0.00E+00	2.02E-07	3.02E-07	5.89E-07	0.00E+00	8.91E-07	6.49E-08	9.61E-08	0.00E+00	1.61E-07	4.96E-08	5.65E-08	0.00E+00	1.06E-07
549	479906.7	3741963	3.77E-07	6.8E-07	0.00E+00	1.06E-06	3.58E-07	7.53E-07	0.00E+00	1.11E-06	7.24E-08	1.20E-07	0.00E+00	1.93E-07	2.87E-07	5.61E-07	0.00E+00	8.48E-07	6.18E-08	9.16E-08	0.00E+00	1.53E-07	4.72E-08	5.38E-08	0.00E+00	1.01E-07
550	480105.3	3741920	5.16E-07	9.31E-07	0.00E+00	1.45E-06	4.90E-07	1.03E-06	0.00E+00	1.52E-06	9.90E-08	1.64E-07	0.00E+00	2.63E-07	3.93E-07	7.68E-07	0.00E+00	1.16E-06	8.45E-08	1.25E-07	0.00E+00	2.10E-07	6.46E-08	7.36E-08	0.00E+00	1.38E-07
551	480138.1	3741934	5.55E-07	1E-06	0.00E+00	1.56E-06	5.27E-07	1.11E-06	0.00E+00	1.64E-06	1.07E-07	1.77E-07	0.00E+00	2.84E-07	4.23E-07	8.26E-07	0.00E+00	1.25E-06	9.09E-08	1.35E-07	0.00E+00	2.26E-07	6.95E-08	7.92E-08	0.00E+00	1.49E-07
552	480170.8	3741947	5.91E-07	1.07E-06	0.00E+00	1.66E-06	5.61E-07	1.18E-06	0.00E+00	1.74E-06	1.13E-07	1.88E-07	0.00E+00	3.02E-07	4.50E-07	8.79E-07	0.00E+00	1.33E-06	9.68E-08	1.43E-07	0.00E+00	2.40E-07	7.40E-08	8.43E-08	0.00E+00	1.58E-07
553	480203.6	3741961	6.21E-07	1.12E-06	0.00E+00	1.74E-06	5.90E-07	1.24E-06	0.00E+00	1.83E-06	1.19E-07	1.98E-07	0.00E+00	3.17E-07	4.73E-07	9.24E-07	0.00E+00	1.40E-06	1.02E-07	1.51E-07	0.00E+00	2.53E-07	7.78E-08	8.86E-08	0.00E+00	1.66E-07
554	480236.3	3741975	6.44E-07	1.16E-06	0.00E+00	1.81E-06	6.11E-07	1.28E-06	0.00E+00	1.90E-06	1.24E-07	2.05E-07	0.00E+00	3.29E-07	4.90E-07	9.58E-07	0.00E+00	1.45E-06	1.05E-07	1.56E-07	0.00E+00	2.62E-07	8.06E-08	9.18E-08	0.00E+00	1.72E-07
555	480269.1	3741988	6.57E-07	1.18E-06	0.00E+00	1.84E-06	6.23E-07	1.31E-06	0.00E+00	1.93E-06	1.26E-07	2.09E-07	0.00E+00	3.35E-07	5.00E-07	9.77E-07	0.00E+00	1.48E-06	1.08E-07	1.59E-07	0.00E+00	2.67E-07	8.22E-08	9.36E-08	0.00E+00	1.76E-07
556	480301.9	3742002	6.59E-07	1.19E-06	0.00E+00	1.85E-06	6.26E-07	1.32E-06	0.00E+00	1.94E-06	1.26E-07	2.10E-07	0.00E+00	3.37E-07	5.02E-07	9.81E-07	0.00E+00	1.48E-06	1.08E-07	1.60E-07	0.00E+00	2.68E-07	8.25E-08	9.40E-08	0.00E+00	1.76E-07
557	480334.6	3742016	6.51E-07	1.17E-06	0.00E+00	1.82E-06	6.17E-07	1.30E-06	0.00E+00	1.92E-06	1.25E-07	2.07E-07	0.00E+00	3.32E-07	4.96E-07	9.68E-07	0.00E+00	1.46E-06	1.07E-07	1.58E-07	0.00E+00	2.64E-07	8.14E-08	9.28E-08	0.00E+00	1.74E-07
558	480367.4	3742029	6.32E-07	1.14E-06	0.00E+00	1.77E-06	5.99E-07	1.26E-06	0.00E+00	1.86E-06	1.21E-07	2.01E-07	0.00E+00	3.22E-07	4.81E-07	9.39E-07	0.00E+00	1.42E-06	1.03E-07	1.53E-07	0.00E+00	2.57E-07	7.90E-08	9.00E-08	0.00E+00	1.69E-07
559	480400.1	3742043	6.03E-07	1.09E-06	0.00E+00	1.69E-06	5.72E-07	1.20E-06	0.00E+00	1.78E-06	1.16E-07	1.92E-07	0.00E+00	3.08E-07	4.59E-07	8.97E-07	0.00E+00	1.36E-06	9.87E-08	1.46E-07	0.00E+00	2.45E-07	7.55E-08	8.60E-08	0.00E+00	1.61E-07
560	480432.9	3742057	5.67E-07	1.02E-06	0.00E+00	1.59E-06	5.38E-07	1.13E-06	0.00E+00	1.67E-06	1.09E-07	1.81E-07	0.00E+00	2.90E-07	4.32E-07	8.44E-07	0.00E+00	1.28E-06	9.29E-08	1.38E-07	0.00E+00	2.31E-07	7.10E-08	8.09E-08	0.00E+00	1.52E-07
561	480465.7	3742070	5.27E-07	9.5E-07	0.00E+00	1.48E-06	5.00E-07	1.05E-06	0.00E+00	1.55E-06	1.01E-07	1.68E-07	0.00E+00	2.69E-07	4.01E-07	7.83E-07	0.00E+00	1.18E-06	8.62E-08	1.28E-07	0.00E+00	2.14E-07	6.59E-08	7.50E-08	0.00E+00	1.41E-07
562	480498.4	3742084	4.83E-07	8.71E-07	0.00E+00	1.35E-06	4.58E-07	9.63E-07	0.00E+00	1.42E-06	9.26E-08	1.54E-07	0.00E+00	2.46E-07	3.68E-07	7.18E-07	0.00E+00	1.09E-06	7.90E-08	1.17E-07	0.00E+00	1.96E-07	6.04E-08	6.88E-08	0.00E+00	1.29E-07
563	480531.2	3742098	4.38E-07	7.91E-07	0.00E+00	1.23E-06	4.16E-07	8.74E-07	0.00E+00	1.29E-06	8.41E-08	1.40E-07	0.00E+00	2.24E-07	3.34E-07	6.52E-07	0.00E+00	9.86E-07	7.17E-08	1.06E-07	0.00E+00	1.78E-07	5.48E-08	6.25E-08	0.00E+00	1.17E-07
564	480554.3	3742121	4.07E-07	7.34E-07	0.00E+00	1.14E-06	3.86E-07	8.12E-07	0.00E+00	1.20E-06	7.80E-08	1.30E-07	0.00E+00	2.08E-07	3.10E-07	6.05E-07	0.00E+00	9.15E-07	6.66E-08	9.87E-08	0.00E+00	1.65E-07	5.09E-08	5.80E-08	0.00E+00	1.09E-07
565	480662.5	3742384	2.18E-07	3.93E-07	0.00E+00	6.11E-07	2.07E-07	4.35E-07	0.00E+00	6.41E-07	4.18E-08	6.95E-08	0.00E+00	1.11E-07	1.66E-07	3.24E-07	0.00E+00	4.90E-07	3.57E-08	5.29E-08	0.00E+00	8.85E-08	2.73E-08	3.11E-08	0.00E+00	5.83E-08
566	480676	3742416	2.00E-07	3.6E-07	0.00E+00	5.60E-07	1.89E-07	3.98E-07	0.00E+00	5.88E-07	3.83E-08	6.36E-08	0.00E+00	1.02E-07	1.52E-07	2.97E-07	0.00E+00	4.49E-07	3.27E-08	4.85E-08	0.00E+00	8.11E-08	2.50E-08	2.85E-08	0.00E+00	5.34E-08
567	480689.6	3742449	1.84E-07	3.31E-07	0.00E+00	5.15E-07	1.74E-07	3.66E-07	0.00E+00	5.41E-07	3.52E-08	5.85E-08	0.00E+00	9.38E-08	1.40E-07	2.73E-07	0.00E+00	4.13E-07	3.01E-08	4.46E-08	0.00E+00	7.46E-08	2.30E-08	2.62E-08	0.00E+00	4.92E-08
568	480070.7	3741913	4.82E-07	8.69E-07	0.00E+00	1.35E-06	4.57E-07	9.61E-07	0.00E+00	1.42E-06	9.24E-08	1.54E-07	0.00E+00	2.46E-07	3.67E-07	7.17E-07	0.00E+00	1.08E-06	7.89E-08	1.17E-07	0.00E+00	1.96E-07	6.03E-08	6.87E-08	0.00E+00	1.29E-07
569	480052.5	3741913	4.67E-07	8.42E-07	0.00E+00	1.31E-06	4.43E-07	9.32E-07	0.00E+00	1.37E-06	8.96E-08	1.49E-07	0.00E+00	2.38E-07	3.56E-07	6.95E-07	0.00E+00	1.05E-06	7.64E-08	1.13E-07	0.00E+00	1.90E-07	5.84E-08	6.66E-08	0.00E+00	1.25E-07
570	480034.3	3741913	4.52E-07	8.14E-07	0.00E+00	1.27E-06	4.28E-07	9.01E-07	0.00E+00	1.33E-06	8.66E-08	1.44E-07	0.00E+00	2.31E-07	3.44E-07	6.72E-07	0.00E+00	1.02E-06	7.39E-08	1.10E-07	0.00E+00	1.83E-07	5.65E-08	6.44E-08	0.00E+00	1.21E-07
571	480016.1	3741913	4.36E-07	7.86E-07	0.00E+00	1.22E-06	4.13E-07	8.69E-07	0.00E+00	1.28E-06	8.36E-08	1.39E-07	0.00E+00	2.22E-07	3.32E-07	6.48E-07	0.00E+00	9.80E-07	7.13E-08	1.06E-07	0.00E+00	1.77E-07	5.45E-08	6.21E-08	0.00E+00	1.17E-07
572	479997.9	3741913	4.19E-07	7.56E-07	0.00E+00	1.18E-06	3.98E-07	8.37E-07	0.00E+00	1.23E-06	8.04E-08	1.34E-07	0.00E+00	2.14E-07	3.19E-07	6.24E-07	0.00E+00	9.43E-07	6.86E-08	1.02E-07	0.00E+00	1.70E-07	5.25E-08	5.98E-08	0.00E+00	1.12E-07
573	479979.7	3741913	4.03E-07	7.26E-07	0.00E+00	1.13E-06	3.82E-07	8.04E-07	0.00E+00	1.19E-06	7.73E-08	1.28E-07	0.00E+00	2.06E-07	3.07E-07	5.99E-07	0.00E+00	9.06E-07	6.59E-08	9.77E-08	0.00E+00	1.64E-07	5.04E-08	5.74E-08	0.00E+00	1.08E-07
574	479961.4	3741913	3.86E-07	6.97E-07	0.00E+00	1.08E-06	3.66E-07	7.71E-07	0.00E+00	1.14E-06	7.41E-08	1.23E-07	0.00E+00	1.97E-07	2.94E-07	5.75E-07	0.00E+00	8.69E-07	6.32E-08	9.37E-08	0.00E+00	1.57E-07	4.83E-08	5.51E-08	0.00E+00	1.03E-07
575	479943.2	3741913	3.70E-07	6.67E-07	0.00E+00	1.04E-06	3.51E-07	7.38E-07	0.00E+00	1.09E-06	7.09E-08	1.18E-07	0.00E+00	1.89E-07	2.82E-07	5.50E-07	0.00E+00	8.32E-07	6.05E-08	8.97E-08	0.00E+00	1.50E-07	4.63E-08	5.27E-08	0.00E+00	9.90E-08
576	479925	3741913	3.54E-07	6.38E-07	0.00E+00	9.92E-07	3.36E-07	7.06E-07	0.00E+00	1.04E-06	6.78E-08	1.13E-07	0.00E+00	1.81E-07	2.69E-07	5.26E-07	0.00E+00	7.95E-07	5.79E-08	8.58E-08	0.00E+00	1.44E-07	4.43E-08	5.04E-08	0.00E+00	9.47E-08
577	479906.8	3741913	3.38E-07	6.09E-07	0.00E+00	9.47E-07	3.21E-07	6.74E-07	0.00E+00	9.95E-07	6.48E-08	1.08E-07	0.00E+00	1.73E-07	2.57E-07	5.03E-07	0.00E+00	7.60E-07	5.53E-08	8.20E-08	0.00E+00	1.37E-07	4.23E-08	4.82E-08	0.00E+00	9.04E-08
578	480105.5	3741870	4.56E-07	8.22E-07	0.00E+00	1.28E-06	4.33E-07	9.10E-07	0.00E+00	1.34E-06	8.75E-08	1.45E-07	0.00E+00	2.33E-07	3.47E-07	6.78E-07	0.00E+00	1.03E-06	7.46E-08	1.11E-07	0.00E+00	1.85E-07	5.71E-08	6.50E-08	0.00E+00	1.22E-07
579	480138.5	3741884	4.90E-07	8.84E-07	0.00E+00	1.37E-06	4.65E-07	9.78E-07	0.00E+00	1.44E-06	9.41E-08	1.56E-07	0.00E+00	2.50E-07	3.73E-07	7.29E-07	0.00E+00	1.10E-06	8.03E-08	1.19E-07	0.00E+00	1.99E-07	6.13E-08	6.99E-08	0.00E+00	1.31E-07
580	480171.4	3741898	5.22E-07	9.42E-07	0.00E+00	1.46E-06	4.95E-07	1.04E-06	0.00E+00	1.54E-06	1.00E-07	1.66E-07	0.00E+00	2.67E-07	3.98E-07	7.77E-07	0.00E+00	1.17E-06	8.55E-08	1.27E-07	0.00E+00	2.12E-07	6.53E-08	7.44E-08	0.00E+00	1.40E-07
581	480204.3	3741911	5.50E-07	9.92E-07	0.00E+00	1.54E-06	5.22E-07	1.10E-06	0.00E+00	1.62E-06	1.06E-07	1.75E-07	0.00E+00	2.81E-07	4.19E-07	8.18E-07	0.00E+00	1.24E-06	9.00E-08	1.33E-07	0.00E+00	2.24E-07	6.88E-08	7.84E-08	0.00E+00	1.47E-07
582	480237.2	3741925	5.72E-07	1.03E-06	0.00E+00	1.60E-06	5.43E-07	1.14E-06	0.00E+00	1.68E-06	1.10E-07	1.82E-07	0.00E+00	2.92E-07	4.36E-07	8.51E-07	0.00E+00	1.29E-06	9.37E-08	1.39E-07	0.00E+00	2.33E-07	7.16E-08	8.16E-08	0.00E+00	1.53E-07
583	480270.2	3741939	5.88E-07	1.06E-06	0.00E+00	1.65E-06	5.57E-07	1.17E-06	0.00E+00	1.73E-06	1.13E-07	1.87E-07	0.00E+00	3.00E-07	4.47E-07	8.74E-07	0.00E+00	1.32E-06	9.62E-08	1.43E-07	0.00E+00	2.39E-07	7.35E-08	8.37E-08	0.00E+00	1.57E-07
584	480303.1	3741953	5.94E-07	1.07E-06	0.00E+00	1.67E-06	5.64E-07	1.19E-06	0.00E+00	1.75E-06	1.14E-07	1.89E-07	0.00E+00	3.03E-07	4.53E-07	8.84E-07	0.00E+00	1.34E-06	9.73E-08	1.44E-07	0.00E+00	2.42E-07	7.44E-08	8.47E-08	0.00E+00	1.59E-07
585	480336	3741966	5.92E-07	1.07E-06	0.00E+00	1.66E-06	5.62E-07	1.18E-06	0.00E+00	1.74E-06	1.14E-07	1.89E-07	0.00E+00	3.02E-07	4.51E-07	8.81E-07	0.00E+00	1.33E-06	9.70E-08	1.44E-07	0.00E+00	2.41E-07	7.41E-08	8.44E-08	0.00E+00	1.59E-07
586	480369	3741980	5.82E-07	1.05E-06	0.00E+00	1.63E-06	5.52E-07	1.16E-06	0.00E+00	1.71E-06	1.12E-07	1.85E-07	0.00E+00	2.97E-07	4.43E-07	8.65E-07	0.00E+00	1.31E-06	9.52E-08	1.41E-07	0.00E+00	2.36E-07	7.28E-08	8.29E-08	0.00E+00	1.56E-07
587	480401.9	3741994	5.62E-07	1.01E-06	0.00E+00	1.58E-06	5.33E-07	1.12E-06	0.00E+00	1.65E-06	1.08E-07	1.79E-07	0.00E+00	2.87E-07	4.28E-07	8.36E-07	0.00E+00	1.26E-06	9.20E-08	1.36E-07	0.00E+00	2.28E-07	7.03E-08	8.01E-08	0.00E+00	1.50E-07
588	480434.8	3742008	5.36E-07	9.67E-07	0.00E+00	1.50E-06	5.08E-07	1.07E-06	0.00E+00	1.58E-06	1.03E-07	1.71E-07	0.00E+00	2.74E-07	4.08E-07	7.97E-07	0.00E+00	1.21E-06	8.77E-08	1.30E-07	0.00E+00	2.18E-07	6.70E-08	7.64E-08	0.00E+00	1.43E-07
589	480467.7	3742021	5.04E-07	9.09E-07	0.00E+00	1.41E-06	4.78E-07	1.01E-06	0.00E+00	1.48E-06	9.66E-08	1.61E-07	0.00E+00	2.57E-07	3.84E-07	7.49E-07	0.00E+00	1.13E-06	8.25E-08	1.22E-07	0.00E+00	2.05E-07	6.30E-08	7.18E-08	0.00E+00	1.35E-07
590	480500.7	3742035	4.68E-07	8.44E-07	0.00E+00	1.31E-06	4.44E-07	9.34E-07	0.00E+00	1.38E-06	8.98E-08	1.49E-07	0.00E+00	2.39E-07	3.56E-07	6.96E-07	0.00E+00	1.05E-06	7.66E-08	1.14E-07	0.00E+00	1.90E-07	5.86E-08	6.67E-08	0.00E+00	1.25E-07
591	480533.6	3742049	4.30E-07	7.76E-07	0.00E+00	1.21E-06	4.08E-07	8.59E-07	0.00E+00	1.27E-06	8.26E-08	1.37E-07	0.00E+00	2.20E-07	3.28E-07	6.40E-07	0.00E+00	9.68E-07	7.05E-08	1.04E-07	0.00E+00	1.75E-07	5.39E-08	6.14E-08	0.00E+00	1.15E-07
592	480566.5	3742063	3.92E-07	7.08E-07	0.00E+00	1.10E-06	3.72E-07	7.83E-07	0.00E+00	1.15E-06	7.53E-08	1.25E-07	0.00E+00	2.00E-07	2.99E-07	5.84E-07	0.00E+00	8.82E-07	6.42E-08	9.52E-08	0.00E+00	1.59E-07	4.91E-08	5.59E-08	0.00E+00	1.05E-07
593	480589.8	3742086	3.66E-07	6.59E-07	0.00E+00	1.02E-06	3.47E-07	7.29E-07	0.00E+00	1.08E-06	7.01E-08	1.17E-07	0.00E+00	1.87E-07	2.78E-07	5.44E-07	0.00E+00	8.22E-07	5.98E-08	8.87E-08	0.00E+00	1.49E-07	4.57E-08	5.21E-08	0.00E+00	9.78E-08
594	480603.4	3742119	3.47E-07	6.26E-07	0.00E+00	9.74E-07	3.29E-07	6.93E-07	0.00E+00	1.02E-06	6.66E-08	1.11E-07	0.00E+00	1.77E-07	2.64E-07	5.16E-07	0.00E+00	7.81E-07	5.68E-08	8.43E-08	0.00E+00	1.41E-07	4.34E-08	4.95E-08	0.00E+00	9.29E-08
595	480698.5	3742350	2.03E-07	3.66E-07	0.00E+00	5.70E-07	1.93E-07	4.05E-07	0.00E+00	5.98E-07	3.90E-08	6.48E-08	0.00E+00	1.04E-07	1.55E-07	3.02E-07	0.00E+00	4.57E-07	3.33E-08	4.93E-08	0.00E+00	8.26E-08	2.54E-08	2.90E-08	0.00E+00	5.44E-08
596	480712.1	3742383	1.87E-07	3.37E-07	0.00E+00	5.24E-07	1.77E-07	3.73E-07	0.00E+00	5.50E-07	3.59E-08	5.96E-08	0.00E+00	9.54E-08	1.42E-07	2.78E-07	0.00E+00	4.20E-07	3.06E-08	4.53E-08	0.00E+00	7.59E-08	2.34E-08	2.66E-08	0.00E+00	5.00E-08
597	480725.7	3742416	1.72E-07	3.11E-07	0.00E+00	4.83E-07	1.64E-07	3.44E-07	0.00E+00	5.08E-07	3.31E-08	5.49E-08	0.00E+00	8.80E-08	1.31E-07	2.56E-07	0.00E+00	3.88E-07	2.82E-08	4.18E-08	0.00E+00	7.01E-08	2.16E-08	2.46E-08	0.00E+00	4.61E-08
598	480070.9	3741863	4.26E-07	7.69E-07	0.00E+00	1.20E-06	4.05E-07	8.51E-07	0.00E+00	1.26E-06	8.18E-08	1.36E-07	0.00E+00	2.18E-07	3.25E-07	6.34E-07	0.00E+00	9.59E-07	6.98E-08	1.03E-07	0.00E+00	1.73E-07	5.34E-08	6.08E-08	0.00E+00	1.14E-07
599	480052.7	3741863	4.14E-07	7.46E-07	0.00E+00	1.16E-06	3.93E-07	8.26E-07	0.00E+00	1.22E-06	7.94E-08	1.32E-07	0.00E+00	2.11E-07	3.15E-07	6.15E-07	0.00E+00	9.31E-07	6.77E-08	1.00E-07	0.00E+00	1.68E-07	5.18E-08	5.90E-08	0.00E+00	1.11E-07
600	480034.4	3741863	4.01E-07	7.23E-07	0.00E+00	1.12E-06	3.80E-07	7.99E-07	0.00E+00	1.18E-06	7.69E-08	1.28E-07	0.00E+00	2.05E-07	3.05E-07	5.96E-07	0.00E+00	9.01E-07	6.56E-08	9.72E-08	0.00E+00	1.63E-07	5.01E-08	5.71E-08	0.00E+00	1.07E-07
601	480016.2	3741863	3.87E-07	6.98E-07	0.00E+00	1.09E-06	3.67E-07	7.72E-07	0.00E+00	1.14E-06	7.43E-08	1.23E-07	0.00E+00	1.98E-07	2.95E-07	5.76E-07	0.00E+00	8.71E-07	6.34E-08	9.39E-08	0.00E+00	1.57E-07	4.84E-08	5.52E-08	0.00E+00	1.04E-07
602	479998	3741863	3.73E-07	6.73E-07	0.00E+00	1.05E-06	3.54E-07	7.45E-07	0.00E+00	1.10E-06	7.16E-08	1.19E-07	0.00E+00	1.91E-07	2.84E-07	5.55E-07	0.00E+00	8.39E-07	6.11E-08	9.06E-08	0.00E+00	1.52E-07	4.67E-08	5.32E-08	0.00E+00	9.99E-08
603	479979.8	3741863	3.59E-07	6.48E-07	0.00E+00	1.01E-06	3.41E-07	7.17E-07	0.00E+00	1.06E-06	6.89E-08	1.15E-07	0.00E+00	1.83E-07	2.74E-07	5.35E-07	0.00E+00	8.08E-07	5.88E-08	8.72E-08	0.00E+00	1.46E-07	4.50E-08	5.12E-08	0.00E+00	9.62E-08
604	479961.6	3741863	3.45E-07	6.23E-07	0.00E+00	9.69E-07	3.28E-07	6.89E-07	0.00E+00	1.02E-06	6.63E-08	1.10E-07	0.00E+00	1.76E-07	2.63E-07	5.14E-07	0.00E+00	7.77E-07	5.65E-08	8.38E-08	0.00E+00	1.40E-07	4.32E-08	4.92E-08	0.00E+00	9.25E-08
605	479943.4	3741863	3.32E-07	5.98E-07	0.00E+00	9.30E-07	3.15E-07	6.62E-07	0.00E+00	9.76E-07	6.36E-08	1.06E-07	0.00E+00	1.69E-07	2.53E-07	4.93E-07	0.00E+00	7.46E-07	5.43E-08	8.05E-08	0.00E+00	1.35E-07	4.15E-08	4.73E-08	0.00E+00	8.88E-08
606	479925.2	3741863	3.18E-07	5.74E-07	0.00E+00	8.92E-07	3.02E-07	6.34E-07	0.00E+00	9.36E-07	6.10E-08	1.01E-07	0.00E+00	1.62E-07	2.42E-07	4.73E-07	0.00E+00	7.15E-07	5.21E-08	7.72E-08	0.00E+00	1.29E-07	3.98E-08	4.53E-08	0.00E+00	8.51E-08
607	479907	3741863	3.05E-07	5.49E-07	0.00E+00	8.54E-07	2.89E-07	6.08E-07	0.00E+00	8.97E-07	5.84E-08	9.71E-08	0.00E+00	1.56E-07	2.32E-07	4.53E-07	0.00E+00	6.85E-07	4.99E-08	7.39E-08	0.00E+00	1.24E-07	3.81E-08	4.34E-08	0.00E+00	8.15E-08
608	480105.8	3741820	4.06E-07	7.32E-07	0.00E+00	1.14E-06	3.85E-07	8.10E-07	0.00E+00	1.20E-06	7.79E-08	1.29E-07	0.00E+00	2.07E-07	3.09E-07	6.04E-07	0.00E+00	9.13E-07	6.65E-08	9.85E-08	0.00E+00	1.65E-07	5.08E-08	5.79E-08	0.00E+00	1.09E-07
609	480138.8	3741834	4.36E-07	7.86E-07	0.00E+00	1.22E-06	4.14E-07	8.70E-07	0.00E+00	1.28E-06	8.36E-08	1.39E-07	0.00E+00	2.23E-07	3.32E-07	6.49E-07	0.00E+00	9.81E-07	7.14E-08	1.06E-07	0.00E+00	1.77E-07	5.46E-08	6.22E-08	0.00E+00	1.17E-07
610	480171.9	3741848	4.64E-07	8.37E-07	0.00E+00	1.30E-06	4.41E-07	9.26E-07	0.00E+00	1.37E-06	8.91E-08	1.48E-07	0.00E+00	2.37E-07	3.54E-07	6.91E-07	0.00E+00	1.04E-06	7.60E-08	1.13E-07	0.00E+00	1.89E-07	5.81E-08	6.62E-08	0.00E+00	1.24E-07
611	480205	3741862	4.90E-07	8.83E-07	0.00E+00	1.37E-06	4.65E-07	9.77E-07	0.00E+00	1.44E-06	9.39E-08	1.56E-07	0.00E+00	2.50E-07	3.73E-07	7.28E-07	0.00E+00	1.10E-06	8.02E-08	1.19E-07	0.00E+00	1.99E-07	6.13E-08	6.98E-08	0.00E+00	1.31E-07
612	480238.1	3741875	5.11E-07	9.22E-07	0.00E+00	1.43E-06	4.85E-07	1.02E-06	0.00E+00	1.50E-06	9.80E-08	1.63E-07	0.00E+00	2.61E-07	3.89E-07	7.60E-07	0.00E+00	1.15E-06	8.37E-08	1.24E-07	0.00E+00	2.08E-07	6.39E-08	7.28E-08	0.00E+00	1.37E-07
613	480271.1	3741889	5.27E-07	9.5E-07	0.00E+00	1.48E-06	5.00E-07	1.05E-06	0.00E+00	1.55E-06	1.01E-07	1.68E-07	0.00E+00	2.69E-07	4.01E-07	7.84E-07	0.00E+00	1.19E-06	8.63E-08	1.28E-07	0.00E+00	2.14E-07	6.59E-08	7.51E-08	0.00E+00	1.41E-07
614	480304.2	3741903	5.36E-07	9.67E-07	0.00E+00	1.50E-06	5.09E-07	1.07E-06	0.00E+00	1.58E-06	1.03E-07	1.71E-07	0.00E+00	2.74E-07	4.08E-07	7.98E-07	0.00E+00	1.21E-06	8.78E-08	1.30E-07	0.00E+00	2.18E-07	6.71E-08	7.65E-08	0.00E+00	1.44E-07
615	480337.3	3741917	5.39E-07	9.72E-07	0.00E+00	1.51E-06	5.11E-07	1.08E-06	0.00E+00	1.59E-06	1.03E-07	1.72E-07	0.00E+00	2.75E-07	4.10E-07	8.02E-07	0.00E+00	1.21E-06	8.82E-08	1.31E-07	0.00E+00	2.19E-07	6.74E-08	7.68E-08	0.00E+00	1.44E-07
616	480370.4	3741931	5.34E-07	9.63E-07	0.00E+00	1.50E-06	5.07E-07	1.07E-06	0.00E+00	1.57E-06	1.02E-07	1.70E-07	0.00E+00	2.73E-07	4.07E-07	7.94E-07	0.00E+00	1.20E-06	8.74E-08	1.30E-07	0.00E+00	2.17E-07	6.68E-08	7.61E-08	0.00E+00	1.43E-07
617	480403.4	3741944	5.22E-07	9.41E-07	0.00E+00	1.46E-06	4.95E-07	1.04E-06	0.00E+00	1.54E-06	1.00E-07	1.66E-07	0.00E+00	2.66E-07	3.97E-07	7.76E-07	0.00E+00	1.17E-06	8.54E-08	1.27E-07	0.00E+00	2.12E-07	6.53E-08	7.44E-08	0.00E+00	1.40E-07
618	480436.5	3741958	5.03E-07	9.08E-07	0.00E+00	1.41E-06	4.77E-07	1.00E-06	0.00E+00	1.48E-06	9.65E-08	1.60E-07	0.00E+00	2.57E-07	3.83E-07	7.48E-07	0.00E+00	1.13E-06	8.24E-08	1.22E-07	0.00E+00	2.04E-07	6.30E-08	7.17E-08	0.00E+00	1.35E-07
619	480469.6	3741972	4.79E-07	8.64E-07	0.00E+00	1.34E-06	4.54E-07	9.56E-07	0.00E+00	1.41E-06	9.19E-08	1.53E-07	0.00E+00	2.45E-07	3.65E-07	7.12E-07	0.00E+00	1.08E-06	7.84E-08	1.16E-07	0.00E+00	1.95E-07	5.99E-08	6.83E-08	0.00E+00	1.28E-07
620	480502.7	3741986	4.51E-07	8.13E-07	0.00E+00	1.26E-06	4.27E-07	8.99E-07	0.00E+00	1.33E-06	8.64E-08	1.44E-07	0.00E+00	2.30E-07	3.43E-07	6.70E-07	0.00E+00	1.01E-06	7.38E-08	1.09E-07	0.00E+00	1.83E-07	5.64E-08	6.42E-08	0.00E+00	1.21E-07
621	480535.7	3742000	4.19E-07	7.56E-07	0.00E+00	1.18E-06	3.98E-07	8.37E-07	0.00E+00	1.23E-06	8.04E-08	1.34E-07	0.00E+00	2.14E-07	3.19E-07	6.24E-07	0.00E+00	9.43E-07	6.86E-08	1.02E-07	0.00E+00	1.70E-07	5.25E-08	5.98E-08	0.00E+00	1.12E-07
622	480568.8	3742013	3.87E-07	6.97E-07	0.00E+00	1.08E-06	3.67E-07	7.71E-07	0.00E+00	1.14E-06	7.42E-08	1.23E-07	0.00E+00	1.97E-07	2.94E-07	5.75E-07	0.00E+00	8.70E-07	6.33E-08	9.38E-08	0.00E+00	1.57E-07	4.84E-08	5.51E-08	0.00E+00	1.03E-07
623	480601.9	3742027	3.54E-07	6.38E-07	0.00E+00	9.92E-07	3.36E-07	7.06E-07	0.00E+00	1.04E-06	6.79E-08	1.13E-07	0.00E+00	1.81E-07	2.69E-07	5.26E-07	0.00E+00	7.96E-07	5.79E-08	8.59E-08	0.00E+00	1.44E-07	4.43E-08	5.04E-08	0.00E+00	9.47E-08
624	480625.2	3742051	3.31E-07	5.96E-07	0.00E+00	9.27E-07	3.14E-07	6.59E-07	0.00E+00	9.73E-07	6.34E-08	1.05E-07	0.00E+00	1.69E-07	2.52E-07	4.92E-07	0.00E+00	7.43E-07	5.41E-08	8.02E-08	0.00E+00	1.34E-07	4.14E-08	4.71E-08	0.00E+00	8.85E-08
625	480638.9	3742084	3.15E-07	5.68E-07	0.00E+00	8.82E-07	2.99E-07	6.28E-07	0.00E+00	9.27E-07	6.04E-08	1.00E-07	0.00E+00	1.61E-07	2.40E-07	4.68E-07	0.00E+00	7.08E-07	5.15E-08	7.64E-08	0.00E+00	1.28E-07	3.94E-08	4.49E-08	0.00E+00	8.42E-08
626	480652.6	3742117	2.97E-07	5.36E-07	0.00E+00	8.34E-07	2.82E-07	5.93E-07	0.00E+00	8.75E-07	5.70E-08	9.48E-08	0.00E+00	1.52E-07	2.26E-07	4.42E-07	0.00E+00	6.69E-07	4.87E-08	7.22E-08	0.00E+00	1.21E-07	3.72E-08	4.24E-08	0.00E+00	7.96E-08
627	480700.3	3742233	2.32E-07	4.18E-07	0.00E+00	6.50E-07	2.20E-07	4.63E-07	0.00E+00	6.83E-07	4.45E-08	7.39E-08	0.00E+00	1.18E-07	1.77E-07	3.45E-07	0.00E+00	5.22E-07	3.80E-08	5.63E-08	0.00E+00	9.43E-08	2.90E-08	3.31E-08	0.00E+00	6.21E-08
628	480714	3742266	2.14E-07	3.86E-07	0.00E+00	6.01E-07	2.03E-07	4.28E-07	0.00E+00	6.31E-07	4.11E-08	6.83E-08	0.00E+00	1.09E-07	1.63E-07	3.19E-07	0.00E+00	4.82E-07	3.51E-08	5.20E-08	0.00E+00	8.71E-08	2.68E-08	3.05E-08	0.00E+00	5.74E-08
629	480720.8	3742283	2.06E-07	3.71E-07	0.00E+00	5.77E-07	1.95E-07	4.11E-07	0.00E+00	6.06E-07	3.95E-08	6.56E-08	0.00E+00	1.05E-07	1.57E-07	3.06E-07	0.00E+00	4.63E-07	3.37E-08	4.99E-08	0.00E+00	8.36E-08	2.58E-08	2.93E-08	0.00E+00	5.51E-08

630	480734.5	3742316	1.90E-07	3.43E-07	0.00E+00	5.32E-07	1.80E-07	3.79E-07	0.00E+00	5.59E-07	3.64E-08	6.05E-08	0.00E+00	9.70E-08	1.45E-07	2.82E-07	0.00E+00	4.27E-07	3.11E-08	4.61E-08	0.00E+00	7.72E-08	2.38E-08	2.71E-08	0.00E+00	5.08E-08
631	480748.1	3742349	1.75E-07	3.16E-07	0.00E+00	4.92E-07	1.66E-07	3.50E-07	0.00E+00	5.16E-07	3.36E-08	5.59E-08	0.00E+00	8.95E-08	1.34E-07	2.61E-07	0.00E+00	3.94E-07	2.87E-08	4.26E-08	0.00E+00	7.13E-08	2.19E-08	2.50E-08	0.00E+00	4.69E-08
632	480761.8	3742382	1.62E-07	2.93E-07	0.00E+00	4.55E-07	1.54E-07	3.24E-07	0.00E+00	4.78E-07	3.11E-08	5.17E-08	0.00E+00	8.28E-08	1.24E-07	2.41E-07	0.00E+00	3.65E-07	2.66E-08	3.94E-08	0.00E+00	6.59E-08	2.03E-08	2.31E-08	0.00E+00	4.34E-08
633	480775.4	3742415	1.51E-07	2.72E-07	0.00E+00	4.22E-07	1.43E-07	3.00E-07	0.00E+00	4.43E-07	2.89E-08	4.80E-08	0.00E+00	7.69E-08	1.15E-07	2.24E-07	0.00E+00	3.39E-07	2.46E-08	3.65E-08	0.00E+00	6.12E-08	1.88E-08	2.15E-08	0.00E+00	4.03E-08
634	480071	3741813	3.80E-07	6.86E-07	0.00E+00	1.07E-06	3.61E-07	7.59E-07	0.00E+00	1.12E-06	7.30E-08	1.21E-07	0.00E+00	1.94E-07	2.90E-07	5.66E-07	0.00E+00	8.56E-07	6.23E-08	9.23E-08	0.00E+00	1.55E-07	4.76E-08	5.42E-08	0.00E+00	1.02E-07
635	480052.8	3741813	3.70E-07	6.66E-07	0.00E+00	1.04E-06	3.51E-07	7.37E-07	0.00E+00	1.09E-06	7.09E-08	1.18E-07	0.00E+00	1.89E-07	2.81E-07	5.50E-07	0.00E+00	8.31E-07	6.05E-08	8.97E-08	0.00E+00	1.50E-07	4.62E-08	5.27E-08	0.00E+00	9.89E-08
636	480034.6	3741813	3.58E-07	6.46E-07	0.00E+00	1.00E-06	3.40E-07	7.15E-07	0.00E+00	1.05E-06	6.87E-08	1.14E-07	0.00E+00	1.83E-07	2.73E-07	5.33E-07	0.00E+00	8.06E-07	5.86E-08	8.69E-08	0.00E+00	1.46E-07	4.48E-08	5.11E-08	0.00E+00	9.59E-08
637	480016.4	3741813	3.47E-07	6.25E-07	0.00E+00	9.72E-07	3.29E-07	6.91E-07	0.00E+00	1.02E-06	6.65E-08	1.10E-07	0.00E+00	1.77E-07	2.64E-07	5.16E-07	0.00E+00	7.79E-07	5.67E-08	8.41E-08	0.00E+00	1.41E-07	4.34E-08	4.94E-08	0.00E+00	9.28E-08
638	479998.2	3741813	3.35E-07	6.04E-07	0.00E+00	9.39E-07	3.18E-07	6.68E-07	0.00E+00	9.86E-07	6.42E-08	1.07E-07	0.00E+00	1.71E-07	2.55E-07	4.98E-07	0.00E+00	7.53E-07	5.48E-08	8.13E-08	0.00E+00	1.36E-07	4.19E-08	4.77E-08	0.00E+00	8.96E-08
639	479980	3741813	3.23E-07	5.83E-07	0.00E+00	9.06E-07	3.06E-07	6.44E-07	0.00E+00	9.51E-07	6.20E-08	1.03E-07	0.00E+00	1.65E-07	2.46E-07	4.80E-07	0.00E+00	7.26E-07	5.29E-08	7.84E-08	0.00E+00	1.31E-07	4.04E-08	4.60E-08	0.00E+00	8.65E-08
640	479961.8	3741813	3.11E-07	5.61E-07	0.00E+00	8.72E-07	2.95E-07	6.21E-07	0.00E+00	9.16E-07	5.97E-08	9.92E-08	0.00E+00	1.59E-07	2.37E-07	4.63E-07	0.00E+00	7.00E-07	5.09E-08	7.55E-08	0.00E+00	1.26E-07	3.89E-08	4.44E-08	0.00E+00	8.33E-08
641	479943.5	3741813	2.99E-07	5.4E-07	0.00E+00	8.39E-07	2.84E-07	5.97E-07	0.00E+00	8.81E-07	5.74E-08	9.54E-08	0.00E+00	1.53E-07	2.28E-07	4.45E-07	0.00E+00	6.73E-07	4.90E-08	7.26E-08	0.00E+00	1.22E-07	3.75E-08	4.27E-08	0.00E+00	8.01E-08
642	479925.3	3741813	2.88E-07	5.19E-07	0.00E+00	8.07E-07	2.73E-07	5.74E-07	0.00E+00	8.47E-07	5.52E-08	9.17E-08	0.00E+00	1.47E-07	2.19E-07	4.28E-07	0.00E+00	6.47E-07	4.71E-08	6.98E-08	0.00E+00	1.17E-07	3.60E-08	4.10E-08	0.00E+00	7.70E-08
643	479907.1	3741813	2.76E-07	4.99E-07	0.00E+00	7.75E-07	2.62E-07	5.51E-07	0.00E+00	8.14E-07	5.30E-08	8.81E-08	0.00E+00	1.41E-07	2.10E-07	4.11E-07	0.00E+00	6.22E-07	4.52E-08	6.71E-08	0.00E+00	1.12E-07	3.46E-08	3.94E-08	0.00E+00	7.40E-08
644	480106	3741770	3.64E-07	6.56E-07	0.00E+00	1.02E-06	3.45E-07	7.26E-07	0.00E+00	1.07E-06	6.98E-08	1.16E-07	0.00E+00	1.86E-07	2.77E-07	5.41E-07	0.00E+00	8.18E-07	5.96E-08	8.83E-08	0.00E+00	1.48E-07	4.55E-08	5.19E-08	0.00E+00	9.74E-08
645	480139.2	3741784	3.90E-07	7.04E-07	0.00E+00	1.09E-06	3.70E-07	7.78E-07	0.00E+00	1.15E-06	7.48E-08	1.24E-07	0.00E+00	1.99E-07	2.97E-07	5.80E-07	0.00E+00	8.77E-07	6.39E-08	9.47E-08	0.00E+00	1.59E-07	4.88E-08	5.56E-08	0.00E+00	1.04E-07
646	480155.8	3741791	4.03E-07	7.27E-07	0.00E+00	1.13E-06	3.82E-07	8.04E-07	0.00E+00	1.19E-06	7.73E-08	1.28E-07	0.00E+00	2.06E-07	3.07E-07	5.99E-07	0.00E+00	9.06E-07	6.59E-08	9.78E-08	0.00E+00	1.64E-07	5.04E-08	5.74E-08	0.00E+00	1.08E-07
647	480189	3741805	4.27E-07	7.7E-07	0.00E+00	1.20E-06	4.05E-07	8.52E-07	0.00E+00	1.26E-06	8.19E-08	1.36E-07	0.00E+00	2.18E-07	3.25E-07	6.35E-07	0.00E+00	9.61E-07	6.99E-08	1.04E-07	0.00E+00	1.74E-07	5.34E-08	6.09E-08	0.00E+00	1.14E-07
648	480205.6	3741812	4.38E-07	7.91E-07	0.00E+00	1.23E-06	4.16E-07	8.75E-07	0.00E+00	1.29E-06	8.41E-08	1.40E-07	0.00E+00	2.24E-07	3.34E-07	6.52E-07	0.00E+00	9.86E-07	7.18E-08	1.06E-07	0.00E+00	1.78E-07	5.48E-08	6.25E-08	0.00E+00	1.17E-07
649	480222.2	3741819	4.49E-07	8.1E-07	0.00E+00	1.26E-06	4.26E-07	8.95E-07	0.00E+00	1.32E-06	8.61E-08	1.43E-07	0.00E+00	2.29E-07	3.42E-07	6.68E-07	0.00E+00	1.01E-06	7.35E-08	1.09E-07	0.00E+00	1.82E-07	5.62E-08	6.40E-08	0.00E+00	1.20E-07
650	480255.4	3741833	4.67E-07	8.42E-07	0.00E+00	1.31E-06	4.43E-07	9.32E-07	0.00E+00	1.37E-06	8.96E-08	1.49E-07	0.00E+00	2.38E-07	3.56E-07	6.95E-07	0.00E+00	1.05E-06	7.64E-08	1.13E-07	0.00E+00	1.90E-07	5.84E-08	6.66E-08	0.00E+00	1.25E-07
651	480272	3741839	4.75E-07	8.56E-07	0.00E+00	1.33E-06	4.50E-07	9.47E-07	0.00E+00	1.40E-06	9.10E-08	1.51E-07	0.00E+00	2.42E-07	3.61E-07	7.06E-07	0.00E+00	1.07E-06	7.77E-08	1.15E-07	0.00E+00	1.93E-07	5.94E-08	6.76E-08	0.00E+00	1.27E-07
652	480288.6	3741846	4.81E-07	8.67E-07	0.00E+00	1.35E-06	4.56E-07	9.59E-07	0.00E+00	1.42E-06	9.22E-08	1.53E-07	0.00E+00	2.45E-07	3.66E-07	7.15E-07	0.00E+00	1.08E-06	7.87E-08	1.17E-07	0.00E+00	1.95E-07	6.02E-08	6.85E-08	0.00E+00	1.29E-07
653	480321.8	3741860	4.89E-07	8.82E-07	0.00E+00	1.37E-06	4.64E-07	9.76E-07	0.00E+00	1.44E-06	9.38E-08	1.56E-07	0.00E+00	2.50E-07	3.72E-07	7.28E-07	0.00E+00	1.10E-06	8.01E-08	1.19E-07	0.00E+00	1.99E-07	6.12E-08	6.97E-08	0.00E+00	1.31E-07
654	480338.4	3741867	4.91E-07	8.86E-07	0.00E+00	1.38E-06	4.66E-07	9.80E-07	0.00E+00	1.45E-06	9.42E-08	1.57E-07	0.00E+00	2.51E-07	3.74E-07	7.30E-07	0.00E+00	1.10E-06	8.04E-08	1.19E-07	0.00E+00	2.00E-07	6.14E-08	7.00E-08	0.00E+00	1.31E-07
655	480371.6	3741881	4.91E-07	8.85E-07	0.00E+00	1.38E-06	4.65E-07	9.79E-07	0.00E+00	1.44E-06	9.41E-08	1.56E-07	0.00E+00	2.50E-07	3.74E-07	7.30E-07	0.00E+00	1.10E-06	8.03E-08	1.19E-07	0.00E+00	1.99E-07	6.14E-08	6.99E-08	0.00E+00	1.31E-07
656	480388.2	3741888	4.88E-07	8.8E-07	0.00E+00	1.37E-06	4.63E-07	9.73E-07	0.00E+00	1.44E-06	9.36E-08	1.56E-07	0.00E+00	2.49E-07	3.72E-07	7.26E-07	0.00E+00	1.10E-06	7.99E-08	1.18E-07	0.00E+00	1.98E-07	6.10E-08	6.95E-08	0.00E+00	1.31E-07
657	480404.8	3741895	4.84E-07	8.73E-07	0.00E+00	1.36E-06	4.59E-07	9.65E-07	0.00E+00	1.42E-06	9.28E-08	1.54E-07	0.00E+00	2.47E-07	3.68E-07	7.20E-07	0.00E+00	1.09E-06	7.92E-08	1.17E-07	0.00E+00	1.97E-07	6.05E-08	6.90E-08	0.00E+00	1.29E-07
658	480438	3741909	4.71E-07	8.5E-07	0.00E+00	1.32E-06	4.47E-07	9.40E-07	0.00E+00	1.39E-06	9.04E-08	1.50E-07	0.00E+00	2.41E-07	3.59E-07	7.01E-07	0.00E+00	1.06E-06	7.71E-08	1.14E-07	0.00E+00	1.91E-07	5.89E-08	6.72E-08	0.00E+00	1.26E-07
659	480454.6	3741916	4.63E-07	8.35E-07	0.00E+00	1.30E-06	4.39E-07	9.23E-07	0.00E+00	1.36E-06	8.88E-08	1.48E-07	0.00E+00	2.36E-07	3.52E-07	6.88E-07	0.00E+00	1.04E-06	7.58E-08	1.12E-07	0.00E+00	1.88E-07	5.79E-08	6.60E-08	0.00E+00	1.24E-07
660	480487.8	3741930	4.43E-07	7.98E-07	0.00E+00	1.24E-06	4.20E-07	8.83E-07	0.00E+00	1.30E-06	8.49E-08	1.41E-07	0.00E+00	2.26E-07	3.37E-07	6.58E-07	0.00E+00	9.95E-07	7.25E-08	1.07E-07	0.00E+00	1.80E-07	5.54E-08	6.31E-08	0.00E+00	1.18E-07
661	480504.4	3741936	4.31E-07	7.77E-07	0.00E+00	1.21E-06	4.09E-07	8.60E-07	0.00E+00	1.27E-06	8.27E-08	1.37E-07	0.00E+00	2.20E-07	3.28E-07	6.41E-07	0.00E+00	9.69E-07	7.06E-08	1.05E-07	0.00E+00	1.75E-07	5.39E-08	6.14E-08	0.00E+00	1.15E-07
662	480521	3741943	4.19E-07	7.55E-07	0.00E+00	1.17E-06	3.97E-07	8.35E-07	0.00E+00	1.23E-06	8.03E-08	1.33E-07	0.00E+00	2.14E-07	3.19E-07	6.23E-07	0.00E+00	9.42E-07	6.85E-08	1.02E-07	0.00E+00	1.70E-07	5.24E-08	5.97E-08	0.00E+00	1.12E-07
663	480554.2	3741957	3.92E-07	7.07E-07	0.00E+00	1.10E-06	3.72E-07	7.82E-07	0.00E+00	1.15E-06	7.52E-08	1.25E-07	0.00E+00	2.00E-07	2.99E-07	5.83E-07	0.00E+00	8.82E-07	6.42E-08	9.51E-08	0.00E+00	1.59E-07	4.91E-08	5.59E-08	0.00E+00	1.05E-07
664	480570.8	3741964	3.78E-07	6.82E-07	0.00E+00	1.06E-06	3.59E-07	7.54E-07	0.00E+00	1.11E-06	7.25E-08	1.21E-07	0.00E+00	1.93E-07	2.88E-07	5.62E-07	0.00E+00	8.50E-07	6.19E-08	9.18E-08	0.00E+00	1.54E-07	4.73E-08	5.39E-08	0.00E+00	1.01E-07
665	480604.1	3741978	3.50E-07	6.3E-07	0.00E+00	9.80E-07	3.32E-07	6.97E-07	0.00E+00	1.03E-06	6.71E-08	1.11E-07	0.00E+00	1.78E-07	2.66E-07	5.20E-07	0.00E+00	7.86E-07	5.72E-08	8.48E-08	0.00E+00	1.42E-07	4.37E-08	4.98E-08	0.00E+00	9.36E-08
666	480620.7	3741985	3.35E-07	6.05E-07	0.00E+00	9.40E-07	3.18E-07	6.69E-07	0.00E+00	9.87E-07	6.43E-08	1.07E-07	0.00E+00	1.71E-07	2.55E-07	4.99E-07	0.00E+00	7.54E-07	5.49E-08	8.13E-08	0.00E+00	1.36E-07	4.19E-08	4.78E-08	0.00E+00	8.97E-08
667	480637.3	3741992	3.21E-07	5.79E-07	0.00E+00	9.00E-07	3.05E-07	6.40E-07	0.00E+00	9.45E-07	6.16E-08	1.02E-07	0.00E+00	1.64E-07	2.44E-07	4.77E-07	0.00E+00	7.22E-07	5.25E-08	7.79E-08	0.00E+00	1.30E-07	4.02E-08	4.58E-08	0.00E+00	8.59E-08
668	480660.7	3742015	3.01E-07	5.42E-07	0.00E+00	8.43E-07	2.85E-07	6.00E-07	0.00E+00	8.85E-07	5.77E-08	9.58E-08	0.00E+00	1.54E-07	2.29E-07	4.47E-07	0.00E+00	6.76E-07	4.92E-08	7.30E-08	0.00E+00	1.22E-07	3.76E-08	4.29E-08	0.00E+00	8.05E-08
669	480674.4	3742049	2.87E-07	5.17E-07	0.00E+00	8.04E-07	2.72E-07	5.72E-07	0.00E+00	8.44E-07	5.50E-08	9.14E-08	0.00E+00	1.46E-07	2.18E-07	4.27E-07	0.00E+00	6.45E-07	4.70E-08	6.96E-08	0.00E+00	1.17E-07	3.59E-08	4.09E-08	0.00E+00	7.68E-08
670	480722.4	3742165	2.31E-07	4.17E-07	0.00E+00	6.49E-07	2.19E-07	4.62E-07	0.00E+00	6.81E-07	4.44E-08	7.37E-08	0.00E+00	1.18E-07	1.76E-07	3.44E-07	0.00E+00	5.20E-07	3.79E-08	5.61E-08	0.00E+00	9.40E-08	2.89E-08	3.30E-08	0.00E+00	6.19E-08
671	480736.1	3742198	2.15E-07	3.88E-07	0.00E+00	6.03E-07	2.04E-07	4.29E-07	0.00E+00	6.33E-07	4.13E-08	6.86E-08	0.00E+00	1.10E-07	1.64E-07	3.20E-07	0.00E+00	4.84E-07	3.52E-08	5.22E-08	0.00E+00	8.74E-08	2.69E-08	3.07E-08	0.00E+00	5.76E-08
672	480749.8	3742232	2.00E-07	3.6E-07	0.00E+00	5.60E-07	1.89E-07	3.98E-07	0.00E+00	5.88E-07	3.83E-08	6.36E-08	0.00E+00	1.02E-07	1.52E-07	2.97E-07	0.00E+00	4.49E-07	3.27E-08	4.84E-08	0.00E+00	8.11E-08	2.50E-08	2.85E-08	0.00E+00	5.34E-08
673	480763.5	3742265	1.85E-07	3.34E-07	0.00E+00	5.18E-07	1.75E-07	3.69E-07	0.00E+00	5.44E-07	3.55E-08	5.89E-08	0.00E+00	9.44E-08	1.41E-07	2.75E-07	0.00E+00	4.16E-07	3.03E-08	4.49E-08	0.00E+00	7.51E-08	2.31E-08	2.64E-08	0.00E+00	4.95E-08
674	480777.2	3742298	1.71E-07	3.09E-07	0.00E+00	4.80E-07	1.63E-07	3.42E-07	0.00E+00	5.04E-07	3.29E-08	5.46E-08	0.00E+00	8.75E-08	1.30E-07	2.55E-07	0.00E+00	3.85E-07	2.80E-08	4.16E-08	0.00E+00	6.96E-08	2.14E-08	2.44E-08	0.00E+00	4.58E-08
675	480790.9	3742331	1.59E-07	2.86E-07	0.00E+00	4.45E-07	1.51E-07	3.17E-07	0.00E+00	4.68E-07	3.05E-08	5.06E-08	0.00E+00	8.11E-08	1.21E-07	2.36E-07	0.00E+00	3.57E-07	2.60E-08	3.85E-08	0.00E+00	6.45E-08	1.99E-08	2.26E-08	0.00E+00	4.25E-08
676	480797.8	3742348	1.53E-07	2.76E-07	0.00E+00	4.29E-07	1.45E-07	3.05E-07	0.00E+00	4.51E-07	2.94E-08	4.88E-08	0.00E+00	7.82E-08	1.17E-07	2.28E-07	0.00E+00	3.44E-07	2.51E-08	3.71E-08	0.00E+00	6.22E-08	1.92E-08	2.18E-08	0.00E+00	4.10E-08
677	480811.5	3742381	1.42E-07	2.57E-07	0.00E+00	3.99E-07	1.35E-07	2.84E-07	0.00E+00	4.19E-07	2.73E-08	4.54E-08	0.00E+00	7.27E-08	1.08E-07	2.12E-07	0.00E+00	3.20E-07	2.33E-08	3.46E-08	0.00E+00	5.79E-08	1.78E-08	2.03E-08	0.00E+00	3.81E-08
678	480825.2	3742415	1.33E-07	2.4E-07	0.00E+00	3.73E-07	1.26E-07	2.65E-07	0.00E+00	3.91E-07	2.55E-08	4.23E-08	0.00E+00	6.78E-08	1.01E-07	1.98E-07	0.00E+00	2.99E-07	2.17E-08	3.22E-08	0.00E+00	5.40E-08	1.66E-08	1.89E-08	0.00E+00	3.56E-08
679	480089.4	3741763	3.51E-07	6.33E-07	0.00E+00	9.83E-07	3.33E-07	7.00E-07	0.00E+00	1.03E-06	6.73E-08	1.12E-07	0.00E+00	1.79E-07	2.67E-07	5.22E-07	0.00E+00	7.89E-07	5.74E-08	8.51E-08	0.00E+00	1.43E-07	4.39E-08	5.00E-08	0.00E+00	9.39E-08
680	480071.2	3741763	3.42E-07	6.16E-07	0.00E+00	9.58E-07	3.24E-07	6.82E-07	0.00E+00	1.01E-06	6.56E-08	1.09E-07	0.00E+00	1.74E-07	2.60E-07	5.08E-07	0.00E+00	7.69E-07	5.59E-08	8.29E-08	0.00E+00	1.39E-07	4.28E-08	4.87E-08	0.00E+00	9.15E-08
681	480053	3741763	3.32E-07	5.99E-07	0.00E+00	9.32E-07	3.15E-07	6.63E-07	0.00E+00	9.78E-07	6.37E-08	1.06E-07	0.00E+00	1.70E-07	2.53E-07	4.94E-07	0.00E+00	7.47E-07	5.44E-08	8.06E-08	0.00E+00	1.35E-07	4.16E-08	4.74E-08	0.00E+00	8.89E-08
682	480034.8	3741763	3.22E-07	5.82E-07	0.00E+00	9.04E-07	3.06E-07	6.43E-07	0.00E+00	9.49E-07	6.19E-08	1.03E-07	0.00E+00	1.65E-07	2.46E-07	4.80E-07	0.00E+00	7.25E-07	5.28E-08	7.82E-08	0.00E+00	1.31E-07	4.03E-08	4.60E-08	0.00E+00	8.63E-08
683	480016.5	3741763	3.12E-07	5.64E-07	0.00E+00	8.76E-07	2.96E-07	6.23E-07	0.00E+00	9.20E-07	5.99E-08	9.96E-08	0.00E+00	1.60E-07	2.38E-07	4.65E-07	0.00E+00	7.03E-07	5.11E-08	7.58E-08	0.00E+00	1.27E-07	3.91E-08	4.45E-08	0.00E+00	8.36E-08
684	479998.3	3741763	3.02E-07	5.45E-07	0.00E+00	8.48E-07	2.87E-07	6.03E-07	0.00E+00	8.90E-07	5.80E-08	9.64E-08	0.00E+00	1.54E-07	2.30E-07	4.50E-07	0.00E+00	6.80E-07	4.95E-08	7.34E-08	0.00E+00	1.23E-07	3.78E-08	4.31E-08	0.00E+00	8.09E-08
685	479980.1	3741763	2.92E-07	5.27E-07	0.00E+00	8.19E-07	2.77E-07	5.83E-07	0.00E+00	8.60E-07	5.60E-08	9.31E-08	0.00E+00	1.49E-07	2.22E-07	4.35E-07	0.00E+00	6.57E-07	4.78E-08	7.09E-08	0.00E+00	1.19E-07	3.66E-08	4.16E-08	0.00E+00	7.82E-08
686	479961.9	3741763	2.82E-07	5.09E-07	0.00E+00	7.91E-07	2.68E-07	5.63E-07	0.00E+00	8.30E-07	5.41E-08	8.99E-08	0.00E+00	1.44E-07	2.15E-07	4.19E-07	0.00E+00	6.34E-07	4.62E-08	6.84E-08	0.00E+00	1.15E-07	3.53E-08	4.02E-08	0.00E+00	7.55E-08
687	479943.7	3741763	2.72E-07	4.9E-07	0.00E+00	7.62E-07	2.58E-07	5.42E-07	0.00E+00	8.00E-07	5.22E-08	8.67E-08	0.00E+00	1.39E-07	2.07E-07	4.04E-07	0.00E+00	6.11E-07	4.45E-08	6.60E-08	0.00E+00	1.10E-07	3.40E-08	3.88E-08	0.00E+00	7.28E-08
688	479925.5	3741763	2.62E-07	4.72E-07	0.00E+00	7.34E-07	2.49E-07	5.23E-07	0.00E+00	7.71E-07	5.02E-08	8.35E-08	0.00E+00	1.34E-07	1.99E-07	3.90E-07	0.00E+00	5.89E-07	4.29E-08	6.36E-08	0.00E+00	1.06E-07	3.28E-08	3.73E-08	0.00E+00	7.01E-08
689	479907.3	3741763	2.52E-07	4.55E-07	0.00E+00	7.07E-07	2.39E-07	5.03E-07	0.00E+00	7.42E-07	4.84E-08	8.04E-08	0.00E+00	1.29E-07	1.92E-07	3.75E-07	0.00E+00	5.67E-07	4.13E-08	6.12E-08	0.00E+00	1.02E-07	3.15E-08	3.59E-08	0.00E+00	6.75E-08
690	480106.2	3741720	3.28E-07	5.92E-07	0.00E+00	9.21E-07	3.12E-07	6.55E-07	0.00E+00	9.67E-07	6.30E-08	1.05E-07	0.00E+00	1.68E-07	2.50E-07	4.88E-07	0.00E+00	7.38E-07	5.37E-08	7.97E-08	0.00E+00	1.33E-07	4.11E-08	4.68E-08	0.00E+00	8.79E-08
691	480122.9	3741727	3.40E-07	6.13E-07	0.00E+00	9.53E-07	3.23E-07	6.78E-07	0.00E+00	1.00E-06	6.52E-08	1.08E-07	0.00E+00	1.74E-07	2.59E-07	5.06E-07	0.00E+00	7.64E-07	5.56E-08	8.25E-08	0.00E+00	1.38E-07	4.25E-08	4.85E-08	0.00E+00	9.10E-08
692	480156.2	3741741	3.63E-07	6.54E-07	0.00E+00	1.02E-06	3.44E-07	7.24E-07	0.00E+00	1.07E-06	6.96E-08	1.16E-07	0.00E+00	1.85E-07	2.76E-07	5.40E-07	0.00E+00	8.16E-07	5.94E-08	8.80E-08	0.00E+00	1.47E-07	4.54E-08	5.17E-08	0.00E+00	9.71E-08
693	480172.8	3741748	3.74E-07	6.74E-07	0.00E+00	1.05E-06	3.55E-07	7.46E-07	0.00E+00	1.10E-06	7.17E-08	1.19E-07	0.00E+00	1.91E-07	2.85E-07	5.56E-07	0.00E+00	8.41E-07	6.12E-08	9.07E-08	0.00E+00	1.52E-07	4.68E-08	5.33E-08	0.00E+00	1.00E-07
694	480189.5	3741755	3.85E-07	6.93E-07	0.00E+00	1.08E-06	3.65E-07	7.67E-07	0.00E+00	1.13E-06	7.38E-08	1.23E-07	0.00E+00	1.96E-07	2.93E-07	5.72E-07	0.00E+00	8.65E-07	6.29E-08	9.33E-08	0.00E+00	1.56E-07	4.81E-08	5.48E-08	0.00E+00	1.03E-07
695	480206.2	3741762	3.95E-07	7.12E-07	0.00E+00	1.11E-06	3.75E-07	7.87E-07	0.00E+00	1.16E-06	7.57E-08	1.26E-07	0.00E+00	2.02E-07	3.01E-07	5.87E-07	0.00E+00	8.88E-07	6.46E-08	9.58E-08	0.00E+00	1.60E-07	4.94E-08	5.63E-08	0.00E+00	1.06E-07
696	480239.5	3741776	4.13E-07	7.46E-07	0.00E+00	1.16E-06	3.92E-07	8.25E-07	0.00E+00	1.22E-06	7.93E-08	1.32E-07	0.00E+00	2.11E-07	3.15E-07	6.15E-07	0.00E+00	9.30E-07	6.77E-08	1.00E-07	0.00E+00	1.68E-07	5.17E-08	5.89E-08	0.00E+00	1.11E-07
697	480256.1	3741783	4.22E-07	7.61E-07	0.00E+00	1.18E-06	4.00E-07	8.41E-07	0.00E+00	1.24E-06	8.09E-08	1.34E-07	0.00E+00	2.15E-07	3.21E-07	6.27E-07	0.00E+00	9.48E-07	6.90E-08	1.02E-07	0.00E+00	1.71E-07	5.28E-08	6.01E-08	0.00E+00	1.13E-07
698	480272.8	3741790	4.29E-07	7.74E-07	0.00E+00	1.20E-06	4.07E-07	8.56E-07	0.00E+00	1.26E-06	8.23E-08	1.37E-07	0.00E+00	2.19E-07	3.27E-07	6.38E-07	0.00E+00	9.65E-07	7.02E-08	1.04E-07	0.00E+00	1.74E-07	5.37E-08	6.12E-08	0.00E+00	1.15E-07
699	480289.5	3741797	4.36E-07	7.86E-07	0.00E+00	1.22E-06	4.13E-07	8.69E-07	0.00E+00	1.28E-06	8.36E-08	1.39E-07	0.00E+00	2.22E-07	3.32E-07	6.48E-07	0.00E+00	9.79E-07	7.13E-08	1.06E-07	0.00E+00	1.77E-07	5.45E-08	6.21E-08	0.00E+00	1.17E-07
700	480322.8	3741811	4.45E-07	8.03E-07	0.00E+00	1.25E-06	4.22E-07	8.88E-07	0.00E+00	1.31E-06	8.54E-08	1.42E-07	0.00E+00	2.27E-07	3.39E-07	6.62E-07	0.00E+00	1.00E-06	7.29E-08	1.08E-07	0.00E+00	1.81E-07	5.57E-08	6.35E-08	0.00E+00	1.19E-07
701	480339.4	3741818	4.48E-07	8.08E-07	0.00E+00	1.26E-06	4.25E-07	8.94E-07	0.00E+00	1.32E-06	8.60E-08	1.43E-07	0.00E+00	2.29E-07	3.41E-07	6.67E-07	0.00E+00	1.01E-06	7.34E-08	1.09E-07	0.00E+00	1.82E-07	5.61E-08	6.39E-08	0.00E+00	1.20E-07
702	480356.1	3741824	4.50E-07	8.12E-07	0.00E+00	1.26E-06	4.27E-07	8.98E-07	0.00E+00	1.32E-06	8.63E-08	1.43E-07	0.00E+00	2.30E-07	3.43E-07	6.69E-07	0.00E+00	1.01E-06	7.37E-08	1.09E-07	0.00E+00	1.83E-07	5.63E-08	6.42E-08	0.00E+00	1.20E-07
703	480372.8	3741831	4.51E-07	8.13E-07	0.00E+00	1.26E-06	4.28E-07	8.99E-07	0.00E+00	1.33E-06	8.64E-08	1.44E-07	0.00E+00	2.30E-07	3.43E-07	6.70E-07	0.00E+00	1.01E-06	7.38E-08	1.09E-07	0.00E+00	1.83E-07	5.64E-08	6.42E-08	0.00E+00	1.21E-07
704	480389.4	3741838	4.50E-07	8.11E-07	0.00E+00	1.26E-06	4.27E-07	8.98E-07	0.00E+00	1.32E-06	8.63E-08	1.43E-07	0.00E+00	2.30E-07	3.43E-07	6.69E-07	0.00E+00	1.01E-06	7.36E-08	1.09E-07	0.00E+00	1.83E-07	5.63E-08	6.41E-08	0.00E+00	1.20E-07
705	480422.7	3741852	4.45E-07	8.02E-07	0.00E+00	1.25E-06	4.22E-07	8.87E-07	0.00E+00	1.31E-06	8.53E-08	1.42E-07	0.00E+00	2.27E-07	3.39E-07	6.61E-07	0.00E+00	1.00E-06	7.28E-08	1.08E-07	0.00E+00	1.81E-07	5.56E-08	6.34E-08	0.00E+00	1.19E-07
706	480439.4	3741859	4.40E-07	7.93E-07	0.00E+00	1.23E-06	4.17E-07	8.78E-07	0.00E+00	1.30E-06	8.44E-08	1.40E-07	0.00E+00	2.25E-07	3.35E-07	6.54E-07	0.00E+00	9.89E-07	7.20E-08	1.07E-07	0.00E+00	1.79E-07	5.50E-08	6.27E-08	0.00E+00	1.18E-07
707	480456.1	3741866	4.34E-07	7.83E-07	0.00E+00	1.22E-06	4.12E-07	8.66E-07	0.00E+00	1.28E-06	8.33E-08	1.38E-07	0.00E+00	2.22E-07	3.31E-07	6.46E-07	0.00E+00	9.76E-07	7.11E-08	1.05E-07	0.00E+00	1.76E-07	5.43E-08	6.19E-08	0.00E+00	1.16E-07
708	480472.7	3741873	4.27E-07	7.71E-07	0.00E+00	1.20E-06	4.05E-07	8.52E-07	0.00E+00	1.26E-06	8.20E-08	1.36E-07	0.00E+00	2.18E-07	3.25E-07	6.35E-07	0.00E+00	9.61E-07	6.99E-08	1.04E-07	0.00E+00	1.74E-07	5.35E-08	6.09E-08	0.00E+00	1.14E-07
709	480506	3741887	4.10E-07	7.4E-07	0.00E+00	1.15E-06	3.89E-07	8.19E-07	0.00E+00	1.21E-06	7.87E-08	1.31E-07	0.00E+00	2.10E-07	3.13E-07	6.10E-07	0.00E+00	9.23E-07	6.72E-08	9.96E-08	0.00E+00	1.67E-07	5.13E-08	5.85E-08	0.00E+00	1.10E-07
710	480522.7	3741894	4.01E-07	7.23E-07	0.00E+00	1.12E-06	3.80E-07	7.99E-07	0.00E+00	1.18E-06	7.69E-08	1.28E-07	0.00E+00	2.05E-07	3.05E-07	5.96E-07	0.00E+00	9.01E-07	6.56E-08	9.72E-08	0.00E+00	1.63E-07	5.01E-08	5.71E-08	0.00E+00	1.07E-07
711	480539.4	3741901	3.90E-07	7.04E-07	0.00E+00	1.09E-06	3.70E-07	7.78E-07	0.00E+00	1.15E-06	7.48E-08	1.24E-07	0.00E+00	1.99E-07	2.97E-07	5.80E-07	0.00E+00	8.77E-07	6.39E-08	9.47E-08	0.00E+00	1.59E-07	4.88E-08	5.56E-08	0.00E+00	1.04E-07
712	480556	3741908	3.79E-07	6.83E-07	0.00E+00	1.06E-06	3.60E-07	7.56E-07	0.00E+00	1.12E-06	7.27E-08	1.21E-07	0.00E+00	1.93E-07	2.89E-07	5.64E-07	0.00E+00	8.52E-07	6.20E-08	9.20E-08	0.00E+00	1.54E-07	4.74E-08	5.40E-08	0.00E+00	1.01E-07
713	480572.7	3741915	3.67E-07	6.62E-07	0.00E+00	1.03E-06	3.48E-07	7.33E-07	0.00E+00	1.08E-06	7.05E-08	1.17E-07	0.00E+00	1.88E-07	2.80E-07	5.46E-07	0.00E+00	8.26E-07	6.01E-08	8.91E-08	0.00E+00	1.49E-07	4.60E-08	5.24E-08	0.00E+00	9.83E-08
714	480589.3	3741922	3.55E-07	6.41E-07	0.00E+00	9.96E-07	3.37E-07	7.09E-07	0.00E+00	1.05E-06	6.81E-08	1.13E-07	0.00E+00	1.81E-07	2.71E-07	5.28E-07	0.00E+00	7.99E-07	5.81E-08	8.62E-08	0.00E+00	1.44E-07	4.44E-08	5.06E-08	0.00E+00	9.51E-08
715	480606	3741929	3.43E-07	6.18E-07	0.00E+00	9.61E-07	3.25E-07	6.84E-07	0.00E+00	1.01E-06	6.58E-08	1.09E-07	0.00E+00	1.75E-07	2.61E-07	5.10E-07	0.00E+00	7.71E-07	5.61E-08	8.32E-08	0.00E+00	1.39E-07	4.29E-08	4.89E-08	0.00E+00	9.18E-08
716	480622.7	3741936	3.30E-07	5.96E-07	0.00E+00	9.26E-07	3.13E-07	6.59E-07	0.00E+00	9.73E-07	6.34E-08	1.05E-07	0.00E+00	1.69E-07	2.52E-07	4.91E-07	0.00E+00	7.43E-07	5.41E-08	8.02E-08	0.00E+00	1.34E-07	4.13E-08	4.71E-08	0.00E+00	8.84E-08
717	480639.3	3741943	3.18E-07	5.73E-07	0.00E+00	8.91E-07	3.02E-07	6.34E-07	0.00E+00	9.36E-07	6.10E-08	1.01E-07	0.00E+00	1.62E-07	2.42E-07	4.73E-07	0.00E+00	7.15E-07	5.20E-08	7.71E-08	0.00E+00	1.29E-07	3.98E-08	4.53E-08	0.00E+00	8.51E-08
718	480656	3741950	3.05E-07	5.51E-07	0.00E+00	8.56E-07	2.90E-07	6.09E-07	0.00E+00	8.99E-07	5.86E-08	9.73E-08	0.00E+00	1.56E-07	2.32E-07	4.54E-07	0.00E+00	6.86E-07	5.00E-08	7.41E-08	0.00E+00	1.24E-07	3.82E-08	4.35E-08	0.00E+00	8.17E-08
719	480778.7	3742181	1.93E-07	3.49E-07	0.00E+00	5.42E-07	1.83E-07	3.86E-07	0.00E+00	5.69E-07	3.71E-08	6.16E-08	0.00E+00	9.87E-08	1.47E-07	2.87E-07	0.00E+00	4.35E-07	3.16E-08	4.69E-08	0.00E+00	7.85E-08	2.42E-08	2.75E-08	0.00E+00	5.17E-08
720	480785.6	3742197	1.86E-07	3.36E-07	0.00E+00	5.23E-07	1.77E-07	3.72E-07	0.00E+00	5.49E-07	3.58E-08	5.94E-08	0.00E+00	9.52E-08	1.42E-07	2.77E-07	0.00E+00	4.19E-07	3.05E-08	4.52E-08	0.00E+00	7.58E-08	2.33E-08	2.66E-08	0.00E+00	4.99E-08
721	480792.5	3742214	1.80E-07	3.24E-07	0.00E+00	5.04E-07	1.71E-07	3.59E-07	0.00E+00	5.29E-07	3.45E-08	5.73E-08	0.00E+00	9.18E-08	1.37E-07	2.67E-07	0.00E+00	4.04E-07	2.94E-08	4.36E-08	0.00E+00	7.31E-08	2.25E-08	2.56E-08	0.00E+00	4.81E-08
722	480806.2	3742247	1.67E-07	3.02E-07	0.00E+00	4.69E-07	1.59E-07	3.34E-07	0.00E+00	4.92E-07	3.21E-08	5.33E-08	0.00E+00	8.54E-08	1.27E-07	2.49E-07	0.00E+00	3.76E-07	2.74E-08	4.06E-08	0.00E+00	6.79E-08	2.09E-08	2.38E-08	0.00E+00	4.47E-08
723	480813.1	3742264	1.61E-07	2.91E-07	0.00E+00	4.52E-07	1.53E-07	3.22E-07	0.00E+00	4.75E-07	3.09E-08	5.14E-08	0.00E+00	8.23E-08	1.23E-07	2.40E-07	0.00E+00	3.63E-07	2.64E-08	3.91E-08	0.00E+00	6.55E-08	2.02E-08	2.30E-08	0.00E+00	4.31E-08
724	480820	3742281	1.55E-07	2.8E-07	0.00E+00	4.36E-07	1.47E-07	3.10E-07	0.00E+00	4.58E-07	2.98E-08	4.95E-08	0.00E+00	7.94E-08	1.18E-07	2.31E-07	0.00E+00	3.50E-07	2.54E-08	3.77E-08	0.00E+00	6.32E-08	1.95E-08	2.22E-08	0.00E+00	4.16E-08
725	480826.8	3742297	1.50E-07	2.7E-07	0.00E+00	4.20E-07	1.42E-07	2.99E-07	0.00E+00	4.41E-07	2.88E-08	4.78E-08	0.00E+00	7.66E-08	1.14E-07	2.23E-07	0.00E+00	3.37E-07	2.45E-08	3.64E-08	0.00E+00	6.09E-08	1.88E-08	2.14E-08	0.00E+00	4.01E-08
726	480840.6	3742331	1.40E-07	2.52E-07	0.00E+00	3.92E-07	1.33E-07	2.79E-07	0.00E+00	4.11E-07	2.68E-08	4.45E-08	0.00E+00	7.13E-08	1.06E-07	2.08E-07	0.00E+00	3.14E-07	2.29E-08	3.39E-08	0.00E+00	5.68E-08	1.75E-08	1.99E-08	0.00E+00	3.74E-08
727	480847.5	3742347	1.35E-07	2.43E-07	0.00E+00	3.78E-07	1.28E-07	2.69E-07	0.00E+00	3.97E-07	2.59E-08	4.30E-08	0.00E+00	6.89E-08	1.03E-07	2.01E-07	0.00E+00	3.03E-07	2.21E-08	3.27E-08	0.00E+00	5.48E-08	1.69E-08	1.92E-08	0.00E+00	3.61E-08
728	480854.4	3742364	1.30E-07	2.35E-07	0.00E+00	3.66E-07	1.24E-07	2.60E-07	0.00E+00	3.84E-07	2.50E-08	4.16E-08	0.00E+00	6.66E-08	9.93E-08	1.94E-07	0.00E+00	2.93E-07	2.14E-08	3.17E-08	0.00E+00	5.30E-08	1.63E-08	1.86E-08	0.00E+00	3.49E-08
729	480089.5	3741713	3.17E-07	5.71E-07	0.00E+00	8.88E-07	3.01E-07	6.32E-07	0.00E+00	9.33E-07	6.08E-08	1.01E-07	0.00E+00	1.62E-07	2.41E-07	4.71E-07	0.00E+00	7.12E-07	5.19E-08	7.69E-08	0.00E+00	1.29E-07	3.96E-08	4.52E-08	0.00E+00	8.48E-08
730	480071.3	3741713	3.09E-07	5.57E-07	0.00E+00	8.66E-07	2.93E-07	6.16E-07	0.00E+00	9.09E-07	5.92E-08	9.84E-08	0.00E+00	1.58E-07	2.35E-07	4.59E-07	0.00E+00	6.94E-07	5.05E-08	7.49E-08	0.00E+00	1.25E-07	3.86E-08	4.40E-08	0.00E+00	8.26E-08
731	480053.1	3741713	3.00E-07	5.42E-07	0.00E+00	8.42E-07	2.85E-07	5.99E-07	0.00E+00	8.84E-07	5.76E-08	9.58E-08	0.00E+00	1.53E-07	2.29E-07	4.47E-07	0.00E+00	6.76E-07	4.92E-08	7.29E-08	0.00E+00	1.22E-07	3.76E-08	4.28E-08	0.00E+00	8.04E-08
732	480034.9	3741713	2.92E-07	5.27E-07	0.00E+00	8.19E-07	2.77E-07	5.82E-07	0.00E+00	8.59E-07	5.60E-08	9.31E-08	0.00E+00	1.49E-07	2.22E-07	4.34E-07	0.00E+00	6.57E-07	4.78E-08	7.08E-08	0.00E+00	1.19E-07	3.65E-08	4.16E-08	0.00E+00	7.81E-08
733	480016.7	3741713	2.83E-07	5.11E-07	0.00E+00	7.94E-07	2.69E-07	5.65E-07	0.00E+00	8.34E-07	5.44E-08	9.03E-08	0.00E+00	1.45E-07	2.16E-07	4.21E-07	0.00E+00	6.37E-07	4.64E-08	6.88E-08	0.00E+00	1.15E-07	3.55E-08	4.04E-08	0.00E+00	7.58E-08
734	479998.5	3741713	2.75E-07	4.95E-07	0.00E+00	7.70E-07	2.61E-07	5.48E-07	0.00E+00	8.08E-07	5.27E-08	8.75E-08	0.00E+00	1.40E-07	2.09E-07	4.08E-07	0.00E+00	6.18E-07	4.49E-08	6.66E-08	0.00E+00	1.12E-07	3.44E-08	3.91E-08	0.00E+00	7.35E-08
735	479980.3	3741713	2.66E-07	4.79E-07	0.00E+00	7.45E-07	2.52E-07	5.30E-07	0.00E+00	7.82E-07	5.10E-08	8.47E-08	0.00E+00	1.36E-07	2.02E-07	3.95E-07	0.00E+00	5.98E-07	4.35E-08	6.45E-08	0.00E+00	1.08E-07	3.33E-08	3.79E-08	0.00E+00	7.11E-08
736	479962.1	3741713	2.57E-07	4.63E-07	0.00E+00	7.20E-07	2.44E-07	5.13E-07	0.00E+00	7.56E-07	4.93E-08	8.19E-08	0.00E+00	1.31E-07	1.96E-07	3.82E-07	0.00E+00	5.78E-07	4.21E-08	6.24E-08	0.00E+00	1.04E-07	3.22E-08	3.66E-08	0.00E+00	6.88E-08
737	479943.9	3741713	2.48E-07	4.48E-07	0.00E+00	6.96E-07	2.36E-07	4.95E-07	0.00E+00	7.31E-07	4.76E-08	7.91E-08	0.00E+00	1.27E-07	1.89E-07	3.69E-07	0.00E+00	5.58E-07	4.06E-08	6.02E-08	0.00E+00	1.01E-07	3.11E-08	3.54E-08	0.00E+00	6.64E-08
738	479925.6	3741713	2.40E-07	4.32E-07	0.00E+00	6.72E-07	2.27E-07	4.78E-07	0.00E+00	7.05E-07	4.60E-08	7.64E-08	0.00E+00	1.22E-07	1.82E-07	3.56E-07	0.00E+00	5.39E-07	3.92E-08	5.81E-08	0.00E+00	9.74E-08	3.00E-08	3.42E-08	0.00E+00	6.41E-08
739	479907.4	3741713	2.31E-07	4.17E-07	0.00E+00	6.48E-07	2.19E-07	4.61E-07	0.00E+00	6.80E-07	4.43E-08	7.37E-08	0.00E+00	1.18E-07	1.76E-07	3.44E-07	0.00E+00	5.20E-07	3.78E-08	5.61E-08	0.00E+00	9.39E-08	2.89E-08	3.29E-08	0.00E+00	6.19E-08
740	480106.4	3741670	2.98E-07	5.37E-07	0.00E+00	8.35E-07	2.83E-07	5.94E-07	0.00E+00	8.77E-07	5.72E-08	9.50E-08	0.00E+00	1.52E-07	2.27E-07	4.43E-07	0.00E+00	6.70E-07	4.88E-08	7.23E-08	0.00E+00	1.21E-07	3.73E-08	4.25E-08	0.00E+00	7.97E-08
741	480123.1	3741677	3.08E-07	5.56E-07	0.00E+00	8.64E-07	2.92E-07	6.15E-07	0.00E+00	9.07E-07	5.91E-08	9.82E-08	0.00E+00	1.57E-07	2.35E-07	4.58E-07	0.00E+00	6.93E-07	5.04E-08	7.48E-08	0.00E+00	1.25E-07	3.86E-08	4.39E-08	0.00E+00	8.25E-08
742	480139.8	3741684	3.18E-07	5.74E-07	0.00E+00	8.92E-07	3.02E-07	6.35E-07	0.00E+00	9.37E-07	6.11E-08	1.01E-07	0.00E+00	1.63E-07	2.42E-07	4.73E-07	0.00E+00	7.16E-07	5.21E-08	7.72E-08	0.00E+00	1.29E-07	3.98E-08	4.54E-08	0.00E+00	8.52E-08
743	480156.5	3741691	3.28E-07	5.92E-07	0.00E+00	9.21E-07	3.12E-07	6.55E-07	0.00E+00	9.67E-07	6.30E-08	1.05E-07	0.00E+00	1.68E-07	2.50E-07	4.88E-07	0.00E+00	7.38E-07	5.38E-08	7.97E-08	0.00E+00	1.33E-07	4.11E-08	4.68E-08	0.00E+00	8.79E-08
744	480173.3	3741698	3.38E-07	6.1E-07	0.00E+00	9.48E-07	3.21E-07	6.75E-07	0.00E+00	9.96E-07	6.49E-08	1.08E-07	0.00E+00	1.73E-07	2.58E-07	5.03E-07	0.00E+00	7.61E-07	5.54E-08	8.21E-08	0.00E+00	1.37E-07	4.23E-08	4.82E-08	0.00E+00	9.05E-08
745	480190	3741705	3.48E-07	6.27E-07	0.00E+00	9.75E-07	3.30E-07	6.94E-07	0.00E+00	1.02E-06	6.67E-08	1.11E-07	0.00E+00	1.78E-07	2.65E-07	5.17E-07	0.00E+00	7.82E-07	5.69E-08	8.44E-08	0.00E+00	1.41E-07	4.35E-08	4.96E-08	0.00E+00	9.31E-08
746	480206.7	3741712	3.57E-07	6.44E-07	0.00E+00	1.00E-06	3.39E-07	7.13E-07	0.00E+00	1.05E-06	6.85E-08	1.14E-07	0.00E+00	1.82E-07	2.72E-07	5.31E-07	0.00E+00	8.03E-07	5.85E-08	8.67E-08	0.00E+00	1.45E-07	4.47E-08	5.09E-08	0.00E+00	9.56E-08
747	480223.4	3741719	3.66E-07	6.6E-07	0.00E+00	1.03E-06	3.47E-07	7.30E-07	0.00E+00	1.08E-06	7.02E-08	1.17E-07	0.00E+00	1.87E-07	2.79E-07	5.45E-07	0.00E+00	8.23E-07	5.99E-08	8.88E-08	0.00E+00	1.49E-07	4.58E-08	5.22E-08	0.00E+00	9.80E-08
748	480240.1	3741726	3.75E-07	6.75E-07	0.00E+00	1.05E-06	3.55E-07	7.47E-07	0.00E+00	1.10E-06	7.18E-08	1.19E-07	0.00E+00	1.91E-07	2.85E-07	5.57E-07	0.00E+00	8.42E-07	6.13E-08	9.09E-08	0.00E+00	1.52E-07	4.69E-08	5.34E-08	0.00E+00	1.00E-07
749	480256.8	3741733	3.82E-07	6.9E-07	0.00E+00	1.07E-06	3.63E-07	7.63E-07	0.00E+00	1.13E-06	7.33E-08	1.22E-07	0.00E+00	1.95E-07	2.91E-07	5.69E-07	0.00E+00	8.60E-07	6.26E-08	9.28E-08	0.00E+00	1.55E-07	4.78E-08	5.45E-08	0.00E+00	1.02E-07
750	480273.5	3741740	3.90E-07	7.02E-07	0.00E+00	1.09E-06	3.70E-07	7.77E-07	0.00E+00	1.15E-06	7.47E-08	1.24E-07	0.00E+00	1.99E-07	2.97E-07	5.79E-07	0.00E+00	8.76E-07	6.38E-08	9.45E-08	0.00E+00	1.58E-07	4.87E-08	5.55E-08	0.00E+00	1.04E-07
751	480290.2	3741747	3.96E-07	7.14E-07	0.00E+00	1.11E-06	3.76E-07	7.90E-07	0.00E+00	1.17E-06	7.59E-08	1.26E-07	0.00E+00	2.02E-07	3.01E-07	5.89E-07	0.00E+00	8.90E-07	6.48E-08	9.61E-08	0.00E+00	1.61E-07	4.95E-08	5.64E-08	0.00E+00	1.06E-07
752	480306.9	3741754	4.02E-07	7.24E-07	0.00E+00	1.13E-06	3.81E-07	8.01E-07	0.00E+00	1.18E-06	7.70E-08	1.28E-07	0.00E+00	2.05E-07	3.06E-07	5.97E-07	0.00E+00	9.03E-07	6.57E-08	9.74E-08	0.00E+00	1.63E-07	5.02E-08	5.72E-08	0.00E+00	1.07E-07
753	480323.7	3741761	4.06E-07	7.33E-07	0.00E+00	1.14E-06	3.85E-07	8.10E-07	0.00E+00	1.20E-06	7.79E-08	1.29E-07	0.00E+00	2.07E-07	3.09E-07	6.04E-07	0.00E+00	9.13E-07	6.65E-08	9.86E-08	0.00E+00	1.65E-07	5.08E-08	5.79E-08	0.00E+00	1.09E-07
754	480340.4	3741768	4.10E-07	7.39E-07	0.00E+00	1.15E-06	3.89E-07	8.18E-07	0.00E+00	1.21E-06	7.86E-08	1.31E-07	0.00E+00	2.09E-07	3.12E-07	6.10E-07	0.00E+00	9.22E-07	6.71E-08	9.95E-08	0.00E+00	1.67E-07	5.13E-08	5.84E-08	0.00E+00	1.10E-07
755	480357.1	3741775	4.13E-07	7.44E-07	0.00E+00	1.16E-06	3.92E-07	8.23E-07	0.00E+00	1.21E-06	7.92E-08	1.32E-07	0.00E+00	2.11E-07	3.14E-07	6.14E-07	0.00E+00	9.28E-07	6.75E-08	1.00E-07	0.00E+00	1.68E-07	5.16E-08	5.88E-08	0.00E+00	1.10E-07
756	480373.8	3741782	4.14E-07	7.47E-07	0.00E+00	1.16E-06	3.93E-07	8.27E-07	0.00E+00	1.22E-06	7.95E-08	1.32E-07	0.00E+00	2.12E-07	3.16E-07	6.16E-07	0.00E+00	9.32E-07	6.78E-08	1.01E-07	0.00E+00	1.68E-07	5.18E-08	5.91E-08	0.00E+00	1.11E-07
757	480390.5	3741789	4.15E-07	7.48E-07	0.00E+00	1.16E-06	3.94E-07	8.28E-07	0.00E+00	1.22E-06	7.96E-08	1.32E-07	0.00E+00	2.12E-07	3.16E-07	6.17E-07	0.00E+00	9.33E-07	6.79E-08	1.01E-07	0.00E+00	1.69E-07	5.19E-08	5.91E-08	0.00E+00	1.11E-07
758	480407.2	3741796	4.14E-07	7.47E-07	0.00E+00	1.16E-06	3.93E-07	8.27E-07	0.00E+00	1.22E-06	7.95E-08	1.32E-07	0.00E+00	2.12E-07	3.16E-07	6.16E-07	0.00E+00	9.32E-07	6.78E-08	1.01E-07	0.00E+00	1.68E-07	5.19E-08	5.91E-08	0.00E+00	1.11E-07
759	480423.9	3741803	4.13E-07	7.45E-07	0.00E+00	1.16E-06	3.92E-07	8.24E-07	0.00E+00	1.22E-06	7.92E-08	1.32E-07	0.00E+00	2.11E-07	3.14E-07	6.14E-07	0.00E+00	9.28E-07	6.76E-08	1.00E-07	0.00E+00	1.68E-07	5.17E-08	5.88E-08	0.00E+00	1.10E-07
760	480440.6	3741810	4.10E-07	7.4E-07	0.00E+00	1.15E-06	3.89E-07	8.18E-07	0.00E+00	1.21E-06	7.87E-08	1.31E-07	0.00E+00	2.09E-07	3.12E-07	6.10E-07	0.00E+00	9.22E-07	6.71E-08	9.95E-08	0.00E+00	1.67E-07	5.13E-08	5.85E-08	0.00E+00	1.10E-07
761	480457.3	3741817	4.06E-07	7.33E-07	0.00E+00	1.14E-06	3.86E-07	8.11E-07	0.00E+00	1.20E-06	7.80E-08	1.30E-07	0.00E+00	2.07E-07	3.09E-07	6.04E-07	0.00E+00	9.14E-07	6.65E-08	9.86E-08	0.00E+00	1.65E-07	5.08E-08	5.79E-08	0.00E+00	1.09E-07
762	480474.1	3741824	4.02E-07	7.24E-07	0.00E+00	1.13E-06	3.81E-07	8.01E-07	0.00E+00	1.18E-06	7.70E-08	1.28E-07	0.00E+00	2.05E-07	3.06E-07	5.97E-07	0.00E+00	9.03E-07	6.57E-08	9.74E-08	0.00E+00	1.63E-07	5.02E-08	5.72E-08	0.00E+00	1.07E-07
763	480490.8	3741831	3.96E-07	7.14E-07	0.00E+00	1.11E-06	3.76E-07	7.90E-07	0.00E+00	1.17E-06	7.59E-08	1.26E-07	0.00E+00	2.02E-07	3.01E-07	5.89E-07	0.00E+00	8.90E-07	6.48E-08	9.60E-08	0.00E+00	1.61E-07	4.95E-08	5.64E-08	0.00E+00	1.06E-07
764	480507.5	3741838	3.89E-07	7.02E-07	0.00E+00	1.09E-06	3.69E-07	7.76E-07	0.00E+00	1.15E-06	7.46E-08	1.24E-07	0.00E+00	1.99E-07	2.96E-07	5.79E-07	0.00E+00	8.75E-07	6.37E-08	9.44E-08	0.00E+00	1.58E-07	4.87E-08	5.55E-08	0.00E+00	1.04E-07
765	480524.2	3741845	3.82E-07	6.88E-07	0.00E+00	1.07E-06	3.62E-07	7.61E-07	0.00E+00	1.12E-06	7.32E-08	1.22E-07	0.00E+00	1.95E-07	2.91E-07	5.68E-07	0.00E+00	8.58E-07	6.25E-08	9.26E-08	0.00E+00	1.55E-07	4.77E-08	5.44E-08	0.00E+00	1.02E-07
766	480540.9	3741852	3.73E-07	6.73E-07	0.00E+00	1.05E-06	3.54E-07	7.45E-07	0.00E+00	1.10E-06	7.16E-08	1.19E-07	0.00E+00	1.91E-07	2.84E-07	5.55E-07	0.00E+00	8.39E-07	6.11E-08	9.06E-08	0.00E+00	1.52E-07	4.67E-08	5.32E-08	0.00E+00	9.99E-08
767	480557.6	3741859	3.64E-07	6.57E-07	0.00E+00	1.02E-06	3.46E-07	7.27E-07	0.00E+00	1.07E-06	6.99E-08	1.16E-07	0.00E+00	1.86E-07	2.77E-07	5.42E-07	0.00E+00	8.19E-07	5.96E-08	8.84E-08	0.00E+00	1.48E-07	4.56E-08	5.19E-08	0.00E+00	9.75E-08
768	480574.3	3741866	3.55E-07	6.4E-07	0.00E+00	9.95E-07	3.37E-07	7.08E-07	0.00E+00	1.04E-06	6.81E-08	1.13E-07	0.00E+00	1.81E-07	2.70E-07	5.28E-07	0.00E+00	7.98E-07	5.81E-08	8.61E-08	0.00E+00	1.44E-07	4.44E-08	5.06E-08	0.00E+00	9.49E-08
769	480591	3741872	3.45E-07	6.22E-07	0.00E+00	9.66E-07	3.27E-07	6.88E-07	0.00E+00	1.01E-06	6.61E-08	1.10E-07	0.00E+00	1.76E-07	2.62E-07	5.13E-07	0.00E+00	7.75E-07	5.64E-08	8.36E-08	0.00E+00	1.40E-07	4.31E-08	4.91E-08	0.00E+00	9.23E-08
770	480607.8	3741879	3.34E-07	6.03E-07	0.00E+00	9.37E-07	3.17E-07	6.67E-07	0.00E+00	9.84E-07	6.41E-08	1.07E-07	0.00E+00	1.71E-07	2.55E-07	4.97E-07	0.00E+00	7.52E-07	5.47E-08	8.11E-08	0.00E+00	1.36E-07	4.18E-08	4.76E-08	0.00E+00	8.95E-08
771	480624.5	3741886	3.24E-07	5.83E-07	0.00E+00	9.07E-07	3.07E-07	6.45E-07	0.00E+00	9.52E-07	6.21E-08	1.03E-07	0.00E+00	1.65E-07	2.46E-07	4.81E-07	0.00E+00	7.28E-07	5.30E-08	7.85E-08	0.00E+00	1.31E-07	4.05E-08	4.61E-08	0.00E+00	8.66E-08
772	480641.2	3741893	3.13E-07	5.64E-07	0.00E+00	8.76E-07	2.97E-07	6.24E-07	0.00E+00	9.20E-07	6.00E-08	9.96E-08	0.00E+00	1.60E-07	2.38E-07	4.65E-07	0.00E+00	7.03E-07	5.12E-08	7.58E-08	0.00E+00	1.27E-07	3.91E-08	4.46E-08	0.00E+00	8.37E-08
773	480657.9	3741900	3.02E-07	5.44E-07	0.00E+00	8.45E-07	2.86E-07	6.01E-07	0.00E+00	8.88E-07	5.78E-08	9.61E-08	0.00E+00	1.54E-07	2.30E-07	4.48E-07	0.00E+00	6.78E-07	4.93E-08	7.32E-08	0.00E+00	1.23E-07	3.77E-08	4.30E-08	0.00E+00	8.07E-08
774	480674.6	3741907	2.90E-07	5.24E-07	0.00E+00	8.14E-07	2.76E-07	5.79E-07	0.00E+00	8.55E-07	5.57E-08	9.26E-08	0.00E+00	1.48E-07	2.21E-07	4.32E-07	0.00E+00	6.53E-07	4.75E-08	7.05E-08	0.00E+00	1.18E-07	3.63E-08	4.14E-08	0.00E+00	7.77E-08
775	480821.3	3742163	1.75E-07	3.15E-07	0.00E+00	4.90E-07	1.66E-07	3.48E-07	0.00E+00	5.14E-07	3.35E-08	5.57E-08	0.00E+00	8.91E-08	1.33E-07	2.60E-07	0.00E+00	3.93E-07	2.86E-08	4.24E-08	0.00E+00	7.09E-08	2.18E-08	2.49E-08	0.00E+00	4.67E-08
776	480828.2	3742179	1.69E-07	3.04E-07	0.00E+00	4.73E-07	1.60E-07	3.37E-07	0.00E+00	4.97E-07	3.24E-08	5.38E-08	0.00E+00	8.61E-08	1.28E-07	2.51E-07	0.00E+00	3.79E-07	2.76E-08	4.09E-08	0.00E+00	6.86E-08	2.11E-08	2.40E-08	0.00E+00	4.52E-08
777	480835.1	3742196	1.63E-07	2.94E-07	0.00E+00	4.57E-07	1.55E-07	3.25E-07	0.00E+00	4.80E-07	3.13E-08	5.19E-08	0.00E+00	8.32E-08	1.24E-07	2.42E-07	0.00E+00	3.66E-07	2.67E-08	3.95E-08	0.00E+00	6.62E-08	2.04E-08	2.32E-08	0.00E+00	4.36E-08
778	480842	3742213	1.57E-07	2.84E-07	0.00E+00	4.41E-07	1.49E-07	3.14E-07	0.00E+00	4.63E-07	3.02E-08	5.02E-08	0.00E+00	8.04E-08	1.20E-07	2.34E-07	0.00E+00	3.54E-07	2.58E-08	3.82E-08	0.00E+00	6.40E-08	1.97E-08	2.24E-08	0.00E+00	4.21E-08
779	480848.9	3742230	1.52E-07	2.74E-07	0.00E+00	4.26E-07	1.44E-07	3.03E-07	0.00E+00	4.47E-07	2.92E-08	4.85E-08	0.00E+00	7.76E-08	1.16E-07	2.26E-07	0.00E+00	3.42E-07	2.49E-08	3.69E-08	0.00E+00	6.18E-08	1.90E-08	2.17E-08	0.00E+00	4.07E-08
780	480855.8	3742246	1.47E-07	2.65E-07	0.00E+00	4.12E-07	1.39E-07	2.93E-07	0.00E+00	4.32E-07	2.82E-08	4.68E-08	0.00E+00	7.50E-08	1.12E-07	2.18E-07	0.00E+00	3.30E-07	2.40E-08	3.56E-08	0.00E+00	5.97E-08	1.84E-08	2.09E-08	0.00E+00	3.93E-08
781	480862.7	3742263	1.42E-07	2.56E-07	0.00E+00	3.98E-07	1.35E-07	2.83E-07	0.00E+00	4.17E-07	2.72E-08	4.52E-08	0.00E+00	7.24E-08	1.08E-07	2.11E-07	0.00E+00	3.19E-07	2.32E-08	3.44E-08	0.00E+00	5.76E-08	1.77E-08	2.02E-08	0.00E+00	3.80E-08
782	480869.6	3742280	1.37E-07	2.47E-07	0.00E+00	3.84E-07	1.30E-07	2.73E-07	0.00E+00	4.03E-07	2.63E-08	4.37E-08	0.00E+00	7.00E-08	1.04E-07	2.04E-07	0.00E+00	3.08E-07	2.24E-08	3.33E-08	0.00E+00	5.57E-08	1.71E-08	1.95E-08	0.00E+00	3.67E-08
783	480089.7	3741663	2.88E-07	5.19E-07	0.00E+00	8.07E-07	2.73E-07	5.74E-07	0.00E+00	8.47E-07	5.52E-08	9.17E-08	0.00E+00	1.47E-07	2.19E-07	4.28E-07	0.00E+00	6.47E-07	4.71E-08	6.98E-08	0.00E+00	1.17E-07	3.60E-08	4.10E-08	0.00E+00	7.70E-08
784	480071.5	3741663	2.81E-07	5.06E-07	0.00E+00	7.87E-07	2.66E-07	5.60E-07	0.00E+00	8.26E-07	5.38E-08	8.94E-08	0.00E+00	1.43E-07	2.14E-07	4.17E-07	0.00E+00	6.31E-07	4.59E-08	6.81E-08	0.00E+00	1.14E-07	3.51E-08	4.00E-08	0.00E+00	7.51E-08
785	480053.3	3741663	2.73E-07	4.93E-07	0.00E+00	7.66E-07	2.59E-07	5.45E-07	0.00E+00	8.05E-07	5.24E-08	8.71E-08	0.00E+00	1.40E-07	2.08E-07	4.06E-07	0.00E+00	6.15E-07	4.47E-08	6.63E-08	0.00E+00	1.11E-07	3.42E-08	3.90E-08	0.00E+00	7.32E-08
786	480035.1	3741663	2.66E-07	4.79E-07	0.00E+00	7.45E-07	2.52E-07	5.30E-07	0.00E+00	7.82E-07	5.10E-08	8.47E-08	0.00E+00	1.36E-07	2.02E-07	3.95E-07	0.00E+00	5.98E-07	4.35E-08	6.45E-08	0.00E+00	1.08E-07	3.33E-08	3.79E-08	0.00E+00	7.11E-08
787	480016.9	3741663	2.58E-07	4.66E-07	0.00E+00	7.24E-07	2.45E-07	5.15E-07	0.00E+00	7.60E-07	4.95E-08	8.23E-08	0.00E+00	1.32E-07	1.97E-07	3.84E-07	0.00E+00	5.81E-07	4.23E-08	6.27E-08	0.00E+00	1.05E-07	3.23E-08	3.68E-08	0.00E+00	6.91E-08

945	479700.8	3742296	4.01E-07	7.22E-07	0.00E+00	0.00E+00	1.12E-06	7.68E-08	1.28E-07	0.00E+00	2.05E-07	3.80E-07	7.99E-07	0.00E+00	1.18E-06	3.05E-07	5.96E-07	0.00E+00	9.01E-07	6.56E-08	9.72E-08	0.00E+00	1.63E-07	5.01E-08	5.71E-08	0.00E+00	1.07E-07
944	479683.2	3742303	3.81E-07	6.86E-07	0.00E+00	0.00E+00	1.07E-06	3.61E-07	7.59E-07	0.00E+00	1.12E-06	7.30E-08	1.21E-07	0.00E+00	1.94E-07	2.90E-07	5.66E-07	0.00E+00	8.56E-07	6.23E-08	9.23E-08	0.00E+00	1.55E-07	4.76E-08	5.42E-08	0.00E+00	1.02E-07
943	479665.6	3742310	3.63E-07	6.52E-07	0.00E+00	0.00E+00	1.01E-06	6.94E-08	1.15E-07	0.00E+00	1.85E-07	6.94E-08	7.22E-07	0.00E+00	1.06E-06	2.75E-07	5.38E-07	0.00E+00	8.14E-07	5.92E-08	8.78E-08	0.00E+00	1.47E-07	4.53E-08	5.16E-08	0.00E+00	9.68E-08
942	479858.8	3742282	7.79E-07	1.41E-06	0.00E+00	0.00E+00	2.18E-06	7.39E-07	1.55E-06	0.00E+00	2.29E-06	1.49E-06	2.48E-07	0.00E+00	3.98E-07	5.93E-07	1.16E-06	0.00E+00	1.75E-06	1.28E-07	1.89E-07	0.00E+00	3.17E-07	9.75E-08	1.11E-07	0.00E+00	2.09E-07
941	479841.3	3742289	7.31E-07	1.32E-06	0.00E+00	0.00E+00	2.05E-06	6.94E-07	1.46E-06	0.00E+00	2.15E-06	1.40E-07	2.33E-07	0.00E+00	3.73E-07	5.57E-07	1.09E-06	0.00E+00	1.64E-06	1.20E-07	1.77E-07	0.00E+00	2.97E-07	9.15E-08	1.04E-07	0.00E+00	1.96E-07
940	479823.7	3742296	8.85E-07	1.24E-06	0.00E+00	0.00E+00	1.92E-06	6.50E-07	1.37E-06	0.00E+00	2.02E-06	1.31E-07	2.22E-07	0.00E+00	3.50E-07	5.22E-07	1.02E-06	0.00E+00	1.54E-06	1.12E-07	1.66E-07	0.00E+00	2.78E-07	8.57E-08	9.77E-08	0.00E+00	1.83E-07
939	479806.1	3742303	6.43E-07	1.16E-06	0.00E+00	0.00E+00	1.80E-06	6.10E-07	1.28E-06	0.00E+00	1.89E-06	1.23E-07	2.05E-07	0.00E+00	3.28E-07	4.89E-07	9.56E-07	0.00E+00	1.44E-06	1.05E-07	1.56E-07	0.00E+00	2.61E-07	8.04E-08	9.16E-08	0.00E+00	1.72E-07
938	479788.5	3742310	6.03E-07	1.09E-06	0.00E+00	0.00E+00	1.69E-06	5.72E-07	1.20E-06	0.00E+00	1.77E-06	1.16E-07	1.92E-07	0.00E+00	3.08E-07	4.59E-07	8.97E-07	0.00E+00	1.36E-06	9.87E-08	1.46E-07	0.00E+00	2.45E-07	7.54E-08	8.59E-08	0.00E+00	1.61E-07
937	479755.9	3742317	5.66E-07	1.03E-06	0.00E+00	0.00E+00	1.59E-06	5.37E-07	1.13E-06	0.00E+00	1.67E-06	1.09E-07	1.80E-07	0.00E+00	2.89E-07	4.31E-07	8.42E-07	0.00E+00	1.27E-06	9.27E-08	1.37E-07	0.00E+00	2.30E-07	7.08E-08	8.07E-08	0.00E+00	1.52E-07
936	479753.4	3742325	5.32E-07	9.46E-07	0.00E+00	0.00E+00	1.49E-06	5.05E-07	1.06E-06	0.00E+00	1.57E-06	1.02E-07	1.70E-07	0.00E+00	2.72E-07	4.05E-07	7.92E-07	0.00E+00	1.20E-06	8.71E-08	1.29E-07	0.00E+00	2.16E-07	6.66E-08	7.59E-08	0.00E+00	1.43E-07
935	479735.8	3742332	5.01E-07	9.04E-07	0.00E+00	0.00E+00	1.41E-06	4.76E-07	1.00E-06	0.00E+00	1.48E-06	9.62E-08	1.60E-07	0.00E+00	2.56E-07	3.82E-07	7.46E-07	0.00E+00	1.13E-06	8.21E-08	1.22E-07	0.00E+00	2.04E-07	6.27E-08	7.15E-08	0.00E+00	1.34E-07
934	479718.2	3742339	4.73E-07	8.52E-07	0.00E+00	0.00E+00	1.32E-06	4.48E-07	9.43E-07	0.00E+00	1.39E-06	9.07E-08	1.51E-07	0.00E+00	2.41E-07	3.60E-07	7.03E-07	0.00E+00	1.06E-06	7.74E-08	1.15E-07	0.00E+00	1.92E-07	5.91E-08	6.74E-08	0.00E+00	1.26E-07
933	479700.6	3742346	4.46E-07	8.04E-07	0.00E+00	0.00E+00	1.25E-06	4.23E-07	8.90E-07	0.00E+00	1.31E-06	8.55E-08	1.42E-07	0.00E+00	2.28E-07	3.40E-07	6.63E-07	0.00E+00	1.00E-06	7.30E-08	1.08E-07	0.00E+00	1.81E-07	5.58E-08	6.36E-08	0.00E+00	1.19E-07
932	479703.9	3742297	8.76E-07	1.58E-06	0.00E+00	0.00E+00	2.46E-06	8.31E-07	1.75E-06	0.00E+00	2.58E-06	1.68E-07	2.79E-07	0.00E+00	4.47E-07	6.67E-07	1.30E-06	0.00E+00	1.97E-06	1.43E-07	2.12E-07	0.00E+00	3.56E-07	1.10E-07	1.25E-07	0.00E+00	2.34E-07
931	479853.5	3742304	8.20E-07	1.48E-06	0.00E+00	0.00E+00	2.30E-06	7.78E-07	1.64E-06	0.00E+00	2.41E-06	1.57E-07	2.61E-07	0.00E+00	4.19E-07	6.24E-07	1.22E-06	0.00E+00	1.84E-06	1.34E-07	1.99E-07	0.00E+00	3.33E-07	1.03E-07	1.17E-07	0.00E+00	2.19E-07
930	479836.2	3742311	7.67E-07	1.38E-06	0.00E+00	0.00E+00	2.15E-06	7.28E-07	1.53E-06	0.00E+00	2.26E-06	1.47E-07	2.44E-07	0.00E+00	3.92E-07	5.84E-07	1.14E-06	0.00E+00	1.72E-06	1.26E-07	1.86E-07	0.00E+00	3.12E-07	9.60E-08	1.09E-07	0.00E+00	2.05E-07
929	479818.8	3742318	7.17E-07	1.29E-06	0.00E+00	0.00E+00	2.01E-06	6.80E-07	1.43E-06	0.00E+00	2.11E-06	1.38E-07	2.29E-07	0.00E+00	3.66E-07	5.46E-07	1.07E-06	0.00E+00	1.61E-06	1.17E-07	1.74E-07	0.00E+00	2.91E-07	8.97E-08	1.02E-07	0.00E+00	1.92E-07
928	479801.4	3742325	6.71E-07	1.21E-06	0.00E+00	0.00E+00	1.88E-06	6.36E-07	1.34E-06	0.00E+00	1.97E-06	1.29E-07	2.14E-07	0.00E+00	3.43E-07	5.11E-07	9.98E-07	0.00E+00	1.51E-06	1.10E-07	1.52E-07	0.00E+00	2.73E-07	8.39E-08	9.56E-08	0.00E+00	1.80E-07
927	479784	3742332	6.28E-07	1.13E-06	0.00E+00	0.00E+00	1.76E-06	5.96E-07	1.25E-06	0.00E+00	1.85E-06	1.29E-07	2.00E-07	0.00E+00	3.21E-07	4.78E-07	9.34E-07	0.00E+00	1.41E-06	1.03E-07	1.52E-07	0.00E+00	2.55E-07	7.86E-08	8.95E-08	0.00E+00	1.68E-07
926	479766.7	3742339	5.89E-07	1.06E-06	0.00E+00	0.00E+00	1.65E-06	5.59E-07	1.17E-06	0.00E+00	1.73E-06	1.13E-07	1.88E-07	0.00E+00	3.01E-07	4.48E-07	8.76E-07	0.00E+00	1.32E-06	9.64E-08	1.43E-07	0.00E+00	2.39E-07	7.37E-08	8.39E-08	0.00E+00	1.58E-07
925	479749.3	3742346	5.24E-07	9.97E-07	0.00E+00	0.00E+00	1.55E-06	5.24E-07	1.10E-06	0.00E+00	1.63E-06	1.06E-07	1.76E-07	0.00E+00	2.82E-07	4.21E-07	8.22E-07	0.00E+00	1.24E-06	9.05E-08	1.34E-07	0.00E+00	2.25E-07	6.91E-08	7.88E-08	0.00E+00	1.48E-07
924	479731.9	3742353	5.19E-07	9.37E-07	0.00E+00	0.00E+00	1.46E-06	4.93E-07	1.04E-06	0.00E+00	1.53E-06	9.96E-08	1.66E-07	0.00E+00	2.65E-07	3.96E-07	7.27E-07	0.00E+00	1.17E-06	8.50E-08	1.26E-07	0.00E+00	2.11E-07	6.50E-08	7.40E-08	0.00E+00	1.39E-07
923	479714.6	3742360	4.89E-07	8.82E-07	0.00E+00	0.00E+00	1.37E-06	4.64E-07	9.75E-07	0.00E+00	1.44E-06	9.38E-08	1.56E-07	0.00E+00	2.50E-07	3.72E-07	7.27E-07	0.00E+00	1.10E-06	8.00E-08	1.19E-07	0.00E+00	1.99E-07	6.12E-08	6.97E-08	0.00E+00	1.31E-07
922	479728.1	3742367	5.76E-07	1.04E-06	0.00E+00	0.00E+00	1.61E-06	5.46E-07	1.15E-06	0.00E+00	1.70E-06	1.10E-07	1.84E-07	0.00E+00	2.94E-07	4.39E-07	8.57E-07	0.00E+00	1.30E-06	9.43E-08	1.40E-07	0.00E+00	2.34E-07	7.20E-08	8.21E-08	0.00E+00	1.54E-07
921	479752.5	3742324	8.79E-07	1.58E-06	0.00E+00	0.00E+00	2.46E-06	8.34E-07	1.75E-06	0.00E+00	2.59E-06	1.69E-07	2.80E-07	0.00E+00	4.49E-07	6.69E-07	1.31E-06	0.00E+00	1.98E-06	1.44E-07	2.13E-07	0.00E+00	3.57E-07	1.10E-07	1.25E-07	0.00E+00	2.35E-07
920	479834.8	3742331	8.18E-07	1.47E-06	0.00E+00	0.00E+00	2.29E-06	7.76E-07	1.63E-06	0.00E+00	2.41E-06	1.57E-07	2.61E-07	0.00E+00	4.17E-07	6.23E-07	1.22E-06	0.00E+00	1.98E-06	1.34E-07	1.98E-07	0.00E+00	3.32E-07	1.02E-07	1.17E-07	0.00E+00	2.19E-07
919	479812.1	3742339	7.61E-07	1.37E-06	0.00E+00	0.00E+00	2.13E-06	7.22E-07	1.52E-06	0.00E+00	2.42E-06	1.46E-07	2.42E-07	0.00E+00	3.88E-07	5.79E-07	1.13E-06	0.00E+00	1.71E-06	1.24E-07	1.85E-07	0.00E+00	3.09E-07	9.52E-08	1.08E-07	0.00E+00	2.04E-07
918	479799.4	3742346	7.08E-07	1.28E-06	0.00E+00	0.00E+00	1.99E-06	6.72E-07	1.41E-06	0.00E+00	2.08E-06	1.36E-07	2.26E-07	0.00E+00	3.61E-07	5.39E-07	1.05E-06	0.00E+00	1.59E-06	1.16E-07	1.72E-07	0.00E+00	2.68E-07	8.86E-08	1.01E-07	0.00E+00	1.90E-07
917	479781.7	3742353	6.60E-07	1.19E-06	0.00E+00	0.00E+00	1.85E-06	6.26E-07	1.32E-06	0.00E+00	1.94E-06	1.27E-07	2.10E-07	0.00E+00	3.37E-07	5.03E-07	9.82E-07	0.00E+00	1.48E-06	1.08E-07	1.60E-07	0.00E+00	2.68E-07	8.26E-08	9.41E-08	0.00E+00	1.77E-07
916	479764.1	3742360	6.16E-07	1.11E-06	0.00E+00	0.00E+00	1.73E-06	5.84E-07	1.23E-06	0.00E+00	1.81E-06	1.18E-07	1.96E-07	0.00E+00	3.15E-07	4.69E-07	9.16E-07	0.00E+00	1.39E-06	1.01E-07	1.49E-07	0.00E+00	2.50E-07	7.71E-08	8.78E-08	0.00E+00	1.65E-07
915	479764.4	3742367	5.76E-07	1.04E-06	0.00E+00	0.00E+00	1.61E-06	5.46E-07	1.15E-06	0.00E+00	1.70E-06	1.10E-07	1.84E-07	0.00E+00	2.94E-07	4.39E-07	8.57E-07	0.00E+00	1.30E-06	9.43E-08	1.40E-07	0.00E+00	2.34E-07	7.20E-08	8.21E-08	0.00E+00	1.54E-07
914	479728.7	3742375	5.39E-07	9.72E-07	0.00E+00	0.00E+00	1.51E-06	5.11E-07	1.08E-06	0.00E+00	1.59E-06	1.03E-07	1.72E-07	0.00E+00	2.75E-07	4.11E-07	8.02E-07	0.00E+00	1.21E-06	8.82E-08	1.31E-07	0.00E+00	2.19E-07	6.75E-08	7.68E-08	0.00E+00	1.44E-07
913	479864.8	3742339	9.99E-07	1.86E-06	0.00E+00	0.00E+00	2.80E-06	9.48E-07	1.99E-06	0.00E+00	2.94E-06	1.92E-07	3.19E-07	0.00E+00	5.10E-07	7.61E-07	1.49E-06	0.00E+00	2.25E-06	1.64E-07	2.43E-07	0.00E+00	4.06E-07	1.25E-07	1.42E-07	0.00E+00	2.67E-07
912	479847.3	3742346	9.27E-07	1.67E-06	0.00E+00	0.00E+00	2.60E-06	8.80E-07	1.85E-06	0.00E+00	2.73E-06	1.78E-07	2.96E-07	0.00E+00	4.73E-07	7.06E-07	1.38E-06	0.00E+00	2.09E-06	1.52E-07	2.25E-07	0.00E+00	3.77E-07	1.16E-07	1.32E-07	0.00E+00	2.48E-07
911	479829.9	3742353	8.60E-07	1.55E-06	0.00E+00	0.00E+00	2.41E-06	8.16E-07	1.72E-06	0.00E+00	2.53E-06	1.65E-07	2.74E-07	0.00E+00	4.39E-07	6.55E-07	1.28E-06	0.00E+00	1.93E-06	1.41E-07	2.09E-07	0.00E+00	3.49E-07	1.08E-07	1.23E-07	0.00E+00	2.30E-07
910	479812.4	3742361	7.97E-07	1.44E-06	0.00E+00	0.00E+00	2.24E-06	7.57E-07	1.39E-06	0.00E+00	2.35E-06	1.53E-07	2.54E-07	0.00E+00	4.07E-07	6.07E-07	1.19E-06	0.00E+00	1.79E-06	1.31E-07	1.93E-07	0.00E+00	2.98E-07	9.98E-08	1.14E-07	0.00E+00	2.13E-07
909	479795	3742368	7.40E-07	1.34E-06	0.00E+00	0.00E+00	2.08E-06	7.02E-07	1.48E-06	0.00E+00	2.18E-06	1.42E-07	2.36E-07	0.00E+00	3.78E-07	5.64E-07	1.10E-06	0.00E+00	1.66E-06	1.21E-07	1.80E-07	0.00E+00	3.01E-07	9.26E-08	1.06E-07	0.00E+00	1.98E-07
908	479777.5	3742375	6.88E-07	1.24E-06	0.00E+00	0.00E+00	1.93E-06	6.53E-07	1.37E-06	0.00E+00	2.03E-06	1.32E-07	2.19E-07	0.00E+00	3.51E-07	5.24E-07	1.02E-06	0.00E+00	1.55E-06	1.13E-07	1.67E-07	0.00E+00	2.80E-07	8.61E-08	9.81E-08	0.00E+00	1.84E-07
907	479760	3742382	1.41E-06	1.16E-06	0.00E+00	0.00E+00	1.80E-06	6.08E-07	1.28E-06	0.00E+00	1.86E-06	1.23E-07	2.04E-07	0.00E+00	3.27E-07	4.88E-07	9.53E-07	0.00E+00	1.44E-06	1.05E-07	1.56E-07	0.00E+00	2.60E-07	8.02E-08	9.14E-08	0.00E+00	1.72E-07
906	479742.6	3742389	5.98E-07	1.08E-06	0.00E+00	0.00E+00	1.68E-06	5.67E-07	1.19E-06	0.00E+00	1.76E-06	1.15E-07	1.91E-07	0.00E+00	3.05E-07	4.55E-07	8.89E-07	0.00E+00	1.34E-06	9.79E-08	1.45E-07	0.00E+00	2.43E-07	7.48E-08	8.52E-08	0.00E+00	1.60E-07
905	479859.6	3742361	1.06E-06	1.91E-06	0.00E+00	0.00E+00	2.97E-06	1.01E-06	2.12E-06	0.00E+00	3.12E-06	2.03E-07	3.38E-07	0.00E+00	5.42E-07	8.08E-07	1.58E-06	0.00E+00	2.39E-06	1.74E-07	2.57E-07	0.00E+00	4.31E-07	1.33E-07	1.51E-07	0.00E+00	2.84E-07
904	479824.2	3742368	9.80E-07	1.77E-06	0.00E+00	0.00E+00	2.75E-06	9.30E-07	1.96E-06	0.00E+00	2.89E-06	1.88E-07	3.12E-07	0.00E+00	5.00E-07	7.47E-07	1.46E-06	0.00E+00	2.20E-06	1.60E-07	2.38E-07	0.00E+00	3.98E-07	1.23E-07	1.40E-07	0.00E+00	2.62E-07
903	479823.5	3742375	9.06E-07	1.63E-06	0.00E+00	0.00E+00	2.54E-06	8.59E-07	1.81E-06	0.00E+00	2.67E-06	1.74E-07	2.89E-07	0.00E+00	4.62E-07	6.90E-07	1.35E-06	0.00E+00	2.04E-06	1.48E-07	2.20E-07	0.00E+00	3.68E-07	1.13E-07	1.29E-07	0.00E+00	2.42E-07
902	479808.1	3742382	8.37E-07	1.51E-06	0.00E+00	0.00E+00	2.35E-06	7.94E-07	1.67E-06	0.00E+00	2.46E-06	1.61E-07	2.67E-07	0.00E+00	4.27E-07	6.38E-07	1.25E-06	0.00E+00	1.88E-06	1.37E-07	2.03E-07	0.00E+00	3.40E-07	1.05E-07	1.19E-07	0.00E+00	2.24E-07
901	479790.9	3742389	7.45E-07	1.40E-06	0.00E+00	0.00E+00	2.17E-06	7.35E-07	1.55E-06	0.00E+00	2.47E-06	1.49E-07	2.58E-07	0.00E+00	3.96E-07	5.90E-07	1.15E-06	0.00E+00	1.74E-06	1.27E-07	1.88E-07	0.00E+00	3.15E-07	9.70E-08	1.10E-07	0.00E+00	2.07E-07
900	479773.7	3742396	7.19E-07	1.36E-06	0.00E+00	0.00E+00	2.02E-06	6.82E-07	1.43E-06	0.00E+00	2.12E-06	1.38E-07	2.29E-07	0.00E+00	3.67E-07	5.47E-07	1.07E-06	0.00E+00	1.62E-06	1.18E-07	1.74E-07	0.00E+00	2.92E-07	9.00E-08	1.02E-07	0.00E+00	1.92E-07
899	479756.5	3742403	6.68E-07	1.25E-06	0.00E+00	0.00E+00	1.87E-06	6.34E-07	1.33E-06	0.00E+00	1.97E-06	1.28E-07	2.13E-07	0.00E+00	3.41E-07	5.09E-07	9.93E-07	0.00E+00	1.50E-06	1.09E-07	1.62E-07	0.00E+00	2.71E-07	8.36E-08	9.52E-08	0.00E+00	1.79E-07
898	479858.3	3742382	1.15E-06	2.07E-06	0.00E+00	0.00E+00	3.22E-06	1.09E-06	2.29E-06	0.00E+00	3.38E-06	2.21E-07	3.66E-07	0.00E+00	5.87E-07	8.75E-07	1.71E-06	0.00E+00	2.59E-06	1.88E-07	2.76E-07	0.00E+00	4.67E-07	1.44E-07	1.68E-07	0.00E+00	3.08E-07
897	479830.9	3742389	1.05E-06	1.96E-06	0.00E+00	0.00E+00	2.96E-06	1.00E-06	2.10E-06	0.00E+00	3.10E-06	2.02E-07	3.36E-07	0.00E+00	5.37E-07	8.03E-07	1.57E-06	0.00E+00	2.37E-06	1.73E-07	2.56E-07	0.00E+00	4.28E-07	1.32E-07	1.50E-07	0.00E+00	2.82E-07
896	479823.4	3742396	9.67E-07	1.74E-06	0.00E+00	0.00E+00	2.71E-06	9.17E-07	1.93E-06	0.00E+00	2.85E-06	1.85E-07	3.08E-07	0.00E+00	4.94E-07	7.36E-07	1.44E-06	0.00E+00	2.17E-06	1.58E-07	2.35E-07	0.00E+00	3.93E-07	1.21E-07	1.38E-07	0.00E+00	2.59E-07
895	479805.8	3742403	8.88E-07	1.66E-06	0.00E+00	0.00E+00	2.49E-06	8.42E-07	1.77E-06	0.00E+00	2.61E-06	1.70E-07	2.83E-07	0.00E+00	4.53E-07	6.76E-07	1.32E-06	0.00E+00	2.00E-06	1.45E-07	2.15E-07	0.00E+00	3.61E-07	1.11E-07	1.27E-07	0.00E+00	2.38E-07
894	479770.8	3742410	8.17E-07	1.47E-06	0.00E+00	0.00E+00	2.29E-06	7.75E-07	1.63E-06	0.00E+00	2.40E-06	1.57E-07	2.60E-07	0.00E+00	4.17E-07	6.22E-07	1.21E-06	0.00E+00	1.84E-06	1.34E-07	1.98E-07	0.00E+00	3.32E-07	1.02E-07	1.16E-07	0.00E+00	2.19E-07
893	479770.6	3742417	7.53E-07	1.36E-06	0.00E+00	0.00E+00	2.11E-06	7.14E-07	1.50E-06	0.00E+00	2.22E-06	1.46E-07	2.40E-07	0.00E+00	3.84E-07	5.73E-07	1.12E-06	0.00E+00	1.69E-06	1.23E-07	1.83E-07	0.00E+00	3.06E-07	9.42E-08	1.07E-07	0.00E+00	2.02E-07
892	479870.8	3742397	1.34E-06	2.42E-06	0.00E+00	0.00E+00	3.76E-06	1.27E-06	2.68E-06	0.00E+00	3.95E-06	2.57E-07	4.28E-07	0.00E+00	6.85E-07	1.02E-06	1.99E-06	0.00E+00	3.02E-06	2.20E-07	3.25E-07	0.00E+00	4.45E-07	1.68E-07	1.91E-07	0.00E+00	3.59E-07
891	479853.6	3742404	2.18E-06	2.21E-06	0.00E+00	0.00E+00	4.43E-06	2.35E-06	2.44E-06	0.00E+00	3.61E-06	2.52E-07	3.90E-07	0.00E+00	6.25E-07	9.33E-07	1.82E-06	0.00E+00	2.75E-06	2.00E-07	2.97E-07	0.00E+00	4.98E-07	1.53E-07	1.75E-07	0.00E+00	2.28E-07
890	479836.3	1.12E-06	2.02E-06	0.00E+00	0.00E+00	1.13E-06	1.06E-06	2.23E-06	0.00E+00	3.29E-06	2.14E-07	3.56E-07	0.00E+00	5.71E-07	8.51E-07	1.66E-06	0.00E+00	2.51E-06	1.83E-07	2.71E-07	0.00E+00	4.54E-07	1.40E-07	1.59E-07	0.00E+00	2.99E-07
889	479819	3742418	1.02E-06	1.84E-06	0.00E+00	0.00E+00	2.86E-06	9.68E-07	2.04E-06	0.00E+00	3.00E-06	1.96E-07	3.25E-07	0.00E+00	5.21E-07	7.77E-07	1.52E-06	0.00E+00	2.30E-06	1.67E-07	2.48E-07	0.00E+00	4.15E-07	1.28E-07	1.45E-07	0.00E+00	2.73E-07
888	479865.9	3742419	1.44E-06	2.66E-06	0.00E+00	0.00E+00	4.04E-06	1.37E-06	2.88E-06	0.00E+00	4.24E-06	2.77E-07	4.59E-07	0.00E+00	7.36E-07	1.10E-06	2.14E-06	0.00E+00	3.24E-06	2.36E-07	3.58E-07	0.00E+00	4.86E-07	1.80E-07	2.05E-07	0.00E+00	3.86E-07
887	479907.9	3742463	1.82E-06	2.29E-06	0.00E+00	0.00E+00	5.11E-06	1.73E-06	3.64E-06	0.00E+00	5.37E-06	3.50E-07	5.81E-07	0.00E+00	9.31E-07	1.39E-06	2.71E-06	0.00E+00	4.20E-06	2.98E-07	4.41E-07	0.00E+00	7.41E-07	2.28E-07	2.60E-07	0.00E+00	4.88E-07
886	479926.1	3742463	1.88E-06	3.39E-06	0.00E+00	0.00E+00	5.27E-06	1.78E-06	3.75E-06	0.00E+00	5.54E-06	3.61E-07	5.99E-07	0.00E+00	9.60E-07	1.43E-06	2.80E-06	0.00E+00	4.23E-06	3.08E-07	4.56E-06	0.00E+00	7.64E-07	2.35E-07	2.68E-07	0.00E+00	5.03E-07
885	479944.3	3742463	1.94E-06	3.5E-06	0.00E+00	0.00E+00	5.44E-06	1.84E-06	3.87E-06	0.00E+00	5.71E-06	3.72E-07	6.18E-07	0.00E+00	9.90E-07	1.48E-06	2.88E-06	0.00E+00	4.36E-06	3.17E-07	4.71E-06	0.00E+00	7.88E-07	2.43E-07	2.76E-07	0.00E+00	5.19E-07
884	479966.5	3742463	2.00E-06	3.6E-06	0.00E+00	0.00E+00	5.60E-06	1.90E-06	3.99E-06	0.00E+00	5.88E-06	3.83E-07	6.37E-07	0.00E+00	1.02E-06	1.52E-06	2.97E-06	0.00E+00	4.49E-06	3.27E-07	4.85E-06	0.00E+00	8.12E-07	2.50E-07	2.85E-07	0.00E+00	5.35E-07
883	479990.7	3742463	2.06E-06	3.71E-06	0.00E+00	0.00E+00	5.77E-06	1.95E-06	4.11E-06	0.00E+00	6.06E-06	3.95E-07	6.56E-07	0.00E+00	1.05E-06	1.57E-06	3.06E-06	0.00E+00	4.63E-06	3.37E-07	4.99E-06	0.00E+00	8.36E-07	2.57E-07	2.93E-07	0.00E+00	5.51E-07
882	479999	3742463	2.12E-06	3.82E-06	0.00E+00	0.00E+00	5.94E-06	2.01E-06	4.22E-06	0.00E+00	6.42E-06	4.06E-07	6.75E-07	0.00E+00	1.08E-06	1.61E-06	3.14E-06	0.00E+00	4.76E-06	3.47E-07	5.14E-06	0.00E+00	8.60E-07	2.65E-07	3.02E-07	0.00E+00	5.67E-07
881	480017.2	3742463	2.18E-06	3.93E-06	0.00E+00	0.00E+00	6.10E-06	2.07E-06	4.34E-06	0.00E+00	6.41E-06	4.18E-07	6.94E-07	0.00E+00	1.11E-06	1.66E-06	3.24E-06	0.00E+00	4.89E-06	3.56E-07	5.28E-06	0.00E+00	8.85E-07	2.72E-07	3.10E-07	0.00E+00	5.83E-07
880	480035.4	3742463	2.24E-06	4.03E-06	0.00E+00	0.00E+00	6.27E-06	2.12E-06	4.46E-06	0.00E

946	479718.4	3742289	4.22E-07	7.61E-07	0.00E+00	1.18E-06	4.00E-07	8.42E-07	0.00E+00	1.24E-06	8.10E-08	1.35E-07	0.00E+00	2.15E-07	3.21E-07	6.28E-07	0.00E+00	9.49E-07	6.91E-08	1.02E-07	0.00E+00	1.71E-07	5.28E-08	6.02E-08	0.00E+00	1.13E-07
947	479735.9	3742282	4.45E-07	8.03E-07	0.00E+00	1.25E-06	4.22E-07	8.88E-07	0.00E+00	1.31E-06	8.54E-08	1.42E-07	0.00E+00	2.27E-07	3.39E-07	6.62E-07	0.00E+00	1.00E-06	7.29E-08	1.08E-07	0.00E+00	1.81E-07	5.57E-08	6.34E-08	0.00E+00	1.19E-07
948	479753.5	3742275	4.70E-07	8.48E-07	0.00E+00	1.32E-06	4.46E-07	9.38E-07	0.00E+00	1.38E-06	9.02E-08	1.50E-07	0.00E+00	2.40E-07	3.58E-07	6.99E-07	0.00E+00	1.06E-06	7.69E-08	1.14E-07	0.00E+00	1.91E-07	5.88E-08	6.70E-08	0.00E+00	1.26E-07
949	479771.1	3742267	4.97E-07	8.96E-07	0.00E+00	1.39E-06	4.71E-07	9.91E-07	0.00E+00	1.46E-06	9.53E-08	1.58E-07	0.00E+00	2.54E-07	3.78E-07	7.39E-07	0.00E+00	1.12E-06	8.13E-08	1.21E-07	0.00E+00	2.02E-07	6.22E-08	7.08E-08	0.00E+00	1.33E-07
950	479788.7	3742260	5.26E-07	9.48E-07	0.00E+00	1.47E-06	4.99E-07	1.05E-06	0.00E+00	1.55E-06	1.01E-07	1.68E-07	0.00E+00	2.68E-07	4.00E-07	7.82E-07	0.00E+00	1.18E-06	8.60E-08	1.28E-07	0.00E+00	2.14E-07	6.58E-08	7.49E-08	0.00E+00	1.41E-07
951	479806.3	3742253	5.56E-07	1E-06	0.00E+00	1.56E-06	5.28E-07	1.11E-06	0.00E+00	1.64E-06	1.07E-07	1.77E-07	0.00E+00	2.84E-07	4.24E-07	8.28E-07	0.00E+00	1.25E-06	9.11E-08	1.35E-07	0.00E+00	2.26E-07	6.96E-08	7.93E-08	0.00E+00	1.49E-07
952	479823.8	3742246	5.89E-07	1.06E-06	0.00E+00	1.65E-06	5.59E-07	1.18E-06	0.00E+00	1.73E-06	1.13E-07	1.88E-07	0.00E+00	3.01E-07	4.49E-07	8.76E-07	0.00E+00	1.33E-06	9.65E-08	1.43E-07	0.00E+00	2.39E-07	7.37E-08	8.40E-08	0.00E+00	1.58E-07
953	479841.4	3742239	6.24E-07	1.13E-06	0.00E+00	1.75E-06	5.92E-07	1.24E-06	0.00E+00	1.84E-06	1.20E-07	1.99E-07	0.00E+00	3.19E-07	4.75E-07	9.28E-07	0.00E+00	1.40E-06	1.02E-07	1.51E-07	0.00E+00	2.54E-07	7.81E-08	8.89E-08	0.00E+00	1.67E-07
954	479859	3742232	6.60E-07	1.19E-06	0.00E+00	1.85E-06	6.26E-07	1.32E-06	0.00E+00	1.94E-06	1.27E-07	2.10E-07	0.00E+00	3.37E-07	5.03E-07	9.82E-07	0.00E+00	1.48E-06	1.08E-07	1.60E-07	0.00E+00	2.68E-07	8.26E-08	9.41E-08	0.00E+00	1.77E-07
955	479630.6	3742275	3.01E-07	5.42E-07	0.00E+00	8.43E-07	2.85E-07	6.00E-07	0.00E+00	8.85E-07	5.77E-08	9.58E-08	0.00E+00	1.53E-07	2.29E-07	4.47E-07	0.00E+00	6.76E-07	4.92E-08	7.30E-08	0.00E+00	1.22E-07	3.76E-08	4.29E-08	0.00E+00	8.05E-08
956	479648.2	3742267	3.14E-07	5.67E-07	0.00E+00	8.82E-07	2.98E-07	6.27E-07	0.00E+00	9.26E-07	6.03E-08	1.00E-07	0.00E+00	1.61E-07	2.39E-07	4.68E-07	0.00E+00	7.07E-07	5.15E-08	7.63E-08	0.00E+00	1.28E-07	3.93E-08	4.48E-08	0.00E+00	8.42E-08
957	479665.8	3742260	3.29E-07	5.93E-07	0.00E+00	9.22E-07	3.12E-07	6.56E-07	0.00E+00	9.69E-07	6.31E-08	1.05E-07	0.00E+00	1.68E-07	2.51E-07	4.89E-07	0.00E+00	7.40E-07	5.39E-08	7.98E-08	0.00E+00	1.34E-07	4.12E-08	4.69E-08	0.00E+00	8.81E-08
958	479683.4	3742253	3.45E-07	6.21E-07	0.00E+00	9.66E-07	3.27E-07	6.87E-07	0.00E+00	1.01E-06	6.61E-08	1.10E-07	0.00E+00	1.76E-07	2.62E-07	5.12E-07	0.00E+00	7.75E-07	5.64E-08	8.36E-08	0.00E+00	1.40E-07	4.31E-08	4.91E-08	0.00E+00	9.22E-08
959	479700.9	3742246	3.61E-07	6.51E-07	0.00E+00	1.01E-06	3.43E-07	7.20E-07	0.00E+00	1.06E-06	6.93E-08	1.15E-07	0.00E+00	1.84E-07	2.75E-07	5.37E-07	0.00E+00	8.12E-07	5.91E-08	8.76E-08	0.00E+00	1.47E-07	4.52E-08	5.15E-08	0.00E+00	9.66E-08
960	479718.5	3742239	3.79E-07	6.83E-07	0.00E+00	1.06E-06	3.59E-07	7.55E-07	0.00E+00	1.11E-06	7.26E-08	1.21E-07	0.00E+00	1.93E-07	2.88E-07	5.63E-07	0.00E+00	8.52E-07	6.20E-08	9.19E-08	0.00E+00	1.54E-07	4.74E-08	5.40E-08	0.00E+00	1.01E-07
961	479736.1	3742232	3.98E-07	7.17E-07	0.00E+00	1.11E-06	3.77E-07	7.93E-07	0.00E+00	1.17E-06	7.63E-08	1.27E-07	0.00E+00	2.03E-07	3.03E-07	5.91E-07	0.00E+00	8.94E-07	6.51E-08	9.65E-08	0.00E+00	1.62E-07	4.97E-08	5.67E-08	0.00E+00	1.06E-07
962	479753.7	3742225	4.18E-07	7.53E-07	0.00E+00	1.17E-06	3.96E-07	8.33E-07	0.00E+00	1.23E-06	8.01E-08	1.33E-07	0.00E+00	2.13E-07	3.18E-07	6.21E-07	0.00E+00	9.39E-07	6.84E-08	1.01E-07	0.00E+00	1.70E-07	5.23E-08	5.95E-08	0.00E+00	1.12E-07
963	479771.3	3742217	4.39E-07	7.92E-07	0.00E+00	1.23E-06	4.17E-07	8.76E-07	0.00E+00	1.29E-06	8.43E-08	1.40E-07	0.00E+00	2.24E-07	3.35E-07	6.53E-07	0.00E+00	9.88E-07	7.19E-08	1.07E-07	0.00E+00	1.79E-07	5.50E-08	6.26E-08	0.00E+00	1.18E-07
964	479788.8	3742210	4.62E-07	8.34E-07	0.00E+00	1.30E-06	4.39E-07	9.22E-07	0.00E+00	1.36E-06	8.87E-08	1.47E-07	0.00E+00	2.36E-07	3.52E-07	6.88E-07	0.00E+00	1.04E-06	7.57E-08	1.12E-07	0.00E+00	1.88E-07	5.79E-08	6.59E-08	0.00E+00	1.24E-07
965	479806.4	3742203	4.87E-07	8.78E-07	0.00E+00	1.36E-06	4.62E-07	9.71E-07	0.00E+00	1.43E-06	9.34E-08	1.55E-07	0.00E+00	2.48E-07	3.71E-07	7.24E-07	0.00E+00	1.09E-06	7.97E-08	1.18E-07	0.00E+00	1.98E-07	6.09E-08	6.94E-08	0.00E+00	1.30E-07
966	479824	3742196	5.12E-07	9.24E-07	0.00E+00	1.44E-06	4.86E-07	1.02E-06	0.00E+00	1.51E-06	9.83E-08	1.63E-07	0.00E+00	2.62E-07	3.90E-07	7.62E-07	0.00E+00	1.15E-06	8.39E-08	1.24E-07	0.00E+00	2.08E-07	6.41E-08	7.30E-08	0.00E+00	1.37E-07
967	479841.6	3742189	5.39E-07	9.73E-07	0.00E+00	1.51E-06	5.12E-07	1.08E-06	0.00E+00	1.59E-06	1.03E-07	1.72E-07	0.00E+00	2.75E-07	4.11E-07	8.02E-07	0.00E+00	1.21E-06	8.83E-08	1.31E-07	0.00E+00	2.19E-07	6.75E-08	7.69E-08	0.00E+00	1.44E-07
968	479859.2	3742182	5.67E-07	1.02E-06	0.00E+00	1.59E-06	5.38E-07	1.13E-06	0.00E+00	1.67E-06	1.09E-07	1.81E-07	0.00E+00	2.90E-07	4.32E-07	8.44E-07	0.00E+00	1.28E-06	9.28E-08	1.38E-07	0.00E+00	2.30E-07	7.10E-08	8.08E-08	0.00E+00	1.52E-07
969	479876.7	3742175	5.96E-07	1.07E-06	0.00E+00	1.67E-06	5.65E-07	1.19E-06	0.00E+00	1.75E-06	1.14E-07	1.90E-07	0.00E+00	3.04E-07	4.54E-07	8.86E-07	0.00E+00	1.34E-06	9.75E-08	1.45E-07	0.00E+00	2.42E-07	7.45E-08	8.49E-08	0.00E+00	1.59E-07
970	479595.6	3742239	2.55E-07	4.59E-07	0.00E+00	7.14E-07	2.42E-07	5.08E-07	0.00E+00	7.50E-07	4.89E-08	8.12E-08	0.00E+00	1.30E-07	1.94E-07	3.79E-07	0.00E+00	5.73E-07	4.17E-08	6.18E-08	0.00E+00	1.03E-07	3.19E-08	3.63E-08	0.00E+00	6.82E-08
971	479613.2	3742232	2.65E-07	4.78E-07	0.00E+00	7.43E-07	2.52E-07	5.29E-07	0.00E+00	7.80E-07	5.09E-08	8.45E-08	0.00E+00	1.35E-07	2.02E-07	3.94E-07	0.00E+00	5.96E-07	4.34E-08	6.43E-08	0.00E+00	1.08E-07	3.32E-08	3.78E-08	0.00E+00	7.10E-08
972	479630.8	3742225	2.76E-07	4.98E-07	0.00E+00	7.74E-07	2.62E-07	5.51E-07	0.00E+00	8.13E-07	5.30E-08	8.80E-08	0.00E+00	1.41E-07	2.10E-07	4.11E-07	0.00E+00	6.21E-07	4.52E-08	6.70E-08	0.00E+00	1.12E-07	3.45E-08	3.94E-08	0.00E+00	7.39E-08
973	479648.4	3742217	2.88E-07	5.19E-07	0.00E+00	8.07E-07	2.73E-07	5.74E-07	0.00E+00	8.47E-07	5.52E-08	9.17E-08	0.00E+00	1.47E-07	2.19E-07	4.28E-07	0.00E+00	6.47E-07	4.71E-08	6.98E-08	0.00E+00	1.17E-07	3.60E-08	4.10E-08	0.00E+00	7.70E-08
974	479665.9	3742210	3.00E-07	5.41E-07	0.00E+00	8.41E-07	2.85E-07	5.98E-07	0.00E+00	8.83E-07	5.75E-08	9.56E-08	0.00E+00	1.53E-07	2.28E-07	4.46E-07	0.00E+00	6.74E-07	4.91E-08	7.28E-08	0.00E+00	1.22E-07	3.75E-08	4.28E-08	0.00E+00	8.03E-08
975	479683.5	3742203	3.13E-07	5.64E-07	0.00E+00	8.77E-07	2.97E-07	6.24E-07	0.00E+00	9.21E-07	6.00E-08	9.97E-08	0.00E+00	1.60E-07	2.38E-07	4.65E-07	0.00E+00	7.04E-07	5.12E-08	7.59E-08	0.00E+00	1.27E-07	3.92E-08	4.46E-08	0.00E+00	8.38E-08
976	479701.1	3742196	3.27E-07	5.89E-07	0.00E+00	9.16E-07	3.10E-07	6.52E-07	0.00E+00	9.62E-07	6.27E-08	1.04E-07	0.00E+00	1.67E-07	2.49E-07	4.86E-07	0.00E+00	7.35E-07	5.35E-08	7.93E-08	0.00E+00	1.33E-07	4.09E-08	4.66E-08	0.00E+00	8.74E-08
977	479718.7	3742189	3.41E-07	6.16E-07	0.00E+00	9.57E-07	3.24E-07	6.81E-07	0.00E+00	1.01E-06	6.55E-08	1.09E-07	0.00E+00	1.74E-07	2.60E-07	5.08E-07	0.00E+00	7.68E-07	5.59E-08	8.28E-08	0.00E+00	1.39E-07	4.27E-08	4.87E-08	0.00E+00	9.14E-08
978	479736.3	3742182	3.57E-07	6.44E-07	0.00E+00	1.00E-06	3.39E-07	7.12E-07	0.00E+00	1.05E-06	6.85E-08	1.14E-07	0.00E+00	1.82E-07	2.72E-07	5.31E-07	0.00E+00	8.03E-07	5.84E-08	8.66E-08	0.00E+00	1.45E-07	4.47E-08	5.09E-08	0.00E+00	9.56E-08
979	479753.8	3742175	3.74E-07	6.74E-07	0.00E+00	1.05E-06	3.55E-07	7.46E-07	0.00E+00	1.10E-06	7.17E-08	1.19E-07	0.00E+00	1.91E-07	2.85E-07	5.56E-07	0.00E+00	8.40E-07	6.12E-08	9.07E-08	0.00E+00	1.52E-07	4.68E-08	5.33E-08	0.00E+00	1.00E-07
980	479771.4	3742167	3.91E-07	7.06E-07	0.00E+00	1.10E-06	3.71E-07	7.81E-07	0.00E+00	1.15E-06	7.51E-08	1.25E-07	0.00E+00	2.00E-07	2.98E-07	5.82E-07	0.00E+00	8.80E-07	6.41E-08	9.50E-08	0.00E+00	1.59E-07	4.90E-08	5.58E-08	0.00E+00	1.05E-07
981	479789	3742160	4.10E-07	7.39E-07	0.00E+00	1.15E-06	3.89E-07	8.18E-07	0.00E+00	1.21E-06	7.86E-08	1.31E-07	0.00E+00	2.09E-07	3.12E-07	6.10E-07	0.00E+00	9.22E-07	6.71E-08	9.95E-08	0.00E+00	1.67E-07	5.13E-08	5.84E-08	0.00E+00	1.10E-07
982	479806.6	3742153	4.30E-07	7.75E-07	0.00E+00	1.20E-06	4.08E-07	8.57E-07	0.00E+00	1.26E-06	8.24E-08	1.37E-07	0.00E+00	2.19E-07	3.27E-07	6.39E-07	0.00E+00	9.66E-07	7.03E-08	1.04E-07	0.00E+00	1.75E-07	5.38E-08	6.12E-08	0.00E+00	1.15E-07
983	479824.2	3742146	4.50E-07	8.12E-07	0.00E+00	1.26E-06	4.27E-07	8.98E-07	0.00E+00	1.33E-06	8.64E-08	1.44E-07	0.00E+00	2.30E-07	3.43E-07	6.70E-07	0.00E+00	1.01E-06	7.37E-08	1.09E-07	0.00E+00	1.83E-07	5.64E-08	6.42E-08	0.00E+00	1.21E-07
984	479841.7	3742139	4.72E-07	8.51E-07	0.00E+00	1.32E-06	4.48E-07	9.41E-07	0.00E+00	1.39E-06	9.05E-08	1.50E-07	0.00E+00	2.41E-07	3.59E-07	7.02E-07	0.00E+00	1.06E-06	7.72E-08	1.14E-07	0.00E+00	1.92E-07	5.90E-08	6.73E-08	0.00E+00	1.26E-07
985	479859.3	3742132	4.94E-07	8.91E-07	0.00E+00	1.38E-06	4.69E-07	9.85E-07	0.00E+00	1.45E-06	9.47E-08	1.57E-07	0.00E+00	2.52E-07	3.76E-07	7.35E-07	0.00E+00	1.11E-06	8.08E-08	1.20E-07	0.00E+00	2.01E-07	6.18E-08	7.04E-08	0.00E+00	1.32E-07
986	479876.9	3742125	5.16E-07	9.31E-07	0.00E+00	1.45E-06	4.90E-07	1.03E-06	0.00E+00	1.52E-06	9.90E-08	1.65E-07	0.00E+00	2.64E-07	3.93E-07	7.68E-07	0.00E+00	1.16E-06	8.45E-08	1.25E-07	0.00E+00	2.10E-07	6.46E-08	7.36E-08	0.00E+00	1.38E-07
987	479560.6	3742203	2.19E-07	3.95E-07	0.00E+00	6.14E-07	2.08E-07	4.37E-07	0.00E+00	6.45E-07	4.20E-08	6.99E-08	0.00E+00	1.12E-07	1.67E-07	3.26E-07	0.00E+00	4.93E-07	3.59E-08	5.32E-08	0.00E+00	8.91E-08	2.74E-08	3.12E-08	0.00E+00	5.87E-08
988	479578.2	3742196	2.27E-07	4.1E-07	0.00E+00	6.37E-07	2.16E-07	4.53E-07	0.00E+00	6.69E-07	4.36E-08	7.24E-08	0.00E+00	1.16E-07	1.73E-07	3.38E-07	0.00E+00	5.11E-07	3.72E-08	5.51E-08	0.00E+00	9.24E-08	2.84E-08	3.24E-08	0.00E+00	6.08E-08
989	479595.8	3742189	2.36E-07	4.25E-07	0.00E+00	6.61E-07	2.24E-07	4.70E-07	0.00E+00	6.94E-07	4.52E-08	7.51E-08	0.00E+00	1.20E-07	1.80E-07	3.51E-07	0.00E+00	5.30E-07	3.86E-08	5.72E-08	0.00E+00	9.58E-08	2.95E-08	3.36E-08	0.00E+00	6.31E-08
990	479613.4	3742182	2.45E-07	4.41E-07	0.00E+00	6.86E-07	2.32E-07	4.88E-07	0.00E+00	7.20E-07	4.69E-08	7.80E-08	0.00E+00	1.25E-07	1.86E-07	3.64E-07	0.00E+00	5.50E-07	4.00E-08	5.94E-08	0.00E+00	9.94E-08	3.06E-08	3.49E-08	0.00E+00	6.55E-08
991	479630.9	3742175	2.54E-07	4.58E-07	0.00E+00	7.12E-07	2.41E-07	5.07E-07	0.00E+00	7.48E-07	4.87E-08	8.10E-08	0.00E+00	1.30E-07	1.93E-07	3.78E-07	0.00E+00	5.71E-07	4.16E-08	6.16E-08	0.00E+00	1.03E-07	3.18E-08	3.62E-08	0.00E+00	6.80E-08
992	479648.5	3742167	2.64E-07	4.76E-07	0.00E+00	7.40E-07	2.50E-07	5.26E-07	0.00E+00	7.77E-07	5.06E-08	8.41E-08	0.00E+00	1.35E-07	2.01E-07	3.92E-07	0.00E+00	5.93E-07	4.32E-08	6.40E-08	0.00E+00	1.07E-07	3.30E-08	3.76E-08	0.00E+00	7.06E-08
993	479666.1	3742160	2.74E-07	4.95E-07	0.00E+00	7.69E-07	2.60E-07	5.47E-07	0.00E+00	8.07E-07	5.26E-08	8.74E-08	0.00E+00	1.40E-07	2.09E-07	4.08E-07	0.00E+00	6.17E-07	4.49E-08	6.66E-08	0.00E+00	1.11E-07	3.43E-08	3.91E-08	0.00E+00	7.34E-08
994	479683.7	3742153	2.85E-07	5.15E-07	0.00E+00	8.00E-07	2.71E-07	5.69E-07	0.00E+00	8.40E-07	5.47E-08	9.09E-08	0.00E+00	1.46E-07	2.17E-07	4.24E-07	0.00E+00	6.42E-07	4.67E-08	6.92E-08	0.00E+00	1.16E-07	3.57E-08	4.07E-08	0.00E+00	7.64E-08
995	479701.3	3742146	2.97E-07	5.36E-07	0.00E+00	8.33E-07	2.82E-07	5.92E-07	0.00E+00	8.74E-07	5.70E-08	9.47E-08	0.00E+00	1.52E-07	2.26E-07	4.42E-07	0.00E+00	6.68E-07	4.86E-08	7.21E-08	0.00E+00	1.21E-07	3.72E-08	4.23E-08	0.00E+00	7.95E-08
996	479718.8	3742139	3.09E-07	5.58E-07	0.00E+00	8.67E-07	2.94E-07	6.17E-07	0.00E+00	9.11E-07	5.93E-08	9.86E-08	0.00E+00	1.58E-07	2.36E-07	4.60E-07	0.00E+00	6.96E-07	5.06E-08	7.51E-08	0.00E+00	1.26E-07	3.87E-08	4.41E-08	0.00E+00	8.28E-08
997	479736.4	3742132	3.22E-07	5.81E-07	0.00E+00	9.04E-07	3.06E-07	6.43E-07	0.00E+00	9.49E-07	6.18E-08	1.03E-07	0.00E+00	1.65E-07	2.46E-07	4.80E-07	0.00E+00	7.25E-07	5.28E-08	7.82E-08	0.00E+00	1.31E-07	4.03E-08	4.60E-08	0.00E+00	8.63E-08
998	479754	3742125	3.36E-07	6.06E-07	0.00E+00	9.43E-07	3.19E-07	6.71E-07	0.00E+00	9.90E-07	6.45E-08	1.07E-07	0.00E+00	1.72E-07	2.56E-07	5.00E-07	0.00E+00	7.56E-07	5.50E-08	8.16E-08	0.00E+00	1.37E-07	4.21E-08	4.79E-08	0.00E+00	9.00E-08
999	479771.6	3742117	3.51E-07	6.33E-07	0.00E+00	9.84E-07	3.33E-07	7.00E-07	0.00E+00	1.03E-06	6.73E-08	1.12E-07	0.00E+00	1.79E-07	2.67E-07	5.22E-07	0.00E+00	7.89E-07	5.75E-08	8.52E-08	0.00E+00	1.43E-07	4.39E-08	5.00E-08	0.00E+00	9.39E-08
1000	479789.2	3742110	3.67E-07	6.61E-07	0.00E+00	1.03E-06	3.48E-07	7.31E-07	0.00E+00	1.08E-06	7.03E-08	1.17E-07	0.00E+00	1.87E-07	2.79E-07	5.45E-07	0.00E+00	8.24E-07	6.00E-08	8.89E-08	0.00E+00	1.49E-07	4.59E-08	5.22E-08	0.00E+00	9.81E-08
1001	479806.7	3742103	3.83E-07	6.9E-07	0.00E+00	1.07E-06	3.63E-07	7.63E-07	0.00E+00	1.13E-06	7.34E-08	1.22E-07	0.00E+00	1.95E-07	2.91E-07	5.69E-07	0.00E+00	8.61E-07	6.26E-08	9.29E-08	0.00E+00	1.55E-07	4.79E-08	5.45E-08	0.00E+00	1.02E-07
1002	479824.3	3742096	4.00E-07	7.21E-07	0.00E+00	1.12E-06	3.79E-07	7.97E-07	0.00E+00	1.18E-06	7.66E-08	1.27E-07	0.00E+00	2.04E-07	3.04E-07	5.94E-07	0.00E+00	8.98E-07	6.54E-08	9.69E-08	0.00E+00	1.62E-07	5.00E-08	5.69E-08	0.00E+00	1.07E-07
1003	479841.9	3742089	4.17E-07	7.52E-07	0.00E+00	1.17E-06	3.96E-07	8.32E-07	0.00E+00	1.23E-06	8.00E-08	1.33E-07	0.00E+00	2.13E-07	3.17E-07	6.20E-07	0.00E+00	9.37E-07	6.82E-08	1.01E-07	0.00E+00	1.69E-07	5.22E-08	5.94E-08	0.00E+00	1.12E-07
1004	479859.5	3742082	4.35E-07	7.84E-07	0.00E+00	1.22E-06	4.12E-07	8.67E-07	0.00E+00	1.28E-06	8.34E-08	1.39E-07	0.00E+00	2.22E-07	3.31E-07	6.46E-07	0.00E+00	9.77E-07	7.11E-08	1.05E-07	0.00E+00	1.77E-07	5.44E-08	6.19E-08	0.00E+00	1.16E-07
1005	479877	3742075	4.53E-07	8.16E-07	0.00E+00	1.27E-06	4.29E-07	9.03E-07	0.00E+00	1.33E-06	8.68E-08	1.44E-07	0.00E+00	2.31E-07	3.45E-07	6.73E-07	0.00E+00	1.02E-06	7.41E-08	1.10E-07	0.00E+00	1.84E-07	5.66E-08	6.45E-08	0.00E+00	1.21E-07
1006	479525.6	3742167	1.91E-07	3.45E-07	0.00E+00	5.36E-07	1.81E-07	3.81E-07	0.00E+00	5.62E-07	3.66E-08	6.09E-08	0.00E+00	9.75E-08	1.45E-07	2.84E-07	0.00E+00	4.30E-07	3.13E-08	4.64E-08	0.00E+00	7.76E-08	2.39E-08	2.72E-08	0.00E+00	5.11E-08
1007	479543.2	3742160	1.98E-07	3.56E-07	0.00E+00	5.54E-07	1.87E-07	3.94E-07	0.00E+00	5.81E-07	3.79E-08	6.29E-08	0.00E+00	1.01E-07	1.50E-07	2.94E-07	0.00E+00	4.44E-07	3.23E-08	4.79E-08	0.00E+00	8.02E-08	2.47E-08	2.81E-08	0.00E+00	5.29E-08
1008	479560.8	3742153	2.04E-07	3.68E-07	0.00E+00	5.73E-07	1.94E-07	4.07E-07	0.00E+00	6.01E-07	3.92E-08	6.51E-08	0.00E+00	1.04E-07	1.56E-07	3.04E-07	0.00E+00	4.59E-07	3.34E-08	4.96E-08	0.00E+00	8.30E-08	2.55E-08	2.91E-08	0.00E+00	5.47E-08
1009	479578.4	3742146	2.11E-07	3.81E-07	0.00E+00	5.92E-07	2.00E-07	4.21E-07	0.00E+00	6.22E-07	4.05E-08	6.73E-08	0.00E+00	1.08E-07	1.61E-07	3.14E-07	0.00E+00	4.75E-07	3.46E-08	5.12E-08	0.00E+00	8.58E-08	2.64E-08	3.01E-08	0.00E+00	5.65E-08
1010	479595.9	3742139	2.19E-07	3.94E-07	0.00E+00	6.13E-07	2.07E-07	4.36E-07	0.00E+00	6.43E-07	4.19E-08	6.96E-08	0.00E+00	1.12E-07	1.66E-07	3.25E-07	0.00E+00	4.91E-07	3.58E-08	5.30E-08	0.00E+00	8.88E-08	2.73E-08	3.11E-08	0.00E+00	5.85E-08
1011	479613.5	3742132	2.26E-07	4.08E-07	0.00E+00	6.34E-07	2.15E-07	4.51E-07	0.00E+00	6.66E-07	4.34E-08	7.21E-08	0.00E+00	1.15E-07	1.72E-07	3.36E-07	0.00E+00	5.09E-07	3.70E-08	5.49E-08	0.00E+00	9.19E-08	2.83E-08	3.22E-08	0.00E+00	6.05E-08
1012	479631.1	3742125	2.34E-07	4.22E-07	0.00E+00	6.57E-07	2.22E-07	4.67E-07	0.00E+00	6.90E-07	4.49E-08	7.47E-08	0.00E+00	1.20E-07	1.78E-07	3.48E-07	0.00E+00	5.27E-07	3.83E-08	5.68E-08	0.00E+00	9.52E-08	2.93E-08	3.34E-08	0.00E+00	6.27E-08
1013	479648.7	3742117	2.43E-07	4.38E-07	0.00E+00	6.81E-07	2.30E-07	4.84E-07	0.00E+00	7.15E-07	4.66E-08	7.74E-08	0.00E+00	1.24E-07	1.85E-07	3.61E-07	0.00E+00	5.46E-07	3.97E-08	5.89E-08	0.00E+00	9.86E-08	3.04E-08	3.46E-08	0.00E+00	6.50E-08
1014	479666.3	3742110	2.52E-07	4.54E-07	0.00E+00	7.06E-07	2.39E-07	5.02E-07	0.00E+00	7.41E-07	4.83E-08	8.02E-08	0.00E+00	1.28E-07	1.92E-07	3.74E-07	0.00E+00	5.66E-07	4.12E-08	6.11E-08	0.00E+00	1.02E-07	3.15E-08	3.59E-08	0.00E+00	6.74E-08
1015	479683.8	3742103	2.61E-07	4.71E-07	0.00E+00	7.32E-07	2.48E-07	5.21E-07	0.00E+00	7.69E-07	5.01E-08	8.32E-08	0.00E+00	1.33E-07	1.99E-07	3.88E-07	0.00E+00	5.87E-07	4.27E-08	6.34E-08	0.00E+00	1.06E-07	3.27E-08	3.72E-08	0.00E+00	6.99E-08
1016	479701.4	3742096	2.71E-07	4.89E-07	0.00E+00	7.60E-07	2.57E-07	5.41E-07	0.00E+00	7.98E-07	5.20E-08	8.64E-08	0.00E+00	1.38E-07	2.06E-07	4.03E-07	0.00E+00	6.10E-07	4.44E-08	6.58E-08	0.00E+00	1.10E-07	3.39E-08	3.86E-08	0.00E+00	7.25E-08
1017	479719	3742089	2.82E-07	5.08E-07	0.00E+00	7.89E-07	2.67E-07	5.62E-07	0.00E+00	8.29E-07	5.40E-08	8.97E-08	0.00E+00	1.44E-07	2.14E-07	4.19E-07	0.00E+00	6.33E-07	4.61E-08	6.83E-08	0.00E+00	1.14E-07	3.52E-08	4.01E-08	0.00E+00	7.54E-08
1018	479736.6	3742082	2.93E-07	5.28E-07	0.00E+00	8.21E-07	2.78E-07	5.84E-07	0.00E+00	8.62E-07	5.62E-08	9.33E-08	0.00E+00	1.49E-07	2.23E-07	4.35E-07	0.00E+00	6.58E-07	4.79E-08	7.10E-08	0.00E+00	1.19E-07	3.66E-08	4.17E-08	0.00E+00	7.84E-08
1019	479754.1	3742075	3.05E-07	5.49E-07	0.00E+00	8.54E-07	2.89E-07	6.08E-07	0.00E+00	8.96E-07	5.84E-08	9.71E-08	0.00E+00	1.55E-07	2.32E-07	4.53E-07	0.00E+00	6.85E-07	4.98E-08	7.39E-08	0.00E+00	1.24E-07	3.81E-08	4.34E-08	0.00E+00	8.15E-08
1020	479771.7	3742067	3.17E-07	5.72E-07	0.00E+00	8.88E-07	3.01E-07	6.32E-07	0.00E+00	9.33E-07	6.08E-08	1.01E-07	0.00E+00	1.62E-07	2.41E-07	4.71E-07	0.00E+00	7.13E-07	5.19E-08	7.69E-08	0.00E+00	1.29E-07	3.96E-08	4.52E-08	0.00E+00	8.48E-08
1021	479789.3	3742060	3.30E-07	5.95E-07	0.00E+00	9.25E-07	3.13E-07	6.58E-07	0.00E+00	9.71E-07	6.33E-08	1.05E-07	0.00E+00	1.68E-07	2.51E-07	4.91E-07	0.00E+00	7.42E-07	5.40E-08	8.00E-08	0.00E+00	1.34E-07	4.13E-08	4.70E-08	0.00E+00	8.83E-08
1022	479806.9	3742053	3.43E-07	6.19E-07	0.00E+00	9.62E-07	3.26E-07	6.85E-07	0.00E+00	1.01E-06	6.58E-08	1.09E-07	0.00E+00	1.75E-07	2.61E-07	5.11E-07	0.00E+00	7.72E-07	5.62E-08	8.33E-08	0.00E+00	1.39E-07	4.29E-08	4.89E-08	0.00E+00	9.19E-08
1023	479824.5	3742046	3.57E-07	6.44E-07	0.00E+00	1.00E-06	3.39E-07	7.13E-07	0.00E+00	1.05E-06	6.85E-08	1.14E-07	0.00E+00	1.82E-07	2.72E-07	5.31E-07	0.00E+00	8.03E-07	5.85E-08	8.67E-08	0.00E+00	1.45E-07	4.47E-08	5.09E-08	0.00E+00	9.56E-08
1024	479842	3742039	3.71E-07	6.7E-07	0.00E+00	1.04E-06	3.52E-07	7.41E-07	0.00E+00	1.09E-06	7.12E-08	1.18E-07	0.00E+00	1.90E-07	2.83E-07	5.52E-07	0.00E+00	8.35E-07	6.08E-08	9.01E-08	0.00E+00	1.51E-07	4.65E-08	5.29E-08	0.00E+00	9.94E-08
1025	479859.6	3742032	3.86E-07	6.96E-07	0.00E+00	1.08E-06	3.66E-07	7.70E-07	0.00E+00	1.14E-06	7.40E-08	1.23E-07	0.00E+00	1.97E-07	2.94E-07	5.74E-07	0.00E+00	8.68E-07	6.32E-08	9.36E-08	0.00E+00	1.57E-07	4.83E-08	5.50E-08	0.00E+00	1.03E-07
1026	479877.2	3742025	4.01E-07	7.22E-07	0.00E+00	1.12E-06	3.80E-07	7.99E-07	0.00E+00	1.18E-06	7.68E-08	1.28E-07	0.00E+00	2.04E-07	3.05E-07	5.96E-07	0.00E+00	9.01E-07	6.56E-08	9.72E-08	0.00E+00	1.63E-07	5.01E-08	5.71E-08	0.00E+00	1.07E-07
1027	479490.6	3742132	1.68E-07	3.04E-07	0.00E+00	4.72E-07	1.60E-07	3.36E-07	0.00E+00	4.96E-07	3.23E-08	5.37E-08	0.00E+00	8.60E-08	1.28E-07	2.50E-07	0.00E+00	3.79E-07	2.76E-08	4.09E-08	0.00E+00	6.84E-08	2.11E-08	2.40E-08	0.00E+00	4.51E-08
1028	479508.2	3742125	1.74E-07	3.13E-07	0.00E+00	4.87E-07	1.65E-07	3.46E-07	0.00E+00	5.11E-07	3.33E-08	5.53E-08	0.00E+00	8.86E-08	1.32E-07	2.58E-07	0.00E+00	3.90E-07	2.84E-08	4.21E-08	0.00E+00	7.05E-08	2.17E-08	2.47E-08	0.00E+00	4.65E-08
1029	479525.8	3742117	1.79E-07	3.23E-07	0.00E+00	5.02E-07	1.70E-07	3.57E-07	0.00E+00	5.27E-07	3.43E-08	5.70E-08	0.00E+00	9.14E-08	1.36E-07	2.66E-07	0.00E+00	4.03E-07	2.93E-08	4.34E-08	0.00E+00	7.27E-08	2.24E-08	2.55E-08	0.00E+00	4.79E-08
1030	479543.4	3742110	1.85E-07	3.33E-07	0.00E+00	5.18E-07	1.75E-07	3.68E-07	0.00E+00	5.43E-07	3.54E-08	5.88E-08	0.00E+00	9.42E-08	1.41E-07	2.75E-07	0.00E+00	4.15E-07	3.02E-08	4.48E-08	0.00E+00	7.50E-08	2.31E-08	2.63E-08	0.00E+00	4.94E-08
1031	479560.9	3742103	1.90E-07	3.43E-07	0.00E+00	5.34E-07	1.81E-07	3.80E-07	0.00E+00	5.61E-07	3.65E-08	6.07E-08	0.00E+00	9.72E-08	1.45E-07	2.83E-07	0.00E+00	4.28E-07	3.12E-08	4.62E-08	0.00E+00	7.74E-08	2.38E-08	2.71E-08	0.00E+00	5.10E-08
1032	479578.5	3742096	1.97E-07	3.54E-07	0.00E+00	5.51E-07	1.86E-07	3.92E-07	0.00E+00	5.79E-07	3.77E-08	6.26E-08	0.00E+00	1.00E-07	1.50E-07	2.92E-07	0.00E+00	4.42E-07	3.22E-08	4.77E-08	0.00E+00	7.99E-08	2.46E-08	2.80E-08	0.00E+00	5.26E-08
1033	479596.1	3742089	2.03E-07	3.66E-07	0.00E+00	5.69E-07	1.93E-07	4.05E-07	0.00E+00	5.97E-07	3.89E-08	6.47E-08	0.00E+00	1.04E-07	1.55E-07	3.02E-07	0.00E+00	4.56E-07	3.32E-08	4.92E-08	0.00E+00	8.24E-08	2.54E-08	2.89E-08	0.00E+00	5.43E-08
1034	479613.7	3742082	2.10E-07	3.78E-07	0.00E+00	5.88E-07	1.99E-07	4.18E-07	0.00E+00	6.17E-07	4.02E-08	6.68E-08	0.00E+00	1.07E-07	1.60E-07	3.12E-07	0.00E+00	4.71E-07	3.43E-08	5.09E-08	0.00E+00	8.52E-08	2.62E-08	2.99E-08	0.00E+00	5.61E-08
1035	479631.3	3742075	2.17E-07	3.91E-07	0.00E+00	6.07E-07	2.06E-07	4.32E-07	0.00E+00	6.38E-07	4.16E-08	6.90E-08	0.00E+00	1.11E-07	1.65E-07	3.22E-07	0.00E+00	4.87E-07	3.55E-08	5.26E-08	0.00E+00	8.80E-08	2.71E-08	3.09E-08	0.00E+00	5.80E-08
1036	479648.8	3742067	2.24E-07	4.04E-07	0.00E+00	6.28E-07	2.13E-07	4.47E-07	0.00E+00	6.59E-07	4.30E-08	7.14E-08	0.00E+00	1.14E-07	1.71E-07	3.33E-07	0.00E+00	5.04E-07	3.67E-08	5.44E-08	0.00E+00	9.10E-08	2.80E-08	3.19E-08	0.00E+00	6.00E-08
1037	479666.4	3742060	2.32E-07	4.18E-07	0.00E+00	6.50E-07	2.20E-07	4.62E-07	0.00E+00	6.82E-07	4.44E-08	7.38E-08	0.00E+00	1.18E-07	1.76E-07	3.45E-07	0.00E+00	5.21E-07	3.79E-08	5.62E-08	0.00E+00	9.41E-08	2.90E-08	3.30E-08	0.00E+00	6.20E-08
1038	479684	3742053	2.40E-07	4.33E-07	0.00E+00	6.72E-07	2.28E-07	4.78E-07	0.00E+00	7.06E-07	4.60E-08	7.64E-08	0.00E+00	1.22E-07	1.83E-07	3.57E-07	0.00E+00	5.39E-07	3.93E-08	5.82E-08	0.00E+00	9.75E-08	3.00E-08	3.42E-08	0.00E+00	6.42E-08
1039	479701.6	3742046	2.49E-07	4.48E-07	0.00E+00	6.97E-07	2.36E-07	4.96E-07	0.00E+00	7.32E-07	4.77E-08	7.92E-08	0.00E+00	1.27E-07	1.89E-07	3.70E-07	0.00E+00	5.59E-07	4.07E-08	6.03E-08	0.00E+00	1.01E-07	3.11E-08	3.54E-08	0.00E+00	6.65E-08
1040	479719.1	3742039	2.58E-07	4.65E-07	0.00E+00	7.22E-07	2.44E-07	5.14E-07	0.00E+00	7.58E-07	4.94E-08	8.21E-08	0.00E+00	1.32E-07	1.96E-07	3.83E-07	0.00E+00	5.79E-07	4.22E-08	6.25E-08	0.00E+00	1.05E-07	3.22E-08	3.67E-08	0.00E+00	6.89E-08
1041	479736.7	3742032	2.67E-07	4.82E-07	0.00E+00	7.49E-07	2.54E-07	5.33E-07	0.00E+00	7.87E-07	5.13E-08	8.52E-08	0.00E+00	1.36E-07	2.03E-07	3.97E-07	0.00E+00	6.01E-07	4.37E-08	6.48E-08	0.00E+00	1.09E-07	3.34E-08	3.81E-08	0.00E+00	7.15E-08
1042	479754.3	3742025	2.77E-07	5E-07	0.00E+00	7.77E-07	2.63E-07	5.53E-07	0.00E+00	8.16E-07	5.32E-08	8.84E-08	0.00E+00	1.42E-07	2.11E-07	4.12E-07	0.00E+00	6.23E-07	4.54E-08	6.73E-08	0.00E+00	1.13E-07	3.47E-08	3.95E-08	0.00E+00	7.42E-08
1043	479771.9	3742017	2.88E-07	5.19E-07	0.00E+00	8.07E-07	2.73E-07	5.74E-07	0.00E+00	8.47E-07	5.52E-08	9.17E-08	0.00E+00	1.47E-07	2.19E-07	4.28E-07	0.00E+00	6.47E-07	4.71E-08	6.98E-08	0.00E+00	1.17E-07	3.60E-08	4.10E-08	0.00E+00	7.70E-08
1044	479789.5	3742010	2.99E-07	5.39E-07	0.00E+00	8.37E-07	2.83E-07	5.96E-07	0.00E+00	8.79E-07	5.73E-08	9.52E-08	0.00E+00	1.52E-07	2.27E-07	4.44E-07	0.00E+00	6.72E-07	4.89E-08	7.25E-08	0.00E+00	1.21E-07	3.74E-08	4.26E-08	0.00E+00	7.99E-08
1045	479807	3742003	3.10E-07	5.59E-07	0.00E+00	8.69E-07	2.94E-07	6.18E-07	0.00E+00	9.12E-07	5.95E-08	9.88E-08	0.00E+00	1.58E-07	2.36E-07	4.61E-07	0.00E+00	6.97E-07	5.07E-08	7.52E-08	0.00E+00	1.26E-07	3.88E-08	4.42E-08	0.00E+00	8.29E-08
1046	479824.6	3741996	3.22E-07	5.8E-07	0.00E+00	9.01E-07	3.05E-07	6.41E-07	0.00E+00	9.46E-07	6.17E-08	1.02E-07	0.00E+00	1.64E-07	2.45E-07	4.78E-07	0.00E+00	7.23E-07	5.26E-08	7.80E-08	0.00E+00	1.31E-07	4.02E-08	4.58E-08	0.00E+00	8.61E-08
1047	479842.2	3741989	3.33E-07	6.01E-07	0.00E+00	9.35E-07	3.16E-07	6.65E-07	0.00E+00	9.81E-07	6.39E-08	1.06E-07	0.00E+00	1.70E-07	2.54E-07	4.96E-07	0.00E+00	7.50E-07	5.46E-08	8.09E-08	0.00E+00	1.35E-07	4.17E-08	4.75E-08	0.00E+00	8.92E-08
1048	479859.8	3741982	3.45E-07	6.23E-07	0.00E+00	9.68E-07	3.28E-07	6.89E-07	0.00E+00	1.02E-06	6.62E-08	1.10E-07	0.00E+00	1.76E-07	2.63E-07	5.14E-07	0.00E+00	7.77E-07	5.65E-08	8.38E-08	0.00E+00	1.40E-07	4.32E-08	4.92E-08	0.00E+00	9.24E-08
1049	479877.4	3741975	3.57E-07	6.45E-07	0.00E+00	1.00E-06	3.39E-07	7.13E-07	0.00E+00	1.05E-06	6.86E-08	1.14E-07	0.00E+00	1.82E-07	2.72E-07	5.32E-07	0.00E+00	8.04E-07	5.85E-08	8.67E-08	0.00E+00	1.45E-07	4.47E-08	5.09E-08	0.00E+00	9.57E-08
1050	479455.6	3742096	1.50E-07	2.7E-07	0.00E+00	4.20E-07	1.42E-07	2.99E-07	0.00E+00	4.41E-07	2.87E-08	4.77E-08	0.00E+00	7.65E-08	1.14E-07	2.23E-07	0.00E+00	3.37E-07	2.45E-08	3.63E-08	0.00E+00	6.09E-08	1.87E-08	2.13E-08	0.00E+00	4.01E-08
1051	479473.2	3742089	1.54E-07	2.78E-07	0.00E+00	4.32E-07	1.46E-07	3.07E-07	0.00E+00	4.53E-07	2.96E-08	4.91E-08	0.00E+00	7.87E-08	1.17E-07	2.29E-07	0.00E+00	3.46E-07	2.52E-08	3.74E-08	0.00E+00	6.26E-08	1.93E-08	2.20E-08	0.00E+00	4.12E-08
1052	479490.8	3742082	1.58E-07	2.86E-07	0.00E+00	4.44E-07	1.50E-07	3.16E-07	0.00E+00	4.67E-07	3.04E-08	5.05E-08	0.00E+00	8.09E-08	1.21E-07	2.36E-07	0.00E+00	3.56E-07	2.59E-08	3.85E-08	0.00E+00	6.44E-08	1.98E-08	2.26E-08	0.00E+00	4.24E-08
1053	479508.4	3742075	1.63E-07	2.94E-07	0.00E+00	4.57E-07	1.55E-07	3.25E-07	0.00E+00	4.80E-07	3.13E-08	5.20E-08	0.00E+00	8.33E-08	1.24E-07	2.43E-07	0.00E+00	3.67E-07	2.67E-08	3.96E-08	0.00E+00	6.63E-08	2.04E-08	2.32E-08	0.00E+00	4.36E-08
1054	479525.9	3742067	1.68E-07	3.03E-07	0.00E+00	4.70E-07	1.59E-07	3.35E-07	0.00E+00	4.94E-07	3.22E-08	5.35E-08	0.00E+00	8.57E-08	1.28E-07	2.50E-07	0.00E+00	3.77E-07	2.75E-08	4.07E-08	0.00E+00	6.82E-08	2.10E-08	2.39E-08	0.00E+00	4.49E-08
1055	479543.5	3742060	1.73E-07	3.12E-07	0.00E+00	4.84E-07	1.64E-07	3.45E-07	0.00E+00	5.08E-07	3.31E-08	5.51E-08	0.00E+00	8.82E-08	1.32E-07	2.57E-07	0.00E+00	3.88E-07	2.83E-08	4.19E-08	0.00E+00	7.02E-08	2.16E-08	2.46E-08	0.00E+00	4.62E-08
1056	479561.1	3742053	1.78E-07	3.21E-07	0.00E+00	4.99E-07	1.69E-07	3.55E-07	0.00E+00	5.24E-07	3.41E-08	5.67E-08	0.00E+00	9.08E-08	1.35E-07	2.65E-07	0.00E+00	4.00E-07	2.91E-08	4.32E-08	0.00E+00	7.23E-08	2.23E-08	2.54E-08	0.00E+00	4.76E-08
1057	479578.7	3742046	1.83E-07	3.3E-07	0.00E+00	5.14E-07	1.74E-07	3.66E-07	0.00E+00	5.39E-07	3.51E-08	5.84E-08	0.00E+00	9.35E-08	1.40E-07	2.73E-07	0.00E+00	4.12E-07	3.00E-08	4.45E-08	0.00E+00	7.44E-08	2.29E-08	2.61E-08	0.00E+00	4.90E-08
1058	479596.3	3742039	1.89E-07	3.41E-07	0.00E+00	5.29E-07	1.79E-07	3.77E-07	0.00E+00	5.56E-07	3.62E-08	6.02E-08	0.00E+00	9.64E-08	1.44E-07	2.81E-07	0.00E+00	4.25E-07	3.09E-08	4.58E-08	0.00E+00	7.67E-08	2.36E-08	2.69E-08	0.00E+00	5.05E-08
1059	479613.8	3742032	1.95E-07	3.51E-07	0.00E+00	5.46E-07	1.85E-07	3.88E-07	0.00E+00	5.73E-07	3.73E-08	6.20E-08	0.00E+00	9.94E-08	1.48E-07	2.89E-07	0.00E+00	4.38E-07	3.19E-08	4.72E-08	0.00E+00	7.91E-08	2.44E-08	2.77E-08	0.00E+00	5.21E-08
1060	479631.4	3742025	2.01E-07	3.62E-07	0.00E+00	5.63E-07	1.90E-07	4.01E-07	0.00E+00	5.91E-07	3.85E-08	6.40E-08	0.00E+00	1.03E-07	1.53E-07	2.99E-07	0.00E+00	4.52E-07	3.29E-08	4.87E-08	0.00E+00	8.16E-08	2.51E-08	2.86E-08	0.00E+00	5.37E-08
1061	479649	3742017	2.07E-07	3.74E-07	0.00E+00	5.81E-07	1.97E-07	4.13E-07	0.00E+00	6.10E-07	3.98E-08	6.61E-08	0.00E+00	1.06E-07	1.58E-07	3.08E-07	0.00E+00	4.66E-07	3.39E-08	5.03E-08	0.00E+00	8.42E-08	2.59E-08	2.95E-08	0.00E+00	5.55E-08
1062	479666.6	3742010	2.14E-07	3.86E-07	0.00E+00	6.00E-07	2.03E-07	4.27E-07	0.00E+00	6.30E-07	4.11E-08	6.82E-08	0.00E+00	1.09E-07	1.63E-07	3.18E-07	0.00E+00	4.81E-07	3.50E-08	5.19E-08	0.00E+00	8.70E-08	2.68E-08	3.05E-08	0.00E+00	5.73E-08
1063	479684.1	3742003	2.21E-07	3.99E-07	0.00E+00	6.20E-07	2.10E-07	4.41E-07	0.00E+00	6.51E-07	4.24E-08	7.05E-08	0.00E+00	1.13E-07	1.68E-07	3.29E-07	0.00E+00	4.98E-07	3.62E-08	5.37E-08	0.00E+00	8.99E-08	2.77E-08	3.15E-08	0.00E+00	5.92E-08
1064	479701.7	3741996	2.29E-07	4.13E-07	0.00E+00	6.41E-07	2.17E-07	4.56E-07	0.00E+00	6.73E-07	4.39E-08	7.29E-08	0.00E+00	1.17E-07	1.74E-07	3.40E-07	0.00E+00	5.14E-07	3.74E-08	5.55E-08	0.00E+00	9.30E-08	2.86E-08	3.26E-08	0.00E+00	6.12E-08
1065	479719.3	3741989	2.37E-07	4.27E-07	0.00E+00	6.64E-07	2.25E-07	4.72E-07	0.00E+00	6.97E-07	4.54E-08	7.54E-08	0.00E+00	1.21E-07	1.80E-07	3.52E-07	0.00E+00	5.32E-07	3.87E-08	5.74E-08	0.00E+00	9.62E-08	2.96E-08	3.37E-08	0.00E+00	6.33E-08
1066	479736.9	3741982	2.45E-07	4.42E-07	0.00E+00	6.87E-07	2.32E-07	4.89E-07	0.00E+00	7.21E-07	4.70E-08	7.81E-08	0.00E+00	1.25E-07	1.87E-07	3.64E-07	0.00E+00	5.51E-07	4.01E-08	5.94E-08	0.00E+00	9.95E-08	3.06E-08	3.49E-08	0.00E+00	6.56E-08
1067	479754.5	3741975	2.54E-07	4.57E-07	0.00E+00	7.11E-07	2.41E-07	5.06E-07	0.00E+00	7.46E-07	4.86E-08	8.08E-08	0.00E+00	1.29E-07	1.93E-07	3.77E-07	0.00E+00	5.70E-07	4.15E-08	6.15E-08	0.00E+00	1.03E-07	3.17E-08	3.61E-08	0.00E+00	6.79E-08
1068	479772	3741967	2.63E-07	4.74E-07	0.00E+00	7.36E-07	2.49E-07	5.24E-07	0.00E+00	7.73E-07	5.04E-08	8.37E-08	0.00E+00	1.34E-07	2.00E-07	3.91E-07	0.00E+00	5.90E-07	4.30E-08	6.37E-08	0.00E+00	1.07E-07	3.28E-08	3.74E-08	0.00E+00	7.03E-08
1069	479789.6	3741960	2.72E-07	4.9E-07	0.00E+00	7.62E-07	2.58E-07	5.42E-07	0.00E+00	8.00E-07	5.21E-08	8.66E-08	0.00E+00	1.39E-07	2.07E-07	4.04E-07	0.00E+00	6.11E-07	4.45E-08	6.60E-08	0.00E+00	1.10E-07	3.40E-08	3.87E-08	0.00E+00	7.28E-08
1070	479807.2	3741953	2.81E-07	5.08E-07	0.00E+00	7.89E-07	2.67E-07	5.61E-07	0.00E+00	8.28E-07	5.40E-08	8.97E-08	0.00E+00	1.44E-07	2.14E-07	4.19E-07	0.00E+00	6.33E-07	4.61E-08	6.83E-08	0.00E+00	1.14E-07	3.52E-08	4.01E-08	0.00E+00	7.53E-08
1071	479824.8	3741946	2.91E-07	5.25E-07	0.00E+00	8.16E-07	2.76E-07	5.81E-07	0.00E+00	8.57E-07	5.59E-08	9.28E-08	0.00E+00	1.49E-07	2.22E-07	4.33E-07	0.00E+00	6.55E-07	4.77E-08	7.07E-08	0.00E+00	1.18E-07	3.64E-08	4.15E-08	0.00E+00	7.79E-08
1072	479842.4	3741939	3.01E-07	5.43E-07	0.00E+00	8.44E-07	2.86E-07	6.01E-07	0.00E+00	8.86E-07	5.78E-08	9.60E-08	0.00E+00	1.54E-07	2.29E-07	4.48E-07	0.00E+00	6.77E-07	4.93E-08	7.31E-08	0.00E+00	1.22E-07	3.77E-08	4.29E-08	0.00E+00	8.06E-08
1073	479859.9	3741932	3.11E-07	5.61E-07	0.00E+00	8.72E-07	2.95E-07	6.21E-07	0.00E+00	9.16E-07	5.97E-08	9.92E-08	0.00E+00	1.59E-07	2.37E-07	4.63E-07	0.00E+00	7.00E-07	5.09E-08	7.55E-08	0.00E+00	1.26E-07	3.89E-08	4.44E-08	0.00E+00	8.33E-08
1074	479877.5	3741925	3.21E-07	5.79E-07	0.00E+00	9.01E-07	3.05E-07	6.41E-07	0.00E+00	9.46E-07	6.16E-08	1.02E-07	0.00E+00	1.64E-07	2.45E-07	4.78E-07	0.00E+00	7.22E-07	5.26E-08	7.80E-08	0.00E+00	1.31E-07	4.02E-08	4.58E-08	0.00E+00	8.60E-08
1075	479420.6	3742060	1.34E-07	2.42E-07	0.00E+00	3.77E-07	1.27E-07	2.68E-07	0.00E+00	3.95E-07	2.58E-08	4.28E-08	0.00E+00	6.86E-08	1.02E-07	2.00E-07	0.00E+00	3.02E-07	2.20E-08	3.26E-08	0.00E+00	5.46E-08	1.68E-08	1.91E-08	0.00E+00	3.59E-08
1076	479438.2	3742053	1.38E-07	2.49E-07	0.00E+00	3.87E-07	1.31E-07	2.75E-07	0.00E+00	4.06E-07	2.64E-08	4.39E-08	0.00E+00	7.04E-08	1.05E-07	2.05E-07	0.00E+00	3.10E-07	2.26E-08	3.35E-08	0.00E+00	5.60E-08	1.73E-08	1.97E-08	0.00E+00	3.69E-08
1077	479455.8	3742046	1.42E-07	2.55E-07	0.00E+00	3.97E-07	1.34E-07	2.82E-07	0.00E+00	4.17E-07	2.72E-08	4.51E-08	0.00E+00	7.23E-08	1.08E-07	2.11E-07	0.00E+00	3.18E-07	2.32E-08	3.43E-08	0.00E+00	5.75E-08	1.77E-08	2.02E-08	0.00E+00	3.79E-08
1078	479473.4	3742039	1.45E-07	2.62E-07	0.00E+00	4.07E-07	1.38E-07	2.90E-07	0.00E+00	4.28E-07	2.79E-08	4.63E-08	0.00E+00	7.42E-08	1.11E-07	2.16E-07	0.00E+00	3.27E-07	2.38E-08	3.53E-08	0.00E+00	5.91E-08	1.82E-08	2.07E-08	0.00E+00	3.89E-08
1079	479490.9	3742032	1.49E-07	2.69E-07	0.00E+00	4.18E-07	1.42E-07	2.98E-07	0.00E+00	4.39E-07	2.86E-08	4.76E-08	0.00E+00	7.62E-08	1.14E-07	2.22E-07	0.00E+00	3.36E-07	2.44E-08	3.62E-08	0.00E+00	6.06E-08	1.87E-08	2.13E-08	0.00E+00	3.99E-08
1080	479508.5	3742025	1.53E-07	2.76E-07	0.00E+00	4.30E-07	1.45E-07	3.06E-07	0.00E+00	4.51E-07	2.94E-08	4.89E-08	0.00E+00	7.83E-08	1.17E-07	2.28E-07	0.00E+00	3.45E-07	2.51E-08	3.72E-08	0.00E+00	6.23E-08	1.92E-08	2.18E-08	0.00E+00	4.10E-08
1081	479526.1	3742017	1.58E-07	2.84E-07	0.00E+00	4.42E-07	1.49E-07	3.14E-07	0.00E+00	4.64E-07	3.02E-08	5.02E-08	0.00E+00	8.04E-08	1.20E-07	2.34E-07	0.00E+00	3.54E-07	2.58E-08	3.82E-08	0.00E+00	6.40E-08	1.97E-08	2.24E-08	0.00E+00	4.22E-08
1082	479543.7	3742010	1.62E-07	2.92E-07	0.00E+00	4.54E-07	1.54E-07	3.23E-07	0.00E+00	4.76E-07	3.11E-08	5.16E-08	0.00E+00	8.26E-08	1.23E-07	2.41E-07	0.00E+00	3.64E-07	2.65E-08	3.93E-08	0.00E+00	6.58E-08	2.03E-08	2.31E-08	0.00E+00	4.33E-08
1083	479561.3	3742003	1.66E-07	3E-07	0.00E+00	4.67E-07	1.58E-07	3.32E-07	0.00E+00	4.90E-07	3.19E-08	5.30E-08	0.00E+00	8.50E-08	1.27E-07	2.48E-07	0.00E+00	3.74E-07	2.72E-08	4.04E-08	0.00E+00	6.76E-08	2.08E-08	2.37E-08	0.00E+00	4.45E-08
1084	479578.8	3741996	1.71E-07	3.09E-07	0.00E+00	4.80E-07	1.62E-07	3.41E-07	0.00E+00	5.04E-07	3.28E-08	5.45E-08	0.00E+00	8.74E-08	1.30E-07	2.55E-07	0.00E+00	3.85E-07	2.80E-08	4.15E-08	0.00E+00	6.95E-08	2.14E-08	2.44E-08	0.00E+00	4.58E-08
1085	479596.4	3741989	1.76E-07	3.18E-07	0.00E+00	4.94E-07	1.67E-07	3.51E-07	0.00E+00	5.18E-07	3.38E-08	5.61E-08	0.00E+00	8.99E-08	1.34E-07	2.62E-07	0.00E+00	3.96E-07	2.88E-08	4.27E-08	0.00E+00	7.15E-08	2.20E-08	2.51E-08	0.00E+00	4.71E-08
1086	479614	3741982	1.81E-07	3.27E-07	0.00E+00	5.08E-07	1.72E-07	3.62E-07	0.00E+00	5.34E-07	3.48E-08	5.78E-08	0.00E+00	9.26E-08	1.38E-07	2.70E-07	0.00E+00	4.08E-07	2.97E-08	4.40E-08	0.00E+00	7.37E-08	2.27E-08	2.58E-08	0.00E+00	4.85E-08
1087	479631.6	3741975	1.87E-07	3.37E-07	0.00E+00	5.24E-07	1.77E-07	3.73E-07	0.00E+00	5.50E-07	3.58E-08	5.95E-08	0.00E+00	9.53E-08	1.42E-07	2.78E-07	0.00E+00	4.20E-07	3.06E-08	4.53E-08	0.00E+00	7.59E-08	2.34E-08	2.66E-08	0.00E+00	5.00E-08
1088	479649.1	3741967	1.92E-07	3.47E-07	0.00E+00	5.40E-07	1.83E-07	3.84E-07	0.00E+00	5.67E-07	3.69E-08	6.13E-08	0.00E+00	9.83E-08	1.47E-07	2.86E-07	0.00E+00	4.33E-07	3.15E-08	4.67E-08	0.00E+00	7.82E-08	2.41E-08	2.74E-08	0.00E+00	5.15E-08
1089	479666.7	3741960	1.99E-07	3.58E-07	0.00E+00	5.56E-07	1.88E-07	3.96E-07	0.00E+00	5.84E-07	3.81E-08	6.33E-08	0.00E+00	1.01E-07	1.51E-07	2.95E-07	0.00E+00	4.46E-07	3.25E-08	4.82E-08	0.00E+00	8.07E-08	2.48E-08	2.83E-08	0.00E+00	5.31E-08
1090	479684.3	3741953	2.05E-07	3.69E-07	0.00E+00	5.74E-07	1.94E-07	4.09E-07	0.00E+00	6.03E-07	3.93E-08	6.53E-08	0.00E+00	1.05E-07	1.56E-07	3.05E-07	0.00E+00	4.61E-07	3.35E-08	4.97E-08	0.00E+00	8.32E-08	2.56E-08	2.92E-08	0.00E+00	5.48E-08
1091	479701.9	3741946	2.11E-07	3.81E-07	0.00E+00	5.93E-07	2.01E-07	4.22E-07	0.00E+00	6.22E-07	4.06E-08	6.74E-08	0.00E+00	1.08E-07	1.61E-07	3.14E-07	0.00E+00	4.75E-07	3.46E-08	5.13E-08	0.00E+00	8.59E-08	2.64E-08	3.01E-08	0.00E+00	5.66E-08
1092	479719.5	3741939	2.18E-07	3.94E-07	0.00E+00	6.12E-07	2.07E-07	4.35E-07	0.00E+00	6.43E-07	4.19E-08	6.96E-08	0.00E+00	1.11E-07	1.66E-07	3.25E-07	0.00E+00	4.91E-07	3.57E-08	5.30E-08	0.00E+00	8.87E-08	2.73E-08	3.11E-08	0.00E+00	5.84E-08
1093	479737	3741932	2.26E-07	4.07E-07	0.00E+00	6.32E-07	2.14E-07	4.50E-07	0.00E+00	6.64E-07	4.33E-08	7.19E-08	0.00E+00	1.15E-07	1.72E-07	3.35E-07	0.00E+00	5.07E-07	3.69E-08	5.47E-08	0.00E+00	9.16E-08	2.82E-08	3.21E-08	0.00E+00	6.04E-08
1094	479754.6	3741925	2.33E-07	4.2E-07	0.00E+00	6.53E-07	2.21E-07	4.65E-07	0.00E+00	6.86E-07	4.47E-08	7.42E-08	0.00E+00	1.19E-07	1.77E-07	3.46E-07	0.00E+00	5.24E-07	3.81E-08	5.65E-08	0.00E+00	9.47E-08	2.91E-08	3.32E-08	0.00E+00	6.24E-08
1095	479772.2	3741917	2.41E-07	4.34E-07	0.00E+00	6.75E-07	2.28E-07	4.80E-07	0.00E+00	7.09E-07	4.62E-08	7.67E-08	0.00E+00	1.23E-07	1.83E-07	3.58E-07	0.00E+00	5.41E-07	3.94E-08	5.84E-08	0.00E+00	9.78E-08	3.01E-08	3.43E-08	0.00E+00	6.44E-08
1096	479789.8	3741910	2.49E-07	4.48E-07	0.00E+00	6.97E-07	2.36E-07	4.96E-07	0.00E+00	7.32E-07	4.77E-08	7.93E-08	0.00E+00	1.27E-07	1.89E-07	3.70E-07	0.00E+00	5.59E-07	4.07E-08	6.03E-08	0.00E+00	1.01E-07	3.11E-08	3.54E-08	0.00E+00	6.66E-08
1097	479807.4	3741903	2.57E-07	4.63E-07	0.00E+00	7.20E-07	2.44E-07	5.12E-07	0.00E+00	7.56E-07	4.93E-08	8.19E-08	0.00E+00	1.31E-07	1.96E-07	3.82E-07	0.00E+00	5.78E-07	4.20E-08	6.23E-08	0.00E+00	1.04E-07	3.21E-08	3.66E-08	0.00E+00	6.87E-08
1098	479824.9	3741896	2.65E-07	4.78E-07	0.00E+00	7.43E-07	2.52E-07	5.29E-07	0.00E+00	7.81E-07	5.09E-08	8.45E-08	0.00E+00	1.35E-07	2.02E-07	3.94E-07	0.00E+00	5.96E-07	4.34E-08	6.43E-08	0.00E+00	1.08E-07	3.32E-08	3.78E-08	0.00E+00	7.10E-08
1099	479842.5	3741889	2.74E-07	4.93E-07	0.00E+00	7.67E-07	2.60E-07	5.46E-07	0.00E+00	8.05E-07	5.25E-08	8.72E-08	0.00E+00	1.40E-07	2.08E-07	4.07E-07	0.00E+00	6.15E-07	4.48E-08	6.64E-08	0.00E+00	1.11E-07	3.42E-08	3.90E-08	0.00E+00	7.32E-08
1100	479860.1	3741882	2.82E-07	5.09E-07	0.00E+00	7.91E-07	2.68E-07	5.63E-07	0.00E+00	8.31E-07	5.41E-08	8.99E-08	0.00E+00	1.44E-07	2.15E-07	4.20E-07	0.00E+00	6.34E-07	4.62E-08	6.85E-08	0.00E+00	1.15E-07	3.53E-08	4.02E-08	0.00E+00	7.55E-08
1101	479877.7	3741875	2.91E-07	5.24E-07	0.00E+00	8.15E-07	2.76E-07	5.80E-07	0.00E+00	8.56E-07	5.58E-08	9.26E-08	0.00E+00	1.48E-07	2.21E-07	4.32E-07	0.00E+00	6.54E-07	4.76E-08	7.05E-08	0.00E+00	1.18E-07	3.64E-08	4.14E-08	0.00E+00	7.78E-08
1102	479385.6	3742025	1.21E-07	2.19E-07	0.00E+00	3.40E-07	1.15E-07	2.42E-07	0.00E+00	3.57E-07	2.33E-08	3.87E-08	0.00E+00	6.19E-08	9.24E-08	1.80E-07	0.00E+00	2.73E-07	1.99E-08	2.94E-08	0.00E+00	4.93E-08	1.52E-08	1.73E-08	0.00E+00	3.25E-08
1103	479403.2	3742018	1.24E-07	2.24E-07	0.00E+00	3.48E-07	1.18E-07	2.48E-07	0.00E+00	3.66E-07	2.38E-08	3.96E-08	0.00E+00	6.35E-08	9.46E-08	1.85E-07	0.00E+00	2.80E-07	2.03E-08	3.02E-08	0.00E+00	5.05E-08	1.56E-08	1.77E-08	0.00E+00	3.33E-08

1104	479420.8	3742010	1.27E-07	2.3E-07	0.00E+00	3.57E-07	1.21E-07	2.54E-07	0.00E+00	3.75E-07	2.44E-08	4.06E-08	0.00E+00	6.50E-08	9.70E-08	1.89E-07	0.00E+00	2.86E-07	2.09E-08	3.09E-08	0.00E+00	5.18E-08	1.59E-08	1.82E-08	0.00E+00	3.41E-08
1105	479438.4	3742003	1.31E-07	2.35E-07	0.00E+00	3.66E-07	1.24E-07	2.60E-07	0.00E+00	3.84E-07	2.50E-08	4.16E-08	0.00E+00	6.67E-08	9.94E-08	1.94E-07	0.00E+00	2.94E-07	2.14E-08	3.17E-08	0.00E+00	5.30E-08	1.63E-08	1.86E-08	0.00E+00	3.49E-08
1106	479455.9	3741996	1.34E-07	2.41E-07	0.00E+00	3.75E-07	1.27E-07	2.67E-07	0.00E+00	3.94E-07	2.57E-08	4.27E-08	0.00E+00	6.83E-08	1.02E-07	1.99E-07	0.00E+00	3.01E-07	2.19E-08	3.25E-08	0.00E+00	5.44E-08	1.67E-08	1.91E-08	0.00E+00	3.58E-08
1107	479473.5	3741989	1.37E-07	2.47E-07	0.00E+00	3.85E-07	1.30E-07	2.74E-07	0.00E+00	4.04E-07	2.63E-08	4.37E-08	0.00E+00	7.00E-08	1.04E-07	2.04E-07	0.00E+00	3.09E-07	2.25E-08	3.33E-08	0.00E+00	5.57E-08	1.72E-08	1.96E-08	0.00E+00	3.67E-08
1108	479491.1	3741982	1.41E-07	2.54E-07	0.00E+00	3.94E-07	1.33E-07	2.81E-07	0.00E+00	4.14E-07	2.70E-08	4.48E-08	0.00E+00	7.18E-08	1.07E-07	2.09E-07	0.00E+00	3.16E-07	2.30E-08	3.41E-08	0.00E+00	5.72E-08	1.76E-08	2.01E-08	0.00E+00	3.77E-08
1109	479508.7	3741975	1.44E-07	2.6E-07	0.00E+00	4.05E-07	1.37E-07	2.88E-07	0.00E+00	4.25E-07	2.77E-08	4.60E-08	0.00E+00	7.37E-08	1.10E-07	2.15E-07	0.00E+00	3.24E-07	2.36E-08	3.50E-08	0.00E+00	5.86E-08	1.81E-08	2.06E-08	0.00E+00	3.86E-08
1110	479526.3	3741967	1.48E-07	2.67E-07	0.00E+00	4.15E-07	1.40E-07	2.95E-07	0.00E+00	4.36E-07	2.84E-08	4.72E-08	0.00E+00	7.56E-08	1.13E-07	2.20E-07	0.00E+00	3.33E-07	2.42E-08	3.59E-08	0.00E+00	6.02E-08	1.85E-08	2.11E-08	0.00E+00	3.96E-08
1111	479543.8	3741960	1.52E-07	2.74E-07	0.00E+00	4.26E-07	1.44E-07	3.03E-07	0.00E+00	4.47E-07	2.91E-08	4.84E-08	0.00E+00	7.76E-08	1.16E-07	2.26E-07	0.00E+00	3.42E-07	2.49E-08	3.69E-08	0.00E+00	6.17E-08	1.90E-08	2.17E-08	0.00E+00	4.07E-08
1112	479561.4	3741953	1.56E-07	2.81E-07	0.00E+00	4.37E-07	1.48E-07	3.11E-07	0.00E+00	4.59E-07	2.99E-08	4.97E-08	0.00E+00	7.96E-08	1.19E-07	2.32E-07	0.00E+00	3.51E-07	2.55E-08	3.78E-08	0.00E+00	6.34E-08	1.95E-08	2.22E-08	0.00E+00	4.17E-08
1113	479579	3741946	1.60E-07	2.89E-07	0.00E+00	4.49E-07	1.52E-07	3.20E-07	0.00E+00	4.72E-07	3.07E-08	5.11E-08	0.00E+00	8.18E-08	1.22E-07	2.38E-07	0.00E+00	3.60E-07	2.62E-08	3.89E-08	0.00E+00	6.51E-08	2.00E-08	2.28E-08	0.00E+00	4.29E-08
1114	479596.6	3741939	1.65E-07	2.97E-07	0.00E+00	4.62E-07	1.56E-07	3.28E-07	0.00E+00	4.85E-07	3.16E-08	5.25E-08	0.00E+00	8.41E-08	1.25E-07	2.45E-07	0.00E+00	3.70E-07	2.70E-08	4.00E-08	0.00E+00	6.69E-08	2.06E-08	2.35E-08	0.00E+00	4.41E-08
1115	479614.1	3741932	1.69E-07	3.05E-07	0.00E+00	4.75E-07	1.61E-07	3.38E-07	0.00E+00	4.98E-07	3.25E-08	5.40E-08	0.00E+00	8.64E-08	1.29E-07	2.52E-07	0.00E+00	3.81E-07	2.77E-08	4.11E-08	0.00E+00	6.88E-08	2.12E-08	2.41E-08	0.00E+00	4.53E-08
1116	479631.7	3741925	1.74E-07	3.14E-07	0.00E+00	4.88E-07	1.65E-07	3.47E-07	0.00E+00	5.13E-07	3.34E-08	5.55E-08	0.00E+00	8.89E-08	1.33E-07	2.59E-07	0.00E+00	3.92E-07	2.85E-08	4.23E-08	0.00E+00	7.08E-08	2.18E-08	2.48E-08	0.00E+00	4.66E-08
1117	479649.3	3741917	1.79E-07	3.23E-07	0.00E+00	5.03E-07	1.70E-07	3.58E-07	0.00E+00	5.28E-07	3.44E-08	5.71E-08	0.00E+00	9.15E-08	1.37E-07	2.67E-07	0.00E+00	4.03E-07	2.93E-08	4.35E-08	0.00E+00	7.28E-08	2.24E-08	2.56E-08	0.00E+00	4.80E-08
1118	479666.9	3741910	1.85E-07	3.33E-07	0.00E+00	5.18E-07	1.75E-07	3.68E-07	0.00E+00	5.43E-07	3.54E-08	5.88E-08	0.00E+00	9.43E-08	1.41E-07	2.75E-07	0.00E+00	4.15E-07	3.02E-08	4.48E-08	0.00E+00	7.50E-08	2.31E-08	2.63E-08	0.00E+00	4.94E-08
1119	479684.5	3741903	1.90E-07	3.43E-07	0.00E+00	5.33E-07	1.80E-07	3.79E-07	0.00E+00	5.60E-07	3.65E-08	6.06E-08	0.00E+00	9.71E-08	1.45E-07	2.83E-07	0.00E+00	4.28E-07	3.11E-08	4.61E-08	0.00E+00	7.73E-08	2.38E-08	2.71E-08	0.00E+00	5.09E-08
1120	479702	3741896	1.96E-07	3.54E-07	0.00E+00	5.50E-07	1.86E-07	3.91E-07	0.00E+00	5.77E-07	3.76E-08	6.25E-08	0.00E+00	1.00E-07	1.49E-07	2.92E-07	0.00E+00	4.41E-07	3.21E-08	4.76E-08	0.00E+00	7.96E-08	2.45E-08	2.79E-08	0.00E+00	5.25E-08
1121	479719.6	3741889	2.02E-07	3.64E-07	0.00E+00	5.66E-07	1.92E-07	4.03E-07	0.00E+00	5.95E-07	3.88E-08	6.44E-08	0.00E+00	1.03E-07	1.54E-07	3.01E-07	0.00E+00	4.54E-07	3.31E-08	4.90E-08	0.00E+00	8.21E-08	2.53E-08	2.88E-08	0.00E+00	5.41E-08
1122	479737.2	3741882	2.08E-07	3.76E-07	0.00E+00	5.84E-07	1.98E-07	4.16E-07	0.00E+00	6.13E-07	4.00E-08	6.64E-08	0.00E+00	1.06E-07	1.59E-07	3.10E-07	0.00E+00	4.69E-07	3.41E-08	5.06E-08	0.00E+00	8.47E-08	2.61E-08	2.97E-08	0.00E+00	5.58E-08
1123	479754.8	3741875	2.15E-07	3.88E-07	0.00E+00	6.02E-07	2.04E-07	4.29E-07	0.00E+00	6.33E-07	4.12E-08	6.85E-08	0.00E+00	1.10E-07	1.64E-07	3.20E-07	0.00E+00	4.83E-07	3.52E-08	5.21E-08	0.00E+00	8.73E-08	2.69E-08	3.06E-08	0.00E+00	5.75E-08
1124	479772.4	3741867	2.22E-07	4E-07	0.00E+00	6.21E-07	2.10E-07	4.42E-07	0.00E+00	6.52E-07	4.25E-08	7.06E-08	0.00E+00	1.13E-07	1.69E-07	3.30E-07	0.00E+00	4.98E-07	3.63E-08	5.38E-08	0.00E+00	9.00E-08	2.77E-08	3.16E-08	0.00E+00	5.93E-08
1125	479789.9	3741860	2.28E-07	4.12E-07	0.00E+00	6.41E-07	2.17E-07	4.56E-07	0.00E+00	6.73E-07	4.38E-08	7.28E-08	0.00E+00	1.17E-07	1.74E-07	3.40E-07	0.00E+00	5.14E-07	3.74E-08	5.54E-08	0.00E+00	9.28E-08	2.86E-08	3.26E-08	0.00E+00	6.11E-08
1126	479807.5	3741853	2.36E-07	4.25E-07	0.00E+00	6.60E-07	2.23E-07	4.70E-07	0.00E+00	6.93E-07	4.52E-08	7.51E-08	0.00E+00	1.20E-07	1.79E-07	3.50E-07	0.00E+00	5.30E-07	3.85E-08	5.71E-08	0.00E+00	9.57E-08	2.95E-08	3.36E-08	0.00E+00	6.30E-08
1127	479825.1	3741846	2.43E-07	4.38E-07	0.00E+00	6.80E-07	2.30E-07	4.84E-07	0.00E+00	7.14E-07	4.66E-08	7.73E-08	0.00E+00	1.24E-07	1.85E-07	3.61E-07	0.00E+00	5.46E-07	3.97E-08	5.89E-08	0.00E+00	9.86E-08	3.04E-08	3.46E-08	0.00E+00	6.49E-08
1128	479842.7	3741839	2.50E-07	4.51E-07	0.00E+00	7.01E-07	2.37E-07	4.99E-07	0.00E+00	7.36E-07	4.79E-08	7.97E-08	0.00E+00	1.28E-07	1.90E-07	3.72E-07	0.00E+00	5.62E-07	4.09E-08	6.06E-08	0.00E+00	1.02E-07	3.13E-08	3.56E-08	0.00E+00	6.69E-08
1129	479860.2	3741832	2.57E-07	4.64E-07	0.00E+00	7.21E-07	2.44E-07	5.13E-07	0.00E+00	7.57E-07	4.93E-08	8.20E-08	0.00E+00	1.31E-07	1.96E-07	3.83E-07	0.00E+00	5.78E-07	4.21E-08	6.24E-08	0.00E+00	1.05E-07	3.22E-08	3.67E-08	0.00E+00	6.88E-08
1130	479877.8	3741825	2.64E-07	4.77E-07	0.00E+00	7.41E-07	2.51E-07	5.28E-07	0.00E+00	7.78E-07	5.07E-08	8.43E-08	0.00E+00	1.35E-07	2.01E-07	3.93E-07	0.00E+00	5.95E-07	4.33E-08	6.42E-08	0.00E+00	1.07E-07	3.31E-08	3.77E-08	0.00E+00	7.08E-08
1131	479350.6	3741989	1.10E-07	1.99E-07	0.00E+00	3.09E-07	1.05E-07	2.20E-07	0.00E+00	3.24E-07	2.11E-08	3.51E-08	0.00E+00	5.63E-08	8.39E-08	1.64E-07	0.00E+00	2.48E-07	1.80E-08	2.67E-08	0.00E+00	4.48E-08	1.38E-08	1.57E-08	0.00E+00	2.95E-08
1132	479368.2	3741982	1.13E-07	2.03E-07	0.00E+00	3.16E-07	1.07E-07	2.25E-07	0.00E+00	3.32E-07	2.16E-08	3.59E-08	0.00E+00	5.76E-08	8.59E-08	1.68E-07	0.00E+00	2.54E-07	1.85E-08	2.74E-08	0.00E+00	4.58E-08	1.41E-08	1.61E-08	0.00E+00	3.02E-08
1133	479385.8	3741975	1.15E-07	2.08E-07	0.00E+00	3.24E-07	1.09E-07	2.30E-07	0.00E+00	3.40E-07	2.21E-08	3.68E-08	0.00E+00	5.89E-08	8.79E-08	1.72E-07	0.00E+00	2.60E-07	1.89E-08	2.80E-08	0.00E+00	4.69E-08	1.44E-08	1.64E-08	0.00E+00	3.09E-08
1134	479403.4	3741968	1.18E-07	2.13E-07	0.00E+00	3.31E-07	1.12E-07	2.36E-07	0.00E+00	3.48E-07	2.27E-08	3.76E-08	0.00E+00	6.03E-08	8.99E-08	1.76E-07	0.00E+00	2.66E-07	1.93E-08	2.87E-08	0.00E+00	4.80E-08	1.48E-08	1.68E-08	0.00E+00	3.16E-08
1135	479420.9	3741960	1.21E-07	2.18E-07	0.00E+00	3.39E-07	1.15E-07	2.41E-07	0.00E+00	3.56E-07	2.32E-08	3.85E-08	0.00E+00	6.17E-08	9.20E-08	1.80E-07	0.00E+00	2.72E-07	1.98E-08	2.93E-08	0.00E+00	4.91E-08	1.51E-08	1.72E-08	0.00E+00	3.23E-08
1136	479438.5	3741953	1.24E-07	2.23E-07	0.00E+00	3.47E-07	1.17E-07	2.47E-07	0.00E+00	3.64E-07	2.37E-08	3.94E-08	0.00E+00	6.31E-08	9.42E-08	1.84E-07	0.00E+00	2.78E-07	2.02E-08	3.00E-08	0.00E+00	5.03E-08	1.55E-08	1.76E-08	0.00E+00	3.31E-08
1137	479456.1	3741946	1.27E-07	2.28E-07	0.00E+00	3.55E-07	1.20E-07	2.53E-07	0.00E+00	3.73E-07	2.43E-08	4.04E-08	0.00E+00	6.46E-08	9.64E-08	1.88E-07	0.00E+00	2.85E-07	2.07E-08	3.07E-08	0.00E+00	5.14E-08	1.58E-08	1.80E-08	0.00E+00	3.39E-08
1138	479473.7	3741939	1.30E-07	2.34E-07	0.00E+00	3.63E-07	1.23E-07	2.59E-07	0.00E+00	3.82E-07	2.49E-08	4.13E-08	0.00E+00	6.62E-08	9.87E-08	1.93E-07	0.00E+00	2.92E-07	2.12E-08	3.15E-08	0.00E+00	5.27E-08	1.62E-08	1.85E-08	0.00E+00	3.47E-08
1139	479491.3	3741932	1.33E-07	2.39E-07	0.00E+00	3.72E-07	1.26E-07	2.65E-07	0.00E+00	3.91E-07	2.55E-08	4.23E-08	0.00E+00	6.78E-08	1.01E-07	1.97E-07	0.00E+00	2.99E-07	2.17E-08	3.22E-08	0.00E+00	5.40E-08	1.66E-08	1.89E-08	0.00E+00	3.55E-08
1140	479508.8	3741925	1.36E-07	2.45E-07	0.00E+00	3.81E-07	1.29E-07	2.71E-07	0.00E+00	4.00E-07	2.61E-08	4.34E-08	0.00E+00	6.94E-08	1.04E-07	2.02E-07	0.00E+00	3.06E-07	2.23E-08	3.30E-08	0.00E+00	5.53E-08	1.70E-08	1.94E-08	0.00E+00	3.64E-08
1141	479526.4	3741918	1.39E-07	2.51E-07	0.00E+00	3.91E-07	1.32E-07	2.78E-07	0.00E+00	4.10E-07	2.67E-08	4.44E-08	0.00E+00	7.11E-08	1.06E-07	2.07E-07	0.00E+00	3.13E-07	2.28E-08	3.38E-08	0.00E+00	5.66E-08	1.74E-08	1.99E-08	0.00E+00	3.73E-08
1142	479544	3741910	1.43E-07	2.58E-07	0.00E+00	4.01E-07	1.36E-07	2.85E-07	0.00E+00	4.21E-07	2.74E-08	4.55E-08	0.00E+00	7.29E-08	1.09E-07	2.12E-07	0.00E+00	3.21E-07	2.34E-08	3.47E-08	0.00E+00	5.80E-08	1.79E-08	2.04E-08	0.00E+00	3.82E-08
1143	479561.6	3741903	1.47E-07	2.64E-07	0.00E+00	4.11E-07	1.39E-07	2.92E-07	0.00E+00	4.31E-07	2.81E-08	4.67E-08	0.00E+00	7.48E-08	1.12E-07	2.18E-07	0.00E+00	3.30E-07	2.40E-08	3.56E-08	0.00E+00	5.95E-08	1.83E-08	2.09E-08	0.00E+00	3.92E-08
1144	479579.1	3741896	1.50E-07	2.71E-07	0.00E+00	4.22E-07	1.43E-07	3.00E-07	0.00E+00	4.43E-07	2.88E-08	4.79E-08	0.00E+00	7.68E-08	1.14E-07	2.24E-07	0.00E+00	3.38E-07	2.46E-08	3.65E-08	0.00E+00	6.11E-08	1.88E-08	2.14E-08	0.00E+00	4.02E-08
1145	479596.7	3741889	1.54E-07	2.78E-07	0.00E+00	4.33E-07	1.46E-07	3.08E-07	0.00E+00	4.54E-07	2.96E-08	4.92E-08	0.00E+00	7.88E-08	1.18E-07	2.30E-07	0.00E+00	3.47E-07	2.53E-08	3.75E-08	0.00E+00	6.27E-08	1.93E-08	2.20E-08	0.00E+00	4.13E-08
1146	479614.3	3741882	1.59E-07	2.86E-07	0.00E+00	4.44E-07	1.50E-07	3.16E-07	0.00E+00	4.67E-07	3.04E-08	5.05E-08	0.00E+00	8.09E-08	1.21E-07	2.36E-07	0.00E+00	3.56E-07	2.59E-08	3.85E-08	0.00E+00	6.44E-08	1.98E-08	2.26E-08	0.00E+00	4.24E-08
1147	479631.9	3741875	1.63E-07	2.94E-07	0.00E+00	4.57E-07	1.55E-07	3.25E-07	0.00E+00	4.79E-07	3.12E-08	5.19E-08	0.00E+00	8.32E-08	1.24E-07	2.42E-07	0.00E+00	3.66E-07	2.67E-08	3.95E-08	0.00E+00	6.62E-08	2.04E-08	2.32E-08	0.00E+00	4.36E-08
1148	479649.5	3741867	1.67E-07	3.02E-07	0.00E+00	4.69E-07	1.59E-07	3.34E-07	0.00E+00	4.93E-07	3.21E-08	5.34E-08	0.00E+00	8.55E-08	1.28E-07	2.49E-07	0.00E+00	3.77E-07	2.74E-08	4.06E-08	0.00E+00	6.80E-08	2.09E-08	2.39E-08	0.00E+00	4.48E-08
1149	479667	3741860	1.72E-07	3.11E-07	0.00E+00	4.83E-07	1.63E-07	3.44E-07	0.00E+00	5.07E-07	3.30E-08	5.49E-08	0.00E+00	8.79E-08	1.31E-07	2.56E-07	0.00E+00	3.87E-07	2.82E-08	4.18E-08	0.00E+00	7.00E-08	2.15E-08	2.45E-08	0.00E+00	4.61E-08
1150	479684.6	3741853	1.77E-07	3.2E-07	0.00E+00	4.97E-07	1.68E-07	3.53E-07	0.00E+00	5.21E-07	3.40E-08	5.65E-08	0.00E+00	9.04E-08	1.35E-07	2.63E-07	0.00E+00	3.98E-07	2.90E-08	4.30E-08	0.00E+00	7.20E-08	2.22E-08	2.53E-08	0.00E+00	4.74E-08
1151	479702.2	3741846	1.82E-07	3.29E-07	0.00E+00	5.11E-07	1.73E-07	3.64E-07	0.00E+00	5.37E-07	3.50E-08	5.81E-08	0.00E+00	9.31E-08	1.39E-07	2.71E-07	0.00E+00	4.10E-07	2.98E-08	4.42E-08	0.00E+00	7.41E-08	2.28E-08	2.60E-08	0.00E+00	4.88E-08
1152	479719.8	3741839	1.88E-07	3.38E-07	0.00E+00	5.26E-07	1.78E-07	3.74E-07	0.00E+00	5.52E-07	3.60E-08	5.98E-08	0.00E+00	9.58E-08	1.43E-07	2.79E-07	0.00E+00	4.22E-07	3.07E-08	4.55E-08	0.00E+00	7.62E-08	2.35E-08	2.67E-08	0.00E+00	5.02E-08
1153	479737.4	3741832	1.93E-07	3.48E-07	0.00E+00	5.42E-07	1.83E-07	3.85E-07	0.00E+00	5.69E-07	3.71E-08	6.16E-08	0.00E+00	9.86E-08	1.47E-07	2.87E-07	0.00E+00	4.34E-07	3.16E-08	4.69E-08	0.00E+00	7.85E-08	2.42E-08	2.75E-08	0.00E+00	5.17E-08
1154	479754.9	3741825	1.99E-07	3.59E-07	0.00E+00	5.58E-07	1.89E-07	3.97E-07	0.00E+00	5.85E-07	3.82E-08	6.34E-08	0.00E+00	1.02E-07	1.51E-07	2.96E-07	0.00E+00	4.47E-07	3.26E-08	4.83E-08	0.00E+00	8.08E-08	2.49E-08	2.83E-08	0.00E+00	5.32E-08
1155	479772.5	3741817	2.05E-07	3.69E-07	0.00E+00	5.74E-07	1.94E-07	4.08E-07	0.00E+00	6.03E-07	3.93E-08	6.53E-08	0.00E+00	1.05E-07	1.56E-07	3.05E-07	0.00E+00	4.60E-07	3.35E-08	4.97E-08	0.00E+00	8.32E-08	2.56E-08	2.92E-08	0.00E+00	5.48E-08
1156	479790.1	3741810	2.11E-07	3.8E-07	0.00E+00	5.91E-07	2.00E-07	4.20E-07	0.00E+00	6.20E-07	4.04E-08	6.72E-08	0.00E+00	1.08E-07	1.60E-07	3.13E-07	0.00E+00	4.74E-07	3.45E-08	5.11E-08	0.00E+00	8.56E-08	2.64E-08	3.00E-08	0.00E+00	5.64E-08
1157	479807.7	3741803	2.17E-07	3.91E-07	0.00E+00	6.08E-07	2.06E-07	4.33E-07	0.00E+00	6.38E-07	4.16E-08	6.91E-08	0.00E+00	1.11E-07	1.65E-07	3.23E-07	0.00E+00	4.88E-07	3.55E-08	5.26E-08	0.00E+00	8.81E-08	2.71E-08	3.09E-08	0.00E+00	5.80E-08
1158	479825.2	3741796	2.23E-07	4.02E-07	0.00E+00	6.25E-07	2.12E-07	4.45E-07	0.00E+00	6.57E-07	4.28E-08	7.11E-08	0.00E+00	1.14E-07	1.70E-07	3.32E-07	0.00E+00	5.02E-07	3.65E-08	5.41E-08	0.00E+00	9.06E-08	2.79E-08	3.18E-08	0.00E+00	5.97E-08
1159	479842.8	3741789	2.29E-07	4.14E-07	0.00E+00	6.43E-07	2.18E-07	4.57E-07	0.00E+00	6.75E-07	4.40E-08	7.31E-08	0.00E+00	1.17E-07	1.75E-07	3.41E-07	0.00E+00	5.16E-07	3.75E-08	5.56E-08	0.00E+00	9.32E-08	2.87E-08	3.27E-08	0.00E+00	6.14E-08
1160	479860.4	3741782	2.36E-07	4.25E-07	0.00E+00	6.60E-07	2.24E-07	4.70E-07	0.00E+00	6.93E-07	4.52E-08	7.51E-08	0.00E+00	1.20E-07	1.79E-07	3.50E-07	0.00E+00	5.30E-07	3.86E-08	5.72E-08	0.00E+00	9.57E-08	2.95E-08	3.36E-08	0.00E+00	6.31E-08
1161	479878	3741775	2.42E-07	4.36E-07	0.00E+00	6.78E-07	2.29E-07	4.82E-07	0.00E+00	7.12E-07	4.64E-08	7.71E-08	0.00E+00	1.23E-07	1.84E-07	3.60E-07	0.00E+00	5.44E-07	3.96E-08	5.87E-08	0.00E+00	9.83E-08	3.03E-08	3.45E-08	0.00E+00	6.47E-08
1162	479315.6	3741953	1.01E-07	1.82E-07	0.00E+00	2.82E-07	9.56E-08	2.01E-07	0.00E+00	2.96E-07	1.93E-08	3.21E-08	0.00E+00	5.14E-08	7.67E-08	1.50E-07	0.00E+00	2.26E-07	1.65E-08	2.44E-08	0.00E+00	4.09E-08	1.26E-08	1.44E-08	0.00E+00	2.70E-08
1163	479333.2	3741946	1.03E-07	1.86E-07	0.00E+00	2.89E-07	9.76E-08	2.05E-07	0.00E+00	3.03E-07	1.97E-08	3.28E-08	0.00E+00	5.25E-08	7.84E-08	1.53E-07	0.00E+00	2.31E-07	1.68E-08	2.50E-08	0.00E+00	4.18E-08	1.29E-08	1.47E-08	0.00E+00	2.75E-08
1164	479350.8	3741939	1.05E-07	1.9E-07	0.00E+00	2.95E-07	9.98E-08	2.10E-07	0.00E+00	3.10E-07	2.02E-08	3.35E-08	0.00E+00	5.37E-08	8.01E-08	1.56E-07	0.00E+00	2.36E-07	1.72E-08	2.55E-08	0.00E+00	4.27E-08	1.32E-08	1.50E-08	0.00E+00	2.81E-08
1165	479368.4	3741932	1.07E-07	1.94E-07	0.00E+00	3.01E-07	1.02E-07	2.14E-07	0.00E+00	3.16E-07	2.06E-08	3.42E-08	0.00E+00	5.49E-08	8.18E-08	1.60E-07	0.00E+00	2.42E-07	1.76E-08	2.61E-08	0.00E+00	4.37E-08	1.34E-08	1.53E-08	0.00E+00	2.88E-08
1166	479385.9	3741925	1.10E-07	1.98E-07	0.00E+00	3.08E-07	1.04E-07	2.19E-07	0.00E+00	3.23E-07	2.11E-08	3.50E-08	0.00E+00	5.61E-08	8.36E-08	1.63E-07	0.00E+00	2.47E-07	1.80E-08	2.66E-08	0.00E+00	4.46E-08	1.37E-08	1.57E-08	0.00E+00	2.94E-08
1167	479403.5	3741918	1.12E-07	2.02E-07	0.00E+00	3.15E-07	1.06E-07	2.24E-07	0.00E+00	3.30E-07	2.15E-08	3.58E-08	0.00E+00	5.73E-08	8.55E-08	1.67E-07	0.00E+00	2.52E-07	1.84E-08	2.72E-08	0.00E+00	4.56E-08	1.40E-08	1.60E-08	0.00E+00	3.00E-08
1168	479421.1	3741910	1.15E-07	2.07E-07	0.00E+00	3.22E-07	1.09E-07	2.29E-07	0.00E+00	3.38E-07	2.20E-08	3.66E-08	0.00E+00	5.86E-08	8.74E-08	1.71E-07	0.00E+00	2.58E-07	1.88E-08	2.78E-08	0.00E+00	4.66E-08	1.44E-08	1.64E-08	0.00E+00	3.07E-08
1169	479438.7	3741903	1.17E-07	2.12E-07	0.00E+00	3.29E-07	1.11E-07	2.34E-07	0.00E+00	3.45E-07	2.25E-08	3.74E-08	0.00E+00	5.99E-08	8.93E-08	1.74E-07	0.00E+00	2.64E-07	1.92E-08	2.85E-08	0.00E+00	4.77E-08	1.47E-08	1.67E-08	0.00E+00	3.14E-08
1170	479456.3	3741896	1.20E-07	2.16E-07	0.00E+00	3.36E-07	1.14E-07	2.39E-07	0.00E+00	3.53E-07	2.30E-08	3.82E-08	0.00E+00	6.12E-08	9.13E-08	1.78E-07	0.00E+00	2.70E-07	1.96E-08	2.91E-08	0.00E+00	4.87E-08	1.50E-08	1.71E-08	0.00E+00	3.21E-08
1171	479473.8	3741889	1.23E-07	2.21E-07	0.00E+00	3.44E-07	1.16E-07	2.45E-07	0.00E+00	3.61E-07	2.35E-08	3.91E-08	0.00E+00	6.26E-08	9.34E-08	1.82E-07	0.00E+00	2.76E-07	2.01E-08	2.98E-08	0.00E+00	4.98E-08	1.53E-08	1.75E-08	0.00E+00	3.28E-08
1172	479491.4	3741882	1.25E-07	2.26E-07	0.00E+00	3.52E-07	1.19E-07	2.50E-07	0.00E+00	3.69E-07	2.41E-08	4.00E-08	0.00E+00	6.41E-08	9.55E-08	1.87E-07	0.00E+00	2.82E-07	2.05E-08	3.04E-08	0.00E+00	5.10E-08	1.57E-08	1.79E-08	0.00E+00	3.36E-08
1173	479509	3741875	1.28E-07	2.32E-07	0.00E+00	3.60E-07	1.22E-07	2.56E-07	0.00E+00	3.78E-07	2.46E-08	4.09E-08	0.00E+00	6.55E-08	9.78E-08	1.91E-07	0.00E+00	2.89E-07	2.10E-08	3.12E-08	0.00E+00	5.22E-08	1.61E-08	1.83E-08	0.00E+00	3.44E-08
1174	479526.6	3741868	1.31E-07	2.37E-07	0.00E+00	3.69E-07	1.25E-07	2.62E-07	0.00E+00	3.87E-07	2.52E-08	4.19E-08	0.00E+00	6.71E-08	1.00E-07	1.95E-07	0.00E+00	2.96E-07	2.15E-08	3.19E-08	0.00E+00	5.34E-08	1.64E-08	1.87E-08	0.00E+00	3.52E-08
1175	479544.1	3741860	1.35E-07	2.43E-07	0.00E+00	3.77E-07	1.28E-07	2.69E-07	0.00E+00	3.96E-07	2.58E-08	4.29E-08	0.00E+00	6.87E-08	1.03E-07	2.00E-07	0.00E+00	3.03E-07	2.20E-08	3.27E-08	0.00E+00	5.47E-08	1.68E-08	1.92E-08	0.00E+00	3.60E-08
1176	479561.7	3741853	1.38E-07	2.49E-07	0.00E+00	3.87E-07	1.31E-07	2.75E-07	0.00E+00	4.06E-07	2.65E-08	4.40E-08	0.00E+00	7.04E-08	1.05E-07	2.05E-07	0.00E+00	3.10E-07	2.26E-08	3.35E-08	0.00E+00	5.61E-08	1.73E-08	1.97E-08	0.00E+00	3.69E-08
1177	479579.3	3741846	1.41E-07	2.55E-07	0.00E+00	3.96E-07	1.34E-07	2.82E-07	0.00E+00	4.16E-07	2.71E-08	4.51E-08	0.00E+00	7.22E-08	1.08E-07	2.10E-07	0.00E+00	3.18E-07	2.31E-08	3.43E-08	0.00E+00	5.75E-08	1.77E-08	2.02E-08	0.00E+00	3.78E-08
1178	479596.9	3741839	1.45E-07	2.62E-07	0.00E+00	4.07E-07	1.38E-07	2.89E-07	0.00E+00	4.27E-07	2.78E-08	4.62E-08	0.00E+00	7.40E-08	1.10E-07	2.16E-07	0.00E+00	3.26E-07	2.37E-08	3.52E-08	0.00E+00	5.89E-08	1.81E-08	2.07E-08	0.00E+00	3.88E-08
1179	479614.5	3741832	1.49E-07	2.68E-07	0.00E+00	4.17E-07	1.41E-07	2.97E-07	0.00E+00	4.38E-07	2.85E-08	4.74E-08	0.00E+00	7.60E-08	1.13E-07	2.21E-07	0.00E+00	3.35E-07	2.44E-08	3.61E-08	0.00E+00	6.05E-08	1.86E-08	2.12E-08	0.00E+00	3.98E-08
1180	479632	3741825	1.53E-07	2.75E-07	0.00E+00	4.28E-07	1.45E-07	3.05E-07	0.00E+00	4.50E-07	2.93E-08	4.87E-08	0.00E+00	7.80E-08	1.16E-07	2.27E-07	0.00E+00	3.43E-07	2.50E-08	3.71E-08	0.00E+00	6.20E-08	1.91E-08	2.18E-08	0.00E+00	4.09E-08
1181	479649.6	3741817	1.57E-07	2.83E-07	0.00E+00	4.40E-07	1.49E-07	3.13E-07	0.00E+00	4.62E-07	3.01E-08	5.00E-08	0.00E+00	8.01E-08	1.19E-07	2.33E-07	0.00E+00	3.53E-07	2.57E-08	3.80E-08	0.00E+00	6.37E-08	1.96E-08	2.23E-08	0.00E+00	4.20E-08
1182	479667.2	3741810	1.61E-07	2.9E-07	0.00E+00	4.52E-07	1.53E-07	3.21E-07	0.00E+00	4.74E-07	3.09E-08	5.13E-08	0.00E+00	8.22E-08	1.23E-07	2.40E-07	0.00E+00	3.62E-07	2.64E-08	3.91E-08	0.00E+00	6.54E-08	2.02E-08	2.30E-08	0.00E+00	4.31E-08
1183	479684.8	3741803	1.65E-07	2.98E-07	0.00E+00	4.64E-07	1.57E-07	3.30E-07	0.00E+00	4.87E-07	3.17E-08	5.27E-08	0.00E+00	8.45E-08	1.26E-07	2.46E-07	0.00E+00	3.72E-07	2.71E-08	4.02E-08	0.00E+00	6.72E-08	2.07E-08	2.36E-08	0.00E+00	4.43E-08
1184	479702.4	3741796	1.70E-07	3.07E-07	0.00E+00	4.77E-07	1.61E-07	3.39E-07	0.00E+00	5.01E-07	3.26E-08	5.42E-08	0.00E+00	8.68E-08	1.30E-07	2.53E-07	0.00E+00	3.82E-07	2.78E-08	4.13E-08	0.00E+00	6.91E-08	2.13E-08	2.42E-08	0.00E+00	4.55E-08
1185	479719.9	3741789	1.75E-07	3.15E-07	0.00E+00	4.90E-07	1.66E-07	3.49E-07	0.00E+00	5.15E-07	3.35E-08	5.57E-08	0.00E+00	8.92E-08	1.33E-07	2.60E-07	0.00E+00	3.93E-07	2.86E-08	4.24E-08	0.00E+00	7.10E-08	2.19E-08	2.49E-08	0.00E+00	4.68E-08
1186	479737.5	3741782	1.80E-07	3.24E-07	0.00E+00	5.04E-07	1.70E-07	3.58E-07	0.00E+00	5.29E-07	3.45E-08	5.73E-08	0.00E+00	9.17E-08	1.37E-07	2.67E-07	0.00E+00	4.04E-07	2.94E-08	4.36E-08	0.00E+00	7.30E-08	2.25E-08	2.56E-08	0.00E+00	4.81E-08
1187	479755.1	3741775	1.85E-07	3.33E-07	0.00E+00	5.18E-07	1.75E-07	3.69E-07	0.00E+00	5.44E-07	3.54E-08	5.89E-08	0.00E+00	9.43E-08	1.41E-07	2.75E-07	0.00E+00	4.15E-07	3.02E-08	4.48E-08	0.00E+00	7.51E-08	2.31E-08	2.63E-08	0.00E+00	4.94E-08
1188	479772.7	3741767	1.90E-07	3.42E-07	0.00E+00	5.32E-07	1.80E-07	3.79E-07	0.00E+00	5.59E-07	3.64E-08	6.05E-08	0.00E+00	9.69E-08	1.45E-07	2.82E-07	0.00E+00	4.27E-07	3.11E-08	4.61E-08	0.00E+00	7.71E-08	2.38E-08	2.71E-08	0.00E+00	5.08E-08
1189	479790.2	3741760	1.95E-07	3.52E-07	0.00E+00	5.47E-07	1.85E-07	3.89E-07	0.00E+00	5.74E-07	3.74E-08	6.22E-08	0.00E+00	9.96E-08	1.49E-07	2.90E-07	0.00E+00	4.39E-07	3.19E-08	4.73E-08	0.00E+00	7.93E-08	2.44E-08	2.78E-08	0.00E+00	5.22E-08
1190	479807.8	3741753	2.00E-07	3.62E-07	0.00E+00	5.62E-07	1.90E-07	4.00E-07	0.00E+00	5.90E-07	3.85E-08	6.39E-08	0.00E+00	1.02E-07	1.53E-07	2.98E-07	0.00E+00	4.51E-07	3.28E-08	4.86E-08	0.00E+00	8.15E-08	2.51E-08	2.86E-08	0.00E+00	5.37E-08
1191	479825.4	3741746	2.06E-07	3.71E-07	0.00E+00	5.77E-07	1.95E-07	4.11E-07	0.00E+00	6.06E-07	3.95E-08	6.56E-08	0.00E+00	1.05E-07	1.57E-07	3.06E-07	0.00E+00	4.63E-07	3.37E-08	5.00E-08	0.00E+00	8.37E-08	2.58E-08	2.93E-08	0.00E+00	5.51E-08
1192	479843	3741739	2.11E-07	3.81E-07	0.00E+00	5.92E-07	2.00E-07	4.22E-07	0.00E+00	6.22E-07	4.05E-08	6.73E-08	0.00E+00	1.08E-07	1.61E-07	3.14E-07	0.00E+00	4.75E-07	3.46E-08	5.13E-08	0.00E+00	8.59E-08	2.64E-08	3.01E-08	0.00E+00	5.66E-08
1193	479860.6	3741732	2.17E-07	3.91E-07	0.00E+00	6.08E-07	2.06E-07	4.32E-07	0.00E+00	6.38E-07	4.16E-08	6.91E-08	0.00E+00	1.11E-07	1.65E-07	3.22E-07	0.00E+00	4.87E-07	3.55E-08	5.26E-08	0.00E+00	8.81E-08	2.71E-08	3.09E-08	0.00E+00	5.80E-08
1194	479878.1	3741725	2.22E-07	4.01E-07	0.00E+00	6.23E-07	2.11E-07	4.43E-07	0.00E+00	6.54E-07	4.26E-08	7.08E-08	0.00E+00	1.13E-07	1.69E-07	3.30E-07	0.00E+00	5.00E-07	3.64E-08	5.39E-08	0.00E+00	9.03E-08	2.78E-08	3.17E-08	0.00E+00	5.95E-08
1195	479280.6	3741918	9.25E-08	1.67E-07	0.00E+00	2.59E-07	8.77E-08	1.85E-07	0.00E+00	2.72E-07	1.77E-08	2.95E-08	0.00E+00	4.72E-08	7.04E-08	1.38E-07	0.00E+00	2.08E-07	1.51E-08	2.24E-08	0.00E+00	3.76E-08	1.16E-08	1.32E-08	0.00E+00	2.48E-08
1196	479298.2	3741910	9.44E-08	1.7E-07	0.00E+00	2.65E-07	8.95E-08	1.88E-07	0.00E+00	2.78E-07	1.81E-08	3.01E-08	0.00E+00	4.82E-08	7.19E-08	1.40E-07	0.00E+00	2.12E-07	1.54E-08	2.29E-08	0.00E+00	3.84E-08	1.18E-08	1.35E-08	0.00E+00	2.53E-08
1197	479315.8	3741903	9.63E-08	1.74E-07	0.00E+00	2.70E-07	9.14E-08	1.92E-07	0.00E+00	2.84E-07	1.85E-08	3.07E-08	0.00E+00	4.92E-08	7.33E-08	1.43E-07	0.00E+00	2.17E-07	1.58E-08	2.34E-08	0.00E+00	3.91E-08	1.21E-08	1.37E-08	0.00E+00	2.58E-08
1198	479333.4	3741896	9.83E-08	1.77E-07	0.00E+00	2.76E-07	9.33E-08	1.96E-07	0.00E+00	2.89E-07	1.89E-08	3.13E-08	0.00E+00	5.02E-08	7.49E-08	1.46E-07	0.00E+00	2.21E-07	1.61E-08	2.39E-08	0.00E+00	3.99E-08	1.23E-08	1.40E-08	0.00E+00	2.63E-08
1199	479350.9	3741889	1.00E-07	1.81E-07	0.00E+00	2.81E-07	9.52E-08	2.00E-07	0.00E+00	2.95E-07	1.92E-08	3.20E-08	0.00E+00	5.12E-08	7.64E-08	1.49E-07	0.00E+00	2.26E-07	1.64E-08	2.43E-08	0.00E+00	4.08E-08	1.26E-08	1.43E-08	0.00E+00	2.69E-08
1200	479368.5	3741882	1.02E-07	1.85E-07	0.00E+00	2.87E-07	9.72E-08	2.04E-07	0.00E+00	3.01E-07	1.96E-08	3.26E-08	0.00E+00	5.23E-08	7.80E-08	1.52E-07	0.00E+00	2.30E-07	1.68E-08	2.48E-08	0.00E+00	4.16E-08	1.28E-08	1.46E-08	0.00E+00	2.74E-08
1201	479386.1	3741875	1.05E-07	1.89E-07	0.00E+00	2.93E-07	9.92E-08	2.09E-07	0.00E+00	3.08E-07	2.01E-08	3.33E-08	0.00E+00	5.34E-08	7.96E-08	1.55E-07	0.00E+00	2.35E-07	1.71E-08	2.54E-08	0.00E+00	4.25E-08	1.31E-08	1.49E-08	0.00E+00	2.80E-08
1202	479403.7	3741868	1.07E-07	1.92E-07	0.00E+00	2.99E-07	1.01E-07	2.13E-07	0.00E+00	3.14E-07	2.05E-08	3.40E-08	0.00E+00	5.45E-08	8.13E-08	1.59E-07	0.00E+00	2.40E-07	1.75E-08	2.59E-08	0.00E+00	4.34E-08	1.34E-08	1.52E-08	0.00E+00	2.86E-08
1203	479421.3	3741860	1.09E-07	1.97E-07	0.00E+00	3.06E-07	1.03E-07	2.17E-07	0.00E+00	3.21E-07	2.09E-08	3.47E-08	0.00E+00	5.56E-08	8.30E-08	1.62E-07	0.00E+00	2.45E-07	1.78E-08	2.64E-08	0.00E+00	4.43E-08	1.36E-08	1.55E-08	0.00E+00	2.92E-08
1204	479438.8	3741853	1.11E-07	2.01E-07	0.00E+00	3.12E-07	1.06E-07	2.22E-07	0.00E+00	3.28E-07	2.14E-08	3.55E-08	0.00E+00	5.68E-08	8.48E-08	1.66E-07	0.00E+00	2.50E-07	1.82E-08	2.70E-08	0.00E+00	4.52E-08	1.39E-08	1.59E-08	0.00E+00	2.98E-08
1205	479456.4	3741846	1.14E-07	2.05E-07	0.00E+00	3.19E-07	1.08E-07	2.27E-07	0.00E+00	3.35E-07	2.18E-08	3.62E-08	0.00E+00	5.81E-08	8.66E-08	1.69E-07	0.00E+00	2.56E-07	1.86E-08	2.76E-08	0.00E+00	4.62E-08	1.42E-08	1.62E-08	0.00E+00	3.04E-08
1206	479474	3741839	1.16E-07	2.1E-07	0.00E+00	3.26E-07	1.10E-07	2.32E-07	0.00E+00	3.42E-07	2.23E-08	3.70E-08	0.00E+00	5.93E-08	8.85E-08	1.73E-07	0.00E+00	2.61E-07	1.90E-08	2.82E-08	0.00E+00	4.72E-08	1.45E-08	1.66E-08	0.00E+00	3.11E-08
1207	479491.6	3741832	1.19E-07	2.14E-07	0.00E+00	3.33E-07	1.13E-07	2.37E-07	0.00E+00	3.50E-07	2.28E-08	3.78E-08	0.00E+00	6.06E-08	9.04E-08	1.77E-07	0.00E+00	2.67E-07	1.94E-08	2.88E-08	0.00E+00	4.83E-08	1.49E-08	1.69E-08	0.00E+00	3.18E-08
1208	479509.1	3741825	1.21E-07	2.19E-07	0.00E+00	3.40E-07	1.15E-07	2.42E-07	0.00E+00	3.57E-07	2.33E-08	3.87E-08	0.00E+00	6.20E-08	9.25E-08	1.81E-07	0.00E+00	2.73E-07	1.99E-08	2.95E-08	0.00E+00	4.93E-08	1.52E-08	1.73E-08	0.00E+00	3.25E-08
1209	479526.7	3741818	1.24E-07	2.24E-07	0.00E+00	3.48E-07	1.18E-07	2.48E-07	0.00E+00	3.66E-07	2.38E-08	3.96E-08	0.00E+00	6.34E-08	9.46E-08	1.85E-07	0.00E+00	2.79E-07	2.03E-08	3.01E-08	0.00E+00	5.05E-08	1.55E-08	1.77E-08	0.00E+00	3.32E-08
1210	479544.3	3741810	1.27E-07	2.29E-07	0.00E+00	3.56E-07	1.21E-07	2.54E-07	0.00E+00	3.74E-07	2.44E-08	4.05E-08	0.00E+00	6.49E-08	9.68E-08	1.89E-07	0.00E+00	2.86E-07	2.08E-08	3.08E-08	0.00E+00	5.17E-08	1.59E-08	1.81E-08	0.00E+00	3.40E-08
1211	479561.9	3741803	1.30E-07	2.35E-07	0.00E+00	3.65E-07	1.23E-07	2.60E-07	0.00E+00	3.83E-07	2.50E-08	4.15E-08	0.00E+00	6.64E-08	9.91E-08	1.94E-07	0.00E+00	2.93E-07	2.13E-08	3.16E-08	0.00E+00	5.29E-08	1.63E-08	1.85E-08	0.00E+00	3.48E-08
1212	479579.5	3741796	1.33E-07	2.4E-07	0.00E+00	3.74E-07	1.26E-07	2.66E-07	0.00E+00	3.92E-07	2.56E-08	4.25E-08	0.00E+00	6.80E-08	1.01E-07	1.98E-07	0.00E+00	3.00E-07	2.18E-08	3.23E-08	0.00E+00	5.42E-08	1.67E-08	1.90E-08	0.00E+00	3.57E-08
1213	479597	3741789	1.37E-07	2.46E-07	0.00E+00	3.83E-07	1.30E-07	2.72E-07	0.00E+00	4.02E-07	2.62E-08	4.35E-08	0.00E+00	6.97E-08	1.04E-07	2.03E-07	0.00E+00	3.07E-07	2.23E-08	3.31E-08	0.00E+00	5.55E-08	1.71E-08	1.95E-08	0.00E+00	3.65E-08
1214	479614.6	3741782	1.40E-07	2.52E-07	0.00E+00	3.92E-07	1.33E-07	2.79E-07	0.00E+00	4.12E-07	2.68E-08	4.46E-08	0.00E+00	7.15E-08	1.07E-07	2.08E-07	0.00E+00	3.15E-07	2.29E-08	3.40E-08	0.00E+00	5.69E-08	1.75E-08	1.99E-08	0.00E+00	3.75E-08
1215	479632.2	3741775	1.44E-07	2.59E-07	0.00E+00	4.02E-07	1.36E-07	2.86E-07	0.00E+00	4.22E-07	2.75E-08	4.57E-08	0.00E+00	7.33E-08	1.09E-07	2.13E-07	0.00E+00	3.23E-07	2.35E-08	3.48E-08	0.00E+00	5.83E-08	1.80E-08	2.05E-08	0.00E+00	3.84E-08
1216	479649.8	3741767	1.47E-07	2.65E-07	0.00E+00	4.13E-07	1.40E-07	2.94E-07	0.00E+00	4.33E-07	2.82E-08	4.69E-08	0.00E+00	7.51E-08	1.12E-07	2.19E-07	0.00E+00	3.31E-07	2.41E-08	3.57E-08	0.00E+00	5.98E-08	1.84E-08	2.10E-08	0.00E+00	3.94E-08
1217	479667.4	3741760	1.51E-07	2.72E-07	0.00E+00	4.23E-07	1.43E-07	3.01E-07	0.00E+00	4.45E-07	2.90E-08	4.81E-08	0.00E+00	7.71E-08	1.15E-07	2.25E-07	0.00E+00	3.40E-07	2.47E-08	3.66E-08	0.00E+00	6.14E-08	1.89E-08	2.15E-08	0.00E+00	4.04E-08
1218	479684.9	3741753	1.55E-07	2.8E-07	0.00E+00	4.34E-07	1.47E-07	3.09E-07	0.00E+00	4.56E-07	2.97E-08	4.94E-08	0.00E+00	7.91E-08	1.18E-07	2.30E-07	0.00E+00	3.49E-07	2.54E-08	3.76E-08	0.00E+00	6.30E-08	1.94E-08	2.21E-08	0.00E+00	4.15E-08
1219	479702.5	3741746	1.59E-07	2.87E-07	0.00E+00	4.46E-07	1.51E-07	3.17E-07	0.00E+00	4.68E-07	3.05E-08	5.07E-08	0.00E+00	8.12E-08	1.21E-07	2.37E-07	0.00E+00	3.58E-07	2.60E-08	3.86E-08	0.00E+00	6.46E-08	1.99E-08	2.27E-08	0.00E+00	4.26E-08
1220	479720.1	3741739	1.63E-07	2.94E-07	0.00E+00	4.58E-07	1.55E-07	3.26E-07	0.00E+00	4.81E-07	3.13E-08	5.20E-08	0.00E+00	8.34E-08	1.24E-07	2.43E-07	0.00E+00	3.67E-07	2.67E-08	3.96E-08	0.00E+00	6.63E-08	2.04E-08	2.33E-08	0.00E+00	4.37E-08
1221	479737.7	3741732	1.68E-07	3.02E-07	0.00E+00	4.70E-07	1.59E-07	3.34E-07	0.00E+00	4.93E-07	3.22E-08	5.34E-08	0.00E+00	8.56E-08	1.28E-07	2.49E-07	0.00E+00	3.77E-07	2.74E-08	4.07E-08	0.00E+00	6.81E-08	2.10E-08	2.39E-08	0.00E+00	4.49E-08
1222	479755.2	3741725	1.72E-07	3.1E-07	0.00E+00	4.82E-07	1.63E-07	3.43E-07	0.00E+00	5.07E-07	3.30E-08	5.48E-08	0.00E+00	8.79E-08	1.31E-07	2.56E-07	0.00E+00	3.87E-07	2.82E-08	4.18E-08	0.00E+00	6.99E-08	2.15E-08	2.45E-08	0.00E+00	4.61E-08
1223	479772.8	3741717	1.77E-07	3.19E-07	0.00E+00	4.95E-07	1.68E-07	3.52E-07	0.00E+00	5.20E-07	3.39E-08	5.63E-08	0.00E+00	9.02E-08	1.35E-07	2.63E-07	0.00E+00	3.97E-07	2.89E-08	4.29E-08	0.00E+00	7.18E-08	2.21E-08	2.52E-08	0.00E+00	4.73E-08
1224	479790.4	3741710	1.81E-07	3.27E-07	0.00E+00	5.08E-07	1.72E-07	3.62E-07	0.00E+00	5.34E-07	3.48E-08	5.78E-08	0.00E+00	9.25E-08	1.38E-07	2.70E-07	0.00E+00	4.08E-07	2.97E-08	4.40E-08	0.00E+00	7.37E-08	2.27E-08	2.58E-08	0.00E+00	4.85E-08
1225	479808	3741703	1.86E-07	3.35E-07	0.00E+00	5.21E-07	1.76E-07	3.71E-07	0.00E+00	5.47E-07	3.57E-08	5.93E-08	0.00E+00	9.49E-08	1.42E-07	2.77E-07	0.00E+00	4.18E-07	3.04E-08	4.51E-08	0.00E+00	7.56E-08	2.33E-08	2.65E-08	0.00E+00	4.98E-08
1226	479825.6	3741696	1.91E-07	3.44E-07	0.00E+00	5.35E-07	1.81E-07	3.80E-07	0.00E+00	5.61E-07	3.66E-08	6.08E-08	0.00E+00	9.74E-08	1.45E-07	2.84E-07	0.00E+00	4.29E-07	3.12E-08	4.63E-08	0.00E+00	7.75E-08	2.39E-08	2.72E-08	0.00E+00	5.10E-08
1227	479843.1	3741689	1.95E-07	3.53E-07	0.00E+00	5.48E-07	1.85E-07	3.90E-07	0.00E+00	5.75E-07	3.75E-08	6.23E-08	0.00E+00	9.98E-08	1.49E-07	2.91E-07	0.00E+00	4.40E-07	3.20E-08	4.74E-08	0.00E+00	7.94E-08	2.45E-08	2.79E-08	0.00E+00	5.23E-08
1228	479860.7	3741682	2.00E-07	3.61E-07	0.00E+00	5.61E-07	1.90E-07	3.99E-07	0.00E+00	5.89E-07	3.84E-08	6.38E-08	0.00E+00	1.02E-07	1.52E-07	2.98E-07	0.00E+00	4.50E-07	3.28E-08	4.86E-08	0.00E+00	8.14E-08	2.51E-08	2.85E-08	0.00E+00	5.36E-08
1229	479878.3	3741675	2.05E-07	3.7E-07	0.00E+00	5.75E-07	1.94E-07	4.09E-07	0.00E+00	6.03E-07	3.93E-08	6.53E-08	0.00E+00	1.05E-07	1.56E-07	3.05E-07	0.00E+00	4.61E-07	3.35E-08	4.97E-08	0.00E+00	8.33E-08	2.56E-08	2.92E-08	0.00E+00	5.49E-08
1230	479245.6	3741882	8.53E-08	1.54E-07	0.00E+00	2.39E-07	8.09E-08	1.70E-07	0.00E+00	2.51E-07	1.64E-08	2.72E-08	0.00E+00	4.36E-08	6.50E-08	1.27E-07	0.00E+00	1.92E-07	1.40E-08	2.07E-08	0.00E+00	3.47E-08	1.07E-08	1.22E-08	0.00E+00	2.28E-08
1231	479263.2	3741875	8.70E-08	1.57E-07	0.00E+00	2.44E-07	8.25E-08	1.73E-07	0.00E+00	2.56E-07	1.67E-08	2.77E-08	0.00E+00	4.44E-08	6.62E-08	1.29E-07	0.00E+00	1.96E-07	1.42E-08	2.11E-08	0.00E+00	3.53E-08	1.09E-08	1.24E-08	0.00E+00	2.33E-08
1232	479280.8	3741868	8.87E-08	1.6E-07	0.00E+00	2.49E-07	8.41E-08	1.77E-07	0.00E+00	2.61E-07	1.70E-08	2.83E-08	0.00E+00	4.53E-08	6.75E-08	1.32E-07	0.00E+00	1.99E-07	1.45E-08	2.15E-08	0.00E+00	3.60E-08	1.11E-08	1.26E-08	0.00E+00	2.37E-08
1233	479298.4	3741860	9.04E-08	1.63E-07	0.00E+00	2.53E-07	8.57E-08	1.80E-07	0.00E+00	2.66E-07	1.73E-08	2.88E-08	0.00E+00	4.61E-08	6.88E-08	1.34E-07	0.00E+00	2.03E-07	1.48E-08	2.19E-08	0.00E+00	3.67E-08	1.13E-08	1.29E-08	0.00E+00	2.42E-08
1234	479315.9	3741853	9.21E-08	1.66E-07	0.00E+00	2.58E-07	8.74E-08	1.84E-07	0.00E+00	2.71E-07	1.77E-08	2.94E-08	0.00E+00	4.70E-08	7.02E-08	1.37E-07	0.00E+00	2.07E-07	1.51E-08	2.24E-08	0.00E+00	3.74E-08	1.15E-08	1.31E-08	0.00E+00	2.47E-08
1235	479333.5	3741846	9.39E-08	1.69E-07	0.00E+00	2.63E-07	8.91E-08	1.87E-07	0.00E+00	2.76E-07	1.80E-08	2.99E-08	0.00E+00	4.80E-08	7.15E-08	1.40E-07	0.00E+00	2.11E-07	1.54E-08	2.28E-08	0.00E+00	3.82E-08	1.18E-08	1.34E-08	0.00E+00	2.51E-08
1236	479351.1	3741839	9.58E-08	1.73E-07	0.00E+00	2.68E-07	9.09E-08	1.91E-07	0.00E+00	2.82E-07	1.84E-08	3.05E-08	0.00E+00	4.89E-08	7.29E-08	1.42E-07	0.00E+00	2.15E-07	1.57E-08	2.32E-08	0.00E+00	3.89E-08	1.20E-08	1.36E-08	0.00E+00	2.56E-08
1237	479368.7	3741832	9.77E-08	1.76E-07	0.00E+00	2.74E-07	9.27E-08	1.95E-07	0.00E+00	2.87E-07	1.87E-08	3.11E-08	0.00E+00	4.99E-08	7.44E-08	1.45E-07	0.00E+00	2.20E-07	1.60E-08	2.37E-08	0.00E+00	3.97E-08	1.22E-08	1.39E-08	0.00E+00	2.61E-08
1238	479386.3	3741825	9.96E-08	1.8E-07	0.00E+00	2.79E-07	9.45E-08	1.99E-07	0.00E+00	2.93E-07	1.91E-08	3.17E-08	0.00E+00	5.08E-08	7.58E-08	1.48E-07	0.00E+00	2.24E-07	1.63E-08	2.42E-08	0.00E+00	4.05E-08	1.25E-08	1.42E-08	0.00E+00	2.67E-08
1239	479403.8	3741818	1.02E-07	1.83E-07	0.00E+00	2.85E-07	9.64E-08	2.03E-07	0.00E+00	2.99E-07	1.95E-08	3.24E-08	0.00E+00	5.19E-08	7.74E-08	1.51E-07	0.00E+00	2.28E-07	1.66E-08	2.47E-08	0.00E+00	4.13E-08	1.27E-08	1.45E-08	0.00E+00	2.72E-08
1240	479421.4	3741810	1.04E-07	1.87E-07	0.00E+00	2.91E-07	9.83E-08	2.07E-07	0.00E+00	3.05E-07	1.99E-08	3.30E-08	0.00E+00	5.29E-08	7.89E-08	1.54E-07	0.00E+00	2.33E-07	1.70E-08	2.52E-08	0.00E+00	4.21E-08	1.30E-08	1.48E-08	0.00E+00	2.77E-08
1241	479439	3741803	1.06E-07	1.91E-07	0.00E+00	2.97E-07	1.00E-07	2.11E-07	0.00E+00	3.11E-07	2.03E-08	3.37E-08	0.00E+00	5.40E-08	8.06E-08	1.57E-07	0.00E+00	2.38E-07	1.73E-08	2.57E-08	0.00E+00	4.30E-08	1.32E-08	1.51E-08	0.00E+00	2.83E-08
1242	479456.6	3741796	1.08E-07	1.95E-07	0.00E+00	3.03E-07	1.02E-07	2.15E-07	0.00E+00	3.18E-07	2.07E-08	3.44E-08	0.00E+00	5.51E-08	8.22E-08	1.61E-07	0.00E+00	2.43E-07	1.77E-08	2.62E-08	0.00E+00	4.39E-08	1.35E-08	1.54E-08	0.00E+00	2.89E-08
1243	479474.1	3741789	1.10E-07	1.99E-07	0.00E+00	3.09E-07	1.05E-07	2.20E-07	0.00E+00	3.24E-07	2.11E-08	3.51E-08	0.00E+00	5.63E-08	8.39E-08	1.64E-07	0.00E+00	2.48E-07	1.80E-08	2.67E-08	0.00E+00	4.48E-08	1.38E-08	1.57E-08	0.00E+00	2.95E-08
1244	479491.7	3741782	1.13E-07	2.03E-07	0.00E+00	3.16E-07	1.07E-07	2.25E-07	0.00E+00	3.31E-07	2.16E-08	3.59E-08	0.00E+00	5.75E-08	8.57E-08	1.67E-07	0.00E+00	2.53E-07	1.84E-08	2.73E-08	0.00E+00	4.57E-08	1.41E-08	1.60E-08	0.00E+00	3.01E-08
1245	479509.3	3741775	1.15E-07	2.07E-07	0.00E+00	3.23E-07	1.09E-07	2.29E-07	0.00E+00	3.39E-07	2.21E-08	3.67E-08	0.00E+00	5.87E-08	8.76E-08	1.71E-07	0.00E+00	2.59E-07	1.88E-08	2.79E-08	0.00E+00	4.67E-08	1.44E-08	1.64E-08	0.00E+00	3.08E-08
1246	479526.9	3741768	1.18E-07	2.12E-07	0.00E+00	3.30E-07	1.12E-07	2.35E-07	0.00E+00	3.46E-07	2.26E-08	3.75E-08	0.00E+00	6.00E-08	8.95E-08	1.75E-07	0.00E+00	2.64E-07	1.92E-08	2.85E-08	0.00E+00	4.78E-08	1.47E-08	1.68E-08	0.00E+00	3.15E-08
1247	479544.5	3741760	1.20E-07	2.17E-07	0.00E+00	3.37E-07	1.14E-07	2.40E-07	0.00E+00	3.54E-07	2.31E-08	3.83E-08	0.00E+00	6.14E-08	9.16E-08	1.79E-07	0.00E+00	2.70E-07	1.97E-08	2.92E-08	0.00E+00	4.89E-08	1.50E-08	1.71E-08	0.00E+00	3.22E-08
1248	479562	3741753	1.23E-07	2.22E-07	0.00E+00	3.45E-07	1.17E-07	2.45E-07	0.00E+00	3.62E-07	2.36E-08	3.92E-08	0.00E+00	6.28E-08	9.37E-08	1.83E-07	0.00E+00	2.77E-07	2.01E-08	2.98E-08	0.00E+00	5.00E-08	1.54E-08	1.75E-08	0.00E+00	3.29E-08
1249	479579.6	3741746	1.26E-07	2.27E-07	0.00E+00	3.53E-07	1.19E-07	2.51E-07	0.00E+00	3.70E-07	2.41E-08	4.01E-08	0.00E+00	6.43E-08	9.58E-08	1.87E-07	0.00E+00	2.83E-07	2.06E-08	3.05E-08	0.00E+00	5.11E-08	1.57E-08	1.79E-08	0.00E+00	3.37E-08
1250	479597.2	3741739	1.29E-07	2.32E-07	0.00E+00	3.61E-07	1.22E-07	2.57E-07	0.00E+00	3.79E-07	2.47E-08	4.11E-08	0.00E+00	6.58E-08	9.81E-08	1.92E-07	0.00E+00	2.90E-07	2.11E-08	3.13E-08	0.00E+00	5.24E-08	1.61E-08	1.84E-08	0.00E+00	3.45E-08
1251	479614.8	3741732	1.32E-07	2.38E-07	0.00E+00	3.70E-07	1.25E-07	2.63E-07	0.00E+00	3.88E-07	2.53E-08	4.20E-08	0.00E+00	6.74E-08	1.00E-07	1.96E-07	0.00E+00	2.97E-07	2.16E-08	3.20E-08	0.00E+00	5.36E-08	1.65E-08	1.88E-08	0.00E+00	3.53E-08
1252	479632.4	3741725	1.35E-07	2.44E-07	0.00E+00	3.79E-07	1.28E-07	2.70E-07	0.00E+00	3.98E-07	2.59E-08	4.31E-08	0.00E+00	6.90E-08	1.03E-07	2.01E-07	0.00E+00	3.04E-07	2.21E-08	3.28E-08	0.00E+00	5.49E-08	1.69E-08	1.93E-08	0.00E+00	3.62E-08
1253	479649.9	3741717	1.38E-07	2.5E-07	0.00E+00	3.88E-07	1.31E-07	2.76E-07	0.00E+00	4.08E-07	2.66E-08	4.41E-08	0.00E+00	7.07E-08	1.05E-07	2.06E-07	0.00E+00	3.11E-07	2.27E-08	3.36E-08	0.00E+00	5.63E-08	1.73E-08	1.97E-08	0.00E+00	3.71E-08
1254	479667.5	3741710	1.42E-07	2.56E-07	0.00E+00	3.98E-07	1.35E-07	2.83E-07	0.00E+00	4.18E-07	2.72E-08	4.52E-08	0.00E+00	7.25E-08	1.08E-07	2.11E-07	0.00E+00	3.19E-07	2.32E-08	3.44E-08	0.00E+00	5.77E-08	1.78E-08	2.02E-08	0.00E+00	3.80E-08
1255	479685.1	3741703	1.45E-07	2.62E-07	0.00E+00	4.08E-07	1.38E-07	2.90E-07	0.00E+00	4.28E-07	2.79E-08	4.64E-08	0.00E+00	7.43E-08	1.11E-07	2.16E-07	0.00E+00	3.27E-07	2.38E-08	3.53E-08	0.00E+00	5.91E-08	1.82E-08	2.07E-08	0.00E+00	3.89E-08
1256	479702.7	3741696	1.49E-07	2.69E-07	0.00E+00	4.18E-07	1.42E-07	2.98E-07	0.00E+00	4.39E-07	2.86E-08	4.75E-08	0.00E+00	7.62E-08	1.14E-07	2.22E-07	0.00E+00	3.35E-07	2.44E-08	3.62E-08	0.00E+00	6.06E-08	1.87E-08	2.13E-08	0.00E+00	3.99E-08
1257	479720.2	3741689	1.53E-07	2.76E-07	0.00E+00	4.29E-07	1.45E-07	3.05E-07	0.00E+00	4.50E-07	2.93E-08	4.87E-08	0.00E+00	7.81E-08	1.16E-07	2.27E-07	0.00E+00	3.44E-07	2.50E-08	3.71E-08	0.00E+00	6.21E-08	1.91E-08	2.18E-08	0.00E+00	4.09E-08
1258	479737.8	3741682	1.57E-07	2.83E-07	0.00E+00	4.40E-07	1.49E-07	3.13E-07	0.00E+00	4.62E-07	3.01E-08	5.00E-08	0.00E+00	8.01E-08	1.19E-07	2.33E-07	0.00E+00	3.53E-07	2.57E-08	3.81E-08	0.00E+00	6.37E-08	1.96E-08	2.24E-08	0.00E+00	4.20E-08
1259	479755.4	3741675	1.61E-07	2.9E-07	0.00E+00	4.51E-07	1.53E-07	3.21E-07	0.00E+00	4.73E-07	3.08E-08	5.12E-08	0.00E+00	8.21E-08	1.22E-07	2.39E-07	0.00E+00	3.62E-07	2.63E-08	3.90E-08	0.00E+00	6.53E-08	2.01E-08	2.29E-08	0.00E+00	4.30E-08
1260	479773	3741667	1.65E-07	2.97E-07	0.00E+00	4.62E-07	1.56E-07	3.29E-07	0.00E+00	4.85E-07	3.16E-08	5.25E-08	0.00E+00	8.41E-08	1.26E-07	2.45E-07	0.00E+00	3.71E-07	2.70E-08	4.00E-08	0.00E+00	6.70E-08	2.06E-08	2.35E-08	0.00E+00	4.41E-08
1261	479790.6	3741660	1.69E-07	3.05E-07	0.00E+00	4.74E-07	1.60E-07	3.37E-07	0.00E+00	4.97E-07	3.24E-08	5.38E-08	0.00E+00	8.62E-08	1.29E-07	2.51E-07	0.00E+00	3.80E-07	2.76E-08	4.10E-08	0.00E+00	6.86E-08	2.11E-08	2.41E-08	0.00E+00	4.52E-08

1419	479577.9	3742382	2.98E-07	5.38E-07	0.00E+00	0.00E+00	8.36E-07	2.83E-07	5.95E-07	0.00E+00	0.00E+00	8.78E-07	5.72E-08	9.50E-08	0.00E+00	1.52E-07	6.70E-07	4.43E-07	0.00E+00	1.21E-07	4.88E-08	7.23E-08	0.00E+00	0.00E+00	7.98E-08	4.25E-08	0.00E+00	0.00E+00	3.73E-08
1418	479570.8	3742398	2.98E-07	5.37E-07	0.00E+00	0.00E+00	8.35E-07	2.83E-07	5.94E-07	0.00E+00	0.00E+00	8.77E-07	5.71E-08	9.49E-08	0.00E+00	1.52E-07	6.70E-07	4.43E-07	0.00E+00	1.21E-07	4.87E-08	7.23E-08	0.00E+00	0.00E+00	7.97E-08	4.24E-08	0.00E+00	0.00E+00	3.73E-08
1417	479556.7	3742432	2.96E-07	5.34E-07	0.00E+00	0.00E+00	8.30E-07	2.81E-07	5.91E-07	0.00E+00	0.00E+00	8.72E-07	5.68E-08	9.44E-08	0.00E+00	1.51E-07	6.66E-07	4.41E-07	0.00E+00	1.20E-07	4.85E-08	7.19E-08	0.00E+00	0.00E+00	7.93E-08	4.22E-08	0.00E+00	0.00E+00	3.71E-08
1416	479549.6	3742448	2.95E-07	5.33E-07	0.00E+00	0.00E+00	8.28E-07	2.80E-07	5.89E-07	0.00E+00	0.00E+00	8.69E-07	5.66E-08	9.41E-08	0.00E+00	1.51E-07	6.64E-07	4.39E-07	0.00E+00	1.20E-07	4.83E-08	7.16E-08	0.00E+00	0.00E+00	7.90E-08	4.21E-08	0.00E+00	0.00E+00	3.69E-08
1415	479542.5	3742465	2.94E-07	5.31E-07	0.00E+00	0.00E+00	8.25E-07	2.79E-07	5.87E-07	0.00E+00	0.00E+00	8.66E-07	5.64E-08	9.38E-08	0.00E+00	1.50E-07	6.62E-07	4.38E-07	0.00E+00	1.20E-07	4.82E-08	7.14E-08	0.00E+00	0.00E+00	7.87E-08	4.19E-08	0.00E+00	0.00E+00	3.68E-08
1414	479532.8	3742498	2.92E-07	5.26E-07	0.00E+00	0.00E+00	8.18E-07	2.77E-07	5.82E-07	0.00E+00	0.00E+00	8.59E-07	5.60E-08	9.30E-08	0.00E+00	1.49E-07	6.56E-07	4.34E-07	0.00E+00	1.19E-07	4.78E-08	7.08E-08	0.00E+00	0.00E+00	7.81E-08	4.16E-08	0.00E+00	0.00E+00	3.65E-08
1413	479532.4	3742515	2.91E-07	5.24E-07	0.00E+00	0.00E+00	8.15E-07	2.76E-07	5.80E-07	0.00E+00	0.00E+00	8.56E-07	5.58E-08	9.26E-08	0.00E+00	1.48E-07	6.54E-07	4.32E-07	0.00E+00	1.18E-07	4.76E-08	7.05E-08	0.00E+00	0.00E+00	7.78E-08	4.14E-08	0.00E+00	0.00E+00	3.64E-08
1412	479549.5	3742694	4.08E-07	7.36E-07	0.00E+00	0.00E+00	1.14E-06	3.87E-07	8.15E-07	0.00E+00	0.00E+00	1.20E-06	7.83E-08	9.26E-08	0.00E+00	2.08E-07	6.18E-07	4.91E-08	0.00E+00	1.66E-07	5.11E-08	9.91E-08	0.00E+00	0.00E+00	1.09E-07	5.82E-08	0.00E+00	0.00E+00	5.11E-08
1411	479549.7	3742676	7.19E-07	7.95E-07	0.00E+00	0.00E+00	1.12E-06	3.78E-07	7.65E-07	0.00E+00	0.00E+00	1.17E-06	7.46E-08	1.27E-07	0.00E+00	2.04E-07	6.31E-07	5.93E-08	0.00E+00	1.62E-07	5.04E-08	9.67E-08	0.00E+00	0.00E+00	1.07E-07	5.68E-08	0.00E+00	0.00E+00	4.99E-08
1410	479549.8	3742658	3.89E-07	7.02E-07	0.00E+00	0.00E+00	1.09E-06	3.69E-07	7.76E-07	0.00E+00	0.00E+00	1.15E-06	7.46E-08	1.24E-07	0.00E+00	2.09E-07	6.33E-07	5.79E-08	0.00E+00	1.63E-07	5.07E-08	9.44E-08	0.00E+00	0.00E+00	1.04E-07	5.55E-08	0.00E+00	0.00E+00	4.87E-08
1409	479548.9	3742639	3.80E-07	6.85E-07	0.00E+00	0.00E+00	1.06E-06	3.60E-07	7.57E-07	0.00E+00	0.00E+00	1.12E-06	7.28E-08	1.21E-07	0.00E+00	2.00E-07	6.31E-07	5.65E-08	0.00E+00	1.54E-07	5.02E-08	9.21E-08	0.00E+00	0.00E+00	1.02E-07	5.41E-08	0.00E+00	0.00E+00	4.75E-08
1408	479548.9	3742621	3.71E-07	6.68E-07	0.00E+00	0.00E+00	1.04E-06	3.52E-07	7.39E-07	0.00E+00	0.00E+00	1.09E-06	7.11E-08	1.18E-07	0.00E+00	1.93E-07	6.29E-07	5.51E-08	0.00E+00	1.51E-07	4.98E-08	8.99E-08	0.00E+00	0.00E+00	9.92E-08	5.28E-08	0.00E+00	0.00E+00	4.64E-08
1407	479550	3742602	3.62E-07	6.52E-07	0.00E+00	0.00E+00	1.01E-06	3.43E-07	7.21E-07	0.00E+00	0.00E+00	1.06E-06	6.94E-08	1.15E-07	0.00E+00	1.85E-07	6.09E-07	5.38E-08	0.00E+00	1.47E-07	4.92E-08	8.77E-08	0.00E+00	0.00E+00	9.68E-08	5.15E-08	0.00E+00	0.00E+00	4.52E-08
1406	479550.1	3742584	3.53E-07	6.36E-07	0.00E+00	0.00E+00	9.89E-07	3.35E-07	7.04E-07	0.00E+00	0.00E+00	1.04E-06	6.77E-08	1.12E-07	0.00E+00	1.80E-07	5.94E-07	5.25E-08	0.00E+00	1.44E-07	4.87E-08	8.56E-08	0.00E+00	0.00E+00	9.44E-08	5.03E-08	0.00E+00	0.00E+00	4.42E-08
1405	479548.2	3742334	3.55E-07	6.4E-07	0.00E+00	0.00E+00	9.94E-07	3.37E-07	7.08E-07	0.00E+00	0.00E+00	1.03E-06	6.80E-08	1.13E-07	0.00E+00	1.81E-07	5.98E-07	5.28E-08	0.00E+00	1.44E-07	4.84E-08	8.61E-08	0.00E+00	0.00E+00	9.49E-08	5.06E-08	0.00E+00	0.00E+00	4.44E-08
1404	479634.2	3742367	3.57E-07	6.44E-07	0.00E+00	0.00E+00	1.00E-06	3.39E-07	7.12E-07	0.00E+00	0.00E+00	1.05E-06	6.85E-08	1.14E-07	0.00E+00	1.82E-07	5.98E-07	5.31E-08	0.00E+00	1.45E-07	4.84E-08	8.66E-08	0.00E+00	0.00E+00	9.56E-08	5.09E-08	0.00E+00	0.00E+00	4.47E-08
1403	479620.2	3742400	3.58E-07	6.45E-07	0.00E+00	0.00E+00	1.00E-06	3.39E-07	7.14E-07	0.00E+00	0.00E+00	1.05E-06	6.86E-08	1.14E-07	0.00E+00	1.83E-07	5.97E-07	5.32E-08	0.00E+00	1.45E-07	4.85E-08	8.68E-08	0.00E+00	0.00E+00	9.57E-08	5.10E-08	0.00E+00	0.00E+00	4.48E-08
1402	479613.2	3742416	3.57E-07	6.45E-07	0.00E+00	0.00E+00	1.00E-06	3.39E-07	7.13E-07	0.00E+00	0.00E+00	1.05E-06	6.86E-08	1.14E-07	0.00E+00	1.82E-07	5.97E-07	5.32E-08	0.00E+00	1.45E-07	4.85E-08	8.63E-08	0.00E+00	0.00E+00	9.57E-08	5.09E-08	0.00E+00	0.00E+00	4.47E-08
1401	479599.2	3742450	3.56E-07	6.42E-07	0.00E+00	0.00E+00	9.97E-07	3.38E-07	7.10E-07	0.00E+00	0.00E+00	1.05E-06	6.77E-08	1.13E-07	0.00E+00	1.80E-07	5.96E-07	5.29E-08	0.00E+00	1.45E-07	4.82E-08	8.63E-08	0.00E+00	0.00E+00	9.52E-08	5.07E-08	0.00E+00	0.00E+00	4.45E-08
1400	479585.2	3742483	3.53E-07	6.36E-07	0.00E+00	0.00E+00	9.89E-07	3.35E-07	7.04E-07	0.00E+00	0.00E+00	1.04E-06	6.77E-08	1.12E-07	0.00E+00	1.80E-07	5.96E-07	5.25E-08	0.00E+00	1.43E-07	4.81E-08	8.56E-08	0.00E+00	0.00E+00	9.44E-08	5.03E-08	0.00E+00	0.00E+00	4.41E-08
1399	479571.2	3742516	3.50E-07	6.31E-07	0.00E+00	0.00E+00	9.80E-07	3.32E-07	6.97E-07	0.00E+00	0.00E+00	1.03E-06	6.71E-08	1.11E-07	0.00E+00	1.78E-07	5.94E-07	5.20E-08	0.00E+00	1.42E-07	4.80E-08	8.48E-08	0.00E+00	0.00E+00	9.36E-08	4.98E-08	0.00E+00	0.00E+00	4.37E-08
1398	479599.6	3742695	5.15E-07	9.29E-07	0.00E+00	0.00E+00	1.44E-06	4.89E-07	1.03E-06	0.00E+00	0.00E+00	1.52E-06	9.88E-08	1.64E-07	0.00E+00	2.63E-07	7.92E-07	7.66E-08	0.00E+00	2.09E-07	6.44E-08	1.25E-07	0.00E+00	0.00E+00	1.38E-07	7.34E-08	0.00E+00	0.00E+00	6.44E-08
1397	479599.7	3742676	5.01E-07	9.03E-07	0.00E+00	0.00E+00	1.40E-06	4.75E-07	9.99E-07	0.00E+00	0.00E+00	1.47E-06	9.60E-08	1.60E-07	0.00E+00	2.56E-07	7.45E-07	3.81E-08	0.00E+00	1.13E-06	8.19E-08	1.21E-07	0.00E+00	0.00E+00	1.34E-07	7.14E-08	0.00E+00	0.00E+00	6.26E-08
1396	479599.8	3742658	4.87E-07	8.78E-07	0.00E+00	0.00E+00	1.36E-06	4.62E-07	9.71E-07	0.00E+00	0.00E+00	1.43E-06	9.34E-08	1.55E-07	0.00E+00	2.48E-07	7.24E-07	3.71E-07	0.00E+00	1.08E-06	7.97E-08	1.18E-07	0.00E+00	0.00E+00	1.30E-07	6.94E-08	0.00E+00	0.00E+00	6.09E-08
1395	479599.8	3742639	4.73E-07	8.53E-07	0.00E+00	0.00E+00	1.33E-06	4.49E-07	9.44E-07	0.00E+00	0.00E+00	1.39E-06	9.08E-08	1.51E-07	0.00E+00	2.42E-07	7.04E-07	3.60E-07	0.00E+00	1.06E-06	7.75E-08	1.15E-07	0.00E+00	0.00E+00	1.27E-07	6.75E-08	0.00E+00	0.00E+00	5.92E-08
1394	479599.9	3742621	4.60E-07	8.3E-07	0.00E+00	0.00E+00	1.29E-06	4.37E-07	9.18E-07	0.00E+00	0.00E+00	1.35E-06	8.83E-08	1.47E-07	0.00E+00	2.35E-07	6.84E-07	3.50E-07	0.00E+00	1.03E-06	7.53E-08	1.12E-07	0.00E+00	0.00E+00	1.27E-07	6.56E-08	0.00E+00	0.00E+00	5.76E-08
1393	479600	3742602	4.48E-07	8.07E-07	0.00E+00	0.00E+00	1.25E-06	4.25E-07	8.93E-07	0.00E+00	0.00E+00	1.32E-06	8.59E-08	1.43E-07	0.00E+00	2.28E-07	6.66E-07	3.41E-07	0.00E+00	1.01E-06	7.33E-08	1.09E-07	0.00E+00	0.00E+00	1.82E-07	6.38E-08	0.00E+00	0.00E+00	5.60E-08
1392	479600.1	3742584	4.35E-07	7.85E-07	0.00E+00	0.00E+00	1.22E-06	4.13E-07	8.69E-07	0.00E+00	0.00E+00	1.28E-06	8.35E-08	1.39E-07	0.00E+00	2.22E-07	6.48E-07	3.32E-07	0.00E+00	9.79E-07	7.13E-08	1.06E-07	0.00E+00	0.00E+00	1.77E-07	6.21E-08	0.00E+00	0.00E+00	5.45E-08
1391	479676.4	3742386	4.38E-07	7.89E-07	0.00E+00	0.00E+00	1.23E-06	4.15E-07	8.73E-07	0.00E+00	0.00E+00	1.29E-06	8.39E-08	1.39E-07	0.00E+00	2.23E-07	6.51E-07	3.33E-07	0.00E+00	9.84E-07	7.16E-08	1.06E-07	0.00E+00	0.00E+00	1.78E-07	6.24E-08	0.00E+00	0.00E+00	5.47E-08
1390	479662.5	3742418	4.39E-07	7.92E-07	0.00E+00	0.00E+00	1.23E-06	4.17E-07	8.76E-07	0.00E+00	0.00E+00	1.29E-06	8.42E-08	1.40E-07	0.00E+00	2.24E-07	6.53E-07	3.34E-07	0.00E+00	9.88E-07	7.19E-08	1.07E-07	0.00E+00	0.00E+00	1.78E-07	6.26E-08	0.00E+00	0.00E+00	5.49E-08
1389	479648.7	3742451	4.38E-07	7.91E-07	0.00E+00	0.00E+00	1.23E-06	4.16E-07	8.74E-07	0.00E+00	0.00E+00	1.29E-06	8.41E-08	1.40E-07	0.00E+00	2.24E-07	6.52E-07	3.34E-07	0.00E+00	9.86E-07	7.18E-08	1.06E-07	0.00E+00	0.00E+00	1.78E-07	6.25E-08	0.00E+00	0.00E+00	5.48E-08
1388	479634.8	3742484	4.36E-07	7.85E-07	0.00E+00	0.00E+00	1.22E-06	4.13E-07	8.69E-07	0.00E+00	0.00E+00	1.28E-06	8.35E-08	1.39E-07	0.00E+00	2.22E-07	6.48E-07	3.32E-07	0.00E+00	9.79E-07	7.13E-08	1.06E-07	0.00E+00	0.00E+00	1.77E-07	6.21E-08	0.00E+00	0.00E+00	5.45E-08
1387	479621	3742516	4.31E-07	7.77E-07	0.00E+00	0.00E+00	1.21E-06	4.09E-07	8.60E-07	0.00E+00	0.00E+00	1.27E-06	8.27E-08	1.37E-07	0.00E+00	2.20E-07	6.41E-07	3.28E-07	0.00E+00	9.69E-07	7.05E-08	1.05E-07	0.00E+00	0.00E+00	1.75E-07	6.14E-08	0.00E+00	0.00E+00	5.39E-08
1386	479619.6	3742695	5.71E-07	1.03E-06	0.00E+00	0.00E+00	1.60E-06	5.42E-07	1.14E-06	0.00E+00	0.00E+00	1.68E-06	1.10E-07	1.82E-07	0.00E+00	2.91E-07	4.35E-07	8.49E-08	0.00E+00	1.28E-06	9.34E-08	1.39E-07	0.00E+00	0.00E+00	1.53E-07	8.14E-08	0.00E+00	0.00E+00	7.14E-08
1385	479619.7	3742676	5.54E-07	9.99E-07	0.00E+00	0.00E+00	1.55E-06	5.26E-07	1.11E-06	0.00E+00	0.00E+00	1.63E-06	1.06E-07	1.77E-07	0.00E+00	2.83E-07	4.22E-07	8.24E-08	0.00E+00	1.25E-06	9.07E-08	1.34E-07	0.00E+00	0.00E+00	2.25E-07	7.90E-08	0.00E+00	0.00E+00	6.93E-08
1384	479619.8	3742658	5.38E-07	9.7E-07	0.00E+00	0.00E+00	1.51E-06	5.10E-07	1.07E-06	0.00E+00	0.00E+00	1.58E-06	1.03E-07	1.71E-07	0.00E+00	2.74E-07	4.09E-07	8.00E-08	0.00E+00	1.21E-06	8.80E-08	1.30E-07	0.00E+00	0.00E+00	2.18E-07	7.66E-08	0.00E+00	0.00E+00	6.73E-08
1383	479619.8	3742639	5.22E-07	9.41E-07	0.00E+00	0.00E+00	1.46E-06	4.95E-07	1.04E-06	0.00E+00	0.00E+00	1.54E-06	1.00E-07	1.66E-07	0.00E+00	2.66E-07	3.97E-07	7.76E-08	0.00E+00	1.17E-06	8.54E-08	1.27E-07	0.00E+00	0.00E+00	2.06E-07	7.44E-08	0.00E+00	0.00E+00	6.53E-08
1382	479619.9	3742621	5.07E-07	9.13E-07	0.00E+00	0.00E+00	1.42E-06	4.81E-07	1.01E-06	0.00E+00	0.00E+00	1.49E-06	9.72E-08	1.61E-07	0.00E+00	2.59E-07	3.86E-07	7.53E-08	0.00E+00	1.14E-06	8.29E-08	1.23E-07	0.00E+00	0.00E+00	2.06E-07	7.22E-08	0.00E+00	0.00E+00	6.34E-08
1381	479620	3742603	4.92E-07	8.87E-07	0.00E+00	0.00E+00	1.38E-06	4.67E-07	9.81E-07	0.00E+00	0.00E+00	1.45E-06	9.43E-08	1.57E-07	0.00E+00	2.51E-07	3.74E-07	7.31E-08	0.00E+00	1.11E-06	8.05E-08	1.19E-07	0.00E+00	0.00E+00	2.00E-07	7.01E-08	0.00E+00	0.00E+00	6.15E-08
1380	479620.1	3742584	4.78E-07	8.61E-07	0.00E+00	0.00E+00	1.34E-06	4.53E-07	9.53E-07	0.00E+00	0.00E+00	1.41E-06	9.16E-08	1.52E-07	0.00E+00	2.44E-07	3.64E-07	7.10E-08	0.00E+00	1.07E-06	7.82E-08	1.16E-07	0.00E+00	0.00E+00	1.94E-07	6.98E-08	0.00E+00	0.00E+00	5.98E-08
1379	479697.2	3742384	4.77E-07	8.6E-07	0.00E+00	0.00E+00	1.34E-06	4.53E-07	9.52E-07	0.00E+00	0.00E+00	1.40E-06	9.15E-08	1.52E-07	0.00E+00	2.44E-07	3.63E-07	7.09E-08	0.00E+00	1.07E-06	7.81E-08	1.16E-07	0.00E+00	0.00E+00	1.94E-07	6.98E-08	0.00E+00	0.00E+00	5.97E-08
1378	479698.3	3742417	4.80E-07	8.66E-07	0.00E+00	0.00E+00	1.35E-06	4.56E-07	9.58E-07	0.00E+00	0.00E+00	1.41E-06	9.21E-08	1.53E-07	0.00E+00	2.45E-07	3.66E-07	7.14E-07	0.00E+00	1.08E-06	7.86E-08	1.17E-07	0.00E+00	0.00E+00	1.95E-07	6.84E-08	0.00E+00	0.00E+00	6.01E-08
1377	479696.2	3742450	4.80E-07	8.66E-07	0.00E+00	0.00E+00	1.35E-06	4.56E-07	9.58E-07	0.00E+00	0.00E+00	1.41E-06	9.21E-08	1.53E-07	0.00E+00	2.45E-07	3.66E-07	7.14E-07	0.00E+00	1.08E-06	7.86E-08	1.17E-07	0.00E+00	0.00E+00	1.95E-07	6.85E-08	0.00E+00	0.00E+00	6.01E-08
1376	479655.2	3742483	4.78E-07	8.61E-07	0.00E+00	0.00E+00	1.34E-06	4.53E-07	9.53E-07	0.00E+00	0.00E+00	1.41E-06	9.16E-08	1.52E-07	0.00E+00	2.44E-07	3.64E-07	7.10E-07	0.00E+00	1.07E-06	7.82E-08	1.16E-07	0.00E+00	0.00E+00	1.94E-07	6.81E-08	0.00E+00	0.00E+00	5.98E-08
1375	479641.2	3742516	4.73E-07	8.52E-07	0.00E+00	0.00E+00	1.32E-06	4.48E-07	9.43E-07	0.00E+00	0.00E+00	1.39E-06	9.07E-08	1.51E-07	0.00E+00	2.41E-07	3.60E-07	7.03E-07	0.00E+00	1.06E-06	7.74E-08	1.15E-07	0.00E+00	0.00E+00	1.92E-07	6.74E-08	0.00E+00	0.00E+00	5.91E-08
1374	479639.6	3742695	6.37E-07	1.15E-06	0.00E+00	0.00E+00	1.76E-06	6.05E-07	1.27E-06	0.00E+00	0.00E+00	1.88E-06	1.22E-07	2.03E-07	0.00E+00	3.25E-07	4.85E-07	9.48E-08	0.00E+00	1.43E-06	1.04E-07	1.55E-07	0.00E+00	0.00E+00	2.59E-07	9.09E-08	0.00E+00	0.00E+00	7.98E-08
1373	479639.7	3742676	6.17E-07	1.11E-06	0.00E+00	0.00E+00	1.73E-06	5.86E-07	1.23E-06	0.00E+00	0.00E+00	1.82E-06	1.18E-07	1.97E-07	0.00E+00	3.15E-07	4.70E-07	9.18E-08	0.00E+00	1.39E-06	1.01E-07	1.50E-07	0.00E+00	0.00E+00	2.51E-07	8.80E-08	0.00E+00	0.00E+00	7.72E-08
1372	479639.8	3742658	5.98E-07	1.08E-06	0.00E+00	0.00E+00	1.68E-06	5.67E-07	1.19E-06	0.00E+00	0.00E+00	1.76E-06	1.15E-07	1.91E-07	0.00E+00	3.05E-07	4.55E-07	8.89E-08	0.00E+00	1.34E-06	9.79E-08	1.45E-07	0.00E+00	0.00E+00	2.43E-07	8.52E-08	0.00E+00	0.00E+00	7.48E-08
1371	479639.8	3742694	6.04E-07	1.16E-06	0.00E+00	0.00E+00	1.70E-06	5.96E-07	1.22E-06	0.00E+00	0.00E+00	1.85E-06	1.11E-07	1.96E-07	0.00E+00	3.09E-07	4.61E-07	8.61E-08	0.00E+00	1.30E-06	9.48E-08	1.41E-07	0.00E+00	0.00E+00	2.35E-07	8.25E-08	0.00E+00	0.00E+00	7.25E-08
1370	479639.9	3742621	5.61E-07	1.01E-06	0.00E+00	0.00E+00	1.57E-06	5.32E-07	1.12E-06	0.00E+00	0.00E+00	1.65E-06	1.08E-07	1.79E-07	0.00E+00	2.86E-07	4.27E-07	8.34E-08	0.00E+00	1.26E-06	9.18E-08	1.36E-07	0.00E+00	0.00E+00	2.28E-07	8.00E-08	0.00E+00	0.00E+00	7.02E-08
1369	479640	3742603	9.86E-07	1.73E-06	0.00E+00	0.00E+00	2.52E-06	8.85E-07	1.64E-06	0.00E+00	0.00E+00	1.55E-06	1.04E-07	1.73E-07	0.00E+00	2.69E-07	8.63E-08	1.32E-07	0.00E+00	1.22E-06	8.90E-08	1.24E-07	0.00E+00	0.00E+00	2.21E-07	7.75E-08	0.00E+00	0.00E+00	6.80E-08
1368	479642.9	3742584	7.72E-07	1.35E-06	0.00E+00	0.00E+00	2.06E-06	7.08E-07	1.64E-06	0.00E+00	0.00E+00	2.12E-06	1.31E-07	2.56E-07	0.00E+00	3.88E-07	1.31E-06	2.56E-06	0.00E+00	1.18E-06	2.83E-08	4.18E-07	0.00E+00	0.00E+00	7.51E-08	4.24E-08	0.00E+00	0.00E+00	3.73E-08
1367	479711.1	3742398	5.25E-07	9.47E-07	0.00E+00	0.00E+00	1.47E-06	4.98E-07	1.05E-06	0.00E+00	0.00E+00	1.55E-06	1.01E-07	1.67E-07	0.00E+00	2.68E-07	4.00E-07	7.81E-07	0.00E+00	1.18E-06	8.39E-08	1.23E-07	0.00E+00	0.00E+00	2.14E-07	7.48E-08	0.00E+00	0.00E+00	5.57E-08
1366	479727.9	3742415	5.27E-07	9.51E-07	0.00E+00	0.00E+00	1.48E-06	5.00E-07	1.05E-06	0.00E+00	0.00E+00	1.55E-06	1.01E-07	1.68E-07	0.00E+00	2.69E-07	4.01E-07	7.84E-07	0.00E+00	1.18E-06	8.63E-08	1.28E-07	0.00E+00	0.00E+00	2.14E-07	7.51E-08	0.00E+00	0.00E+00	6.60E-08
1365	479697	3742432	5.28E-07	9.53E-07	0.00E+00	0.00E+00	1.48E-06	5.01E-07	1.05E-06	0.00E+00	0.00E+00	1.56E-06	1.01E-07	1.68E-07	0.00E+00	2.70E-07	4.02E-07	7.86E-07	0.00E+00	1.18E-06	8.65E-08	1.28E-07	0.00E+00	0.00E+00	2.15E-07	7.53E-08	0.00E+00	0.00E+00	6.61E-08
1364	479698.9	3742448	5.29E-07	9.54E-07	0.00E+00	0.00E+00	1.48E-06	5.02E-07	1.05E-06	0.00E+00	0.00E+00	1.56E-06	1.01E-07	1.69E-07	0.00E+00	2.70E-07	4.03E-07	7.86E-07	0.00E+00	1.18E-06	8.65E-08	1.28E-07	0.00E+00	0.00E+00	2.15E-07	7.54E-08	0.00E+00	0.00E+00	6.62E-08
1363	479682.8	3742465	5.28E-07	9.52E-07	0.00E+00	0.00E+00	1.48E-06	5.01E-07	1.05E-06	0.00E+00	0.00E+00	1.55E-06	1.01E-07	1.68E-07	0.00E+00	2.70E-07	4.02E-07	7.85E-07	0.00E+00	1.18E-06	8.64E-08	1.28E-07	0.00E+00	0.00E+00	2.15E-07	7.53E-08	0.00E+00	0.00E+00	6.61E-08
1362	479675.7	3742482	5.27E-07	9.5E-07	0.00E+00	0.00E+00	1.48E-06	5.00E-07	1.05E-06	0.00E+00	0.00E+00	1.55E-06	1.01E-07	1.68E-07	0.00E+00	2.69E-07	4.01E-07	7.83E-07	0.00E+00	1.18E-06	8.62E-08	1.28E-07	0.00E+00	0.00E+00	2.14E-07	7.51E-08	0.00E+00	0.00E+00	6.59E-08
1361	479669.6	3742499	5.24E-07	9.46E-07	0.00E+00	0.00E+00	1.47E-06	4.98E-07	1.04E-06	0.00E+00	0.00E+00	1.54E-06	1.00E-07	1.67E-07	0.00E+00	2.68E-07	3.99E-07	7.82E-07	0.00E+00	1.17E-06	8.58E-08	1.27E-07	0.00E+00	0.00E+00	2.13E-07	7.48E-08	0.00E+00	0.00E+00	6.56E-08
1360	479661.5	3742515	5.22E-07	9.41E-07	0.00E+00	0.00E+00	1.46E-06	4.95E-07	1.04E-06	0.00E+00	0.00E+00	1.54E-06	1.00E-07	1.66E-07	0.00E+00	2.66E-07	3.97E-07	7.76E-07	0.00E+00	1.17E-06	8.54E-08	1.27E-07	0.00E+00	0.00E+00	2.12E-07	7.43E-08	0.00E+00	0.00E+00	6.53E-08
1359	479659.6	3742693	7.18E-07	1.29E-06	0.00E+00	0.00E+00	2.01E-06	6.81E-07	1.43E-06	0.00E+00	0.00E+00	2.11E-06	1.38E-07	2.29E-07	0.00E+00	3.66E-07	5.46E-07	1.17E-07	0.00E+00	1.61E-06

1577	4792343	3742246	1.10E-07	1.99E-07	0.00E+00	3.09E-07	1.05E-07	2.20E-07	0.00E+00	3.24E-07	2.11E-08	3.51E-08	0.00E+00	5.62E-08	8.39E-08	1.64E-07	0.00E+00	2.48E-07	1.80E-08	2.67E-08	0.00E+00	4.48E-08	1.38E-08	1.57E-08	0.00E+00	2.95E-08
1576	4792273	3742263	1.10E-07	1.98E-07	0.00E+00	3.08E-07	1.04E-07	2.19E-07	0.00E+00	3.24E-07	2.11E-08	3.51E-08	0.00E+00	5.62E-08	8.38E-08	1.64E-07	0.00E+00	2.47E-07	1.80E-08	2.67E-08	0.00E+00	4.47E-08	1.38E-08	1.57E-08	0.00E+00	2.94E-08
1575	4792149	3742692	1.28E-07	2.31E-07	0.00E+00	3.59E-08	9.74E-08	1.90E-07	0.00E+00	2.88E-07	2.45E-08	4.08E-08	0.00E+00	6.53E-08	9.06E-08	3.10E-08	0.00E+00	2.88E-07	2.06E-08	3.17E-08	0.00E+00	5.20E-08	1.60E-08	1.82E-08	0.00E+00	3.42E-08
1574	4791949	3742674	1.26E-07	2.28E-07	0.00E+00	3.54E-08	9.63E-08	1.88E-07	0.00E+00	2.84E-07	2.43E-08	4.03E-08	0.00E+00	6.45E-08	9.53E-08	3.07E-08	0.00E+00	2.84E-07	2.07E-08	3.07E-08	0.00E+00	5.14E-08	1.58E-08	1.80E-08	0.00E+00	3.38E-08
1573	4791949	3742655	1.25E-07	2.25E-07	0.00E+00	3.50E-07	1.19E-07	2.49E-07	0.00E+00	3.68E-07	2.40E-08	3.98E-08	0.00E+00	6.38E-08	9.51E-08	1.86E-07	0.00E+00	2.81E-07	2.04E-08	3.03E-08	0.00E+00	5.08E-08	1.56E-08	1.78E-08	0.00E+00	3.34E-08
1572	4791949	3742637	1.17E-07	2.23E-07	0.00E+00	3.46E-07	1.14E-07	2.46E-07	0.00E+00	3.63E-07	2.37E-08	3.93E-08	0.00E+00	6.30E-08	9.40E-08	3.00E-08	0.00E+00	2.78E-07	2.02E-08	2.98E-08	0.00E+00	4.92E-08	1.54E-08	1.76E-08	0.00E+00	3.30E-08
1571	4791949	3742619	1.22E-07	2.2E-07	0.00E+00	3.42E-07	1.16E-07	2.43E-07	0.00E+00	3.59E-07	2.34E-08	3.89E-08	0.00E+00	6.22E-08	9.28E-08	1.81E-07	0.00E+00	2.74E-07	2.00E-08	2.96E-08	0.00E+00	4.95E-08	1.53E-08	1.74E-08	0.00E+00	3.26E-08
1570	4791S0	3742600	1.20E-07	2.17E-07	0.00E+00	3.38E-07	1.14E-07	2.40E-07	0.00E+00	3.54E-07	2.31E-08	3.84E-08	0.00E+00	6.15E-08	9.17E-08	1.79E-07	0.00E+00	2.71E-07	1.97E-08	2.92E-08	0.00E+00	4.89E-08	1.51E-08	1.72E-08	0.00E+00	3.22E-08
1569	4791SD1	3742582	1.19E-07	2.14E-07	0.00E+00	3.33E-07	1.13E-07	2.37E-07	0.00E+00	3.50E-07	2.28E-08	3.79E-08	0.00E+00	6.07E-08	9.06E-08	1.77E-07	0.00E+00	2.67E-07	1.95E-08	2.89E-08	0.00E+00	4.83E-08	1.49E-08	1.70E-08	0.00E+00	3.18E-08
1568	4793G82	3742048	1.20E-07	2.17E-07	0.00E+00	3.37E-07	1.14E-07	2.40E-07	0.00E+00	3.54E-07	2.31E-08	3.83E-08	0.00E+00	6.14E-08	9.16E-08	1.79E-07	0.00E+00	2.70E-07	1.97E-08	2.92E-08	0.00E+00	4.89E-08	1.50E-08	1.71E-08	0.00E+00	3.22E-08
1567	4793S41	3742081	1.21E-07	2.18E-07	0.00E+00	3.39E-07	1.15E-07	2.41E-07	0.00E+00	3.56E-07	2.32E-08	3.86E-08	0.00E+00	6.18E-08	9.21E-08	1.80E-07	0.00E+00	2.72E-07	1.98E-08	2.94E-08	0.00E+00	4.92E-08	1.51E-08	1.72E-08	0.00E+00	3.24E-08
1566	4793A0.1	3742115	1.21E-07	2.19E-07	0.00E+00	3.41E-07	1.15E-07	2.42E-07	0.00E+00	3.58E-07	2.33E-08	3.87E-08	0.00E+00	6.20E-08	9.25E-08	1.81E-07	0.00E+00	2.73E-07	1.99E-08	2.95E-08	0.00E+00	4.94E-08	1.52E-08	1.73E-08	0.00E+00	3.25E-08
1565	47936	3742148	1.22E-07	2.19E-07	0.00E+00	3.41E-07	1.15E-07	2.43E-07	0.00E+00	3.58E-07	2.33E-08	3.88E-08	0.00E+00	6.21E-08	9.27E-08	1.81E-07	0.00E+00	2.74E-07	1.99E-08	2.95E-08	0.00E+00	4.94E-08	1.52E-08	1.73E-08	0.00E+00	3.26E-08
1564	4793119	3742181	1.22E-07	2.2E-07	0.00E+00	3.41E-07	1.15E-07	2.43E-07	0.00E+00	3.58E-07	2.34E-08	3.88E-08	0.00E+00	6.21E-08	9.27E-08	1.81E-07	0.00E+00	2.74E-07	1.99E-08	2.95E-08	0.00E+00	4.95E-08	1.52E-08	1.73E-08	0.00E+00	3.26E-08
1563	4792971	3742214	1.22E-07	2.19E-07	0.00E+00	3.41E-07	1.15E-07	2.43E-07	0.00E+00	3.58E-07	2.33E-08	3.88E-08	0.00E+00	6.21E-08	9.26E-08	1.81E-07	0.00E+00	2.73E-07	1.99E-08	2.95E-08	0.00E+00	4.94E-08	1.52E-08	1.73E-08	0.00E+00	3.25E-08
1562	4792938	3742248	1.21E-07	2.19E-07	0.00E+00	3.40E-07	1.15E-07	2.42E-07	0.00E+00	3.57E-07	2.33E-08	3.87E-08	0.00E+00	6.19E-08	9.24E-08	1.80E-07	0.00E+00	2.73E-07	1.99E-08	2.94E-08	0.00E+00	4.93E-08	1.52E-08	1.73E-08	0.00E+00	3.25E-08
1561	4792768	3742264	1.21E-07	2.19E-07	0.00E+00	3.40E-07	1.15E-07	2.42E-07	0.00E+00	3.57E-07	2.32E-08	3.86E-08	0.00E+00	6.19E-08	9.23E-08	1.80E-07	0.00E+00	2.72E-07	1.98E-08	2.94E-08	0.00E+00	4.92E-08	1.52E-08	1.73E-08	0.00E+00	3.24E-08
1560	4793969	3742693	1.42E-07	2.5E-07	0.00E+00	3.99E-08	1.35E-07	2.84E-07	0.00E+00	4.53E-08	2.73E-08	4.52E-08	0.00E+00	7.26E-08	1.08E-07	2.11E-07	0.00E+00	3.20E-07	2.33E-08	3.45E-08	0.00E+00	5.78E-08	1.78E-08	2.03E-08	0.00E+00	3.81E-08
1559	4791997	3742674	1.40E-07	2.53E-07	0.00E+00	3.94E-08	1.33E-07	2.80E-07	0.00E+00	4.48E-08	2.69E-08	4.48E-08	0.00E+00	7.17E-08	1.07E-07	2.09E-07	0.00E+00	3.16E-07	2.30E-08	3.41E-08	0.00E+00	5.71E-08	1.76E-08	2.00E-08	0.00E+00	3.76E-08
1558	4791998	3742656	1.39E-07	2.5E-07	0.00E+00	3.89E-08	1.32E-07	2.77E-07	0.00E+00	4.08E-08	2.66E-08	4.24E-08	0.00E+00	7.08E-08	1.06E-07	2.06E-07	0.00E+00	3.12E-07	2.27E-08	3.36E-08	0.00E+00	5.63E-08	1.73E-08	1.98E-08	0.00E+00	3.71E-08
1557	4793999	3742637	1.37E-07	2.47E-07	0.00E+00	3.84E-08	1.30E-07	2.73E-07	0.00E+00	4.03E-08	2.63E-08	4.36E-08	0.00E+00	6.99E-08	1.04E-07	2.04E-07	0.00E+00	3.08E-07	2.24E-08	3.32E-08	0.00E+00	5.56E-08	1.71E-08	1.95E-08	0.00E+00	3.66E-08
1556	4793969	3742619	1.35E-07	2.44E-07	0.00E+00	3.79E-08	1.28E-07	2.70E-07	0.00E+00	3.98E-08	2.59E-08	4.31E-08	0.00E+00	6.90E-08	1.03E-07	2.01E-07	0.00E+00	3.04E-07	2.21E-08	3.28E-08	0.00E+00	5.49E-08	1.69E-08	1.93E-08	0.00E+00	3.62E-08
1555	47920O	3742600	1.33E-07	2.41E-07	0.00E+00	3.74E-07	1.27E-07	2.66E-07	0.00E+00	3.93E-07	2.56E-08	4.25E-08	0.00E+00	6.81E-08	1.02E-07	1.98E-07	0.00E+00	3.00E-07	2.18E-08	3.24E-08	0.00E+00	5.42E-08	1.67E-08	1.90E-08	0.00E+00	3.57E-08
1554	4792O0.1	3742582	1.32E-07	2.37E-07	0.00E+00	3.69E-07	1.26E-07	2.63E-07	0.00E+00	3.87E-07	2.52E-08	4.19E-08	0.00E+00	6.72E-08	1.00E-07	1.96E-07	0.00E+00	2.96E-07	2.15E-08	3.19E-08	0.00E+00	5.35E-08	1.65E-08	1.88E-08	0.00E+00	3.52E-08
1553	4790A3.2	3742084	1.33E-07	2.4E-07	0.00E+00	3.73E-07	1.26E-07	2.65E-07	0.00E+00	3.92E-07	2.55E-08	4.24E-08	0.00E+00	6.79E-08	1.01E-07	1.98E-07	0.00E+00	2.99E-07	2.18E-08	3.25E-08	0.00E+00	5.44E-08	1.67E-08	1.90E-08	0.00E+00	3.58E-08
1552	4793B92	3742117	1.34E-07	2.41E-07	0.00E+00	3.75E-08	1.27E-07	2.67E-07	0.00E+00	3.94E-07	2.57E-08	4.27E-08	0.00E+00	6.83E-08	1.02E-07	1.99E-07	0.00E+00	3.01E-07	2.19E-08	3.25E-08	0.00E+00	5.44E-08	1.67E-08	1.91E-08	0.00E+00	3.58E-08
1551	4793975	3742150	1.34E-07	2.42E-07	0.00E+00	3.77E-07	1.28E-07	2.68E-07	0.00E+00	3.96E-07	2.58E-08	4.28E-08	0.00E+00	6.86E-08	1.02E-07	2.00E-07	0.00E+00	3.02E-07	2.20E-08	3.26E-08	0.00E+00	5.46E-08	1.68E-08	1.92E-08	0.00E+00	3.60E-08
1550	4793G1.2	3742183	1.35E-07	2.43E-07	0.00E+00	3.77E-07	1.28E-07	2.69E-07	0.00E+00	3.96E-07	2.58E-08	4.29E-08	0.00E+00	6.87E-08	1.03E-07	2.00E-07	0.00E+00	3.03E-07	2.20E-08	3.27E-08	0.00E+00	5.47E-08	1.68E-08	1.92E-08	0.00E+00	3.60E-08
1549	4793A7.2	3742216	1.35E-07	2.43E-07	0.00E+00	3.77E-07	1.28E-07	2.69E-07	0.00E+00	3.96E-07	2.58E-08	4.29E-08	0.00E+00	6.87E-08	1.03E-07	2.00E-07	0.00E+00	3.03E-07	2.20E-08	3.27E-08	0.00E+00	5.47E-08	1.68E-08	1.92E-08	0.00E+00	3.60E-08
1548	4793A3.2	3742249	1.34E-07	2.42E-07	0.00E+00	3.77E-07	1.28E-07	2.68E-07	0.00E+00	3.96E-07	2.58E-08	4.28E-08	0.00E+00	6.86E-08	1.02E-07	2.00E-07	0.00E+00	3.02E-07	2.20E-08	3.26E-08	0.00E+00	5.46E-08	1.68E-08	1.92E-08	0.00E+00	3.60E-08
1547	4793I92	3742282	1.34E-07	2.42E-07	0.00E+00	3.76E-07	1.27E-07	2.67E-07	0.00E+00	3.95E-07	2.57E-08	4.27E-08	0.00E+00	6.84E-08	1.02E-07	1.99E-07	0.00E+00	3.01E-07	2.19E-08	3.25E-08	0.00E+00	5.45E-08	1.68E-08	1.91E-08	0.00E+00	3.59E-08
1546	4793O52	3742315	1.34E-07	2.41E-07	0.00E+00	3.75E-07	1.27E-07	2.67E-07	0.00E+00	3.93E-07	2.56E-08	4.26E-08	0.00E+00	6.82E-08	1.02E-07	1.99E-07	0.00E+00	3.00E-07	2.19E-08	3.24E-08	0.00E+00	5.43E-08	1.67E-08	1.90E-08	0.00E+00	3.58E-08
1545	4792921	3742348	1.33E-07	2.4E-07	0.00E+00	3.73E-07	1.26E-07	2.66E-07	0.00E+00	3.92E-07	2.55E-08	4.24E-08	0.00E+00	6.80E-08	1.01E-07	1.98E-07	0.00E+00	2.99E-07	2.18E-08	3.23E-08	0.00E+00	5.41E-08	1.67E-08	1.90E-08	0.00E+00	3.56E-08
1544	4792772	3742382	1.33E-07	2.39E-07	0.00E+00	3.72E-07	1.26E-07	2.65E-07	0.00E+00	3.90E-07	2.54E-08	4.23E-08	0.00E+00	6.77E-08	1.01E-07	1.97E-07	0.00E+00	2.98E-07	2.17E-08	3.22E-08	0.00E+00	5.39E-08	1.66E-08	1.89E-08	0.00E+00	3.55E-08
1543	4792496	3742693	1.59E-07	2.87E-07	0.00E+00	4.46E-07	1.51E-07	3.18E-07	0.00E+00	4.69E-07	3.06E-08	5.08E-08	0.00E+00	8.13E-08	1.21E-07	2.37E-07	0.00E+00	3.58E-07	2.61E-08	3.86E-08	0.00E+00	6.47E-08	1.99E-08	2.27E-08	0.00E+00	4.26E-08
1542	4792649	3742674	1.57E-07	2.83E-07	0.00E+00	4.41E-07	1.49E-07	3.14E-07	0.00E+00	4.63E-07	3.01E-08	5.01E-08	0.00E+00	8.02E-08	1.20E-07	2.34E-07	0.00E+00	3.53E-07	2.57E-08	3.81E-08	0.00E+00	6.39E-08	1.97E-08	2.24E-08	0.00E+00	4.21E-08
1541	4792948	3742656	1.55E-07	2.8E-07	0.00E+00	4.35E-07	1.47E-07	3.09E-07	0.00E+00	4.56E-07	2.97E-08	4.94E-08	0.00E+00	7.92E-08	1.18E-07	2.31E-07	0.00E+00	3.49E-07	2.54E-08	3.76E-08	0.00E+00	6.30E-08	1.94E-08	2.21E-08	0.00E+00	4.15E-08
1540	4792469	3742638	1.53E-07	2.76E-07	0.00E+00	4.29E-07	1.45E-07	3.05E-07	0.00E+00	4.50E-07	2.93E-08	4.87E-08	0.00E+00	7.81E-08	1.16E-07	2.27E-07	0.00E+00	3.44E-07	2.50E-08	3.71E-08	0.00E+00	6.21E-08	1.91E-08	2.18E-08	0.00E+00	4.09E-08
1539	4792469	3742619	1.51E-07	2.72E-07	0.00E+00	4.23E-07	1.43E-07	3.01E-07	0.00E+00	4.44E-07	2.89E-08	4.81E-08	0.00E+00	7.70E-08	1.15E-07	2.24E-07	0.00E+00	3.39E-07	2.47E-08	3.65E-08	0.00E+00	6.04E-08	1.89E-08	2.15E-08	0.00E+00	4.04E-08
1538	479250	3742601	1.49E-07	2.68E-07	0.00E+00	4.17E-07	1.41E-07	2.97E-07	0.00E+00	4.38E-07	2.85E-08	4.74E-08	0.00E+00	7.59E-08	1.13E-07	2.21E-07	0.00E+00	3.34E-07	2.43E-08	3.61E-08	0.00E+00	5.95E-08	1.86E-08	2.12E-08	0.00E+00	3.98E-08
1537	4792501	3742582	1.47E-07	2.64E-07	0.00E+00	4.11E-07	1.39E-07	2.92E-07	0.00E+00	4.32E-07	2.81E-08	4.67E-08	0.00E+00	7.48E-08	1.12E-07	2.18E-07	0.00E+00	3.30E-07	2.40E-08	3.56E-08	0.00E+00	5.96E-08	1.83E-08	2.09E-08	0.00E+00	3.92E-08
1536	4793483	3742119	1.48E-07	2.67E-07	0.00E+00	4.16E-07	1.41E-07	2.96E-07	0.00E+00	4.36E-07	2.84E-08	4.73E-08	0.00E+00	7.57E-08	1.13E-07	2.21E-07	0.00E+00	3.33E-07	2.43E-08	3.60E-08	0.00E+00	6.02E-08	1.86E-08	2.11E-08	0.00E+00	3.97E-08
1535	4793427	3742152	1.49E-07	2.69E-07	0.00E+00	4.18E-07	1.42E-07	2.98E-07	0.00E+00	4.39E-07	2.86E-08	4.75E-08	0.00E+00	7.63E-08	1.14E-07	2.22E-07	0.00E+00	3.35E-07	2.44E-08	3.62E-08	0.00E+00	6.06E-08	1.87E-08	2.13E-08	0.00E+00	3.99E-08
1534	4794O.4	3742185	1.50E-07	2.7E-07	0.00E+00	4.20E-07	1.42E-07	2.99E-07	0.00E+00	4.41E-07	2.87E-08	4.77E-08	0.00E+00	7.64E-08	1.14E-07	2.23E-07	0.00E+00	3.37E-07	2.45E-08	3.63E-08	0.00E+00	6.08E-08	1.87E-08	2.13E-08	0.00E+00	4.01E-08
1533	4793936	3742218	1.50E-07	2.71E-07	0.00E+00	4.21E-07	1.42E-07	2.99E-07	0.00E+00	4.42E-07	2.88E-08	4.78E-08	0.00E+00	7.66E-08	1.14E-07	2.23E-07	0.00E+00	3.37E-07	2.46E-08	3.64E-08	0.00E+00	6.09E-08	1.88E-08	2.14E-08	0.00E+00	4.01E-08
1532	4793Z51	3742251	1.50E-07	2.7E-07	0.00E+00	4.20E-07	1.42E-07	2.99E-07	0.00E+00	4.41E-07	2.88E-08	4.78E-08	0.00E+00	7.65E-08	1.14E-07	2.23E-07	0.00E+00	3.37E-07	2.45E-08	3.64E-08	0.00E+00	6.09E-08	1.88E-08	2.14E-08	0.00E+00	4.01E-08
1531	4793684	3742284	1.50E-07	2.7E-07	0.00E+00	4.19E-07	1.42E-07	2.98E-07	0.00E+00	4.40E-07	2.87E-08	4.77E-08	0.00E+00	7.64E-08	1.14E-07	2.23E-07	0.00E+00	3.36E-07	2.45E-08	3.63E-08	0.00E+00	6.08E-08	1.87E-08	2.13E-08	0.00E+00	4.00E-08
1529	4793A0.8	3742350	1.49E-07	2.68E-07	0.00E+00	4.17E-07	1.41E-07	2.96E-07	0.00E+00	4.37E-07	2.85E-08	4.74E-08	0.00E+00	7.59E-08	1.13E-07	2.21E-07	0.00E+00	3.34E-07	2.43E-08	3.61E-08	0.00E+00	6.04E-08	1.86E-08	2.12E-08	0.00E+00	3.98E-08
1528	4793Z83	3742383	1.48E-07	2.67E-07	0.00E+00	4.15E-07	1.40E-07	2.95E-07	0.00E+00	4.36E-07	2.84E-08	4.72E-08	0.00E+00	7.55E-08	1.13E-07	2.20E-07	0.00E+00	3.33E-07	2.42E-08	3.59E-08	0.00E+00	5.99E-08	1.85E-08	2.11E-08	0.00E+00	3.96E-08
1527	4793I2.9	3742416	1.47E-07	2.66E-07	0.00E+00	4.13E-07	1.40E-07	2.94E-07	0.00E+00	4.34E-07	2.83E-08	4.70E-08	0.00E+00	7.52E-08	1.12E-07	2.19E-07	0.00E+00	3.31E-07	2.41E-08	3.58E-08	0.00E+00	5.99E-08	1.84E-08	2.10E-08	0.00E+00	3.94E-08
1526	4793S.9	3742449	1.46E-07	2.65E-07	0.00E+00	4.12E-07	1.39E-07	2.92E-07	0.00E+00	4.33E-07	2.82E-08	4.69E-08	0.00E+00	7.49E-08	1.11E-07	2.18E-07	0.00E+00	3.30E-07	2.41E-08	3.57E-08	0.00E+00	5.98E-08	1.84E-08	2.09E-08	0.00E+00	3.93E-08
1525	4793Z.9	3742483	1.45E-07	2.64E-07	0.00E+00	4.11E-07	1.39E-07	2.91E-07	0.00E+00	4.32E-07	2.81E-08	4.68E-08	0.00E+00	7.47E-08	1.11E-07	2.17E-07	0.00E+00	3.29E-07	2.40E-08	3.56E-08	0.00E+00	5.97E-08	1.83E-08	2.08E-08	0.00E+00	3.92E-08
1524	4792I71	3742271	1.44E-07	2.62E-07	0.00E+00	4.08E-07	1.38E-07	2.90E-07	0.00E+00	4.28E-07	2.79E-08	4.64E-08	0.00E+00	7.43E-08	1.11E-07	2.16E-07	0.00E+00	3.27E-07	2.38E-08	3.53E-08	0.00E+00	5.91E-08	1.82E-08	2.07E-08	0.00E+00	3.89E-08
1523	4792I.9	3742469	1.43E-07	2.61E-07	0.00E+00	4.07E-07	1.37E-07	2.88E-07	0.00E+00	4.27E-07	2.78E-08	4.62E-08	0.00E+00	7.41E-08	1.10E-07	2.15E-07	0.00E+00	3.26E-07	2.37E-08	3.51E-08	0.00E+00	5.89E-08	1.81E-08	2.06E-08	0.00E+00	3.87E-08
1522	4792I99	3742297	1.42E-07	2.61E-07	0.00E+00	4.06E-07	1.37E-07	2.87E-07	0.00E+00	4.26E-07	2.77E-08	4.60E-08	0.00E+00	7.38E-08	1.10E-07	2.14E-07	0.00E+00	3.25E-07	2.36E-08	3.50E-08	0.00E+00	5.87E-08	1.80E-08	2.05E-08	0.00E+00	3.85E-08
1521	4792I.8	3742656	1.41E-07	2.59E-07	0.00E+00	4.04E-07	1.36E-07	2.85E-07	0.00E+00	4.25E-07	2.75E-08	4.58E-08	0.00E+00	7.35E-08	1.09E-07	2.13E-07	0.00E+00	3.23E-07	2.34E-08	3.48E-08	0.00E+00	5.83E-08	1.79E-08	2.03E-08	0.00E+00	3.82E-08
1520	4792I.9	3742639	1.40E-07	2.58E-07	0.00E+00	4.02E-07	1.35E-07	2.83E-07	0.00E+00	4.23E-07	2.73E-08	4.56E-08	0.00E+00	7.32E-08	1.08E-07	2.12E-07	0.00E+00	3.21E-07	2.33E-08	3.46E-08	0.00E+00	5.80E-08	1.78E-08	2.02E-08	0.00E+00	3.80E-08

1578	479241.4	3742229	1.10E-07	1.99E-07	0.00E+00	3.09E-07	1.05E-07	2.20E-07	0.00E+00	3.25E-07	2.12E-08	3.52E-08	0.00E+00	5.63E-08	8.40E-08	1.64E-07	0.00E+00	2.48E-07	1.81E-08	2.68E-08	0.00E+00	4.48E-08	1.38E-08	1.57E-08	0.00E+00	2.95E-08
1579	479255.5	3742196	1.11E-07	1.99E-07	0.00E+00	3.10E-07	1.05E-07	2.21E-07	0.00E+00	3.25E-07	2.12E-08	3.52E-08	0.00E+00	5.64E-08	8.42E-08	1.64E-07	0.00E+00	2.49E-07	1.81E-08	2.68E-08	0.00E+00	4.49E-08	1.38E-08	1.58E-08	0.00E+00	2.96E-08
1580	479262.6	3742179	1.11E-07	2E-07	0.00E+00	3.10E-07	1.05E-07	2.21E-07	0.00E+00	3.26E-07	2.12E-08	3.53E-08	0.00E+00	5.65E-08	8.43E-08	1.65E-07	0.00E+00	2.49E-07	1.81E-08	2.69E-08	0.00E+00	4.50E-08	1.38E-08	1.58E-08	0.00E+00	2.96E-08
1581	479269.6	3742163	1.11E-07	2E-07	0.00E+00	3.10E-07	1.05E-07	2.21E-07	0.00E+00	3.26E-07	2.12E-08	3.53E-08	0.00E+00	5.65E-08	8.43E-08	1.65E-07	0.00E+00	2.49E-07	1.81E-08	2.69E-08	0.00E+00	4.50E-08	1.39E-08	1.58E-08	0.00E+00	2.96E-08
1582	479283.8	3742129	1.11E-07	2E-07	0.00E+00	3.10E-07	1.05E-07	2.21E-07	0.00E+00	3.26E-07	2.12E-08	3.53E-08	0.00E+00	5.65E-08	8.43E-08	1.65E-07	0.00E+00	2.49E-07	1.81E-08	2.69E-08	0.00E+00	4.50E-08	1.39E-08	1.58E-08	0.00E+00	2.96E-08
1583	479290.8	3742113	1.11E-07	2E-07	0.00E+00	3.10E-07	1.05E-07	2.21E-07	0.00E+00	3.26E-07	2.12E-08	3.53E-08	0.00E+00	5.65E-08	8.43E-08	1.65E-07	0.00E+00	2.49E-07	1.81E-08	2.69E-08	0.00E+00	4.50E-08	1.38E-08	1.58E-08	0.00E+00	2.96E-08
1584	479304.9	3742079	1.10E-07	1.99E-07	0.00E+00	3.10E-07	1.05E-07	2.20E-07	0.00E+00	3.25E-07	2.12E-08	3.52E-08	0.00E+00	5.64E-08	8.41E-08	1.64E-07	0.00E+00	2.48E-07	1.81E-08	2.68E-08	0.00E+00	4.49E-08	1.38E-08	1.57E-08	0.00E+00	2.96E-08
1585	479312	3742063	1.10E-07	1.99E-07	0.00E+00	3.09E-07	1.05E-07	2.20E-07	0.00E+00	3.25E-07	2.11E-08	3.51E-08	0.00E+00	5.63E-08	8.39E-08	1.64E-07	0.00E+00	2.48E-07	1.80E-08	2.67E-08	0.00E+00	4.48E-08	1.38E-08	1.57E-08	0.00E+00	2.95E-08
1586	479319	3742046	1.10E-07	1.98E-07	0.00E+00	3.08E-07	1.04E-07	2.19E-07	0.00E+00	3.24E-07	2.11E-08	3.51E-08	0.00E+00	5.62E-08	8.38E-08	1.64E-07	0.00E+00	2.47E-07	1.80E-08	2.67E-08	0.00E+00	4.47E-08	1.38E-08	1.57E-08	0.00E+00	2.94E-08
1587	479333.2	3742012	1.09E-07	1.97E-07	0.00E+00	3.07E-07	1.04E-07	2.18E-07	0.00E+00	3.22E-07	2.10E-08	3.49E-08	0.00E+00	5.58E-08	8.33E-08	1.63E-07	0.00E+00	2.46E-07	1.79E-08	2.65E-08	0.00E+00	4.44E-08	1.37E-08	1.56E-08	0.00E+00	2.93E-08
1588	479100.1	3742581	1.08E-07	1.95E-07	0.00E+00	3.03E-07	1.03E-07	2.16E-07	0.00E+00	3.19E-07	2.08E-08	3.45E-08	0.00E+00	5.52E-08	8.24E-08	1.61E-07	0.00E+00	2.43E-07	1.77E-08	2.63E-08	0.00E+00	4.40E-08	1.35E-08	1.54E-08	0.00E+00	2.90E-08
1589	479100	3742600	1.09E-07	1.97E-07	0.00E+00	3.07E-07	1.04E-07	2.18E-07	0.00E+00	3.22E-07	2.10E-08	3.49E-08	0.00E+00	5.59E-08	8.34E-08	1.63E-07	0.00E+00	2.46E-07	1.79E-08	2.66E-08	0.00E+00	4.45E-08	1.37E-08	1.56E-08	0.00E+00	2.93E-08
1590	479099.9	3742618	1.11E-07	2E-07	0.00E+00	3.11E-07	1.05E-07	2.21E-07	0.00E+00	3.26E-07	2.12E-08	3.53E-08	0.00E+00	5.65E-08	8.43E-08	1.65E-07	0.00E+00	2.49E-07	1.81E-08	2.69E-08	0.00E+00	4.50E-08	1.39E-08	1.58E-08	0.00E+00	2.96E-08
1591	479099.9	3742637	1.12E-07	2.02E-07	0.00E+00	3.14E-07	1.06E-07	2.24E-07	0.00E+00	3.30E-07	2.15E-08	3.57E-08	0.00E+00	5.72E-08	8.53E-08	1.67E-07	0.00E+00	2.52E-07	1.83E-08	2.72E-08	0.00E+00	4.55E-08	1.40E-08	1.60E-08	0.00E+00	3.00E-08
1592	479099.8	3742655	1.13E-07	2.04E-07	0.00E+00	3.18E-07	1.08E-07	2.26E-07	0.00E+00	3.34E-07	2.17E-08	3.61E-08	0.00E+00	5.79E-08	8.63E-08	1.69E-07	0.00E+00	2.55E-07	1.86E-08	2.75E-08	0.00E+00	4.61E-08	1.42E-08	1.62E-08	0.00E+00	3.03E-08
1593	479099.7	3742674	1.15E-07	2.07E-07	0.00E+00	3.21E-07	1.09E-07	2.29E-07	0.00E+00	3.37E-07	2.20E-08	3.65E-08	0.00E+00	5.85E-08	8.73E-08	1.70E-07	0.00E+00	2.58E-07	1.88E-08	2.78E-08	0.00E+00	4.66E-08	1.43E-08	1.63E-08	0.00E+00	3.07E-08
1594	479099.6	3742692	1.16E-07	2.09E-07	0.00E+00	3.25E-07	1.10E-07	2.31E-07	0.00E+00	3.41E-07	2.22E-08	3.69E-08	0.00E+00	5.92E-08	8.82E-08	1.72E-07	0.00E+00	2.61E-07	1.90E-08	2.81E-08	0.00E+00	4.71E-08	1.45E-08	1.65E-08	0.00E+00	3.10E-08
1595	479170.6	3742278	1.00E-07	1.81E-07	0.00E+00	2.81E-07	9.51E-08	2.00E-07	0.00E+00	2.95E-07	1.92E-08	3.20E-08	0.00E+00	5.12E-08	7.64E-08	1.49E-07	0.00E+00	2.26E-07	1.64E-08	2.43E-08	0.00E+00	4.07E-08	1.25E-08	1.43E-08	0.00E+00	2.68E-08
1596	479177.7	3742261	1.00E-07	1.81E-07	0.00E+00	2.82E-07	9.53E-08	2.00E-07	0.00E+00	2.96E-07	1.93E-08	3.20E-08	0.00E+00	5.13E-08	7.65E-08	1.49E-07	0.00E+00	2.26E-07	1.64E-08	2.44E-08	0.00E+00	4.08E-08	1.26E-08	1.43E-08	0.00E+00	2.69E-08
1597	479184.8	3742245	1.01E-07	1.81E-07	0.00E+00	2.82E-07	9.54E-08	2.01E-07	0.00E+00	2.96E-07	1.93E-08	3.21E-08	0.00E+00	5.13E-08	7.66E-08	1.50E-07	0.00E+00	2.26E-07	1.65E-08	2.44E-08	0.00E+00	4.09E-08	1.26E-08	1.43E-08	0.00E+00	2.69E-08
1598	479191.9	3742228	1.01E-07	1.82E-07	0.00E+00	2.82E-07	9.56E-08	2.01E-07	0.00E+00	2.96E-07	1.93E-08	3.21E-08	0.00E+00	5.14E-08	7.67E-08	1.50E-07	0.00E+00	2.26E-07	1.65E-08	2.44E-08	0.00E+00	4.09E-08	1.26E-08	1.44E-08	0.00E+00	2.70E-08
1599	479199	3742211	1.01E-07	1.82E-07	0.00E+00	2.83E-07	9.57E-08	2.01E-07	0.00E+00	2.97E-07	1.93E-08	3.21E-08	0.00E+00	5.15E-08	7.68E-08	1.50E-07	0.00E+00	2.27E-07	1.65E-08	2.45E-08	0.00E+00	4.10E-08	1.26E-08	1.44E-08	0.00E+00	2.70E-08
1600	479206.1	3742194	1.01E-07	1.82E-07	0.00E+00	2.83E-07	9.58E-08	2.01E-07	0.00E+00	2.97E-07	1.94E-08	3.22E-08	0.00E+00	5.16E-08	7.69E-08	1.50E-07	0.00E+00	2.27E-07	1.65E-08	2.45E-08	0.00E+00	4.10E-08	1.26E-08	1.44E-08	0.00E+00	2.70E-08
1601	479213.1	3742178	1.01E-07	1.82E-07	0.00E+00	2.83E-07	9.59E-08	2.02E-07	0.00E+00	2.98E-07	1.94E-08	3.22E-08	0.00E+00	5.16E-08	7.70E-08	1.50E-07	0.00E+00	2.27E-07	1.65E-08	2.45E-08	0.00E+00	4.11E-08	1.26E-08	1.44E-08	0.00E+00	2.71E-08
1602	479220.2	3742161	1.01E-07	1.82E-07	0.00E+00	2.84E-07	9.60E-08	2.02E-07	0.00E+00	2.98E-07	1.94E-08	3.22E-08	0.00E+00	5.17E-08	7.70E-08	1.50E-07	0.00E+00	2.28E-07	1.66E-08	2.45E-08	0.00E+00	4.11E-08	1.27E-08	1.44E-08	0.00E+00	2.71E-08
1603	479227.3	3742144	1.01E-07	1.83E-07	0.00E+00	2.84E-07	9.60E-08	2.02E-07	0.00E+00	2.98E-07	1.94E-08	3.23E-08	0.00E+00	5.17E-08	7.71E-08	1.51E-07	0.00E+00	2.28E-07	1.66E-08	2.46E-08	0.00E+00	4.11E-08	1.27E-08	1.44E-08	0.00E+00	2.71E-08
1604	479234.4	3742127	1.01E-07	1.83E-07	0.00E+00	2.84E-07	9.61E-08	2.02E-07	0.00E+00	2.98E-07	1.94E-08	3.23E-08	0.00E+00	5.17E-08	7.71E-08	1.51E-07	0.00E+00	2.28E-07	1.66E-08	2.46E-08	0.00E+00	4.12E-08	1.27E-08	1.44E-08	0.00E+00	2.71E-08
1605	479241.5	3742111	1.01E-07	1.83E-07	0.00E+00	2.84E-07	9.61E-08	2.02E-07	0.00E+00	2.98E-07	1.94E-08	3.23E-08	0.00E+00	5.17E-08	7.71E-08	1.51E-07	0.00E+00	2.28E-07	1.66E-08	2.46E-08	0.00E+00	4.12E-08	1.27E-08	1.44E-08	0.00E+00	2.71E-08
1606	479248.6	3742094	1.01E-07	1.83E-07	0.00E+00	2.84E-07	9.61E-08	2.02E-07	0.00E+00	2.98E-07	1.94E-08	3.23E-08	0.00E+00	5.17E-08	7.71E-08	1.51E-07	0.00E+00	2.28E-07	1.66E-08	2.46E-08	0.00E+00	4.11E-08	1.27E-08	1.44E-08	0.00E+00	2.71E-08
1607	479255.6	3742077	1.01E-07	1.82E-07	0.00E+00	2.84E-07	9.60E-08	2.02E-07	0.00E+00	2.98E-07	1.94E-08	3.22E-08	0.00E+00	5.17E-08	7.71E-08	1.50E-07	0.00E+00	2.28E-07	1.66E-08	2.46E-08	0.00E+00	4.11E-08	1.27E-08	1.44E-08	0.00E+00	2.71E-08
1608	479262.7	3742061	1.01E-07	1.82E-07	0.00E+00	2.83E-07	9.59E-08	2.02E-07	0.00E+00	2.98E-07	1.94E-08	3.22E-08	0.00E+00	5.16E-08	7.70E-08	1.50E-07	0.00E+00	2.27E-07	1.65E-08	2.45E-08	0.00E+00	4.11E-08	1.26E-08	1.44E-08	0.00E+00	2.71E-08
1609	479269.8	3742044	1.01E-07	1.82E-07	0.00E+00	2.83E-07	9.58E-08	2.01E-07	0.00E+00	2.97E-07	1.94E-08	3.22E-08	0.00E+00	5.15E-08	7.69E-08	1.50E-07	0.00E+00	2.27E-07	1.65E-08	2.45E-08	0.00E+00	4.10E-08	1.26E-08	1.44E-08	0.00E+00	2.70E-08
1610	479276.9	3742027	1.01E-07	1.82E-07	0.00E+00	2.83E-07	9.56E-08	2.01E-07	0.00E+00	2.97E-07	1.93E-08	3.21E-08	0.00E+00	5.15E-08	7.67E-08	1.50E-07	0.00E+00	2.27E-07	1.65E-08	2.45E-08	0.00E+00	4.09E-08	1.26E-08	1.44E-08	0.00E+00	2.70E-08
1611	479284	3742010	1.01E-07	1.81E-07	0.00E+00	2.82E-07	9.54E-08	2.01E-07	0.00E+00	2.96E-07	1.93E-08	3.20E-08	0.00E+00	5.13E-08	7.66E-08	1.50E-07	0.00E+00	2.26E-07	1.65E-08	2.44E-08	0.00E+00	4.09E-08	1.26E-08	1.43E-08	0.00E+00	2.69E-08
1612	479291.1	3741994	1.00E-07	1.81E-07	0.00E+00	2.81E-07	9.52E-08	2.00E-07	0.00E+00	2.95E-07	1.92E-08	3.20E-08	0.00E+00	5.12E-08	7.64E-08	1.49E-07	0.00E+00	2.26E-07	1.64E-08	2.43E-08	0.00E+00	4.08E-08	1.25E-08	1.43E-08	0.00E+00	2.68E-08
1613	479298.1	3741977	1.00E-07	1.8E-07	0.00E+00	2.80E-07	9.49E-08	1.99E-07	0.00E+00	2.94E-07	1.92E-08	3.19E-08	0.00E+00	5.11E-08	7.61E-08	1.49E-07	0.00E+00	2.25E-07	1.64E-08	2.43E-08	0.00E+00	4.06E-08	1.25E-08	1.43E-08	0.00E+00	2.68E-08
1614	479121	3742277	9.20E-08	1.66E-07	0.00E+00	2.58E-07	8.73E-08	1.83E-07	0.00E+00	2.71E-07	1.76E-08	2.93E-08	0.00E+00	4.70E-08	7.00E-08	1.37E-07	0.00E+00	2.07E-07	1.51E-08	2.23E-08	0.00E+00	3.74E-08	1.15E-08	1.31E-08	0.00E+00	2.46E-08
1615	479128.1	3742260	9.21E-08	1.66E-07	0.00E+00	2.58E-07	8.74E-08	1.84E-07	0.00E+00	2.71E-07	1.77E-08	2.94E-08	0.00E+00	4.70E-08	7.01E-08	1.37E-07	0.00E+00	2.07E-07	1.51E-08	2.24E-08	0.00E+00	3.74E-08	1.15E-08	1.31E-08	0.00E+00	2.47E-08
1616	479135.2	3742243	9.23E-08	1.66E-07	0.00E+00	2.59E-07	8.75E-08	1.84E-07	0.00E+00	2.72E-07	1.77E-08	2.94E-08	0.00E+00	4.71E-08	7.03E-08	1.37E-07	0.00E+00	2.07E-07	1.51E-08	2.24E-08	0.00E+00	3.75E-08	1.15E-08	1.32E-08	0.00E+00	2.47E-08
1617	479142.3	3742227	9.24E-08	1.67E-07	0.00E+00	2.59E-07	8.77E-08	1.84E-07	0.00E+00	2.72E-07	1.77E-08	2.95E-08	0.00E+00	4.72E-08	7.04E-08	1.37E-07	0.00E+00	2.08E-07	1.51E-08	2.24E-08	0.00E+00	3.75E-08	1.16E-08	1.32E-08	0.00E+00	2.47E-08
1618	479149.4	3742210	9.25E-08	1.67E-07	0.00E+00	2.59E-07	8.78E-08	1.85E-07	0.00E+00	2.72E-07	1.77E-08	2.95E-08	0.00E+00	4.72E-08	7.05E-08	1.38E-07	0.00E+00	2.08E-07	1.51E-08	2.25E-08	0.00E+00	3.76E-08	1.16E-08	1.32E-08	0.00E+00	2.48E-08
1619	479156.5	3742193	9.27E-08	1.67E-07	0.00E+00	2.60E-07	8.79E-08	1.85E-07	0.00E+00	2.73E-07	1.78E-08	2.95E-08	0.00E+00	4.73E-08	7.06E-08	1.38E-07	0.00E+00	2.08E-07	1.52E-08	2.25E-08	0.00E+00	3.76E-08	1.16E-08	1.32E-08	0.00E+00	2.48E-08
1620	479163.6	3742176	9.28E-08	1.67E-07	0.00E+00	2.60E-07	8.80E-08	1.85E-07	0.00E+00	2.73E-07	1.78E-08	2.96E-08	0.00E+00	4.74E-08	7.06E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.25E-08	0.00E+00	3.77E-08	1.16E-08	1.32E-08	0.00E+00	2.48E-08
1621	479170.8	3742159	9.29E-08	1.67E-07	0.00E+00	2.60E-07	8.81E-08	1.85E-07	0.00E+00	2.73E-07	1.78E-08	2.96E-08	0.00E+00	4.74E-08	7.07E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.25E-08	0.00E+00	3.77E-08	1.16E-08	1.32E-08	0.00E+00	2.49E-08
1622	479177.9	3742143	9.30E-08	1.68E-07	0.00E+00	2.61E-07	8.82E-08	1.85E-07	0.00E+00	2.74E-07	1.78E-08	2.96E-08	0.00E+00	4.75E-08	7.08E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.26E-08	0.00E+00	3.78E-08	1.16E-08	1.32E-08	0.00E+00	2.49E-08
1623	479185	3742126	9.30E-08	1.68E-07	0.00E+00	2.61E-07	8.83E-08	1.86E-07	0.00E+00	2.74E-07	1.78E-08	2.96E-08	0.00E+00	4.75E-08	7.08E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.26E-08	0.00E+00	3.78E-08	1.16E-08	1.33E-08	0.00E+00	2.49E-08
1624	479192.1	3742109	9.31E-08	1.68E-07	0.00E+00	2.61E-07	8.83E-08	1.86E-07	0.00E+00	2.74E-07	1.79E-08	2.97E-08	0.00E+00	4.75E-08	7.09E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.26E-08	0.00E+00	3.78E-08	1.16E-08	1.33E-08	0.00E+00	2.49E-08
1625	479199.2	3742092	9.31E-08	1.68E-07	0.00E+00	2.61E-07	8.83E-08	1.86E-07	0.00E+00	2.74E-07	1.79E-08	2.97E-08	0.00E+00	4.75E-08	7.09E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.26E-08	0.00E+00	3.78E-08	1.16E-08	1.33E-08	0.00E+00	2.49E-08
1626	479206.3	3742076	9.31E-08	1.68E-07	0.00E+00	2.61E-07	8.83E-08	1.86E-07	0.00E+00	2.74E-07	1.79E-08	2.97E-08	0.00E+00	4.75E-08	7.09E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.26E-08	0.00E+00	3.78E-08	1.16E-08	1.33E-08	0.00E+00	2.49E-08
1627	479213.4	3742059	9.30E-08	1.68E-07	0.00E+00	2.61E-07	8.83E-08	1.86E-07	0.00E+00	2.74E-07	1.78E-08	2.97E-08	0.00E+00	4.75E-08	7.08E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.26E-08	0.00E+00	3.78E-08	1.16E-08	1.33E-08	0.00E+00	2.49E-08
1628	479220.5	3742042	9.30E-08	1.68E-07	0.00E+00	2.61E-07	8.82E-08	1.85E-07	0.00E+00	2.74E-07	1.78E-08	2.96E-08	0.00E+00	4.75E-08	7.08E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.26E-08	0.00E+00	3.78E-08	1.16E-08	1.33E-08	0.00E+00	2.49E-08
1629	479227.6	3742025	9.29E-08	1.67E-07	0.00E+00	2.60E-07	8.81E-08	1.85E-07	0.00E+00	2.73E-07	1.78E-08	2.96E-08	0.00E+00	4.74E-08	7.07E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.25E-08	0.00E+00	3.77E-08	1.16E-08	1.32E-08	0.00E+00	2.49E-08
1630	479234.7	3742008	9.27E-08	1.67E-07	0.00E+00	2.60E-07	8.80E-08	1.85E-07	0.00E+00	2.73E-07	1.78E-08	2.96E-08	0.00E+00	4.73E-08	7.06E-08	1.38E-07	0.00E+00	2.09E-07	1.52E-08	2.25E-08	0.00E+00	3.77E-08	1.16E-08	1.32E-08	0.00E+00	2.48E-08
1631	479241.8	3741992	9.26E-08	1.67E-07	0.00E+00	2.60E-07	8.78E-08	1.85E-07	0.00E+00	2.72E-07	1.78E-08	2.95E-08	0.00E+00	4.73E-08	7.05E-08	1.38E-07	0.00E+00	2.08E-07	1.52E-08	2.25E-08	0.00E+00	3.76E-08	1.16E-08	1.32E-08	0.00E+00	2.48E-08
1632	479248.9	3741975	9.24E-08	1.67E-07	0.00E+00	2.59E-07	8.76E-08	1.84E-07	0.00E+00	2.72E-07	1.77E-08	2.94E-08	0.00E+00	4.72E-08	7.03E-08	1.37E-07	0.00E+00	2.08E-07	1.51E-08	2.24E-08	0.00E+00	3.75E-08	1.16E-08	1.32E-08	0.00E+00	2.47E-08
1633	479256	3741958	9.21E-08	1.66E-07	0.00E+00	2.58E-07	8.74E-08	1.84E-07	0.00E+00	2.71E-07	1.77E-08	2.94E-08	0.00E+00	4.70E-08	7.02E-08	1.37E-07	0.00E+00	2.07E-07	1.51E-08	2.24E-08	0.00E+00	3.74E-08	1.15E-08	1.31E-08	0.00E+00	2.47E-08
1634	479263.1	3741941	9.19E-08	1.66E-07	0.00E+00	2.58E-07	8.72E-08	1.83E-07	0.00E+00	2.70E-07	1.76E-08	2.93E-08	0.00E+00	4.69E-08	7.00E-08	1.37E-07	0.00E+00	2.07E-07	1.50E-08	2.23E-08	0.00E+00	3.73E-08	1.15E-08	1.31E-08	0.00E+00	2.46E-08
1635	479092.7	3742225	8.51E-08	1.53E-07	0.00E+00	2.39E-07	8.07E-08	1.70E-07	0.00E+00	2.51E-07	1.63E-08	2.71E-08	0.00E+00	4.35E-08	6.48E-08	1.27E-07	0.00E+00	1.91E-07	1.39E-08	2.07E-08	0.00E+00	3.46E-08	1.06E-08	1.21E-08	0.00E+00	2.28E-08
1636	479099.9	3742209	8.52E-08	1.54E-07	0.00E+00	2.39E-07	8.09E-08	1.70E-07	0.00E+00	2.51E-07	1.63E-08	2.72E-08	0.00E+00	4.35E-08	6.49E-08	1.27E-07	0.00E+00	1.92E-07	1.39E-08	2.07E-08	0.00E+00	3.46E-08	1.07E-08	1.21E-08	0.00E+00	2.28E-08
1637	479107	3742192	8.53E-08	1.54E-07	0.00E+00	2.39E-07	8.10E-08	1.70E-07	0.00E+00	2.51E-07	1.64E-08	2.72E-08	0.00E+00	4.36E-08	6.50E-08	1.27E-07	0.00E+00	1.92E-07	1.40E-08	2.07E-08	0.00E+00	3.47E-08	1.07E-08	1.22E-08	0.00E+00	2.28E-08
1638	479114.1	3742175	8.55E-08	1.54E-07	0.00E+00	2.40E-07	8.11E-08	1.70E-07	0.00E+00	2.52E-07	1.64E-08	2.72E-08	0.00E+00	4.36E-08	6.51E-08	1.27E-07	0.00E+00	1.92E-07	1.40E-08	2.07E-08	0.00E+00	3.47E-08	1.07E-08	1.22E-08	0.00E+00	2.29E-08
1639	479121.2	3742158	8.56E-08	1.54E-07	0.00E+00	2.40E-07	8.12E-08	1.71E-07	0.00E+00	2.52E-07	1.64E-08	2.73E-08	0.00E+00	4.37E-08	6.52E-08	1.27E-07	0.00E+00	1.92E-07	1.40E-08	2.08E-08	0.00E+00	3.48E-08	1.07E-08	1.22E-08	0.00E+00	2.29E-08
1640	479128.3	3742141	8.57E-08	1.55E-07	0.00E+00	2.40E-07	8.13E-08	1.71E-07	0.00E+00	2.52E-07	1.64E-08	2.73E-08	0.00E+00	4.37E-08	6.52E-08	1.27E-07	0.00E+00	1.93E-07	1.40E-08	2.08E-08	0.00E+00	3.48E-08	1.07E-08	1.22E-08	0.00E+00	2.29E-08
1641	479135.5	3742124	8.58E-08	1.55E-07	0.00E+00	2.40E-07	8.14E-08	1.71E-07	0.00E+00	2.52E-07	1.65E-08	2.73E-08	0.00E+00	4.38E-08	6.53E-08	1.28E-07	0.00E+00	1.93E-07	1.40E-08	2.08E-08	0.00E+00	3.48E-08	1.07E-08	1.22E-08	0.00E+00	2.30E-08
1642	479142.6	3742108	8.58E-08	1.55E-07	0.00E+00	2.41E-07	8.14E-08	1.71E-07	0.00E+00	2.53E-07	1.65E-08	2.74E-08	0.00E+00	4.38E-08	6.54E-08	1.28E-07	0.00E+00	1.93E-07	1.40E-08	2.08E-08	0.00E+00	3.49E-08	1.07E-08	1.22E-08	0.00E+00	2.30E-08
1643	479149.7	3742091	8.59E-08	1.55E-07	0.00E+00	2.41E-07	8.15E-08	1.71E-07	0.00E+00	2.53E-07	1.65E-08	2.74E-08	0.00E+00	4.38E-08	6.54E-08	1.28E-07	0.00E+00	1.93E-07	1.41E-08	2.08E-08	0.00E+00	3.49E-08	1.07E-08	1.22E-08	0.00E+00	2.30E-08
1644	479156.8	3742074	8.59E-08	1.55E-07	0.00E+00	2.41E-07	8.15E-08	1.71E-07	0.00E+00	2.53E-07	1.65E-08	2.74E-08	0.00E+00	4.39E-08	6.54E-08	1.28E-07	0.00E+00	1.93E-07	1.41E-08	2.08E-08	0.00E+00	3.49E-08	1.07E-08	1.22E-08	0.00E+00	2.30E-08
1645	479164	3742057	8.59E-08	1.55E-07	0.00E+00	2.41E-07	8.15E-08	1.71E-07	0.00E+00	2.53E-07	1.65E-08	2.74E-08	0.00E+00	4.39E-08	6.54E-08	1.28E-07	0.00E+00	1.93E-07	1.41E-08	2.08E-08	0.00E+00	3.49E-08	1.08E-08	1.22E-08	0.00E+00	2.30E-08
1646	479171.1	3742040	8.59E-08	1.55E-07	0.00E+00	2.41E-07	8.15E-08	1.71E-07	0.00E+00	2.53E-07	1.65E-08	2.74E-08	0.00E+00	4.39E-08	6.54E-08	1.28E-07	0.00E+00	1.93E-07	1.41E-08	2.08E-08	0.00E+00	3.49E-08	1.07E-08	1.22E-08	0.00E+00	2.30E-08
1647	479178.2	3742023	8.59E-08	1.55E-07	0.00E+00	2.41E-07	8.15E-08	1.71E-07	0.00E+00	2.53E-07	1.65E-08	2.74E-08	0.00E+00	4.38E-08	6.54E-08	1.28E-07	0.00E+00	1.93E-07	1.41E-08	2.08E-08	0.00E+00	3.49E-08	1.07E-08	1.22E-08	0.00E+00	2.30E-08
1648	479185.3	3742007	8.58E-08	1.55E-07	0.00E+00	2.41E-07	8.14E-08	1.71E-07	0.00E+00	2.53E-07	1.65E-08	2.73E-08	0.00E+00	4.38E-08	6.53E-08	1.28E-07	0.00E+00	1.93E-07	1.40E-08	2.08E-08	0.00E+00	3.49E-08	1.07E-08	1.22E-08	0.00E+00	2.30E-08
1649	479192.5	3741990	8.57E-08	1.55E-07	0.00E+00	2.40E-07	8.13E-08	1.71E-07	0.00E+00	2.52E-07	1.64E-08	2.73E-08	0.00E+00	4.37E-08	6.53E-08	1.27E-07	0.00E+00	1.93E-07	1.40E-08	2.08E-08	0.00E+00	3.48E-08	1.07E-08	1.22E-08	0.00E+00	2.29E-08
1650	479199.6	3741973	8.56E-08	1.54E-07	0.00E+00	2.40E-07	8.12E-08	1.71E-07	0.00E+00	2.52E-07	1.64E-08	2.73E-08	0.00E+00	4.37E-08	6.52E-08	1.27E-07	0.00E+00	1.92E-07	1.40E-08	2.08E-08	0.00E+00	3.48E-08	1.07E-08	1.22E-08	0.00E+00	2.29E-08
1651	479206.7	3741956	8.54E-08	1.54E-07	0.00E+00	2.39E-07	8.10E-08	1.70E-07	0.00E+00	2.51E-07	1.64E-08	2.72E-08	0.00E+00	4.36E-08	6.50E-08	1.27E-07	0.00E+00	1.92E-07	1.40E-08	2.07E-08	0.00E+00	3.47E-08	1.07E-08	1.22E-08	0.00E+00	2.29E-08
1652	479213.8	3741939	8.52E-08	1.54E-07	0.00E+00	2.39E-07	8.09E-08	1.70E-07	0.00E+00	2.51E-07	1.63E-08	2.72E-08	0.00E+00	4.35E-08	6.49E-08	1.27E-07	0.00E+00	1.92E-07	1.39E-08	2.07E-08	0.00E+00	3.46E-08	1.07E-08	1.21E-08	0.00E+00	2.28E-08
1653	479221	3741922	8.50E-08	1.53E-07	0.00E+00	2.38E-07	8.07E-08	1.70E-07	0.00E+00	2.50E-07	1.63E-08	2.71E-08	0.00E+00	4.34E-08	6.47E-08	1.26E-07	0.00E+00	1.91E-07	1.39E-08	2.06E-08	0.00E+00	3.45E-08	1.06E-08	1.21E-08	0.00E+00	2.28E-08
1654	479228.1	3741906	8.48E-08	1.53E-07	0.00E+00	2.38E-07	8.04E-08	1.69E-07	0.00E+00	2.50E-07	1.63E-08	2.70E-08	0.00E+00	4.33E-08	6.46E-08	1.26E-07	0.00E+00	1.91E-07	1.39E-08	2.06E-08	0.00E+00	3.44E-08	1.06E-08	1.21E-08	0.00E+00	2.27E-08
1655	479093.1	3742106	7.94E-08	1.43E-07	0.00E+00	2.23E-07	7.54E-08	1.58E-07	0.00E+00	2.34E-07	1.52E-08	2.53E-08	0.00E+00	4.05E-08	6.05E-08	1.18E-07	0.00E+00	1.79E-07	1.30E-08	1.93E-08	0.00E+00	3.23E-08	9.94E-09	1.13E-08	0.00E+00	2.13E-08
1656	479100.2	3742089	7.95E-08	1.43E-07	0.00E+00	2.23E-07	7.54E-08	1.59E-07	0.00E+00	2.34E-07	1.53E-08	2.53E-08	0.00E+00	4.06E-08	6.05E-08	1.18E-07	0.00E+00	1.79E-07	1.30E-08	1.93E-08	0.00E+00	3.23E-08	9.95E-09	1.13E-08	0.00E+00	2.13E-08
1657	479107.4	3742072	7.96E-08	1.44E-07	0.00E+00	2.23E-07	7.55E-08	1.59E-07	0.00E+00	2.34E-07	1.53E-08	2.54E-08	0.00E+00	4.06E-08	6.06E-08	1.18E-07	0.00E+00	1.79E-07	1.30E-08	1.93E-08	0.00E+00	3.23E-08	9.96E-09	1.13E-08	0.00E+00	2.13E-08
1658	479114.5	3742056	7.96E-08	1.44E-07	0.00E+00	2.23E-07	7.55E-08	1.59E-07	0.00E+00	2.34E-07	1.53E-08	2.54E-08	0.00E+00	4.06E-08	6.06E-08	1.18E-07	0.00E+00	1.79E-07	1.30E-08	1.93E-08	0.00E+00	3.23E-08	9.96E-09	1.13E-08	0.00E+00	2.13E-08
1659	479121.7	3742039	7.96E-08	1.44E-07	0.00E+00	2.23E-07	7.55E-08	1.59E-07	0.00E+00	2.34E-07	1.53E-08	2.54E-08	0.00E+00	4.07E-08	6.06E-08	1.18E-07	0.00E+00	1.79E-07	1.30E-08	1.93E-08	0.00E+00	3.24E-08	9.96E-09	1.13E-08	0.00E+00	2.13E-08
1660	479128.8	3742022	7.96E-08	1.44E-07	0.00E+00	2.23E-07	7.55E-08	1.59E-07	0.00E+00	2.34E-07	1.53E-08	2.54E-08	0.00E+00	4.07E-08	6.06E-08	1.18E-07	0.00E+00	1.79E-07	1.30E-08	1.93E-08	0.00E+00	3.24E-08	9.96E-09	1.13E-08	0.00E+00	2.13E-08
1661	479135.9	3742005	7.96E-08	1.44E-07	0.00E+00	2.23E-07	7.55E-08	1.59E-07	0.00E+00	2.34E-07	1.53E-08	2.54E-08	0.00E+00	4.06E-08	6.06E-08	1.18E-07	0.00E+00	1.79E-07	1.30E-08	1.93E-08	0.00E+00	3.23E-08	9.96E-09	1.13E-08	0.00E+00	2.13E-08
1662	479143.1	3741988	7.96E-08	1.43E-07	0.00E+00	2.23E-07	7.55E-08	1.59E-07	0.00E+00	2.34E-07	1.53E-08	2.54E-08	0.00E+00	4.06E-08	6.06E-08	1.18E-07	0.00E+00	1.79E-07	1.30E-08	1.93E-08	0.00E+00	3.23E-08	9.95E-09	1.13E-08	0.00E+00	2.13E-08
1663	479150.2	3741971	7.95E-08	1.43E-07	0.00E+00	2.23E-07	7.54E-08	1.59E-07	0.00E+00	2.34E-07	1.52E-08	2.53E-08	0.00E+00	4.06E-08	6.05E-08	1.18E-07	0.00E+00	1.79E-07	1.30E-08	1.93E-08	0.00E+00	3.23E-08	9.94E-09	1.13E-08	0.00E+00	2.13E-08
1664	479157.4	3741954	7.94E-08	1.43E-07	0.00E+00	2.23E-07	7.53E-08	1.58E-07	0.00E+00	2.34E-07	1.52E-08	2.53E-08	0.00E+00	4.05E-08	6.04E-08	1.18E-07	0.00E+00	1.79E-07	1.30E-08	1.93E-08	0.00E+00	3.23E-08	9.93E-09	1.13E-08	0.00E+00	2.12E-08
1665	479164.5	3741937	7.93E-08	1.43E-07	0.00E+00	2.22E-07	7.52E-08	1.58E-07	0.00E+00	2.33E-07	1.52E-08	2.53E-08	0.00E+00	4.05E-08	6.04E-08	1.18E-07	0.00E+00	1.78E-07	1.30E-08	1.92E-08	0.00E+00	3.22E-08	9.92E-09	1.13E-08	0.00E+00	2.12E-08
1666	479171.6	3741920	7.91E-08	1.43E-07	0.00E+00	2.22E-07	7.51E-08	1.58E-07	0.00E+00	2.33E-07	1.52E-08	2.52E-08	0.00E+00	4.04E-08	6.02E-08	1.18E-07	0.00E+00	1.78E-07	1.29E-08	1.92E-08	0.00E+00	3.21E-08	9.90E-09	1.13E-08	0.00E+00	2.12E-08
1667	479178.8	3741904	7.89E-08	1.42E-07	0.00E+00	2.21E-07	7.49E-08	1.57E-07	0.00E+00	2.32E-07	1.51E-08	2.52E-08	0.00E+00	4.03E-08	6.01E-08	1.17E-07	0.00E+00	1.78E-07	1.29E-08	1.92E-08	0.00E+00	3.21E-08	9.88E-09	1.13E-08	0.00E+00	2.11E-08
1668	479185.9	3741887	7.87E-08	1.42E-07	0.00E+00	2.21E-07	7.47E-08	1.57E-07	0.00E+00	2.32E-07	1.51E-08	2.51E-08	0.00E+00	4.02E-08	6.00E-08	1.17E-07	0.00E+00	1.77E-07	1.29E-08	1.91E-08	0.00E+00	3.20E-08	9.85E-09	1.12E-08	0.00E+00	2.11E-08
1669	479193.1	3741870	7.85E-08	1.42E-07	0.00E+00	2.20E-07	7.45E-08	1.57E-07	0.00E+00	2.31E-07	1.51E-08	2.50E-08	0.00E+00	4.01E-08	5.98E-08	1.17E-07	0.00E+00	1.77E-07	1.29E-08	1.91E-08	0.00E+00	3.19E-08	9.83E-09	1.12E-08	0.00E+00	2.10E-08
1670	479730.1	3742716	1.25E-06	2.25E-06	0.00E+00	3.49E-06	1.18E-06	2.48E-06	0.00E+00	3.67E-06	2.39E-07	3.97E-07	0.00E+00	6.36E-07	9.48E-07	1.85E-06	0.00E+00	2.80E-06	2.04E-07	3.02E-07	0.00E+00	5.06E-07	1.56E-07	1.77E-07	0.00E+00	3.33E-07
1671	479718.9	3742733	1.17E-06	2.12E-06	0.00E+00	3.29E-06	1.11E-06	2.34E-06	0.00E+00	3.45E-06	2.25E-07	3.74E-07	0.00E+00	5.99E-07	8.93E-07	1.74E-06	0.00E+00	2.64E-06	1.92E-07	2.85E-07	0.00E+00	4.77E-07	1.47E-07	1.67E-07	0.00E+00	3.14E-07
1672	479710.5	3742716	1.06E-06	1.92E-06	0.00E+00	2.98E-06	1.01E-06	2.12E-06	0.00E+00	3.13E-06	2.04E-07	3.39E-07	0.00E+00	5.43E-07	8.10E-07	1.58E-06	0.00E+00	2.39E-06	1.74E-07	2.58E-07	0.00E+00	4.32E-07	1.33E-07	1.52E-07	0.00E+00	2.85E-07
1673	479715.6	3742765	1.21E-06	2.18E-06	0.00E+00	3.38E-06	1.15E-06	2.41E-06	0.00E+00	3.55E-06	2.32E-07	3.85E-07	0.00E+00	6.16E-07	9.19E-07	1.79E-06	0.00E+00	2.71E-06	1.98E-07	2.93E-07	0.00E+00	4.90E-07	1.51E-07	1.72E-07	0.00E+00	3.23E-07
1674	479707.3	3742749	1.10E-06	1.99E-06	0.00E+00	3.09E-06	1.05E-06	2.20E-06	0.00E+00	3.25E-06	2.11E-07	3.51E-07	0.00E+00	5.63E-07	8.40E-07	1.64E-06	0.00E+00	2.48E-06	1.80E-07	2.68E-07	0.00E+00	4.48E-07	1.38E-07	1.57E-07	0.00E+00	2.95E-07
1675	479698.9	3742733	1.01E-06	1.81E-06	0.00E+00	2.82E-06	9.54E-07	2.01E-06	0.00E+00	2.96E-06	1.93E-07	3.21E-07	0.00E+00	5.13E-07	7.66E-07	1.50E-06	0.00E+00	2.26E-06	1.65E-07	2.44E-07	0.00E+00	4.09E-07	1.26E-07	1.43E-07	0.00E+00	2.69E-07
1676	479704.3	3742782	1.13E-06	2.04E-06	0.00E+00	3.18E-06	1.07E-06	2.26E-06	0.00E+00	3.33E-06	2.17E-07	3.61E-07	0.00E+00	5.78E-07	8.62E-07	1.68E-06	0.00E+00	2.55E-06	1.85E-07	2.75E-07	0.00E+00	4.60E-07	1.42E-07	1.61E-07	0.00E+00	3.03E-07
1677	479696	3742765	1.04E-06	1.88E-06	0.00E+00	2.92E-06	9.88E-07	2.08E-06	0.00E+00	3.07E-06	2.00E-07	3.32E-07	0.00E+00	5.32E-07	7.93E-07	1.55E-06	0.00E+00	2.34E-06	1.70E-07	2.53E-07	0.00E+00	4.23E-07	1.30E-07	1.48E-07	0.00E+00	2.79E-07
1678	479687.6	3742749	9.55E-07	1.72E-06	0.00E+00	2.68E-06	9.06E-07	1.91E-06	0.00E+00	2.81E-06	1.83E-07	3.04E-07	0.00E+00	4.88E-07	7.27E-07	1.42E-06	0.00E+00	2.15E-06	1.56E-07	2.32E-07	0.00E+00	3.88E-07	1.20E-07	1.36E-07	0.00E+00	2.56E-07
1679	479670.9	3742717	8.04E-07	1.45E-06	0.00E+00	2.25E-06	7.63E-07	1.60E-06	0.00E+00	2.37E-06	1.54E-07	2.56E-07	0.00E+00	4.10E-07	6.12E-07	1.20E-06	0.00E+00	1.81E-06	1.32E-07	1.95E-07	0.00E+00	3.27E-07	1.01E-07	1.15E-07	0.00E+00	2.15E-07
1680	479693.1	3742798	1.06E-06	1.92E-06	0.00E+00	2.99E-06	1.01E-06	2.12E-06	0.00E+00	3.13E-06	2.04E-07	3.39E-07	0.00E+00	5.44E-07	8.11E-07	1.58E-06	0.00E+00	2.39E-06	1.74E-07	2.58E-07	0.00E+00	4.33E-07	1.33E-07	1.52E-07	0.00E+00	2.85E-07
1681	479684.7	3742782	9.84E-07	1.78E-06	0.00E+00	2.76E-06	9.34E-07	1.96E-06	0.00E+00	2.90E-06	1.89E-07	3.14E-07	0.00E+00	5.03E-07	7.50E-07	1.46E-06	0.00E+00	2.21E-06	1.61E-07	2.39E-07	0.00E+00	4.00E-07	1.23E-07	1.40E-07	0.00E+00	2.63E-07
1682	479676.3	3742766	9.08E-07	1.64E-06	0.00E+00	2.54E-06	8.61E-07	1.81E-06	0.00E+00	2.67E-06	1.74E-07	2.89E-07	0.00E+00	4.63E-07	6.91E-07	1.35E-06	0.00E+00	2.04E-06	1.49E-07	2.20E-07	0.00E+00	3.69E-07	1.14E-07	1.29E-07	0.00E+00	2.43E-07
1683	479668	3742750	8.36E-07	1.51E-06	0.00E+00	2.34E-06	7.93E-07	1.67E-06	0.00E+00	2.46E-06	1.60E-07	2.66E-07	0.00E+00	4.27E-07	6.37E-07	1.24E-06	0.00E+00	1.88E-06	1.37E-07	2.03E-07	0.00E+00	3.40E-07	1.05E-07	1.19E-07	0.00E+00	2.24E-07
1684	479659.6	3742734	7.70E-07	1.39E-06	0.00E+00	2.16E-06	7.31E-07	1.54E-06	0.00E+00	2.27E-06	1.48E-07	2.46E-07	0.00E+00	3.93E-07	5.87E-07	1.15E-06	0.00E+00	1.73E-06	1.26E-07	1.87E-07	0.00E+00	3.13E-07	9.64E-08	1.10E-07	0.00E+00	2.06E-07
1685	479651.3	3742718	7.11E-07	1.28E-06	0.00E+00	1.99E-06	6.74E-07	1.42E-06	0.00E+00	2.09E-06	1.36E-07	2.27E-07	0.00E+00	3.63E-07	5.41E-07	1.06E-06	0.00E+00	1.60E-06	1.16E-07	1.72E-07	0.00E+00	2.89E-07	8.89E-08	1.01E-07	0.00E+00	1.90E-07
1686	479681.6	3742815	1.00E-06	1.81E-06	0.00E+00	2.81E-06	9.50E-07	2.00E-06	0.00E+00	2.95E-06	1.92E-07	3.19E-07	0.00E+00	5.11E-07	7.62E-07	1.49E-06	0.00E+00	2.25E-06	1.64E-07	2.43E-07	0.00E+00	4.07E-07	1.25E-07	1.43E-07	0.00E+00	2.68E-07
1687	479673.2	3742799	9.30E-07	1.68E-06	0.00E+00	2.61E-06	8.82E-07	1.85E-06	0.00E+00	2.74E-06	1.78E-07	2.96E-07	0.00E+00	4.75E-07	7.08E-07	1.38E-06	0.00E+00	2.09E-06	1.52E-07	2.26E-07	0.00E+00	3.78E-07	1.16E-07	1.33E-07	0.00E+00	2.49E-07
1688	479664.9	3742782	8.62E-07	1.55E-06	0.00E+00	2.42E-06	8.18E-07	1.72E-06	0.00E+00	2.54E-06	1.65E-07	2.75E-07	0.00E+00	4.40E-07	6.56E-07	1.28E-06	0.00E+00	1.94E-06	1.41E-07	2.09E-07	0.00E+00	3.50E-07	1.08E-07	1.23E-07	0.00E+00	2.31E-07
1689	479656.5	3742766	7.97E-07	1.44E-06	0.00E+00	2.24E-06	7.56E-07	1.59E-06	0.00E+00	2.35E-06	1.53E-07	2.54E-07	0.00E+00	4.07E-07	6.07E-07	1.19E-06	0.00E+00	1.79E-06	1.30E-07	1.93E-07	0.00E+00	3.24E-07	9.97E-08	1.14E-07	0.00E+00	2.13E-07
1690	479648.2	3742750	7.38E-07	1.33E-06	0.00E+00	2.07E-06	7.00E-07	1.47E-06	0.00E+00	2.17E-06	1.41E-07	2.35E-07	0.00E+00	3.77E-07	5.62E-07	1.10E-06	0.00E+00	1.66E-06	1.21E-07	1.79E-07	0.00E+00	3.00E-07	9.23E-08	1.05E-07	0.00E+00	1.97E-07
1691	479639.8	3742734	6.83E-07	1.23E-06	0.00E+00	1.91E-06	6.48E-07	1.36E-06	0.00E+00	2.01E-06	1.31E-07	2.18E-07	0.00E+00	3.49E-07	5.20E-07	1.02E-06	0.00E+00	1.54E-06	1.12E-07	1.66E-07	0.00E+00	2.77E-07	8.54E-08	9.73E-08	0.00E+00	1.83E-07
1692	479631.4	3742718	6.33E-07	1.14E-06	0.00E+00	1.78E-06	6.01E-07	1.26E-06	0.00E+00	1.86E-06	1.21E-07	2.02E-07	0.00E+00	3.23E-07	4.82E-07	9.42E-07	0.00E+00	1.42E-06	1.04E-07	1.54E-07	0.00E+00	2.57E-07	7.92E-08	9.02E-08	0.00E+00	1.69E-07
1693	479670.3	3742832	9.44E-07	1.7E-06	0.00E+00	2.65E-06	8.95E-07	1.88E-06	0.00E+00	2.78E-06	1.81E-07	3.01E-07	0.00E+00	4.82E-07	7.18E-07	1.40E-06	0.00E+00	2.12E-06	1.54E-07	2.29E-07	0.00E+00	3.83E-07	1.18E-07	1.34E-07	0.00E+00	2.53E-07
1694	479662	3742815	8.81E-07	1.59E-06	0.00E+00	2.47E-06	8.35E-07	1.76E-06	0.00E+00	2.59E-06	1.69E-07	2.81E-07	0.00E+00	4.50E-07	6.71E-07	1.31E-06	0.00E+00	1.98E-06	1.44E-07	2.14E-07	0.00E+00	3.58E-07	1.10E-07	1.26E-07	0.00E+00	2.36E-07
1695	479653.6	3742799	8.20E-07	1.48E-06	0.00E+00	2.30E-06	7.78E-07	1.64E-06	0.00E+00	2.41E-06	1.57E-07	2.61E-07	0.00E+00	4.19E-07	6.24E-07	1.22E-06	0.00E+00	1.84E-06	1.34E-07	1.99E-07	0.00E+00	3.33E-07	1.03E-07	1.17E-07	0.00E+00	2.19E-07
1696	479645.2	3742783	7.62E-07	1.37E-06	0.00E+00	2.14E-06	7.23E-07	1.52E-06	0.00E+00	2.24E-06	1.46E-07	2.43E-07	0.00E+00	3.89E-07	5.80E-07	1.13E-06	0.00E+00	1.71E-06	1.25E-07	1.85E-07	0.00E+00	3.10E-07	9.53E-08	1.09E-07	0.00E+00	2.04E-07
1697	479636.9	3742767	7.07E-07	1.28E-06	0.00E+00	1.98E-06	6.71E-07	1.41E-06	0.00E+00	2.08E-06	1.36E-07	2.25E-07	0.00E+00	3.61E-07	5.39E-07	1.05E-06	0.00E+00	1.59E-06	1.16E-07	1.72E-07	0.00E+00	2.87E-07	8.85E-08	1.01E-07	0.00E+00	1.89E-07
1698	479628.5	3742751	6.57E-07	1.19E-06	0.00E+00	1.84E-06	6.23E-07	1.31E-06	0.00E+00	1.93E-06	1.26E-07	2.09E-07	0.00E+00	3.35E-07	5.00E-07	9.77E-07	0.00E+00	1.48E-06	1.08E-07	1.59E-07	0.00E+00	2.67E-07	8.22E-08	9.37E-08	0.00E+00	1.76E-07
1699	479620.2	3742735	6.11E-07	1.1E-06	0.00E+00	1.71E-06	5.80E-07	1.22E-06	0.00E+00	1.80E-06	1.17E-07	1.95E-07	0.00E+00	3.12E-07	4.65E-07	9.09E-07	0.00E+00	1.37E-06	1.00E-07	1.48E-07	0.00E+00	2.48E-07	7.65E-08	8.71E-08	0.00E+00	1.64E-07
1700	479611.8	3742718	5.69E-07	1.03E-06	0.00E+00	1.60E-06	5.40E-07	1.14E-06	0.00E+00	1.68E-06	1.09E-07	1.81E-07	0.00E+00	2.91E-07	4.33E-07	8.47E-07	0.00E+00	1.28E-06	9.32E-08	1.38E-07	0.00E+00	2.31E-07	7.12E-08	8.11E-08	0.00E+00	1.52E-07
1701	479637.7	3742865	7.96E-07	1.43E-06	0.00E+00	2.23E-06	7.55E-07	1.59E-06	0.00E+00	2.34E-06	1.53E-07	2.54E-07	0.00E+00	4.06E-07	6.06E-07	1.18E-06	0.00E+00	1.79E-06	1.30E-07	1.93E-07	0.00E+00	3.23E-07	9.95E-08	1.13E-07	0.00E+00	2.13E-07
1702	479629.3	3742849	7.48E-07	1.35E-06	0.00E+00	2.10E-06	7.10E-07	1.49E-06	0.00E+00	2.20E-06	1.44E-07	2.39E-07	0.00E+00	3.82E-07	5.70E-07	1.11E-06	0.00E+00	1.68E-06	1.22E-07	1.82E-07	0.00E+00	3.04E-07	9.36E-08	1.07E-07	0.00E+00	2.00E-07
1703	479620.9	3742833	7.02E-07	1.27E-06	0.00E+00	1.97E-06	6.66E-07	1.40E-06	0.00E+00	2.07E-06	1.35E-07	2.24E-07	0.00E+00	3.59E-07	5.35E-07	1.04E-06	0.00E+00	1.58E-06	1.15E-07	1.70E-07	0.00E+00	2.85E-07	8.79E-08	1.00E-07	0.00E+00	1.88E-07
1704	479612.6	3742816	6.58E-07	1.19E-06	0.00E+00	1.84E-06	6.24E-07	1.31E-06	0.00E+00	1.94E-06	1.26E-07	2.10E-07	0.00E+00	3.36E-07	5.01E-07	9.78E-07	0.00E+00	1.48E-06	1.08E-07	1.60E-07	0.00E+00	2.67E-07	8.23E-08	9.38E-08	0.00E+00	1.76E-07
1705	479604.2	3742800	6.16E-07	1.11E-06	0.00E+00	1.73E-06	5.84E-07	1.23E-06	0.00E+00	1.81E-06	1.18E-07	1.96E-07	0.00E+00	3.14E-07	4.69E-07	9.16E-07	0.00E+00	1.38E-06	1.01E-07	1.49E-07	0.00E+00	2.50E-07	7.70E-08	8.77E-08	0.00E+00	1.65E-07
1706	479595.8	3742784	5.76E-07	1.04E-06	0.00E+00	1.62E-06	5.47E-07	1.15E-06	0.00E+00	1.70E-06	1.11E-07	1.84E-07	0.00E+00	2.94E-07	4.39E-07	8.57E-07	0.00E+00	1.30E-06	9.43E-08	1.40E-07	0.00E+00	2.34E-07	7.21E-08	8.21E-08	0.00E+00	1.54E-07
1707	479587.5	3742768	5.40E-07	9.73E-07	0.00E+00	1.51E-06	5.12E-07	1.08E-06	0.00E+00	1.59E-06	1.04E-07	1.72E-07	0.00E+00	2.75E-07	4.11E-07	8.03E-07	0.00E+00	1.21E-06	8.83E-08	1.31E-07	0.00E+00	2.19E-07	6.75E-08	7.69E-08	0.00E+00	1.44E-07
1708	479579.1	3742752	5.06E-07	9.12E-07	0.00E+00	1.42E-06	4.80E-07	1.01E-06	0.00E+00	1.49E-06	9.71E-08	1.61E-07	0.00E+00	2.58E-07	3.85E-07	7.53E-07	0.00E+00	1.14E-06	8.28E-08	1.23E-07	0.00E+00	2.06E-07	6.33E-08	7.21E-08	0.00E+00	1.35E-07
1709	479570.7	3742735	4.75E-07	8.57E-07	0.00E+00	1.33E-06	4.51E-07	9.48E-07	0.00E+00	1.40E-06	9.11E-08	1.51E-07	0.00E+00	2.43E-07	3.62E-07	7.07E-07	0.00E+00	1.07E-06	7.78E-08	1.15E-07	0.00E+00	1.93E-07	5.94E-08	6.77E-08	0.00E+00	1.27E-07
1710	479562.4	3742719	4.47E-07	8.06E-07	0.00E+00	1.25E-06	4.24E-07	8.91E-07	0.00E+00	1.32E-06	8.57E-08	1.42E-07	0.00E+00	2.28E-07	3.40E-07	6.65E-07	0.00E+00	1.00E-06	7.31E-08	1.08E-07	0.00E+00	1.82E-07	5.59E-08	6.37E-08	0.00E+00	1.20E-07
1711	479613.4	3742915	7.19E-07	1.3E-06	0.00E+00	2.02E-06	6.82E-07	1.43E-06	0.00E+00	2.12E-06	1.38E-07	2.29E-07	0.00E+00	3.67E-07	5.47E-07	1.07E-06	0.00E+00	1.62E-06	1.18E-07	1.74E-07	0.00E+00	2.92E-07	9.00E-08	1.02E-07	0.00E+00	1.92E-07
1712	479605.1	3742898	6.83E-07	1.23E-06	0.00E+00	1.91E-06	6.48E-07	1.36E-06	0.00E+00	2.01E-06	1.31E-07	2.18E-07	0.00E+00	3.48E-07	5.20E-07	1.02E-06	0.00E+00	1.53E-06	1.12E-07	1.66E-07	0.00E+00	2.77E-07	8.54E-08	9.73E-08	0.00E+00	1.83E-07
1713	479596.7	3742882	6.46E-07	1.17E-06	0.00E+00	1.81E-06	6.13E-07	1.29E-06	0.00E+00	1.90E-06	1.24E-07	2.06E-07	0.00E+00	3.30E-07	4.92E-07	9.61E-07	0.00E+00	1.45E-06	1.06E-07	1.57E-07	0.00E+00	2.63E-07	8.08E-08	9.21E-08	0.00E+00	1.73E-07
1714	479588.4	3742866	6.10E-07	1.1E-06	0.00E+00	1.71E-06	5.79E-07	1.22E-06	0.00E+00	1.80E-06	1.17E-07	1.95E-07	0.00E+00	3.12E-07	4.65E-07	9.08E-07	0.00E+00	1.37E-06	9.99E-08	1.48E-07	0.00E+00	2.48E-07	7.64E-08	8.70E-08	0.00E+00	1.63E-07
1715	479580	3742850	5.76E-07	1.04E-06	0.00E+00	1.61E-06	5.46E-07	1.15E-06	0.00E+00	1.69E-06	1.10E-07	1.83E-07	0.00E+00	2.94E-07	4.38E-07	8.56E-07	0.00E+00	1.29E-06	9.42E-08	1.40E-07	0.00E+00	2.34E-07	7.20E-08	8.20E-08	0.00E+00	1.54E-07
1716	479571.6	3742834	5.42E-07	9.78E-07	0.00E+00	1.52E-06	5.15E-07	1.08E-06	0.00E+00	1.60E-06	1.04E-07	1.73E-07	0.00E+00	2.77E-07	4.13E-07	8.07E-07	0.00E+00	1.22E-06	8.88E-08	1.32E-07	0.00E+00	2.20E-07	6.79E-08	7.73E-08	0.00E+00	1.45E-07
1717	479563.3	3742817	5.11E-07	9.21E-07	0.00E+00	1.43E-06	4.85E-07	1.02E-06	0.00E+00	1.50E-06	9.80E-08	1.63E-07	0.00E+00	2.61E-07	3.89E-07	7.60E-07	0.00E+00	1.15E-06	8.36E-08	1.24E-07	0.00E+00	2.08E-07	6.39E-08	7.28E-08	0.00E+00	1.37E-07
1718	479554.9	3742801	4.81E-07	8.68E-07	0.00E+00	1.35E-06	4.57E-07	9.60E-07	0.00E+00	1.42E-06	9.23E-08	1.53E-07	0.00E+00	2.46E-07	3.66E-07	7.16E-07	0.00E+00	1.08E-06	7.88E-08	1.17E-07	0.00E+00	1.96E-07	6.02E-08	6.86E-08	0.00E+00	1.29E-07
1719	479546.6	3742785	4.54E-07	8.18E-07	0.00E+00	1.27E-06	4.30E-07	9.05E-07	0.00E+00	1.34E-06	8.70E-08	1.45E-07	0.00E+00	2.32E-07	3.45E-07	6.75E-07	0.00E+00	1.02E-06	7.43E-08	1.10E-07	0.00E+00	1.84E-07	5.68E-08	6.47E-08	0.00E+00	1.21E-07
1720	479538.2	3742769	4.28E-07	7.72E-07	0.00E+00	1.20E-06	4.06E-07	8.54E-07	0.00E+00	1.26E-06	8.21E-08	1.36E-07	0.00E+00	2.19E-07	3.26E-07	6.37E-07	0.00E+00	9.63E-07	7.01E-08	1.04E-07	0.00E+00	1.74E-07	5.36E-08	6.10E-08	0.00E+00	1.15E-07
1721	479529.8	3742753	4.05E-07	7.3E-07	0.00E+00	1.13E-06	3.84E-07	8.07E-07	0.00E+00	1.19E-06	7.76E-08	1.29E-07	0.00E+00	2.07E-07	3.08E-07	6.02E-07	0.00E+00	9.10E-07	6.62E-08	9.82E-08	0.00E+00	1.64E-07	5.06E-08	5.77E-08	0.00E+00	1.08E-07
1722	479521.5	3742737	3.83E-07	6.91E-07	0.00E+00	1.07E-06	3.63E-07	7.64E-07	0.00E+00	1.13E-06	7.34E-08	1.22E-07	0.00E+00	1.95E-07	2.92E-07	5.69E-07	0.00E+00	8.61E-07	6.27E-08	9.29E-08	0.00E+00	1.56E-07	4.79E-08	5.46E-08	0.00E+00	1.02E-07
1723	479513.1	3742720	3.63E-07	6.54E-07	0.00E+00	1.02E-06	3.44E-07	7.24E-07	0.00E+00	1.07E-06	6.96E-08	1.16E-07	0.00E+00	1.85E-07	2.76E-07	5.40E-07	0.00E+00	8.16E-07	5.94E-08	8.80E-08	0.00E+00	1.47E-07	4.54E-08	5.17E-08	0.00E+00	9.71E-08
1724	479589.5	3742965	6.52E-07	1.17E-06	0.00E+00	1.83E-06	6.18E-07	1.30E-06	0.00E+00	1.92E-06	1.25E-07	2.08E-07	0.00E+00	3.33E-07	4.96E-07	9.69E-07	0.00E+00	1.47E-06	1.07E-07	1.58E-07	0.00E+00	2.65E-07	8.15E-08	9.29E-08	0.00E+00	1.74E-07
1725	479581.2	3742949	6.23E-07	1.12E-06	0.00E+00	1.75E-06	5.91E-07	1.24E-06	0.00E+00	1.83E-06	1.20E-07	1.99E-07	0.00E+00	3.18E-07	4.75E-07	9.27E-07	0.00E+00	1.40E-06	1.02E-07	1.51E-07	0.00E+00	2.53E-07	7.80E-08	8.88E-08	0.00E+00	1.67E-07
1726	479572.8	3742932	5.95E-07	1.07E-06	0.00E+00	1.67E-06	5.64E-07	1.19E-06	0.00E+00	1.75E-06	1.14E-07	1.89E-07	0.00E+00	3.04E-07	4.53E-07	8.84E-07	0.00E+00	1.34E-06	9.73E-08	1.44E-07	0.00E+00	2.42E-07	7.44E-08	8.47E-08	0.00E+00	1.59E-07
1727	479564.4	3742916	5.66E-07	1.02E-06	0.00E+00	1.59E-06	5.37E-07	1.13E-06	0.00E+00	1.67E-06	1.09E-07	1.80E-07	0.00E+00	2.89E-07	4.31E-07	8.41E-07	0.00E+00	1.27E-06	9.26E-08	1.37E-07	0.00E+00	2.30E-07	7.08E-08	8.06E-08	0.00E+00	1.51E-07
1728	479556.1	3742900	5.37E-07	9.69E-07	0.00E+00	1.51E-06	5.10E-07	1.07E-06	0.00E+00	1.58E-06	1.03E-07	1.71E-07	0.00E+00	2.74E-07	4.09E-07	7.99E-07	0.00E+00	1.21E-06	8.79E-08	1.30E-07	0.00E+00	2.18E-07	6.72E-08	7.66E-08	0.00E+00	1.44E-07
1729	479547.7	3742884	5.10E-07	9.19E-07	0.00E+00	1.43E-06	4.83E-07	1.02E-06	0.00E+00	1.50E-06	9.77E-08	1.62E-07	0.00E+00	2.60E-07	3.88E-07	7.58E-07	0.00E+00	1.15E-06	8.34E-08	1.24E-07	0.00E+00	2.07E-07	6.37E-08	7.26E-08	0.00E+00	1.36E-07
1730	479539.3	3742868	4.83E-07	8.71E-07	0.00E+00	1.35E-06	4.58E-07	9.63E-07	0.00E+00	1.42E-06	9.26E-08	1.54E-07	0.00E+00	2.46E-07	3.68E-07	7.18E-07	0.00E+00	1.09E-06	7.90E-08	1.17E-07	0.00E+00	1.96E-07	6.04E-08	6.88E-08	0.00E+00	1.29E-07
1731	479531	3742851	4.57E-07	8.24E-07	0.00E+00	1.28E-06	4.34E-07	9.12E-07	0.00E+00	1.35E-06	8.77E-08	1.46E-07	0.00E+00	2.33E-07	3.48E-07	6.80E-07	0.00E+00	1.03E-06	7.48E-08	1.11E-07	0.00E+00	1.86E-07	5.72E-08	6.51E-08	0.00E+00	1.22E-07
1732	479522.6	3742835	4.33E-07	7.81E-07	0.00E+00	1.21E-06	4.11E-07	8.63E-07	0.00E+00	1.27E-06	8.30E-08	1.38E-07	0.00E+00	2.21E-07	3.30E-07	6.44E-07	0.00E+00	9.73E-07	7.08E-08	1.05E-07	0.00E+00	1.76E-07	5.41E-08	6.17E-08	0.00E+00	1.16E-07
1733	479514.3	3742819	4.10E-07	7.39E-07	0.00E+00	1.15E-06	3.89E-07	8.18E-07	0.00E+00	1.21E-06	7.86E-08	1.31E-07	0.00E+00	2.09E-07	3.12E-07	6.10E-07	0.00E+00	9.22E-07	6.71E-08	9.95E-08	0.00E+00	1.67E-07	5.13E-08	5.84E-08	0.00E+00	1.10E-07
1734	479505.9	3742803	3.89E-07	7.01E-07	0.00E+00	1.09E-06	3.69E-07	7.75E-07	0.00E+00	1.14E-06	7.45E-08	1.24E-07	0.00E+00	1.98E-07	2.96E-07	5.78E-07	0.00E+00	8.74E-07	6.36E-08	9.43E-08	0.00E+00	1.58E-07	4.86E-08	5.54E-08	0.00E+00	1.04E-07
1735	479497.5	3742787	3.69E-07	6.65E-07	0.00E+00	1.03E-06	3.50E-07	7.35E-07	0.00E+00	1.09E-06	7.07E-08	1.18E-07	0.00E+00	1.88E-07	2.81E-07	5.48E-07	0.00E+00	8.29E-07	6.03E-08	8.95E-08	0.00E+00	1.50E-07	4.61E-08	5.25E-08	0.00E+00	9.87E-08

1893	479403.7	3742380	3.38E-07	6.1E-07	0.00E+00	9.49E-07	3.21E-07	6.75E-07	0.00E+00	9.96E-07	6.49E-08	1.08E-07	0.00E+00	1.73E-07	2.58E-07	5.03E-07	0.00E+00	7.61E-07	5.54E-08	8.21E-08	0.00E+00	1.37E-07	4.23E-08	4.82E-08	0.00E+00	9.06E-08
1892	479160	3742713	1.32E-07	2.39E-07	0.00E+00	3.71E-07	1.26E-07	2.64E-07	0.00E+00	3.90E-07	2.54E-08	4.22E-08	0.00E+00	6.76E-08	1.01E-07	1.97E-07	3.21E-08	0.00E+00	0.00E+00	5.38E-08	0.00E+00	3.54E-08	1.66E-08	1.89E-08	0.00E+00	3.54E-08
1891	479168.3	3742729	1.36E-07	2.46E-07	0.00E+00	3.82E-07	1.29E-07	2.72E-07	0.00E+00	4.01E-07	2.61E-08	4.34E-08	0.00E+00	6.95E-08	1.04E-07	2.03E-07	2.23E-08	3.30E-08	0.00E+00	5.53E-08	0.00E+00	3.64E-08	1.70E-08	1.94E-08	0.00E+00	3.64E-08
1890	479176.7	3742745	1.40E-07	2.53E-07	0.00E+00	3.93E-07	1.33E-07	2.79E-07	0.00E+00	4.12E-07	2.69E-08	4.46E-08	0.00E+00	7.15E-08	1.07E-07	2.08E-07	2.29E-08	3.40E-08	0.00E+00	5.69E-08	0.00E+00	3.75E-08	1.75E-08	2.00E-08	0.00E+00	3.75E-08
1889	479185.1	3742761	1.44E-07	2.6E-07	0.00E+00	4.04E-07	1.37E-07	2.88E-07	0.00E+00	4.24E-07	2.76E-08	4.59E-08	0.00E+00	7.36E-08	1.07E-07	2.14E-07	2.36E-08	3.50E-08	0.00E+00	5.86E-08	0.00E+00	3.86E-08	1.80E-08	2.05E-08	0.00E+00	3.86E-08
1888	479193.4	3742777	1.48E-07	2.68E-07	0.00E+00	4.16E-07	1.41E-07	2.96E-07	0.00E+00	4.37E-07	2.85E-08	4.73E-08	0.00E+00	7.58E-08	1.13E-07	2.21E-07	2.43E-08	3.60E-08	0.00E+00	6.03E-08	0.00E+00	3.97E-08	1.86E-08	2.11E-08	0.00E+00	3.97E-08
1887	479201.8	3742793	1.53E-07	2.76E-07	0.00E+00	4.28E-07	1.45E-07	3.05E-07	0.00E+00	4.44E-07	2.93E-08	4.87E-08	0.00E+00	7.80E-08	1.16E-07	2.27E-07	2.50E-08	3.71E-08	0.00E+00	6.21E-08	0.00E+00	4.09E-08	1.91E-08	2.18E-08	0.00E+00	4.09E-08
1886	479210.2	3742810	1.57E-07	2.84E-07	0.00E+00	4.41E-07	1.49E-07	3.14E-07	0.00E+00	4.54E-07	3.02E-08	5.02E-08	0.00E+00	8.04E-08	1.20E-07	2.34E-07	2.58E-08	3.82E-08	0.00E+00	6.40E-08	0.00E+00	4.21E-08	1.97E-08	2.24E-08	0.00E+00	4.21E-08
1885	479218.5	3742826	1.62E-07	2.93E-07	0.00E+00	4.55E-07	1.54E-07	3.24E-07	0.00E+00	4.78E-07	3.11E-08	5.17E-08	0.00E+00	8.28E-08	1.24E-07	2.41E-07	2.66E-08	3.94E-08	0.00E+00	6.59E-08	0.00E+00	4.34E-08	2.03E-08	2.31E-08	0.00E+00	4.34E-08
1884	479226.9	3742842	1.67E-07	3.02E-07	0.00E+00	4.69E-07	1.59E-07	3.34E-07	0.00E+00	4.93E-07	3.21E-08	5.33E-08	0.00E+00	8.54E-08	1.27E-07	2.49E-07	2.74E-08	4.06E-08	0.00E+00	6.80E-08	0.00E+00	4.48E-08	2.09E-08	2.39E-08	0.00E+00	4.48E-08
1883	479235.3	3742858	1.73E-07	3.11E-07	0.00E+00	4.84E-07	1.64E-07	3.45E-07	0.00E+00	5.08E-07	3.31E-08	5.50E-08	0.00E+00	8.82E-08	1.32E-07	2.57E-07	2.83E-08	4.19E-08	0.00E+00	7.02E-08	0.00E+00	4.62E-08	2.16E-08	2.46E-08	0.00E+00	4.62E-08
1882	479243.6	3742874	1.78E-07	3.22E-07	0.00E+00	5.00E-07	1.69E-07	3.56E-07	0.00E+00	5.25E-07	3.42E-08	5.68E-08	0.00E+00	9.11E-08	1.36E-07	2.65E-07	2.92E-08	4.33E-08	0.00E+00	7.25E-08	0.00E+00	4.77E-08	2.23E-08	2.54E-08	0.00E+00	4.77E-08
1881	47925.2	3742891	1.84E-07	3.32E-07	0.00E+00	5.17E-07	1.75E-07	3.68E-07	0.00E+00	5.42E-07	3.54E-08	5.87E-08	0.00E+00	9.41E-08	1.40E-07	2.74E-07	3.02E-08	4.47E-08	0.00E+00	7.49E-08	0.00E+00	4.93E-08	2.31E-08	2.63E-08	0.00E+00	4.93E-08
1880	479260.4	3742907	1.91E-07	3.44E-07	0.00E+00	5.34E-07	1.81E-07	3.80E-07	0.00E+00	5.61E-07	3.66E-08	6.07E-08	0.00E+00	9.73E-08	1.45E-07	2.83E-07	3.12E-08	4.62E-08	0.00E+00	7.74E-08	0.00E+00	5.10E-08	2.38E-08	2.72E-08	0.00E+00	5.10E-08
1879	479268.7	3742923	1.97E-07	3.56E-07	0.00E+00	5.53E-07	1.87E-07	3.93E-07	0.00E+00	6.01E-07	3.78E-08	6.28E-08	0.00E+00	1.01E-07	1.50E-07	2.93E-07	3.23E-08	4.78E-08	0.00E+00	8.28E-08	0.00E+00	5.46E-08	2.47E-08	2.81E-08	0.00E+00	5.46E-08
1878	479277.1	3742939	2.04E-07	3.68E-07	0.00E+00	5.72E-07	1.94E-07	4.07E-07	0.00E+00	6.01E-07	3.91E-08	6.50E-08	0.00E+00	1.04E-07	1.55E-07	3.03E-07	3.34E-08	4.95E-08	0.00E+00	8.29E-08	0.00E+00	5.46E-08	2.55E-08	2.91E-08	0.00E+00	5.46E-08
1877	479285.5	3742955	2.11E-07	3.81E-07	0.00E+00	5.92E-07	2.00E-07	4.22E-07	0.00E+00	6.22E-07	4.05E-08	6.74E-08	0.00E+00	1.08E-07	1.61E-07	3.14E-07	3.46E-08	5.13E-08	0.00E+00	8.59E-08	0.00E+00	5.66E-08	2.64E-08	3.01E-08	0.00E+00	5.66E-08
1876	479293.8	3742972	2.19E-07	3.95E-07	0.00E+00	6.14E-07	2.08E-07	4.37E-07	0.00E+00	6.45E-07	4.20E-08	6.98E-08	0.00E+00	1.12E-07	1.67E-07	3.26E-07	3.58E-08	5.31E-08	0.00E+00	8.90E-08	0.00E+00	6.07E-08	2.74E-08	3.12E-08	0.00E+00	5.86E-08
1875	479302.2	3742988	2.27E-07	4.09E-07	0.00E+00	6.36E-07	2.15E-07	4.53E-07	0.00E+00	6.68E-07	4.35E-08	7.23E-08	0.00E+00	1.16E-07	1.73E-07	3.38E-07	3.71E-08	5.51E-08	0.00E+00	9.22E-08	0.00E+00	6.07E-08	2.84E-08	3.23E-08	0.00E+00	6.07E-08
1874	479310.6	3743004	2.35E-07	4.24E-07	0.00E+00	6.60E-07	2.23E-07	4.69E-07	0.00E+00	6.93E-07	4.51E-08	7.50E-08	0.00E+00	1.20E-07	1.79E-07	3.50E-07	3.85E-08	5.71E-08	0.00E+00	9.56E-08	0.00E+00	6.30E-08	2.94E-08	3.35E-08	0.00E+00	6.30E-08
1873	479318.9	3743020	2.44E-07	4.4E-07	0.00E+00	6.84E-07	2.31E-07	4.87E-07	0.00E+00	7.18E-07	4.68E-08	7.77E-08	0.00E+00	1.25E-07	1.86E-07	3.63E-07	3.99E-08	5.92E-08	0.00E+00	9.91E-08	0.00E+00	6.53E-08	3.05E-08	3.48E-08	0.00E+00	6.53E-08
1872	479327.3	3743036	2.53E-07	4.56E-07	0.00E+00	7.09E-07	2.40E-07	5.04E-07	0.00E+00	7.44E-07	4.85E-08	8.06E-08	0.00E+00	1.29E-07	1.93E-07	3.76E-07	4.14E-08	6.13E-08	0.00E+00	1.03E-07	0.00E+00	6.77E-08	3.16E-08	3.60E-08	0.00E+00	6.77E-08
1871	479335.7	3743052	2.62E-07	4.72E-07	0.00E+00	7.34E-07	2.49E-07	5.23E-07	0.00E+00	7.71E-07	5.03E-08	8.35E-08	0.00E+00	1.34E-07	1.99E-07	3.90E-07	4.29E-08	6.36E-08	0.00E+00	1.06E-07	0.00E+00	7.01E-08	3.28E-08	3.73E-08	0.00E+00	7.01E-08
1870	479344	3743069	2.71E-07	4.89E-07	0.00E+00	7.61E-07	2.57E-07	5.41E-07	0.00E+00	7.99E-07	5.2E-08	8.65E-08	0.00E+00	1.39E-07	2.07E-07	4.04E-07	4.44E-08	6.58E-08	0.00E+00	1.10E-07	0.00E+00	7.26E-08	3.39E-08	3.87E-08	0.00E+00	7.26E-08
1869	479352.4	3743085	2.81E-07	5.07E-07	0.00E+00	7.87E-07	2.66E-07	5.80E-07	0.00E+00	8.27E-07	5.39E-08	8.95E-08	0.00E+00	1.43E-07	2.14E-07	4.18E-07	4.6E-08	6.82E-08	0.00E+00	1.14E-07	0.00E+00	7.52E-08	3.51E-08	4.00E-08	0.00E+00	7.52E-08
1868	479360.8	3743101	2.91E-07	5.24E-07	0.00E+00	8.14E-07	2.76E-07	5.80E-07	0.00E+00	8.55E-07	5.57E-08	9.26E-08	0.00E+00	1.48E-07	2.21E-07	4.32E-07	4.76E-08	7.05E-08	0.00E+00	1.18E-07	0.00E+00	7.78E-08	3.63E-08	4.14E-08	0.00E+00	7.78E-08
1867	479369.1	3743117	3.00E-07	5.41E-07	0.00E+00	8.42E-07	2.85E-07	5.99E-07	0.00E+00	8.84E-07	5.76E-08	9.57E-08	0.00E+00	1.53E-07	2.29E-07	4.47E-07	4.91E-08	7.28E-08	0.00E+00	1.22E-07	0.00E+00	8.04E-08	3.76E-08	4.28E-08	0.00E+00	8.04E-08
1866	479377.5	3743133	3.10E-07	5.59E-07	0.00E+00	8.69E-07	2.94E-07	6.18E-07	0.00E+00	9.12E-07	5.94E-08	9.88E-08	0.00E+00	1.58E-07	2.36E-07	4.61E-07	5.07E-08	7.52E-08	0.00E+00	1.26E-07	0.00E+00	8.29E-08	3.88E-08	4.42E-08	0.00E+00	8.29E-08
1865	479383.9	3743150	3.20E-07	5.76E-07	0.00E+00	8.96E-07	3.03E-07	6.37E-07	0.00E+00	9.41E-07	6.13E-08	1.02E-07	0.00E+00	1.63E-07	2.43E-07	4.75E-07	5.23E-08	7.75E-08	0.00E+00	1.30E-07	0.00E+00	8.55E-08	4.00E-08	4.55E-08	0.00E+00	8.55E-08
1864	479394.2	3743166	3.29E-07	5.93E-07	0.00E+00	9.22E-07	3.12E-07	6.56E-07	0.00E+00	9.69E-07	6.31E-08	1.05E-07	0.00E+00	1.68E-07	2.51E-07	4.89E-07	5.39E-08	7.98E-08	0.00E+00	1.34E-07	0.00E+00	8.81E-08	4.12E-08	4.69E-08	0.00E+00	8.81E-08
1863	479402.6	3743182	3.38E-07	6.1E-07	0.00E+00	9.48E-07	3.21E-07	6.75E-07	0.00E+00	9.96E-07	6.49E-08	1.08E-07	0.00E+00	1.73E-07	2.58E-07	5.03E-07	5.54E-08	8.21E-08	0.00E+00	1.37E-07	0.00E+00	9.05E-08	4.23E-08	4.82E-08	0.00E+00	9.05E-08
1862	479411	3743198	3.47E-07	6.26E-07	0.00E+00	9.74E-07	3.38E-07	6.93E-07	0.00E+00	1.02E-06	6.64E-08	1.11E-07	0.00E+00	1.77E-07	2.64E-07	5.17E-07	5.68E-08	8.43E-08	0.00E+00	1.41E-07	0.00E+00	9.30E-08	4.35E-08	4.95E-08	0.00E+00	9.30E-08
1861	479419.3	3743214	3.56E-07	6.42E-07	0.00E+00	9.98E-07	3.38E-07	7.10E-07	0.00E+00	1.05E-06	6.83E-08	1.13E-07	0.00E+00	1.82E-07	2.71E-07	5.29E-07	5.83E-08	8.64E-08	0.00E+00	1.45E-07	0.00E+00	9.53E-08	4.45E-08	5.07E-08	0.00E+00	9.53E-08
1860	479427.7	3743231	3.64E-07	6.57E-07	0.00E+00	1.02E-06	3.46E-07	7.27E-07	0.00E+00	1.07E-06	6.99E-08	1.16E-07	0.00E+00	1.86E-07	2.77E-07	5.42E-07	5.96E-08	8.84E-08	0.00E+00	1.48E-07	0.00E+00	9.75E-08	4.56E-08	5.19E-08	0.00E+00	9.75E-08
1859	479208.9	3742711	1.47E-07	2.65E-07	0.00E+00	4.12E-07	1.39E-07	2.93E-07	0.00E+00	4.33E-07	2.82E-08	4.68E-08	0.00E+00	7.50E-08	1.12E-07	2.19E-07	2.40E-08	3.57E-08	0.00E+00	5.97E-08	0.00E+00	3.93E-08	1.84E-08	2.09E-08	0.00E+00	3.93E-08
1858	479217.2	3742727	1.51E-07	2.73E-07	0.00E+00	4.24E-07	1.44E-07	3.02E-07	0.00E+00	4.46E-07	2.90E-08	4.83E-08	0.00E+00	7.73E-08	1.15E-07	2.25E-07	2.48E-08	3.67E-08	0.00E+00	6.14E-08	0.00E+00	4.04E-08	1.89E-08	2.16E-08	0.00E+00	4.05E-08
1857	479225.6	3742743	1.56E-07	2.81E-07	0.00E+00	4.38E-07	1.48E-07	3.11E-07	0.00E+00	4.59E-07	2.99E-08	4.97E-08	0.00E+00	7.97E-08	1.19E-07	2.32E-07	2.55E-08	3.76E-08	0.00E+00	6.31E-08	0.00E+00	4.16E-08	1.95E-08	2.22E-08	0.00E+00	4.16E-08
1856	479233.9	3742759	1.61E-07	2.9E-07	0.00E+00	4.51E-07	1.53E-07	3.21E-07	0.00E+00	4.74E-07	3.09E-08	5.13E-08	0.00E+00	8.22E-08	1.23E-07	2.39E-07	2.63E-08	3.90E-08	0.00E+00	6.47E-08	0.00E+00	4.31E-08	2.01E-08	2.29E-08	0.00E+00	4.31E-08
1855	479242.3	3742775	1.66E-07	2.99E-07	0.00E+00	4.66E-07	1.58E-07	3.31E-07	0.00E+00	4.89E-07	3.19E-08	5.29E-08	0.00E+00	8.48E-08	1.26E-07	2.47E-07	2.72E-08	4.03E-08	0.00E+00	6.75E-08	0.00E+00	4.44E-08	2.08E-08	2.37E-08	0.00E+00	4.44E-08
1854	479250.7	3742792	1.71E-07	3.09E-07	0.00E+00	4.81E-07	1.63E-07	3.42E-07	0.00E+00	5.05E-07	3.29E-08	5.46E-08	0.00E+00	8.75E-08	1.31E-07	2.55E-07	2.81E-08	4.16E-08	0.00E+00	6.96E-08	0.00E+00	4.59E-08	2.14E-08	2.44E-08	0.00E+00	4.59E-08
1853	479259	3742808	1.77E-07	3.19E-07	0.00E+00	4.96E-07	1.68E-07	3.53E-07	0.00E+00	5.21E-07	3.40E-08	5.64E-08	0.00E+00	9.04E-08	1.35E-07	2.63E-07	2.90E-08	4.30E-08	0.00E+00	7.19E-08	0.00E+00	4.74E-08	2.21E-08	2.52E-08	0.00E+00	4.74E-08
1852	479267.4	3742824	1.83E-07	3.3E-07	0.00E+00	5.13E-07	1.74E-07	3.65E-07	0.00E+00	5.38E-07	3.51E-08	5.83E-08	0.00E+00	9.34E-08	1.39E-07	2.79E-07	2.99E-08	4.44E-08	0.00E+00	7.39E-08	0.00E+00	4.88E-08	2.29E-08	2.61E-08	0.00E+00	4.90E-08
1851	479275.8	3742840	1.89E-07	3.41E-07	0.00E+00	5.30E-07	1.79E-07	3.77E-07	0.00E+00	5.57E-07	3.63E-08	6.03E-08	0.00E+00	9.66E-08	1.44E-07	2.81E-07	3.10E-08	4.59E-08	0.00E+00	7.69E-08	0.00E+00	5.06E-08	2.37E-08	2.70E-08	0.00E+00	5.06E-08
1850	479284.1	3742856	1.96E-07	3.53E-07	0.00E+00	5.49E-07	1.86E-07	3.90E-07	0.00E+00	5.76E-07	3.75E-08	6.24E-08	0.00E+00	9.99E-08	1.49E-07	2.91E-07	3.20E-08	4.75E-08	0.00E+00	7.95E-08	0.00E+00	5.24E-08	2.45E-08	2.79E-08	0.00E+00	5.24E-08
1849	479292.7	3742872	2.03E-07	3.66E-07	0.00E+00	5.68E-07	1.92E-07	4.04E-07	0.00E+00	5.97E-07	3.86E-08	6.46E-08	0.00E+00	1.03E-07	1.54E-07	3.01E-07	3.32E-08	4.92E-08	0.00E+00	8.24E-08	0.00E+00	5.54E-08	2.54E-08	2.89E-08	0.00E+00	5.54E-08
1848	479300.9	3742889	2.10E-07	3.79E-07	0.00E+00	5.89E-07	1.99E-07	4.19E-07	0.00E+00	6.18E-07	4.03E-08	6.69E-08	0.00E+00	1.06E-07	1.60E-07	3.12E-07	3.44E-08	5.10E-08	0.00E+00	8.53E-08	0.00E+00	5.63E-08	2.72E-08	2.99E-08	0.00E+00	5.62E-08
1847	479309.2	3742905	2.18E-07	3.93E-07	0.00E+00	6.11E-07	2.07E-07	4.34E-07	0.00E+00	6.41E-07	4.18E-08	6.94E-08	0.00E+00	1.11E-07	1.66E-07	3.24E-07	3.56E-08	5.28E-08	0.00E+00	8.85E-08	0.00E+00	5.83E-08	2.72E-08	3.10E-08	0.00E+00	5.83E-08
1846	479331.6	3742921	2.26E-07	4.07E-07	0.00E+00	6.33E-07	2.14E-07	4.51E-07	0.00E+00	7.20E-07	4.33E-08	7.32E-08	0.00E+00	1.15E-07	1.72E-07	3.36E-07	3.70E-08	5.48E-08	0.00E+00	9.08E-08	0.00E+00	6.33E-08	2.83E-08	3.22E-08	0.00E+00	6.33E-08
1845	479336	3742937	2.35E-07	4.23E-07	0.00E+00	6.57E-07	2.22E-07	4.68E-07	0.00E+00	6.90E-07	4.50E-08	7.47E-08	0.00E+00	1.20E-07	1.79E-07	3.49E-07	3.84E-08	5.69E-08	0.00E+00	9.53E-08	0.00E+00	6.28E-08	2.93E-08	3.34E-08	0.00E+00	6.28E-08
1844	479334.3	3742953	2.44E-07	4.39E-07	0.00E+00	6.83E-07	2.31E-07	4.86E-07	0.00E+00	7.17E-07	4.67E-08	7.76E-08	0.00E+00	1.24E-07	1.85E-07	3.62E-07	3.99E-08	5.91E-08	0.00E+00	9.89E-08	0.00E+00	6.52E-08	3.05E-08	3.47E-08	0.00E+00	6.52E-08
1843	479342.7	3742970	2.53E-07	4.56E-07	0.00E+00	7.09E-07	2.40E-07	5.05E-07	0.00E+00	7.45E-07	4.85E-08	8.06E-08	0.00E+00	1.29E-07	1.93E-07	3.76E-07	4.14E-08	6.43E-08	0.00E+00	1.03E-07	0.00E+00	6.77E-08	3.16E-08	3.61E-08	0.00E+00	6.77E-08
1842	479325.1	3742986	2.63E-07	4.74E-07	0.00E+00	7.37E-07	2.49E-07	5.24E-07	0.00E+00	7.73E-07	5.03E-08	8.37E-08	0.00E+00	1.34E-07	2.00E-07	4.19E-07	4.3E-08	6.66E-08	0.00E+00	1.07E-07	0.00E+00	7.03E-08	3.29E-08	3.75E-08	0.00E+00	7.03E-08
1841	479359.4	3743002	2.73E-07	4.92E-07	0.00E+00	7.65E-07	2.59E-07	5.45E-07	0.00E+00	8.03E-07	5.24E-08	8.70E-08	0.00E+00	1.39E-07	2.08E-07	4.35E-07	4.47E-08	6.92E-08	0.00E+00	1.11E-07	0.00E+00	7.31E-08	3.41E-08	3.89E-08	0.00E+00	7.31E-08
1840	479367.8	3743018	2.83E-07	5.11E-07	0.00E+00	7.95E-07	2.69E-07	5.65E-07	0.00E+00	8.34E-07	5.44E-08	9.03E-08	0.00E+00	1.45E-07	2.16E-07	4.22E-07	4.64E-08	6.88E-08	0.00E+00	1.15E-07	0.00E+00	7.59E-08	3.55E-08	4.04E-08	0.00E+00	7.59E-08
1839	479376.1	3743034	2.94E-07	5.31E-07	0.00E+00	8.25E-07	2.79E-07	5.87E-07	0.00E+00	8.66E-07	5.64E-08	9.38E-08	0.00E+00	1.50E-07	2.24E-07	4.38E-07	4.82E-08	7.14E-08	0.00E+00	1.20E-07	0.00E+00	7.88E-08	3.68E-08	4.19E-08	0.00E+00	7.88E-08
1838	479384.5	3743050	3.05E-07	5.51E-07	0.00E+00	8.56E-07	2.90E-07	6.09E-07	0.00E+00	8.99E-07	5.86E-08	9.73E-08	0.00E+00	1.56E-07	2.32E-07	4.54E-07	5.00E-08	7.41E-08	0.00E+00	1.24E-07	0.00E+00	8.17E-08	3.82E-08	4.35E-08	0.00E+00	8.17E-08
1837	479393.9	3743067	3.17E-07	5.71E-07	0.00E+00	8.87E-07	3.00E-07	6.31E-07	0.00E+00	9.32E-07	6.07E-08	1.01E-07	0.00E+00	1.62E-07	2.41E-07	4.71E-07	5.18E-08	7.68E-08	0.00E+00	1.29E-07	0.00E+00	8.46E-08	3.96E-08	4.51E-08	0.00E+00	8.47E-08
1836	479401.2	3743083	3.29E-07	5.91E-07	0.00E+00	9.19E-07	3.11E-07	6.54E-07	0.00E+00	9.65E-07	6.29E-08	1.04E-07	0.00E+00	1.67E-07	2.50E-07	4.87E-07	5.36E-08	7.95E-08	0.00E+00	1.33E-07	0.00E+00	8.77E-08	4.10E-08	4.67E-08	0.00E+00	8.77E-08
1835	479409.6	3743099	3.39E-07	6.11E-07	0.00E+00	9.51E-07	3.22E-07	6.76E-07	0.00E+00	9.98E-07	6.50E-08	1.08E-07	0.00E+00	1.73E-07	2.58E-07	5.04E-07	5.55E-08	8.23E-08	0.00E+00	1.37E-07	0.00E+00	9.04E-08	4.24E-08	4.83E-08	0.00E+00	9.04E-08
1834	479418	3743115	3.50E-07	6.32E-07	0.00E+00	9.82E-07	3.32E-07	6.99E-07	0.00E+00	1.03E-06	6.72E-08	1.12E-07	0.00E+00	1.79E-07	2.67E-07	5.21E-07	5.73E-08	8.50E-08	0.00E+00	1.42E-07	0.00E+00	9.37E-08	4.38E-08	4.99E-08	0.00E+00	9.37E-08
1833	479426.3	3743131	3.61E-07	6.52E-07	0.00E+00	1.01E-06	3.43E-07	7.21E-07	0.00E+00	1.06E-06	6.93E-08	1.15E-07	0.00E+00	1.84E-07	2.75E-07	5.37E-07	5.91E-08	8.77E-08	0.00E+00	1.47E-07	0.00E+00	9.67E-08	4.52E-08	5.15E-08	0.00E+00	9.67E-08
1832	479437.9	3743148	3.72E-07	6.71E-07	0.00E+00	1.04E-06	3.53E-07	7.42E-07	0.00E+00	1.09E-06	7.14E-08	1.18E-07	0.00E+00	1.90E-07	2.83E-07	5.53E-07	6.09E-08	9.03E-08	0.00E+00	1.51E-07	0.00E+00	9.96E-08	4.66E-08	5.30E-08	0.00E+00	9.96E-08
1831	479443	3743164	3.83E-07	6.9E-07	0.00E+00	1.07E-06	3.63E-07	7.63E-07	0.00E+00	1.13E-06	7.34E-08	1.22E-07	0.00E+00	1.95E-07	2.91E-07	5.69E-07	6.26E-08	9.28E-08	0.00E+00	1.55E-07	0.00E+00	1.02E-07	4.79E-08	5.45E-08	0.00E+00	1.02E-07
1830	479451.4	3743180	3.93E-07	7.08E-07	0.00E+00	1.10E-06	3.73E-07	7.83E-07	0.00E+00	1.16E-06	7.53E-08	1.25E-07	0.00E+00	2.00E-07	2.99E-07	5.84E-07	6.43E-08	9.53E-08	0.00E+00	1.59E-07	0.00E+00	1.03E-07	4.91E-08	5.60E-08	0.00E+00	1.03E-07
1829	479460	3743213	3.99E-07	7.17E-07	0.00E+00	1.14E-06	3.83E-07	7.84E-07	0.00E+00	1.19E-06	7.74E-08	1.28E-07	0.00E+00	2.05E-07	2.99E-07	5.99E-07	6.60E-08	9.78E-08	0.00E+00	1.63E-07	0.00E+00	1.06E-07	5.04E-08	5.75E-08	0.00E+00	1.06E-07
1828	479268.3	3742729	4.09E-07	7.27E-07	0.00E+00	1.18E-06	3.93E-07	8.04E-07	0.00E+00	1.23E-06	7.95E-08	1.32E-07	0.00E+00	2.09E-07	3.07E-07	6.14E-07	6.77E-08	9.99E-08	0.00E+00	1.67E-07	0.00E+00	1.09E-07	5.17E-08	5.90E-08	0.00E+00	1.09E-07
1827	479276.7	3742745	4.19E-07	7.37E-07	0.00E+00	1.21E-06	4.03E-07	8.24E-07	0.00E+00	1.27E-06	8.15E-08	1.36E-07	0.00E+00	2.14E-07	3.14E-07	6.29E-07	6.94E-08	1.02E-07	0.00E+00	1.71E-07	0.00E+00	1.12E-07	5.30E-08	6.04E-08	0.00E+00	1.12E-07
1826	479285.1	3742762	4.29E-07	7.56E-07	0.00E+00	1.24E-06	4.13E-07	8.44E-07	0.00E+00	1.31E-06	8.35E-08	1.40E-07	0.00E+00	2.19E-07

1894	479395.3	3743264	3.32E-07	5.98E-07	0.00E+00	9.29E-07	3.15E-07	6.61E-07	0.00E+00	9.76E-07	6.36E-08	1.06E-07	0.00E+00	1.69E-07	2.52E-07	4.93E-07	0.00E+00	7.45E-07	5.43E-08	8.04E-08	0.00E+00	1.35E-07	4.15E-08	4.72E-08	0.00E+00	8.87E-08
1895	479386.9	3743248	3.24E-07	5.85E-07	0.00E+00	9.09E-07	3.08E-07	6.47E-07	0.00E+00	9.55E-07	6.22E-08	1.03E-07	0.00E+00	1.66E-07	2.47E-07	4.82E-07	0.00E+00	7.29E-07	5.31E-08	7.87E-08	0.00E+00	1.32E-07	4.06E-08	4.62E-08	0.00E+00	8.68E-08
1896	479378.6	3743232	3.17E-07	5.71E-07	0.00E+00	8.88E-07	3.00E-07	6.32E-07	0.00E+00	9.32E-07	6.08E-08	1.01E-07	0.00E+00	1.62E-07	2.41E-07	4.71E-07	0.00E+00	7.12E-07	5.18E-08	7.68E-08	0.00E+00	1.29E-07	3.96E-08	4.51E-08	0.00E+00	8.48E-08
1897	479370.2	3743216	3.09E-07	5.57E-07	0.00E+00	8.66E-07	2.93E-07	6.16E-07	0.00E+00	9.09E-07	5.93E-08	9.84E-08	0.00E+00	1.58E-07	2.35E-07	4.59E-07	0.00E+00	6.95E-07	5.06E-08	7.49E-08	0.00E+00	1.26E-07	3.86E-08	4.40E-08	0.00E+00	8.27E-08
1898	479361.8	3743200	3.01E-07	5.43E-07	0.00E+00	8.43E-07	2.85E-07	6.00E-07	0.00E+00	8.86E-07	5.77E-08	9.59E-08	0.00E+00	1.54E-07	2.29E-07	4.47E-07	0.00E+00	6.77E-07	4.92E-08	7.30E-08	0.00E+00	1.22E-07	3.76E-08	4.29E-08	0.00E+00	8.05E-08
1899	479353.5	3743183	2.93E-07	5.28E-07	0.00E+00	8.20E-07	2.78E-07	5.84E-07	0.00E+00	8.61E-07	5.61E-08	9.33E-08	0.00E+00	1.49E-07	2.23E-07	4.35E-07	0.00E+00	6.58E-07	4.79E-08	7.10E-08	0.00E+00	1.19E-07	3.66E-08	4.17E-08	0.00E+00	7.83E-08
1900	479345.1	3743167	2.84E-07	5.13E-07	0.00E+00	7.97E-07	2.70E-07	5.67E-07	0.00E+00	8.37E-07	5.45E-08	9.06E-08	0.00E+00	1.45E-07	2.16E-07	4.23E-07	0.00E+00	6.39E-07	4.65E-08	6.90E-08	0.00E+00	1.16E-07	3.56E-08	4.05E-08	0.00E+00	7.61E-08
1901	479336.7	3743151	2.76E-07	4.98E-07	0.00E+00	7.74E-07	2.62E-07	5.50E-07	0.00E+00	8.12E-07	5.29E-08	8.79E-08	0.00E+00	1.41E-07	2.10E-07	4.10E-07	0.00E+00	6.20E-07	4.52E-08	6.69E-08	0.00E+00	1.12E-07	3.45E-08	3.93E-08	0.00E+00	7.38E-08
1902	479328.4	3743135	2.67E-07	4.82E-07	0.00E+00	7.50E-07	2.54E-07	5.34E-07	0.00E+00	7.87E-07	5.13E-08	8.53E-08	0.00E+00	1.37E-07	2.04E-07	3.98E-07	0.00E+00	6.02E-07	4.38E-08	6.49E-08	0.00E+00	1.09E-07	3.35E-08	3.81E-08	0.00E+00	7.16E-08
1903	479320	3743119	2.59E-07	4.67E-07	0.00E+00	7.26E-07	2.46E-07	5.17E-07	0.00E+00	7.63E-07	4.97E-08	8.26E-08	0.00E+00	1.32E-07	1.97E-07	3.85E-07	0.00E+00	5.83E-07	4.24E-08	6.29E-08	0.00E+00	1.05E-07	3.24E-08	3.69E-08	0.00E+00	6.93E-08
1904	479311.7	3743102	2.51E-07	4.52E-07	0.00E+00	7.03E-07	2.38E-07	5.00E-07	0.00E+00	7.38E-07	4.81E-08	7.99E-08	0.00E+00	1.28E-07	1.91E-07	3.73E-07	0.00E+00	5.64E-07	4.10E-08	6.08E-08	0.00E+00	1.02E-07	3.14E-08	3.57E-08	0.00E+00	6.71E-08
1905	479303.3	3743086	2.43E-07	4.37E-07	0.00E+00	6.80E-07	2.30E-07	4.84E-07	0.00E+00	7.14E-07	4.65E-08	7.73E-08	0.00E+00	1.24E-07	1.85E-07	3.61E-07	0.00E+00	5.46E-07	3.97E-08	5.89E-08	0.00E+00	9.86E-08	3.04E-08	3.46E-08	0.00E+00	6.49E-08
1906	479294.9	3743070	2.35E-07	4.23E-07	0.00E+00	6.58E-07	2.23E-07	4.68E-07	0.00E+00	6.91E-07	4.50E-08	7.48E-08	0.00E+00	1.20E-07	1.79E-07	3.49E-07	0.00E+00	5.28E-07	3.84E-08	5.69E-08	0.00E+00	9.53E-08	2.94E-08	3.34E-08	0.00E+00	6.28E-08
1907	479286.6	3743054	2.27E-07	4.09E-07	0.00E+00	6.36E-07	2.15E-07	4.52E-07	0.00E+00	6.68E-07	4.35E-08	7.23E-08	0.00E+00	1.16E-07	1.73E-07	3.37E-07	0.00E+00	5.10E-07	3.71E-08	5.50E-08	0.00E+00	9.21E-08	2.84E-08	3.23E-08	0.00E+00	6.07E-08
1908	479278.2	3743038	2.19E-07	3.95E-07	0.00E+00	6.15E-07	2.08E-07	4.37E-07	0.00E+00	6.45E-07	4.20E-08	6.99E-08	0.00E+00	1.12E-07	1.67E-07	3.26E-07	0.00E+00	4.93E-07	3.59E-08	5.32E-08	0.00E+00	8.91E-08	2.74E-08	3.12E-08	0.00E+00	5.87E-08
1909	479269.8	3743022	2.12E-07	3.82E-07	0.00E+00	5.94E-07	2.01E-07	4.23E-07	0.00E+00	6.24E-07	4.06E-08	6.75E-08	0.00E+00	1.08E-07	1.61E-07	3.15E-07	0.00E+00	4.76E-07	3.47E-08	5.14E-08	0.00E+00	8.61E-08	2.65E-08	3.02E-08	0.00E+00	5.67E-08
1910	479261.5	3743005	2.05E-07	3.69E-07	0.00E+00	5.74E-07	1.94E-07	4.09E-07	0.00E+00	6.03E-07	3.93E-08	6.53E-08	0.00E+00	1.05E-07	1.56E-07	3.05E-07	0.00E+00	4.61E-07	3.35E-08	4.97E-08	0.00E+00	8.32E-08	2.56E-08	2.92E-08	0.00E+00	5.48E-08
1911	479253.1	3742989	1.98E-07	3.57E-07	0.00E+00	5.55E-07	1.88E-07	3.95E-07	0.00E+00	5.83E-07	3.80E-08	6.31E-08	0.00E+00	1.01E-07	1.51E-07	2.95E-07	0.00E+00	4.45E-07	3.24E-08	4.81E-08	0.00E+00	8.05E-08	2.48E-08	2.82E-08	0.00E+00	5.30E-08
1912	479244.7	3742973	1.92E-07	3.45E-07	0.00E+00	5.37E-07	1.82E-07	3.82E-07	0.00E+00	5.64E-07	3.67E-08	6.10E-08	0.00E+00	9.78E-08	1.46E-07	2.85E-07	0.00E+00	4.31E-07	3.13E-08	4.65E-08	0.00E+00	7.78E-08	2.40E-08	2.73E-08	0.00E+00	5.13E-08
1913	479236.4	3742957	1.85E-07	3.34E-07	0.00E+00	5.20E-07	1.76E-07	3.70E-07	0.00E+00	5.46E-07	3.55E-08	5.91E-08	0.00E+00	9.46E-08	1.41E-07	2.76E-07	0.00E+00	4.17E-07	3.03E-08	4.50E-08	0.00E+00	7.53E-08	2.32E-08	2.64E-08	0.00E+00	4.96E-08
1914	479228	3742941	1.79E-07	3.24E-07	0.00E+00	5.03E-07	1.70E-07	3.58E-07	0.00E+00	5.28E-07	3.44E-08	5.72E-08	0.00E+00	9.16E-08	1.37E-07	2.67E-07	0.00E+00	4.03E-07	2.94E-08	4.35E-08	0.00E+00	7.29E-08	2.24E-08	2.56E-08	0.00E+00	4.80E-08
1915	479219.6	3742924	1.74E-07	3.13E-07	0.00E+00	4.87E-07	1.65E-07	3.47E-07	0.00E+00	5.11E-07	3.33E-08	5.54E-08	0.00E+00	8.87E-08	1.32E-07	2.58E-07	0.00E+00	3.91E-07	2.84E-08	4.22E-08	0.00E+00	7.06E-08	2.17E-08	2.48E-08	0.00E+00	4.65E-08
1916	479211.3	3742908	1.68E-07	3.04E-07	0.00E+00	4.72E-07	1.60E-07	3.36E-07	0.00E+00	4.96E-07	3.23E-08	5.37E-08	0.00E+00	8.60E-08	1.28E-07	2.50E-07	0.00E+00	3.79E-07	2.76E-08	4.09E-08	0.00E+00	6.84E-08	2.11E-08	2.40E-08	0.00E+00	4.51E-08
1917	479202.9	3742892	1.63E-07	2.94E-07	0.00E+00	4.58E-07	1.55E-07	3.26E-07	0.00E+00	4.81E-07	3.13E-08	5.20E-08	0.00E+00	8.34E-08	1.24E-07	2.43E-07	0.00E+00	3.67E-07	2.67E-08	3.96E-08	0.00E+00	6.63E-08	2.04E-08	2.33E-08	0.00E+00	4.37E-08
1918	479194.5	3742876	1.58E-07	2.86E-07	0.00E+00	4.44E-07	1.50E-07	3.16E-07	0.00E+00	4.66E-07	3.04E-08	5.05E-08	0.00E+00	8.09E-08	1.21E-07	2.36E-07	0.00E+00	3.56E-07	2.59E-08	3.84E-08	0.00E+00	6.44E-08	1.98E-08	2.26E-08	0.00E+00	4.24E-08
1919	479186.2	3742860	1.54E-07	2.77E-07	0.00E+00	4.31E-07	1.46E-07	3.07E-07	0.00E+00	4.53E-07	2.95E-08	4.90E-08	0.00E+00	7.85E-08	1.17E-07	2.29E-07	0.00E+00	3.46E-07	2.52E-08	3.73E-08	0.00E+00	6.25E-08	1.92E-08	2.19E-08	0.00E+00	4.11E-08
1920	479177.8	3742844	1.49E-07	2.69E-07	0.00E+00	4.19E-07	1.42E-07	2.98E-07	0.00E+00	4.40E-07	2.86E-08	4.76E-08	0.00E+00	7.62E-08	1.14E-07	2.22E-07	0.00E+00	3.36E-07	2.44E-08	3.62E-08	0.00E+00	6.07E-08	1.87E-08	2.13E-08	0.00E+00	4.00E-08
1921	479169.5	3742827	1.45E-07	2.62E-07	0.00E+00	4.07E-07	1.38E-07	2.89E-07	0.00E+00	4.27E-07	2.78E-08	4.62E-08	0.00E+00	7.41E-08	1.10E-07	2.16E-07	0.00E+00	3.26E-07	2.37E-08	3.52E-08	0.00E+00	5.90E-08	1.82E-08	2.07E-08	0.00E+00	3.88E-08
1922	479161.1	3742811	1.41E-07	2.54E-07	0.00E+00	3.95E-07	1.34E-07	2.81E-07	0.00E+00	4.15E-07	2.71E-08	4.50E-08	0.00E+00	7.20E-08	1.07E-07	2.10E-07	0.00E+00	3.17E-07	2.31E-08	3.42E-08	0.00E+00	5.73E-08	1.76E-08	2.01E-08	0.00E+00	3.78E-08
1923	479152.7	3742795	1.37E-07	2.47E-07	0.00E+00	3.85E-07	1.30E-07	2.74E-07	0.00E+00	4.04E-07	2.63E-08	4.37E-08	0.00E+00	7.00E-08	1.04E-07	2.04E-07	0.00E+00	3.08E-07	2.25E-08	3.33E-08	0.00E+00	5.57E-08	1.72E-08	1.96E-08	0.00E+00	3.67E-08
1924	479144.4	3742779	1.33E-07	2.41E-07	0.00E+00	3.74E-07	1.27E-07	2.66E-07	0.00E+00	3.93E-07	2.56E-08	4.25E-08	0.00E+00	6.81E-08	1.02E-07	1.98E-07	0.00E+00	3.00E-07	2.18E-08	3.24E-08	0.00E+00	5.42E-08	1.67E-08	1.90E-08	0.00E+00	3.57E-08
1925	479136	3742763	1.30E-07	2.34E-07	0.00E+00	3.64E-07	1.23E-07	2.59E-07	0.00E+00	3.82E-07	2.49E-08	4.14E-08	0.00E+00	6.63E-08	9.89E-08	1.93E-07	0.00E+00	2.92E-07	2.13E-08	3.15E-08	0.00E+00	5.28E-08	1.63E-08	1.85E-08	0.00E+00	3.48E-08
1926	479127.6	3742746	1.26E-07	2.28E-07	0.00E+00	3.55E-07	1.20E-07	2.52E-07	0.00E+00	3.72E-07	2.43E-08	4.03E-08	0.00E+00	6.46E-08	9.63E-08	1.88E-07	0.00E+00	2.84E-07	2.07E-08	3.07E-08	0.00E+00	5.14E-08	1.58E-08	1.80E-08	0.00E+00	3.39E-08
1927	479119.3	3742730	1.23E-07	2.22E-07	0.00E+00	3.45E-07	1.17E-07	2.46E-07	0.00E+00	3.63E-07	2.36E-08	3.93E-08	0.00E+00	6.29E-08	9.38E-08	1.83E-07	0.00E+00	2.77E-07	2.02E-08	2.99E-08	0.00E+00	5.00E-08	1.54E-08	1.76E-08	0.00E+00	3.30E-08
1928	479110.9	3742714	1.20E-07	2.16E-07	0.00E+00	3.36E-07	1.14E-07	2.39E-07	0.00E+00	3.53E-07	2.30E-08	3.82E-08	0.00E+00	6.13E-08	9.14E-08	1.78E-07	0.00E+00	2.70E-07	1.96E-08	2.91E-08	0.00E+00	4.88E-08	1.50E-08	1.71E-08	0.00E+00	3.21E-08
1929	479372.3	3743316	3.10E-07	5.59E-07	0.00E+00	8.69E-07	2.94E-07	6.19E-07	0.00E+00	9.13E-07	5.95E-08	9.88E-08	0.00E+00	1.58E-07	2.36E-07	4.61E-07	0.00E+00	6.97E-07	5.08E-08	7.52E-08	0.00E+00	1.26E-07	3.88E-08	4.42E-08	0.00E+00	8.30E-08
1930	479364	3743300	3.04E-07	5.48E-07	0.00E+00	8.52E-07	2.88E-07	6.07E-07	0.00E+00	8.95E-07	5.83E-08	9.69E-08	0.00E+00	1.55E-07	2.32E-07	4.52E-07	0.00E+00	6.84E-07	4.98E-08	7.38E-08	0.00E+00	1.24E-07	3.80E-08	4.33E-08	0.00E+00	8.14E-08
1931	479355.6	3743284	2.98E-07	5.37E-07	0.00E+00	8.35E-07	2.82E-07	5.94E-07	0.00E+00	8.76E-07	5.71E-08	9.49E-08	0.00E+00	1.52E-07	2.27E-07	4.43E-07	0.00E+00	6.69E-07	4.87E-08	7.22E-08	0.00E+00	1.21E-07	3.72E-08	4.24E-08	0.00E+00	7.97E-08
1932	479347.2	3743268	2.91E-07	5.25E-07	0.00E+00	8.16E-07	2.76E-07	5.81E-07	0.00E+00	8.57E-07	5.58E-08	9.28E-08	0.00E+00	1.49E-07	2.22E-07	4.33E-07	0.00E+00	6.55E-07	4.77E-08	7.06E-08	0.00E+00	1.18E-07	3.64E-08	4.15E-08	0.00E+00	7.79E-08
1933	479338.9	3743252	2.84E-07	5.13E-07	0.00E+00	7.97E-07	2.70E-07	5.67E-07	0.00E+00	8.37E-07	5.45E-08	9.06E-08	0.00E+00	1.45E-07	2.16E-07	4.23E-07	0.00E+00	6.39E-07	4.65E-08	6.90E-08	0.00E+00	1.16E-07	3.56E-08	4.05E-08	0.00E+00	7.61E-08
1934	479330.5	3743235	2.77E-07	5E-07	0.00E+00	7.77E-07	2.63E-07	5.53E-07	0.00E+00	8.16E-07	5.32E-08	8.84E-08	0.00E+00	1.42E-07	2.11E-07	4.12E-07	0.00E+00	6.24E-07	4.54E-08	6.73E-08	0.00E+00	1.13E-07	3.47E-08	3.95E-08	0.00E+00	7.42E-08
1935	479322.1	3743219	2.70E-07	4.87E-07	0.00E+00	7.57E-07	2.56E-07	5.39E-07	0.00E+00	7.95E-07	5.18E-08	8.61E-08	0.00E+00	1.38E-07	2.06E-07	4.02E-07	0.00E+00	6.08E-07	4.42E-08	6.56E-08	0.00E+00	1.10E-07	3.38E-08	3.85E-08	0.00E+00	7.23E-08
1936	479313.8	3743203	2.63E-07	4.74E-07	0.00E+00	7.37E-07	2.49E-07	5.24E-07	0.00E+00	7.74E-07	5.04E-08	8.38E-08	0.00E+00	1.34E-07	2.00E-07	3.91E-07	0.00E+00	5.91E-07	4.30E-08	6.38E-08	0.00E+00	1.07E-07	3.29E-08	3.75E-08	0.00E+00	7.04E-08
1937	479305.4	3743187	2.56E-07	4.61E-07	0.00E+00	7.16E-07	2.42E-07	5.10E-07	0.00E+00	7.52E-07	4.90E-08	8.14E-08	0.00E+00	1.30E-07	1.95E-07	3.80E-07	0.00E+00	5.75E-07	4.18E-08	6.20E-08	0.00E+00	1.04E-07	3.20E-08	3.64E-08	0.00E+00	6.84E-08
1938	479297	3743171	2.48E-07	4.48E-07	0.00E+00	6.96E-07	2.35E-07	4.95E-07	0.00E+00	7.31E-07	4.76E-08	7.91E-08	0.00E+00	1.27E-07	1.89E-07	3.69E-07	0.00E+00	5.58E-07	4.06E-08	6.02E-08	0.00E+00	1.01E-07	3.10E-08	3.54E-08	0.00E+00	6.64E-08
1939	479288.7	3743154	2.41E-07	4.34E-07	0.00E+00	6.75E-07	2.28E-07	4.80E-07	0.00E+00	7.09E-07	4.62E-08	7.68E-08	0.00E+00	1.23E-07	1.83E-07	3.58E-07	0.00E+00	5.42E-07	3.94E-08	5.84E-08	0.00E+00	9.78E-08	3.01E-08	3.43E-08	0.00E+00	6.45E-08
1940	479280.3	3743138	2.34E-07	4.21E-07	0.00E+00	6.55E-07	2.22E-07	4.66E-07	0.00E+00	6.87E-07	4.48E-08	7.44E-08	0.00E+00	1.19E-07	1.78E-07	3.47E-07	0.00E+00	5.25E-07	3.82E-08	5.67E-08	0.00E+00	9.49E-08	2.92E-08	3.33E-08	0.00E+00	6.25E-08
1941	479271.9	3743122	2.26E-07	4.08E-07	0.00E+00	6.35E-07	2.15E-07	4.52E-07	0.00E+00	6.66E-07	4.34E-08	7.21E-08	0.00E+00	1.16E-07	1.72E-07	3.37E-07	0.00E+00	5.09E-07	3.71E-08	5.49E-08	0.00E+00	9.20E-08	2.83E-08	3.23E-08	0.00E+00	6.06E-08
1942	479263.6	3743106	2.19E-07	3.96E-07	0.00E+00	6.15E-07	2.08E-07	4.38E-07	0.00E+00	6.46E-07	4.21E-08	6.99E-08	0.00E+00	1.12E-07	1.67E-07	3.26E-07	0.00E+00	4.93E-07	3.59E-08	5.32E-08	0.00E+00	8.91E-08	2.74E-08	3.13E-08	0.00E+00	5.87E-08
1943	479255.2	3743090	2.12E-07	3.83E-07	0.00E+00	5.95E-07	2.02E-07	4.24E-07	0.00E+00	6.25E-07	4.07E-08	6.77E-08	0.00E+00	1.08E-07	1.62E-07	3.16E-07	0.00E+00	4.78E-07	3.48E-08	5.15E-08	0.00E+00	8.63E-08	2.66E-08	3.03E-08	0.00E+00	5.68E-08
1944	479246.8	3743074	2.06E-07	3.71E-07	0.00E+00	5.77E-07	1.95E-07	4.10E-07	0.00E+00	6.05E-07	3.95E-08	6.56E-08	0.00E+00	1.05E-07	1.57E-07	3.06E-07	0.00E+00	4.63E-07	3.37E-08	4.99E-08	0.00E+00	8.36E-08	2.57E-08	2.93E-08	0.00E+00	5.50E-08
1945	479238.5	3743057	1.99E-07	3.59E-07	0.00E+00	5.58E-07	1.89E-07	3.97E-07	0.00E+00	5.86E-07	3.82E-08	6.35E-08	0.00E+00	1.02E-07	1.52E-07	2.96E-07	0.00E+00	4.48E-07	3.26E-08	4.83E-08	0.00E+00	8.09E-08	2.49E-08	2.84E-08	0.00E+00	5.33E-08
1946	479230.1	3743041	1.93E-07	3.48E-07	0.00E+00	5.41E-07	1.83E-07	3.85E-07	0.00E+00	5.68E-07	3.70E-08	6.15E-08	0.00E+00	9.84E-08	1.47E-07	2.87E-07	0.00E+00	4.34E-07	3.16E-08	4.68E-08	0.00E+00	7.83E-08	2.41E-08	2.75E-08	0.00E+00	5.16E-08
1947	479221.7	3743025	1.87E-07	3.37E-07	0.00E+00	5.23E-07	1.77E-07	3.72E-07	0.00E+00	5.50E-07	3.58E-08	5.95E-08	0.00E+00	9.53E-08	1.42E-07	2.78E-07	0.00E+00	4.20E-07	3.06E-08	4.53E-08	0.00E+00	7.59E-08	2.34E-08	2.66E-08	0.00E+00	5.00E-08
1948	479213.4	3743009	1.81E-07	3.26E-07	0.00E+00	5.07E-07	1.72E-07	3.61E-07	0.00E+00	5.32E-07	3.47E-08	5.76E-08	0.00E+00	9.23E-08	1.38E-07	2.69E-07	0.00E+00	4.07E-07	2.96E-08	4.39E-08	0.00E+00	7.35E-08	2.26E-08	2.58E-08	0.00E+00	4.84E-08
1949	479205	3742993	1.75E-07	3.16E-07	0.00E+00	4.91E-07	1.66E-07	3.50E-07	0.00E+00	5.16E-07	3.36E-08	5.59E-08	0.00E+00	8.95E-08	1.33E-07	2.61E-07	0.00E+00	3.94E-07	2.87E-08	4.25E-08	0.00E+00	7.12E-08	2.19E-08	2.50E-08	0.00E+00	4.69E-08
1950	479196.6	3742976	1.70E-07	3.06E-07	0.00E+00	4.76E-07	1.61E-07	3.39E-07	0.00E+00	5.00E-07	3.26E-08	5.41E-08	0.00E+00	8.67E-08	1.29E-07	2.53E-07	0.00E+00	3.82E-07	2.78E-08	4.12E-08	0.00E+00	6.90E-08	2.13E-08	2.42E-08	0.00E+00	4.55E-08
1951	479188.3	3742960	1.65E-07	2.97E-07	0.00E+00	4.62E-07	1.56E-07	3.29E-07	0.00E+00	4.85E-07	3.16E-08	5.25E-08	0.00E+00	8.41E-08	1.25E-07	2.45E-07	0.00E+00	3.70E-07	2.70E-08	4.00E-08	0.00E+00	6.69E-08	2.06E-08	2.35E-08	0.00E+00	4.41E-08
1952	479179.9	3742944	1.60E-07	2.88E-07	0.00E+00	4.48E-07	1.52E-07	3.19E-07	0.00E+00	4.70E-07	3.07E-08	5.09E-08	0.00E+00	8.16E-08	1.22E-07	2.38E-07	0.00E+00	3.59E-07	2.62E-08	3.88E-08	0.00E+00	6.49E-08	2.00E-08	2.28E-08	0.00E+00	4.28E-08
1953	479171.5	3742928	1.55E-07	2.8E-07	0.00E+00	4.35E-07	1.47E-07	3.09E-07	0.00E+00	4.57E-07	2.98E-08	4.94E-08	0.00E+00	7.92E-08	1.18E-07	2.31E-07	0.00E+00	3.49E-07	2.54E-08	3.76E-08	0.00E+00	6.30E-08	1.94E-08	2.21E-08	0.00E+00	4.15E-08
1954	479163.2	3742912	1.51E-07	2.72E-07	0.00E+00	4.22E-07	1.43E-07	3.01E-07	0.00E+00	4.44E-07	2.89E-08	4.80E-08	0.00E+00	7.69E-08	1.15E-07	2.24E-07	0.00E+00	3.39E-07	2.47E-08	3.66E-08	0.00E+00	6.12E-08	1.89E-08	2.15E-08	0.00E+00	4.03E-08
1955	479154.8	3742895	1.46E-07	2.64E-07	0.00E+00	4.10E-07	1.39E-07	2.92E-07	0.00E+00	4.31E-07	2.81E-08	4.67E-08	0.00E+00	7.47E-08	1.11E-07	2.18E-07	0.00E+00	3.29E-07	2.40E-08	3.55E-08	0.00E+00	5.95E-08	1.83E-08	2.09E-08	0.00E+00	3.92E-08
1956	479146.4	3742879	1.42E-07	2.57E-07	0.00E+00	3.99E-07	1.35E-07	2.84E-07	0.00E+00	4.19E-07	2.73E-08	4.54E-08	0.00E+00	7.27E-08	1.08E-07	2.12E-07	0.00E+00	3.20E-07	2.33E-08	3.45E-08	0.00E+00	5.78E-08	1.78E-08	2.03E-08	0.00E+00	3.81E-08
1957	479138.1	3742863	1.38E-07	2.5E-07	0.00E+00	3.88E-07	1.31E-07	2.76E-07	0.00E+00	4.08E-07	2.66E-08	4.41E-08	0.00E+00	7.07E-08	1.05E-07	2.06E-07	0.00E+00	3.11E-07	2.27E-08	3.36E-08	0.00E+00	5.62E-08	1.73E-08	1.97E-08	0.00E+00	3.71E-08
1958	479129.7	3742847	1.35E-07	2.43E-07	0.00E+00	3.78E-07	1.28E-07	2.69E-07	0.00E+00	3.97E-07	2.58E-08	4.29E-08	0.00E+00	6.88E-08	1.03E-07	2.00E-07	0.00E+00	3.03E-07	2.20E-08	3.27E-08	0.00E+00	5.47E-08	1.69E-08	1.92E-08	0.00E+00	3.61E-08
1959	479121.3	3742831	1.31E-07	2.37E-07	0.00E+00	3.68E-07	1.24E-07	2.62E-07	0.00E+00	3.86E-07	2.52E-08	4.18E-08	0.00E+00	6.70E-08	9.99E-08	1.95E-07	0.00E+00	2.95E-07	2.15E-08	3.18E-08	0.00E+00	5.33E-08	1.64E-08	1.87E-08	0.00E+00	3.51E-08
1960	479113	3742815	1.28E-07	2.3E-07	0.00E+00	3.58E-07	1.21E-07	2.55E-07	0.00E+00	3.76E-07	2.45E-08	4.07E-08	0.00E+00	6.52E-08	9.73E-08	1.90E-07	0.00E+00	2.87E-07	2.09E-08	3.10E-08	0.00E+00	5.19E-08	1.60E-08	1.82E-08	0.00E+00	3.42E-08
1961	479104.6	3742798	1.24E-07	2.24E-07	0.00E+00	3.49E-07	1.18E-07	2.48E-07	0.00E+00	3.66E-07	2.39E-08	3.97E-08	0.00E+00	6.35E-08	9.48E-08	1.85E-07	0.00E+00	2.80E-07	2.04E-08	3.02E-08	0.00E+00	5.06E-08	1.56E-08	1.77E-08	0.00E+00	3.33E-08
1962	479096.2	3742782	1.21E-07	2.19E-07	0.00E+00	3.40E-07	1.15E-07	2.42E-07	0.00E+00	3.57E-07	2.33E-08	3.86E-08	0.00E+00	6.19E-08	9.23E-08	1.80E-07	0.00E+00	2.73E-07	1.98E-08	2.94E-08	0.00E+00	4.93E-08	1.52E-08	1.73E-08	0.00E+00	3.25E-08
1963	479325.6	3743322	2.75E-07	4.97E-07	0.00E+00	7.72E-07	2.61E-07	5.49E-07	0.00E+00	8.11E-07	5.28E-08	8.78E-08	0.00E+00	1.41E-07	2.10E-07	4.10E-07	0.00E+00	6.19E-07	4.51E-08	6.68E-08	0.00E+00	1.12E-07	3.45E-08	3.93E-08	0.00E+00	7.37E-08
1964	479317.3	3743306	2.70E-07	4.86E-07	0.00E+00	7.56E-07	2.56E-07	5.38E-07	0.00E+00	7.94E-07	5.17E-08	8.59E-08	0.00E+00	1.38E-07	2.05E-07	4.01E-07	0.00E+00	6.06E-07	4.41E-08	6.54E-08	0.00E+00	1.10E-07	3.37E-08	3.84E-08	0.00E+00	7.22E-08
1965	479308.9	3743290	2.64E-07	4.76E-07	0.00E+00	7.39E-07	2.50E-07	5.26E-07	0.00E+00	7.76E-07	5.06E-08	8.40E-08	0.00E+00	1.35E-07	2.01E-07	3.92E-07	0.00E+00	5.93E-07	4.32E-08	6.40E-08	0.00E+00	1.07E-07	3.30E-08	3.76E-08	0.00E+00	7.06E-08
1966	479300.5	3743274	2.58E-07	4.64E-07	0.00E+00	7.22E-07	2.44E-07	5.14E-07	0.00E+00	7.58E-07	4.94E-08	8.21E-08	0.00E+00	1.31E-07	1.96E-07	3.83E-07	0.00E+00	5.79E-07	4.22E-08	6.25E-08	0.00E+00	1.05E-07	3.22E-08	3.67E-08	0.00E+00	6.89E-08
1967	479292.2	3743258	2.51E-07	4.53E-07	0.00E+00	7.04E-07	2.38E-07	5.01E-07	0.00E+00	7.40E-07	4.82E-08	8.01E-08	0.00E+00	1.28E-07	1.91E-07	3.74E-07	0.00E+00	5.65E-07	4.11E-08	6.10E-08	0.00E+00	1.02E-07	3.14E-08	3.58E-08	0.00E+00	6.72E-08
1968	479283.8	3743241	2.45E-07	4.42E-07	0.00E+00	6.87E-07	2.32E-07	4.89E-07	0.00E+00	7.21E-07	4.70E-08	7.81E-08	0.00E+00	1.25E-07	1.87E-07	3.64E-07	0.00E+00	5.51E-07	4.01E-08	5.94E-08	0.00E+00	9.95E-08	3.06E-08	3.49E-08	0.00E+00	6.56E-08
1969	479275.4	3743225	2.39E-07	4.3E-07	0.00E+00	6.69E-07	2.26E-07	4.76E-07	0.00E+00	7.02E-07	4.58E-08	7.60E-08	0.00E+00	1.22E-07	1.82E-07	3.55E-07	0.00E+00	5.36E-07	3.90E-08	5.79E-08	0.00E+00	9.69E-08	2.98E-08	3.40E-08	0.00E+00	6.38E-08
1970	479267.1	3743209	2.32E-07	4.19E-07	0.00E+00	6.51E-07	2.20E-07	4.63E-07	0.00E+00	6.83E-07	4.45E-08	7.40E-08	0.00E+00	1.18E-07	1.77E-07	3.45E-07	0.00E+00	5.22E-07	3.80E-08	5.63E-08	0.00E+00	9.43E-08	2.90E-08	3.31E-08	0.00E+00	6.21E-08
1971	479258.7	3743193	2.26E-07	4.07E-07	0.00E+00	6.33E-07	2.14E-07	4.50E-07	0.00E+00	6.64E-07	4.33E-08	7.19E-08	0.00E+00	1.15E-07	1.72E-07	3.36E-07	0.00E+00	5.07E-07	3.69E-08	5.47E-08	0.00E+00	9.17E-08	2.82E-08	3.22E-08	0.00E+00	6.04E-08
1972	479250.3	3743177	2.19E-07	3.95E-07	0.00E+00	6.15E-07	2.08E-07	4.37E-07	0.00E+00	6.45E-07	4.20E-08	6.99E-08	0.00E+00	1.12E-07	1.67E-07	3.26E-07	0.00E+00	4.93E-07	3.59E-08	5.32E-08	0.00E+00	8.91E-08	2.74E-08	3.12E-08	0.00E+00	5.87E-08
1973	479242	3743161	2.13E-07	3.84E-07	0.00E+00	5.97E-07	2.02E-07	4.25E-07	0.00E+00	6.27E-07	4.08E-08	6.78E-08	0.00E+00	1.09E-07	1.62E-07	3.17E-07	0.00E+00	4.79E-07	3.48E-08	5.16E-08	0.00E+00	8.65E-08	2.66E-08	3.03E-08	0.00E+00	5.70E-08
1974	479233.6	3743144	2.07E-07	3.73E-07	0.00E+00	5.79E-07	1.96E-07	4.12E-07	0.00E+00	6.08E-07	3.96E-08	6.58E-08	0.00E+00	1.05E-07	1.57E-07	3.07E-07	0.00E+00	4.65E-07	3.38E-08	5.01E-08	0.00E+00	8.39E-08	2.58E-08	2.94E-08	0.00E+00	5.53E-08
1975	479225.2	3743128	2.00E-07	3.61E-07	0.00E+00	5.62E-07	1.90E-07	4.00E-07	0.00E+00	5.90E-07	3.84E-08	6.39E-08	0.00E+00	1.02E-07	1.53E-07	2.98E-07	0.00E+00	4.51E-07	3.28E-08	4.86E-08	0.00E+00	8.14E-08	2.51E-08	2.86E-08	0.00E+00	5.36E-08
1976	479216.9	3743112	1.94E-07	3.51E-07	0.00E+00	5.45E-07	1.84E-07	3.88E-07	0.00E+00	5.72E-07	3.73E-08	6.20E-08	0.00E+00	9.92E-08	1.48E-07	2.89E-07	0.00E+00	4.37E-07	3.18E-08	4.72E-08	0.00E+00	7.90E-08	2.43E-08	2.77E-08	0.00E+00	5.20E-08
1977	479208.5	3743096	1.89E-07	3.4E-07	0.00E+00	5.29E-07	1.79E-07	3.76E-07	0.00E+00	5.55E-07	3.62E-08	6.01E-08	0.00E+00	9.62E-08	1.44E-07	2.80E-07	0.00E+00	4.24E-07	3.09E-08	4.57E-08	0.00E+00	7.66E-08	2.36E-08	2.69E-08	0.00E+00	5.05E-08
1978	479200.1	3743080	1.83E-07	3.3E-07	0.00E+00	5.13E-07	1.73E-07	3.65E-07	0.00E+00	5.38E-07	3.51E-08	5.83E-08	0.00E+00	9.33E-08	1.39E-07	2.72E-07	0.00E+00	4.11E-07	2.99E-08	4.44E-08	0.00E+00	7.43E-08	2.29E-08	2.61E-08	0.00E+00	4.89E-08
1979	479191.8	3743063	1.77E-07	3.2E-07	0.00E+00	4.97E-07	1.68E-07	3.54E-07	0.00E+00	5.22E-07	3.40E-08	5.65E-08	0.00E+00	9.05E-08	1.35E-07	2.64E-07	0.00E+00	3.99E-07	2.90E-08	4.30E-08	0.00E+00	7.20E-08	2.22E-08	2.53E-08	0.00E+00	4.75E-08
1980	479183.4	3743047	1.72E-07	3.1E-07	0.00E+00	4.82E-07	1.63E-07	3.43E-07	0.00E+00	5.06E-07	3.30E-08	5.48E-08	0.00E+00	8.78E-08	1.31E-07	2.56E-07	0.00E+00	3.87E-07	2.81E-08	4.17E-08	0.00E+00	6.99E-08	2.15E-08	2.45E-08	0.00E+00	4.60E-08
1981	479175	3743031	1.67E-07	3.01E-07	0.00E+00	4.68E-07	1.58E-07	3.33E-07	0.00E+00	4.91E-07	3.20E-08	5.32E-08	0.00E+00	8.52E-08	1.27E-07	2.48E-07	0.00E+00	3.75E-07	2.73E-08	4.05E-08	0.00E+00	6.78E-08	2.09E-08	2.38E-08	0.00E+00	4.47E-08
1982	479166.7	3743015	1.62E-07	2.92E-07	0.00E+00	4.54E-07	1.54E-07	3.23E-07	0.00E+00	4.77E-07	3.11E-08	5.16E-08	0.00E+00	8.27E-08	1.23E-07	2.41E-07	0.00E+00	3.64E-07	2.65E-08	3.93E-08	0.00E+00	6.58E-08	2.03E-08	2.31E-08	0.00E+00	4.33E-08
1983	479158.3	3742999	1.57E-07	2.83E-07	0.00E+00	4.41E-07	1.49E-07	3.14E-07	0.00E+00	4.63E-07	3.01E-08	5.01E-08	0.00E+00	8.02E-08	1.20E-07	2.34E-07	0.00E+00	3.53E-07	2.57E-08	3.81E-08	0.00E+00	6.39E-08	1.97E-08	2.24E-08	0.00E+00	4.21E-08
1984	479150	3742983	1.53E-07	2.75E-07	0.00E+00	4.28E-07	1.45E-07	3.05E-07	0.00E+00	4.49E-07	2.93E-08	4.87E-08	0.00E+00	7.79E-08	1.16E-07	2.27E-07	0.00E+00	3.43E-07	2.50E-08	3.70E-08	0.00E+00	6.20E-08	1.91E-08	2.18E-08	0.00E+00	4.09E-08
1985	479141.6	3742966	1.48E-07	2.67E-07	0.00E+00	4.16E-07	1.41E-07	2.96E-07	0.00E+00	4.37E-07	2.85E-08	4.73E-08	0.00E+00	7.57E-08	1.13E-07	2.21E-07	0.00E+00	3.34E-07	2.43E-08	3.60E-08	0.00E+00	6.03E-08	1.86E-08	2.11E-08	0.00E+00	3.97E-08
1986	479133.2	3742950	1.44E-07	2.6E-07	0.00E+00	4.04E-07	1.37E-07	2.88E-07	0.00E+00	4.24E-07	2.77E-08	4.60E-08	0.00E+00	7.36E-08	1.10E-07	2.14E-07	0.00E+00	3.24E-07	2.36E-08	3.50E-08	0.00E+00	5.86E-08	1.80E-08	2.06E-08	0.00E+00	3.86E-08
1987	479124.9	3742934	1.40E-07	2.53E-07	0.00E+00	3.93E-07	1.33E-07	2.80E-07	0.00E+00	4.13E-07	2.69E-08	4.47E-08	0.00E+00	7.16E-08	1.07E-07	2.09E-07	0.00E+00	3.15E-07	2.30E-08	3.40E-08	0.00E+00	5.70E-08	1.75E-08	2.00E-08	0.00E+00	3.75E-08
1988	479116.5	3742918	1.36E-07	2.46E-07	0.00E+00	3.83E-07	1.29E-07	2.72E-07	0.00E+00	4.02E-07	2.62E-08	4.35E-08	0.00E+00	6.97E-08	1.04E-07	2.03E-07	0.00E+00	3.07E-07	2.23E-08	3.31E-08	0.00E+00	5.54E-08	1.71E-08	1.94E-08	0.00E+00	3.65E-08
1989	479108.1	3742902	1.33E-07	2.4E-07	0.00E+00	3.72E-07	1.26E-07	2.65E-07	0.00E+00	3.91E-07	2.55E-08	4.23E-08	0.00E+00	6.78E-08	1.01E-07	1.98E-07	0.00E+00	2.99E-07	2.17E-08	3.22E-08	0.00E+00	5.40E-08	1.66E-08	1.89E-08	0.00E+00	3.55E-08
1990	479099.8	3742885	1.29E-07	2.33E-07	0.00E+00	3.63E-07	1.23E-07	2.58E-07	0.00E+00	3.81E-07	2.48E-08	4.12E-08	0.00E+00	6.60E-08	9.85E-08	1.92E-07	0.00E+00	2.91E-07	2.12E-08	3.14E-08	0.00E+00	5.26E-08	1.62E-08	1.84E-08	0.00E+00	3.46E-08
1991	479091.4	3742869	1.26E-07	2.27E-07	0.00E+00	3.53E-07	1.20E-07	2.51E-07	0.00E+00	3.71E-07	2.42E-08	4.02E-08	0.00E+00	6.43E-08	9.60E-08	1.87E-07	0.00E+00	2.83E-07	2.06E-08	3.06E-08	0.00E+00	5.12E-08	1.58E-08	1.80E-08	0.00E+00	3.37E-08
1992	479280.5	3743332	2.46E-07	4.44E-07	0.00E+00	6.91E-07	2.34E-07	4.92E-07	0.00E+00	7.25E-07	4.73E-08	7.85E-08	0.00E+00	1.26E-07	1.88E-07	3.66E-07	0.00E+00	5.54E-07	4.03E-08	5.98E-08	0.00E+00	1.00E-07	3.08E-08	3.51E-08	0.00E+00	6.59E-08
1993	479272.2	3743315	2.41E-07	4.35E-07	0.00E+00	6.76E-07	2.29E-07	4.81E-07	0.00E+00	7.10E-07	4.62E-08	7.68E-08	0.00E+00	1.23E-07	1.84E-07	3.58E-07	0.00E+00	5.42E-07	3.95E-08	5.85E-08	0.00E+00	9.79E-08	3.02E-08	3.44E-08	0.00E+00	6.45E-08
1994	479263.8	3743299	2.36E-07	4.25E-07	0.00E+00	6.60E-07	2.24E-07	4.70E-07	0.00E+00	6.93E-07	4.52E-08	7.51E-08	0.00E+00	1.20E-07	1.79E-07	3.50E-07	0.00E+00	5.30E-07	3.86E-08	5.72E-08	0.00E+00	9.57E-08	2.95E-08	3.36E-08	0.00E+00	6.30E-08
1995	479255.4	3743283	2.30E-07	4.15E-07	0.00E+00	6.45E-07	2.18E-07	4.59E-07	0.00E+00	6.77E-07	4.41E-08	7.33E-08	0.00E+00	1.17E-07	1.75E-07	3.42E-07	0.00E+00	5.17E-07	3.76E-08	5.58E-08	0.00E+00	9.35E-08	2.88E-08	3.28E-08	0.00E+00	6.16E-08
1996	479247.1	3743267	2.24E-07	4.05E-07	0.00E+00	6.29E-07	2.13E-07	4.48E-07	0.00E+00	6.60E-07	4.30E-08	7.15E-08	0.00E+00	1.15E-07	1.71E-07	3.34E-07	0.00E+00	5.05E-07	3.67E-08	5.44E-08	0.00E+00	9.12E-08	2.81E-08	3.20E-08	0.00E+00	6.00E-08
1997	479238.7	3743251	2.19E-07	3.94E-07	0.00E+00	6.13E-07	2.07E-07	4.36E-07	0.00E+00	6.44E-07	4.19E-08	6.97E-08	0.00E+00	1.12E-07	1.67E-07	3.25E-07	0.00E+00	4.92E-07	3.58E-08	5.31E-08	0.00E+00	8.88E-08	2.74E-08	3.12E-08	0.00E+00	5.85E-08
1998	479230.3	3743235	2.13E-07	3.84E-07	0.00E+00	5.97E-07	2.02E-07	4.25E-07	0.00E+00	6.27E-07	4.09E-08	6.79E-08	0.00E+00	1.09E-07	1.62E-07	3.17E-07	0.00E+00	4.79E-07	3.49E-08	5.17E-08	0.00E+00	8.65E-08	2.66E-08	3.04E-08	0.00E+00	5.70E-08
1999	479222	3743218	2.07E-07	3.74E-07	0.00E+00	5.81E-07	1.97E-07	4.13E-07	0.00E+00	6.10E-07	3.98E-08	6.61E-08	0.00E+00	1.06E-07	1.58E-07	3.08E-07	0.00E+00	4.66E-07	3.39E-08	5.03E-08	0.00E+00	8.42E-08	2.59E-08	2.95E-08	0.00E+00	5.55E-08
2000	479213.6	3743202	2.02E-07	3.64E-07	0.00E+00	5.65E-07	1.91E-07	4.02E-07	0.00E+00	5.93E-07	3.87E-08	6.43E-08	0.00E+00	1.03E-07	1.54E-07	3.00E-07	0.00E+00	4.53E-07	3.30E-08	4.89E-08	0.00E+00	8.19E-08	2.52E-08	2.87E-08	0.00E+00	5.40E-08
2001	479205.2	3743186	1.96E-07	3.53E-07	0.00E+00	5.49E-07	1.86E-07	3.91E-07	0.00E+00	5.77E-07	3.76E-08	6.25E-08	0.00E+00	1.00E-07	1.49E-07	2.91E-07	0.00E+00	4.41E-07	3.21E-08	4.76E-08	0.00E+00	7.96E-08	2.45E-08	2.79E-08	0.00E+00	5.25E-08
2002	479196.9	3743170	1.90E-07	3.43E-07	0.00E+00	5.34E-07	1.81E-07	3.80E-07	0.00E+00	5.61E-07	3.65E-08	6.07E-08	0.00E+00	9.72E-08	1.45E-07	2.83E-07	0.00E+00	4.28E-07	3.12E-08	4.62E-08	0.00E+00	7.74E-08	2.38E-08	2.71E-08	0.00E+00	5.10E-08
2003	479188.5	3743154	1.85E-07	3.34E-07	0.00E+00	5.19E-07	1.76E-07	3.69E-07	0.00E+00	5.45E-07	3.55E-08	5.90E-08	0.00E+00	9.45E-08	1.41E-07	2.75E-07	0.00E+00	4.16E-07	3.03E-08	4.49E-08	0.00E+00	7.52E-08	2.32E-08	2.64E-08	0.00E+00	4.95E-08
2004	479180.1	3743137	1.80E-07	3.24E-07	0.00E+00	5.04E-07	1.71E-07	3.59E-07	0.00E+00	5.29E-07	3.45E-08	5.73E-08	0.00E+00	9.17E-08	1.37E-07	2.67E-07	0.00E+00	4.04E-07	2.94E-08	4.36E-08	0.00E+00	7.30E-08	2.25E-08	2.56E-08	0.00E+00	4.81E-08
2005	479171.8	3743121	1.75E-07	3.15E-07	0.00E+00	4.89E-07	1.66E-07	3.48E-07	0.00E+00	5.14E-07	3.35E-08	5.56E-08	0.00E+00	8.91E-08	1.33E-07	2.60E-07	0.00E+00	3.92E-07	2.86E-08	4.23E-08	0.00E+00	7.09E-08	2.18E-08	2.49E-08	0.00E+00	4.67E-08
2006	479163.4	3743105	1.69E-07	3.06E-07	0.00E+00	4.75E-07	1.61E-07	3.38E-07	0.00E+00	4.99E-07	3.25E-08	5.40E-08	0.00E+00	8.65E-08	1.29E-07	2.52E-07	0.00E+00	3.81E-07	2.77E-08	4.11E-08	0.00E+00	6.89E-08	2.12E-08	2.42E-08	0.00E+00	4.54E-08
2007	479155	3743089	1.65E-07	2.97E-07	0.00E+00	4.61E-07	1.56E-07	3.28E-07	0.00E+00	4.85E-07	3.16E-08	5.25E-08	0.00E+00	8.40E-08	1.25E-07	2.45E-07	0.00E+00	3.70E-07	2.69E-08	3.99E-08	0.00E+00	6.69E-08	2.06E-08	2.35E-08	0.00E+00	4.41E-08
2008	479146.7	3743073	1.60E-07	2.88E-07	0.00E+00	4.48E-07	1.52E-07	3.19E-07	0.00E+00	4.71E-07	3.07E-08	5.10E-08	0.00E+00	8.16E-08	1.22E-07	2.38E-07	0.00E+00	3.60E-07	2.62E-08	3.88E-08	0.00E+00	6.50E-08	2.00E-08	2.28E-08	0.00E+00	4.28E-08
2009	479138.3	3743056	1.55E-07	2.8E-07	0.00E+00	4.35E-07	1.47E-07	3.10E-07	0.00E+00	4.57E-07	2.98E-08	4.95E-08	0.00E+00	7.93E-08	1.18E-07	2.31E-07	0.00E+00	3.49E-07	2.54E-08	3.77E-08	0.00E+00	6.31E-08	1.94E-08	2.21E-08	0.00E+00	4.16E-08
2010	479129.9	3743040	1.51E-07	2.72E-07	0.00E+00	4.23E-07	1.43E-07	3.01E-07	0.00E+00	4.44E-07	2.90E-08	4.81E-08	0.00E+00	7.71E-08	1.15E-07	2.24E-07	0.00E+00	3.39E-07	2.47E-08	3.66E-08	0.00E+00	6.13E-08	1.89E-08	2.15E-08	0.00E+00	4.04E-08
2011	479121.6	3743024	1.47E-07	2.65E-07	0.00E+00	4.11E-07	1.39E-07	2.93E-07	0.00E+00	4.32E-07	2.81E-08	4.68E-08	0.00E+00	7.49E-08	1.12E-07	2.18E-07	0.00E+00	3.30E-07	2.40E-08	3.56E-08	0.00E+00	5.96E-08	1.84E-08	2.09E-08	0.00E+00	3.93E-08
2012	479113.2	3743008	1.43E-07	2.57E-07	0.00E+00	4.00E-07	1.35E-07	2.85E-07	0.00E+00	4.20E-07	2.74E-08	4.55E-08	0.00E+00	7.28E-08	1.09E-07	2.12E-07	0.00E+00	3.21E-07	2.34E-08	3.46E-08	0.00E+00	5.80E-08	1.79E-08	2.03E-08	0.00E+00	3.82E-08
2013	479104.8	3742992	1.39E-07	2.5E-07	0.00E+00	3.89E-07	1.32E-07	2.77E-07	0.00E+00	4.09E-07	2.66E-08	4.42E-08	0.00E+00	7.09E-08	1.06E-07	2.06E-07	0.00E+00	3.12E-07	2.27E-08	3.37E-08	0.00E+00	5.64E-08	1.74E-08	1.98E-08	0.00E+00	3.72E-08
2014	479096.5	3742976	1.35E-07	2.44E-07	0.00E+00	3.79E-07	1.28E-07	2.70E-07	0.00E+00	3.98E-07	2.59E-08	4.31E-08	0.00E+00	6.90E-08	1.03E-07	2.01E-07	0.00E+00	3.04E-07	2.21E-08	3.28E-08	0.00E+00	5.49E-08	1.69E-08	1.93E-08	0.00E+00	3.62E-08
2015	479088.1	3742959	1.32E-07	2.37E-07	0.00E+00	3.69E-07	1.25E-07	2.62E-07	0.00E+00	3.87E-07	2.52E-08	4.19E-08	0.00E+00	6.72E-08	1.00E-07	1.96E-07	0.00E+00	2.96E-07	2.15E-08	3.19E-08	0.00E+00	5.35E-08	1.65E-08	1.88E-08	0.00E+00	3.52E-08
2016	479228.1	3743327	2.17E-07	3.91E-07	0.00E+00	6.08E-07	2.06E-07	4.33E-07	0.00E+00	6.39E-07	4.16E-08	6.92E-08	0.00E+00	1.11E-07	1.65E-07	3.23E-07	0.00E+00	4.88E-07	3.55E-08	5.27E-08	0.00E+00	8.82E-08	2.72E-08	3.09E-08	0.00E+00	5.81E-08
2017	479219.7	3743310	2.12E-07	3.82E-07	0.00E+00	5.94E-07	2.01E-07	4.23E-07	0.00E+00	6.24E-07	4.07E-08	6.76E-08	0.00E+00	1.08E-07	1.61E-07	3.15E-07	0.00E+00	4.77E-07	3.47E-08	5.14E-08	0.00E+00	8.62E-08	2.65E-08	3.02E-08	0.00E+00	5.67E-08
2018	479211.3	3743294	2.07E-07	3.73E-07	0.00E+00	5.80E-07	1.96E-07	4.13E-07	0.00E+00	6.09E-07	3.97E-08	6.60E-08	0.00E+00	1.06E-07	1.58E-07	3.08E-07	0.00E+00	4.65E-07	3.39E-08	5.02E-08	0.00E+00	8.41E-08	2.59E-08	2.95E-08	0.00E+00	5.54E-08
2019	479203	3743278	2.02E-07	3.64E-07	0.00E+00	5.66E-07	1.92E-07	4.03E-07	0.00E+00	5.94E-07	3.87E-08	6.44E-08	0.00E+00	1.03E-07	1.54E-07	3.00E-07	0.00E+00	4.54E-07	3.31E-08	4.90E-08	0.00E+00	8.21E-08	2.53E-08	2.88E-08	0.00E+00	5.40E-08
2020	479194.6	3743262	1.97E-07	3.55E-07	0.00E+00	5.52E-07	1.87E-07	3.93E-07	0.00E+00	5.79E-07	3.78E-08	6.27E-08	0.00E+00	1.01E-07	1.50E-07	2.93E-07	0.00E+00	4.43E-07	3.22E-08	4.78E-08	0.00E+00	8.00E-08	2.46E-08	2.81E-08	0.00E+00	5.27E-08
2021	479186.2	3743246	1.92E-07	3.46E-07	0.00E+00	5.38E-07	1.82E-07	3.83E-07	0.00E+00	5.65E-07	3.68E-08	6.11E-08	0.00E+00	9.79E-08	1.46E-07	2.85E-07	0.00E+00	4.31E-07	3.14E-08	4.65E-08	0.00E+00	7.79E-08	2.40E-08	2.73E-08	0.00E+00	5.13E-08
2022	479177.9	3743229	1.87E-07	3.37E-07	0.00E+00	5.24E-07	1.77E-07	3.73E-07	0.00E+00	5.50E-07	3.58E-08	5.95E-08	0.00E+00	9.53E-08	1.42E-07	2.78E-07	0.00E+00	4.20E-07	3.06E-08	4.53E-08	0.00E+00	7.59E-08	2.34E-08	2.66E-08	0.00E+00	5.00E-08
2023	479169.5	3743213	1.82E-07	3.28E-07	0.00E+00	5.10E-07	1.72E-07	3.63E-07	0.00E+00	5.35E-07	3.49E-08	5.79E-08	0.00E+00	9.28E-08	1.38E-07	2.70E-07	0.00E+00	4.09E-07	2.98E-08	4.41E-08	0.00E+00	7.39E-08	2.27E-08	2.59E-08	0.00E+00	4.87E-08
2024	479161.1	3743197	1.77E-07	3.19E-07	0.00E+00	4.96E-07	1.68E-07	3.53E-07	0.00E+00	5.21E-07	3.39E-08	5.64E-08	0.00E+00	9.03E-08	1.35E-07	2.63E-07	0.00E+00	3.98E-07	2.90E-08	4.29E-08	0.00E+00	7.19E-08	2.21E-08	2.52E-08	0.00E+00	4.73E-08
2025	479152.8	3743181	1.72E-07	3.1E-07	0.00E+00	4.82E-07	1.63E-07	3.43E-07	0.00E+00	5.06E-07	3.30E-08	5.48E-08	0.00E+00	8.78E-08	1.31E-07	2.56E-07	0.00E+00	3.87E-07	2.82E-08	4.17E-08	0.00E+00	6.99E-08	2.15E-08	2.45E-08	0.00E+00	4.60E-08
2026	479144.4	3743165	1.67E-07	3.02E-07	0.00E+00	4.69E-07	1.59E-07	3.34E-07	0.00E+00	4.93E-07	3.21E-08	5.33E-08	0.00E+00	8.54E-08	1.27E-07	2.49E-07	0.00E+00	3.76E-07	2.74E-08	4.06E-08	0.00E+00	6.80E-08	2.09E-08	2.38E-08	0.00E+00	4.48E-08
2027	479136	3743149	1.63E-07	2.93E-07	0.00E+00	4.56E-07	1.54E-07	3.25E-07	0.00E+00	4.79E-07	3.12E-08	5.19E-08	0.00E+00	8.31E-08	1.24E-07	2.42E-07	0.00E+00	3.66E-07	2.66E-08	3.95E-08	0.00E+00	6.61E-08	2.04E-08	2.32E-08	0.00E+00	4.35E-08
2028	479127.7	3743132	1.58E-07	2.85E-07	0.00E+00	4.44E-07	1.50E-07	3.16E-07	0.00E+00	4.66E-07	3.03E-08	5.04E-08	0.00E+00	8.08E-08	1.20E-07	2.35E-07	0.00E+00	3.56E-07	2.59E-08	3.84E-08	0.00E+00	6.43E-08	1.98E-08	2.25E-08	0.00E+00	4.23E-08
2029	479119.3	3743116	1.54E-07	2.77E-07	0.00E+00	4.31E-07	1.46E-07	3.07E-07	0.00E+00	4.53E-07	2.95E-08	4.90E-08	0.00E+00	7.85E-08	1.17E-07	2.29E-07	0.00E+00	3.46E-07	2.52E-08	3.73E-08	0.00E+00	6.25E-08	1.92E-08	2.19E-08	0.00E+00	4.12E-08
2030	479110.9	3743100	1.50E-07	2.7E-07	0.00E+00	4.19E-07	1.42E-07	2.98E-07	0.00E+00	4.40E-07	2.87E-08	4.77E-08	0.00E+00	7.64E-08	1.14E-07	2.23E-07	0.00E+00	3.36E-07	2.45E-08	3.63E-08	0.00E+00	6.08E-08	1.87E-08	2.13E-08	0.00E+00	4.00E-08
2031	479102.6	3743084	1.46E-07	2.62E-07	0.00E+00	4.08E-07	1.38E-07	2.90E-07	0.00E+00	4.28E-07	2.79E-08	4.64E-08	0.00E+00	7.43E-08	1.11E-07	2.16E-07	0.00E+00	3.27E-07	2.38E-08	3.53E-08	0.00E+00	5.91E-08	1.82E-08	2.07E-08	0.00E+00	3.90E-08
2032	479094.2	3743068	1.42E-07	2.55E-07	0.00E+00	3.97E-07	1.34E-07	2.82E-07	0.00E+00	4.17E-07	2.72E-08	4.51E-08	0.00E+00	7.23E-08	1.08E-07	2.11E-07	0.00E+00	3.18E-07	2.32E-08	3.44E-08	0.00E+00	5.75E-08	1.77E-08	2.02E-08	0.00E+00	3.79E-08
2033	479937.3	3742736	1.38E-05	2.49E-05	0.00E+00	3.87E-05	1.31E-05	2.75E-05	0.00E+00	4.06E-05	2.65E-06	4.40E-06	0.00E+00	7.04E-06	1.05E-05	2.05E-05	0.00E+00	3.10E-05	2.26E-06	3.35E-06	0.00E+00	5.61E-06	1.73E-06	1.97E-06	0.00E+00	3.69E-06
2034	479956	3742736	1.49E-05	2.68E-05	0.00E+00	4.17E-05	1.41E-05	2.96E-05	0.00E+00	4.37E-05	2.85E-06	4.74E-06	0.00E+00	7.59E-06	1.13E-05	2.21E-05	0.00E+00	3.34E-05	2.43E-06	3.61E-06	0.00E+00	6.04E-06	1.86E-06	2.12E-06	0.00E+00	3.98E-06

	UnMitigated				T2				T2L3				T3				T3L3				T4			
	1.97E-02	3.84E-02	0.00E+00		1.87E-02	4.25E-02	0.00E+00		3.77E-03	6.79E-03	0.00E+00		1.50E-02	3.17E-02	0.00E+00		3.22E-03	5.17E-03	0.00E+00		2.46E-03	3.03E-03	0.00E+00	
	Yr 1	Yr 2	Yr 3		Yr 1	Yr 2	Yr 3		Yr 1	Yr 2	Yr 3		Yr 1	Yr 2	Yr 3		Yr 1	Yr 2	Yr 3		Yr 1	Yr 2	Yr 3	
1	4801303	3742949	2.55E-03	4.99E-03	2.42E-03	5.52E-03	0.00E+00		4.90E-04	8.81E-04	0.00E+00		1.94E-03	4.11E-03	0.00E+00		4.18E-04	6.71E-04	0.00E+00		3.20E-04	3.94E-04	0.00E+00	
2	480268	3742901	1.16E-03	2.27E-03	1.10E-03	2.51E-03	0.00E+00		2.23E-04	4.81E-04	0.00E+00		8.85E-04	1.87E-03	0.00E+00		1.90E-04	3.05E-04	0.00E+00		1.45E-04	1.79E-04	0.00E+00	
3	480235	3742915	1.39E-03	2.72E-03	1.32E-03	3.01E-03	0.00E+00		2.67E-04	4.81E-04	0.00E+00		2.28E-04	2.24E-03	0.00E+00		2.28E-04	3.66E-04	0.00E+00		1.74E-04	2.15E-04	0.00E+00	
4	4801361	3742956	2.15E-03	4.20E-03	2.04E-03	4.65E-03	0.00E+00		4.13E-04	7.43E-04	0.00E+00		1.64E-03	3.47E-03	0.00E+00		3.52E-04	5.66E-04	0.00E+00		2.69E-04	3.32E-04	0.00E+00	
5	4801031	3742969	2.36E-03	4.61E-03	2.24E-03	5.10E-03	0.00E+00		4.53E-04	8.14E-04	0.00E+00		1.80E-03	3.80E-03	0.00E+00		3.86E-04	6.20E-04	0.00E+00		2.95E-04	3.64E-04	0.00E+00	
6	4802497	3742929	1.25E-03	2.45E-03	1.19E-03	2.71E-03	0.00E+00		2.41E-04	4.33E-04	0.00E+00		9.55E-04	2.02E-03	0.00E+00		2.05E-04	3.30E-04	0.00E+00		1.57E-04	1.94E-04	0.00E+00	
7	4801845	3742956	1.70E-03	3.31E-03	1.61E-03	3.67E-03	0.00E+00		3.26E-04	5.86E-04	0.00E+00		1.29E-03	2.73E-03	0.00E+00		2.78E-04	4.46E-04	0.00E+00		2.12E-04	2.62E-04	0.00E+00	
8	4801519	3742969	1.91E-03	3.74E-03	1.82E-03	3.01E-03	0.00E+00		1.67E-03	3.08E-03	0.00E+00		1.46E-03	5.03E-04	0.00E+00		1.13E-04	2.70E-04	0.00E+00		2.40E-04	2.95E-04	0.00E+00	
9	4801192	3742983	2.11E-03	4.11E-03	2.00E-03	4.55E-03	0.00E+00		4.04E-04	7.27E-04	0.00E+00		1.60E-03	3.39E-03	0.00E+00		1.45E-04	5.53E-04	0.00E+00		3.45E-04	3.25E-04	0.00E+00	
10	4802515	3742978	1.16E-03	2.26E-03	1.10E-03	2.50E-03	0.00E+00		2.22E-04	3.99E-04	0.00E+00		8.81E-04	1.86E-03	0.00E+00		1.89E-04	3.04E-04	0.00E+00		1.45E-04	1.79E-04	0.00E+00	
11	4802185	3742992	1.32E-03	2.58E-03	1.26E-03	2.86E-03	0.00E+00		2.54E-04	4.57E-04	0.00E+00		1.01E-03	2.13E-03	0.00E+00		2.17E-04	3.48E-04	0.00E+00		1.66E-04	2.04E-04	0.00E+00	
12	4801864	3743055	1.31E-03	2.56E-03	1.24E-03	2.83E-03	0.00E+00		2.52E-04	4.53E-04	0.00E+00		9.99E-04	2.11E-03	0.00E+00		2.15E-04	3.45E-04	0.00E+00		1.64E-04	2.02E-04	0.00E+00	
13	4802707	3743070	9.21E-04	1.80E-03	8.74E-04	1.99E-03	0.00E+00		1.77E-04	3.18E-04	0.00E+00		7.01E-04	1.48E-03	0.00E+00		1.51E-04	2.42E-04	0.00E+00		1.15E-04	1.42E-04	0.00E+00	
14	480254	3743077	9.71E-04	1.90E-03	9.21E-04	2.10E-03	0.00E+00		1.86E-04	3.35E-04	0.00E+00		7.39E-04	1.56E-03	0.00E+00		1.59E-04	2.55E-04	0.00E+00		1.21E-04	1.50E-04	0.00E+00	
15	4802372	3743084	1.02E-03	1.99E-03	9.68E-04	2.20E-03	0.00E+00		1.96E-04	3.52E-04	0.00E+00		7.77E-04	1.64E-03	0.00E+00		1.67E-04	2.68E-04	0.00E+00		1.28E-04	1.58E-04	0.00E+00	
16	4802205	3743091	1.07E-03	2.09E-03	1.01E-03	2.31E-03	0.00E+00		2.05E-04	3.69E-04	0.00E+00		8.14E-04	1.72E-03	0.00E+00		1.75E-04	2.81E-04	0.00E+00		1.34E-04	1.65E-04	0.00E+00	
17	4808653	3742749	1.31E-03	2.56E-03	1.24E-03	2.83E-03	0.00E+00		2.51E-04	4.52E-04	0.00E+00		9.98E-04	2.11E-03	0.00E+00		2.14E-04	3.44E-04	0.00E+00		1.64E-04	2.02E-04	0.00E+00	
18	4805823	3742766	1.33E-03	2.59E-03	1.26E-03	2.87E-03	0.00E+00		2.55E-04	4.58E-04	0.00E+00		1.01E-03	2.14E-03	0.00E+00		2.17E-04	3.49E-04	0.00E+00		1.66E-04	2.05E-04	0.00E+00	
19	4808513	3742783	1.35E-03	2.63E-03	1.28E-03	2.91E-03	0.00E+00		2.58E-04	4.65E-04	0.00E+00		1.03E-03	2.17E-03	0.00E+00		2.21E-04	3.54E-04	0.00E+00		1.69E-04	2.08E-04	0.00E+00	
20	480844	3742800	1.37E-03	2.67E-03	1.30E-03	2.96E-03	0.00E+00		2.62E-04	4.72E-04	0.00E+00		1.04E-03	2.20E-03	0.00E+00		2.24E-04	3.59E-04	0.00E+00		1.71E-04	2.11E-04	0.00E+00	
21	4803836	3742817	1.39E-03	2.72E-03	1.32E-03	2.81E-03	0.00E+00		2.67E-04	4.80E-04	0.00E+00		1.06E-03	2.24E-03	0.00E+00		2.28E-04	3.65E-04	0.00E+00		1.74E-04	2.15E-04	0.00E+00	
22	4808298	3742834	1.42E-03	2.76E-03	1.34E-03	3.06E-03	0.00E+00		2.72E-04	4.88E-04	0.00E+00		1.08E-03	2.28E-03	0.00E+00		2.32E-04	3.72E-04	0.00E+00		1.77E-04	2.18E-04	0.00E+00	
23	4808228	3742801	1.37E-03	2.81E-03	1.37E-03	3.11E-03	0.00E+00		2.77E-04	4.98E-04	0.00E+00		1.10E-03	2.32E-03	0.00E+00		2.36E-04	3.79E-04	0.00E+00		1.80E-04	2.23E-04	0.00E+00	
24	4808153	3742869	1.39E-03	2.87E-03	1.42E-03	3.17E-03	0.00E+00		2.82E-04	5.07E-04	0.00E+00		1.12E-03	2.37E-03	0.00E+00		2.41E-04	3.86E-04	0.00E+00		1.84E-04	2.27E-04	0.00E+00	
25	4808084	3742886	1.50E-03	2.93E-03	1.42E-03	3.24E-03	0.00E+00		2.88E-04	5.17E-04	0.00E+00		1.14E-03	2.41E-03	0.00E+00		2.45E-04	3.94E-04	0.00E+00		1.88E-04	2.31E-04	0.00E+00	
26	4801013	3742903	1.53E-03	2.99E-03	1.45E-03	3.31E-03	0.00E+00		2.94E-04	5.28E-04	0.00E+00		1.17E-03	2.46E-03	0.00E+00		2.50E-04	4.02E-04	0.00E+00		1.91E-04	2.36E-04	0.00E+00	
27	4809082	3742886	1.56E-03	3.05E-03	1.48E-03	3.38E-03	0.00E+00		2.96E-04	5.39E-04	0.00E+00		1.19E-03	2.52E-03	0.00E+00		2.56E-04	4.11E-04	0.00E+00		1.96E-04	2.41E-04	0.00E+00	
28	4807871	3742937	1.60E-03	3.12E-03	1.52E-03	3.45E-03	0.00E+00		3.06E-04	5.51E-04	0.00E+00		1.22E-03	2.57E-03	0.00E+00		2.61E-04	4.20E-04	0.00E+00		2.00E-04	2.47E-04	0.00E+00	
29	480780	3742954	1.63E-03	3.19E-03	1.55E-03	3.53E-03	0.00E+00		3.13E-04	5.64E-04	0.00E+00		1.24E-03	2.63E-03	0.00E+00		2.67E-04	4.29E-04	0.00E+00		2.04E-04	2.52E-04	0.00E+00	
30	4807729	3742971	1.67E-03	3.26E-03	1.58E-03	3.61E-03	0.00E+00		3.20E-04	5.76E-04	0.00E+00		1.27E-03	2.69E-03	0.00E+00		2.73E-04	4.39E-04	0.00E+00		2.09E-04	2.58E-04	0.00E+00	
31	4807657	3742988	1.71E-03	3.34E-03	1.62E-03	3.69E-03	0.00E+00		3.28E-04	5.90E-04	0.00E+00		1.30E-03	2.75E-03	0.00E+00		2.80E-04	4.49E-04	0.00E+00		2.14E-04	2.64E-04	0.00E+00	
32	4807586	3743006	1.75E-03	3.41E-03	1.66E-03	3.78E-03	0.00E+00		3.35E-04	6.03E-04	0.00E+00		1.33E-03	2.81E-03	0.00E+00		2.86E-04	4.59E-04	0.00E+00		2.19E-04	2.70E-04	0.00E+00	
33	4807515	3742990	1.79E-03	3.49E-03	1.70E-03	3.86E-03	0.00E+00		3.43E-04	6.17E-04	0.00E+00		1.36E-03	2.88E-03	0.00E+00		2.93E-04	4.70E-04	0.00E+00		2.24E-04	2.76E-04	0.00E+00	
34	4807444	3743040	1.83E-03	3.57E-03	1.74E-03	3.95E-03	0.00E+00		3.51E-04	6.31E-04	0.00E+00		1.39E-03	2.95E-03	0.00E+00		2.99E-04	4.81E-04	0.00E+00		2.29E-04	2.82E-04	0.00E+00	
35	4807373	3743057	1.87E-03	3.66E-03	1.78E-03	4.04E-03	0.00E+00		3.59E-04	6.46E-04	0.00E+00		1.43E-03	3.01E-03	0.00E+00		3.06E-04	4.92E-04	0.00E+00		2.34E-04	2.89E-04	0.00E+00	
36	4807302	3743074	1.92E-03	3.74E-03	1.82E-03	4.14E-03	0.00E+00		3.67E-04	6.61E-04	0.00E+00		1.46E-03	3.08E-03	0.00E+00		3.13E-04	5.03E-04	0.00E+00		2.40E-04	2.96E-04	0.00E+00	
37	4807223	3743091	1.96E-03	3.83E-03	1.86E-03	4.23E-03	0.00E+00		3.76E-04	6.76E-04	0.00E+00		1.49E-03	3.15E-03	0.00E+00		3.21E-04	5.15E-04	0.00E+00		2.45E-04	3.02E-04	0.00E+00	
38	4807315	3743108	2.00E-03	3.91E-03	1.90E-03	4.33E-03	0.00E+00		3.84E-04	6.91E-04	0.00E+00		1.53E-03	3.23E-03	0.00E+00		3.28E-04	5.26E-04	0.00E+00		2.51E-04	3.09E-04	0.00E+00	
39	4807082	3743125	2.05E-03	4.00E-03	1.94E-03	4.42E-03	0.00E+00		3.93E-04	7.07E-04	0.00E+00		1.56E-03	3.30E-03	0.00E+00		3.35E-04	5.38E-04	0.00E+00		2.56E-04	3.16E-04	0.00E+00	
40	4807017	3743142	2.09E-03	4.09E-03	1.99E-03	4.52E-03	0.00E+00		4.01E-04	7.22E-04	0.00E+00		1.59E-03	3.37E-03	0.00E+00		3.43E-04	5.50E-04	0.00E+00		2.62E-04	3.23E-04	0.00E+00	
41	4806946	3743160	2.14E-03	4.17E-03	2.03E-03	4.62E-03	0.00E+00		4.10E-04	7.38E-04	0.00E+00		1.63E-03	3.44E-03	0.00E+00		3.50E-04	5.62E-04	0.00E+00		2.67E-04	3.30E-04	0.00E+00	
42	4806875	3743177	2.18E-03	4.26E-03	2.07E-03	4.71E-03	0.00E+00		4.19E-04	7.53E-04	0.00E+00		1.66E-03	3.51E-03	0.00E+00		3.57E-04	5.73E-04	0.00E+00		2.73E-04	3.37E-04	0.00E+00	
43	4809153	3742749	1.13E-03	2.32E-03	1.07E-03	2.57E-03	0.00E+00		2.28E-03	4.10E-04	0.00E+00		9.05E-04	1.91E-03	0.00E+00		1.94E-03	3.12E-03	0.00E+00		1.49E-03	1.83E-03	0.00E+00	
44	4809082	3742766	1.20E-03	2.35E-03	1.14E-03	2.60E-03	0.00E+00		2.31E-03	4.15E-04	0.00E+00		9.16E-04	1.94E-03	0.00E+00		1.97E-03	3.16E-03	0.00E+00		1.50E-03	1.86E-03	0.00E+00	
45	4809011	3742783	1.22E-03	2.38E-03	1.16E-03	2.63E-03	0.00E+00		2.34E-03	4.21E-04	0.00E+00		9.28E-04	1.96E-03	0.00E+00		1.99E-03	3.20E-03	0.00E+00		1.52E-03	1.88E-03	0.00E+00	
46	4808939	3742800	1.24E-03	2.41E-03	1.17E-03	2.67E-03	0.00E+00		2.37E-03	4.27E-04	0.00E+00		9.41E-04	1.99E-03	0.00E+00		2.02E-03	3.25E-03	0.00E+00		1.55E-03	1.91E-03	0.00E+00	
47	4808868	3742817	1.26E-03	2.45E-03	1.19E-03	2.71E-03	0.00E+00		2.41E-03	4.33E-04	0.00E+00		9.56E-04	2.02E-03	0.00E+00		2.05E-03	3.30E-03	0.00E+00		1.57E-03	1.94E-03	0.00E+00	
48	4808797	3742835	1.28E-03	2.49E-03	1.21E-03	2.76E-03	0.00E+00		2.45E-03	4.40E-04	0.00E+00		9.71E-04	2.05E-03	0.00E+00		2.09E-03	3.35E-03	0.00E+00		1.60E-03	1.97E-03	0.00E+00	
49	4808725	3742852	1.30E-03	2.53E-03	1.23E-03	2.80E-03	0.00E+00		2.49E-03	4.48E-04	0.00E+00		9.88E-04	2.09E-03	0.00E+00		2.12E-03	3.41E-03	0.00E+00		1.62E-03	2.00E-03	0.00E+00	
50	4808654	3742869	1.32E-03	2.58E-03	1.25E-03	2.85E-03	0.00E+00		2.53E-03	4.56E-04	0.00E+00		1.01E-03	2.13E-03	0.00E+00		2.16E-03	3.47E-03	0.00E+00		1.65E-03	2.04E-03	0.00E+00	
51	4808583	3742886	1.35E-03	2.63E-03	1.28E-03	2.91E-03	0.00E+00		2.58E-03	4.64E-04	0.00E+00		1.02E-03	2.17E-03	0.00E+00		2.20E-03	3.54E-03	0.00E+00		1.68E-03	2.08E-03	0.00E+00	
52	4808512	3742903	1.37E-03	2.68E-03	1.30E-03	2.96E-03	0.00E+00		2.63E-03	4.73E-04	0.00E+00		1.04E-03	2.21E-03	0.00E+00		2.24E-03	3.60E-03	0.00E+00		1.72E-03	2.12E-03	0.00E+00	
53	480844	3742920	1.40E-03	2.73E-03	1.33E-03	3.02E-03	0.00E+00		2.68E-03	4.83E-04	0.00E+00		1.07E-03	2.25E-03	0.00E+00		2.29E-03	3.68E-03	0.00E+00		1.75E-03	2.16E-03	0.00E+00	
54	4808369	3742938	1.43E-03	2.79E-03	1.35E-03	3.08E-03	0.00E+00		2.74E-03	4.93E-04	0.00E+00		1.09E-03	2.30E-03	0.00E+00		2.34E-03	3.75E-03	0.00E+00		1.79E-03	2.20E-03	0.00E+00	
55	4808293	3742955	1.46E-03	2.85E-03	1.38E-03	3.15E-03	0.00E+00		2.80E-03	5.03E-04	0.00E+00		1.11E-03	2.35E-03	0.00E+00		2.39E-03	3.83E-03	0.00E+00		1.82E-03	2.25E-03	0.00E+00	
56	4808227	3742972	1.49E-03	2.91E-03	1.41E-03	3.21E-03	0.00E+00		2.85E-03	5.14E-04	0.00E+00		1.13E-03	2.40E-03	0.00E+00		2.44E-03	3.91E-03	0.00E+00		1.86E-03	2.30E-03	0.00E+00	
57	4808153	3742989	1.52E-03	2.97E-03	1.44E-03	3.28E-03	0.00E+00		2.92E-03	5.25E-04	0.00E+00		1.16E-03	2.45E-03	0.00E+00		2.49E-03	3.99E-03	0.00E+00		1.90E-03	2.35E-03	0.00E+00	
58	4808084	3743006	1.55E-03	3.03E-03	1.47E-03	3.35E-03	0.00E+00		2.98E-03	5.36E-04	0.00E+00		1.18E-03	2.50E-03	0.00E+00		2.54E-03	4.08E-03	0.00E+00		1.94E-03	2.40E-03	0.00E+00	
59	4808013	3743023	1.59E-03	3.10E-03	1.51E-03	3.43E-03	0.00E+00		3.04E-03	5.48E-04	0.00E+00		1.21E-03	2.56E-03	0.00E+00		2.60E-03	4.17E-03	0.00E+00		1.99E-03	2.45E-03	0.00E+00	
60	4807941	3743040	1.62E-03	3.17E-03	1.54E-03	3.50E-03	0.00E+00		3.11E-03	5.60E-04	0.00E+00		1.23E-03	2.61E-03	0.00E+00		2.65E-03	4.26E-03	0.00E+00		2.03E-03	2.50E-03	0.00E+00	
61	480787	3743058	1.66E-03	3.24E-03	1.57E-03	3.58E-03	0.00E+00		3.18E-03	5.72E-04	0.00E+00		1.26E-03	2.67E-03	0.00E+00		2.71E-03	4.35E-03	0.00E+00		2.07E-03	2.56E-03	0.00E+00	
62	4807793	3743075	1.69E-03	3.31E-03	1.61E-03	3.66E-03	0.00E+00		3.25E-03	5.85E-04	0.00E+00		1.29E-03	2.73E-03	0.00E+00		2.77E-03	4.45E-03	0.00E+00		2.12E-03	2.61E-03	0.00E+00	
63	4807772	3743092	1.73E-03	3.38E-03	1.64E-03	3.74E-03	0.00E+00		3.32E-03	5.97E-04	0.00E+00		1.32E-03	2.79E-03	0.00E+00		2.83E-03	4.55E-03	0.00E+00		2.17E-03	2.67E-03	0.00E+00	
64	4807765	3743109	1.77E-03	3.45E-03	1.68E-03	3.82E-03	0.00E+00		3.39E-03	6.10E-03	0.00E+00		1.35E-03	2.85E-03	0.00E+00		2.89E-03	4.65E-03	0.00E+00		2.21E-03	2.73E-03	0.00E+00	
65	4807583	3743126	1.81E-03	3.53E-03	1.71E-03	3.90E-03	0.00E+00		3.47E-03	6.23E-03	0.00E+00		1.38E-03	2.91E-03	0.00E+00		2.96E-03	4.75E-03	0.00E+00		2.26E-03	2.79E-03	0.00E+00	
66	4807514	3743143	1.84E-03	3.60E-03	1.75E-03	3.99E-03	0.00E+00		3.54E-03	6.37E-03	0.00E+00		1.40E-03	2.97E-03	0.00E+00		3.02E-03	4.85E-03	0.00E+00		2.31E-03	2.85E-03	0.00E+00	
67	4807442	3743161	1.88E-03	3.68E-03	1.79E-03	4.07E-03	0.00E+00		3.61E-03	6.50E-03	0.00E+00		1.43E-03	3.03E-03	0.00E+00		3.08E-03	4.95E-03	0.00E+00		2.36E-03	2.91E-03	0.00E+00	
68	4807371	3743178	1.92E-03	3.75E-03	1.82E-03	4.15E-03	0.00E+00		3.69E-03	6.63E-03	0.00E+00		1.46E-03	3.10E-03	0.00E+00		3.15E-03	5.05E-03	0.00E+00		2.41E-03	2.97E-03	0.00E+00	
69	4809653	3742749	1.08E-03	2.11E-03	1.03E-03	2.34E-03	0.00E+00		2.08E-03	3.74E-04	0.00E+00		1.74E-03	2.84E-03	0.00E+00		2.84E-03	3.88E-03	0.00E+00		1.77E-03	1.67E-03	0.00E+00	
70	4809581	3742766	1.10E-03	2.14E-03	1.04E-03	2.37E-03	0.00E+00		2.10E-03	3.78E-04	0.00E+00		1.76E-03	2.88E-03	0.00E+00		2.88E-03	3.94E-03	0.00E+00		1.79E-03	1.69E-03	0.00E+00	
71	480951	3742783	1.11E-03	2.17E-03	1.05E-03	2.40E-03	0.00E+00		2.13E-03	3.83E-04	0.00E+00		1.79E-03	2.91E-03	0.00E+00		2.91E-03	3.99E-03	0.00E+00		1.81E-03	1.71E-03	0.00E+00	
72	4809243	3742801	1.12E-03	2.19E-03	1.07E-03	2.43E-03	0.00E+00		2.16E-03	3.88E-04	0.00E+00		1.81E-03	2.95E-03	0.00E+00		2.94E-03	4.08E-03	0.00E+00		1.84E-03	1.73E-03	0.00E+00	
73	4809367	3742818	1.14E-03	2.23E-03	1.08E-03	2.46E-03	0.00E+00		2.19E-03	3.93E-04	0.00E+00		1.84E-03	2.99E-03	0.00E+00		2.98E-03	4.13E-03	0.00E+00		1.87E-03	1.76E-03	0.00E+00	
74	4809296	3742835	1.16E-03	2.26E-03	1.10E-03	2.50E-03	0.00E+00		2.22E-03	3.99E-04	0.00E+00		1.86E-03	3.02E-03	0.00E+00		3.02E-03	4.18E-03	0.00E+00		1.89E-03	1.79E-03	0.00E+00	
75	4809224	3742852	1.18E-03	2.30E-03	1.12E-03	2.54E-03	0.00E+00		2.25E-03	4.06E-04	0.00E+00		1.89E-03	3.06E-03	0.00E+00		3.06E-03	4.23E-03	0.00E+00		1.92E-03	1.81E-03	0.00E+00	
76	4809153	3742869	1.19E-03	2.33E-03	1.13E-03	2.58E-03	0.00E+00		2.29E-03	4.12E-04	0.00E+00		1.92E-03	3.14E-03	0.00E+00		3.09E-03	4.28E-03	0.00E+00		1.96E-03	1.84E-03	0.00E+00	
77	4809082	3742886	1.15E-03	2.37E-03	1.09E-03	2.63E-03	0.00E+00		2.33E-03	4.20E-04	0.00E+00		1.96E-03	3.19E-03	0.00E+00		3.13E-03	4.33E-03	0.00E+00		1.99E-03	1.88E-03	0.00E+00	
78	480901	3742904	1.24E-03	2.42E-03	1.17E-03	2.67E-03	0.00E+00		2.37E-03	4.27E-04	0.00E+00		1.99E-03	3.25E-03	0.00E+00		3.17E-03	4.38E-03	0.00E+00		2.03E-03	1.91E-03	0.00E+00	
79	4809393	3742921	1.26E-03	2.46E-03	1.20E-03	2.72E-03	0.00E+00		2.42E-03	4.35E-04	0.00E+00		2.03E-03	3.31E-03	0.00E+00		3.21E-03	4.46E-03	0.00E+00		2.06E-03	1.95E-03	0.00E+00	
80	4808867	3742938	1.28E-03	2.51E-03	1.22E-03	2.77E-03	0.00E+00		2.46E-03	4.43E-04	0.00E+00		2.07E-03	3.38E-03	0.00E+00		3.26E-03	4.52E-03	0.00E+00		2.10E-03	1.98E-03	0.00E+00	
81	4808276	3742955	1.31E-03	2.56E-03	1.24E-03	2.83E-03	0.00E+00		2.51E-03	4.52E-04	0.00E+00		2.11E-03	3.44E-03	0.00E+00		3.32E-03	4.59E-03	0.00E+00		2.14E-03	2.02E-03	0.00E+00	
82	4808725	3742972	1.34E-03	2.61E-03	1.27E-03	2.89E-03	0.00E+00		2.56E-03	4.61E-04	0.00E+00		2.15E-03	3.51E-03	0.00E+00		3.38E-03	4.67E-03	0.00E+00		2.19E-03	2.06E-03	0.00E+00	
83	4808653	3742990	1.36E-03	2.66E-03	1.29E-03	2.94E-03	0.00E+00		2.61E-03	4.70E-04	0.00E+00		2.19E-03	3.58E-03	0.00E+00		3.44E-03	4.76E-03	0.00E+00		2.23E-03	2.10E-03	0.00E+00	
84	4808582	3743007	1.39E-03	2.72E-03	1.32E-03	3.00E-03	0.00E+00		2.67E-03	4.80E-04	0.00E+00		2.24E-03	3.65E-03	0.00E+00		3.50E-03	4.85E-03	0.00E+00		2.28E-03	2.15E-03	0.00E+00	
85	4808512	3743024	1.42E-03	2.77E-03	1.35E-03	3.07E-03	0.00E+00		2.72E-03	4.90E-04	0.00E+00		2.29E-03	3.73E-03	0.00E+00		3.56E-03	4.94E-03	0.00E+00		2.32E-03	2.19E-03	0.00E+00	
86	4808439	3743041	1.45E-03	2.83E-03	1.37E-03	3.13E-03	0.00E+00		2.78E-03	5.00E-04	0.00E+00		2.33E-03	3.81E-03	0.00E+00		3.62E-03	5.03E-03	0.00E+00		2.37E-03	2.24E-03	0.00E+00	
87	4808368	3743058	1.48E-03	2.89E-03	1.40E-03	3.19E-03	0.00E+00		2.84E-03	5.10E-04	0.00E+00		2.38E-03	3.89E-03	0.00E+00		3.68E-03	5.12E-03	0.00E+00		2.42E-03	2.28E-03	0.00E+00	

126	481058.1	3742767	9.22E-05	1.80E-04	0.00E+00	8.74E-05	1.99E-04	0.00E+00	1.77E-05	3.18E-05	0.00E+00	7.02E-05	1.48E-04	0.00E+00	1.51E-05	2.42E-05	0.00E+00	1.15E-05	1.42E-05	0.00E+00
127	481050.9	3742784	9.32E-05	1.82E-04	0.00E+00	8.84E-05	2.01E-04	0.00E+00	1.79E-05	3.22E-05	0.00E+00	7.09E-05	1.50E-04	0.00E+00	1.52E-05	2.45E-05	0.00E+00	1.17E-05	1.44E-05	0.00E+00
128	481043.7	3742801	9.42E-05	1.84E-04	0.00E+00	8.94E-05	2.04E-04	0.00E+00	1.81E-05	3.25E-05	0.00E+00	7.18E-05	1.52E-04	0.00E+00	1.54E-05	2.48E-05	0.00E+00	1.18E-05	1.45E-05	0.00E+00
129	481036.6	3742818	9.54E-05	1.86E-04	0.00E+00	9.05E-05	2.06E-04	0.00E+00	1.83E-05	3.29E-05	0.00E+00	7.27E-05	1.54E-04	0.00E+00	1.56E-05	2.51E-05	0.00E+00	1.19E-05	1.47E-05	0.00E+00
130	481029.4	3742835	9.67E-05	1.89E-04	0.00E+00	9.17E-05	2.09E-04	0.00E+00	1.85E-05	3.34E-05	0.00E+00	7.36E-05	1.56E-04	0.00E+00	1.58E-05	2.54E-05	0.00E+00	1.21E-05	1.49E-05	0.00E+00
131	481022.3	3742853	9.80E-05	1.91E-04	0.00E+00	9.30E-05	2.12E-04	0.00E+00	1.88E-05	3.38E-05	0.00E+00	7.46E-05	1.58E-04	0.00E+00	1.60E-05	2.58E-05	0.00E+00	1.23E-05	1.51E-05	0.00E+00
132	481015.1	3742870	9.94E-05	1.94E-04	0.00E+00	9.43E-05	2.15E-04	0.00E+00	1.91E-05	3.43E-05	0.00E+00	7.57E-05	1.60E-04	0.00E+00	1.63E-05	2.61E-05	0.00E+00	1.24E-05	1.53E-05	0.00E+00
133	481008	3742887	1.01E-04	1.97E-04	0.00E+00	9.58E-05	2.18E-04	0.00E+00	1.94E-05	3.48E-05	0.00E+00	7.69E-05	1.63E-04	0.00E+00	1.65E-05	2.65E-05	0.00E+00	1.26E-05	1.56E-05	0.00E+00
134	481000.8	3742904	1.03E-04	2.00E-04	0.00E+00	9.73E-05	2.21E-04	0.00E+00	1.97E-05	3.54E-05	0.00E+00	7.81E-05	1.65E-04	0.00E+00	1.68E-05	2.69E-05	0.00E+00	1.28E-05	1.58E-05	0.00E+00
135	480993.6	3742922	1.04E-04	2.04E-04	0.00E+00	9.89E-05	2.25E-04	0.00E+00	2.00E-05	3.60E-05	0.00E+00	7.94E-05	1.68E-04	0.00E+00	1.71E-05	2.74E-05	0.00E+00	1.30E-05	1.61E-05	0.00E+00
136	480986.5	3742939	1.06E-04	2.07E-04	0.00E+00	1.01E-04	2.29E-04	0.00E+00	2.03E-05	3.66E-05	0.00E+00	8.07E-05	1.71E-04	0.00E+00	1.73E-05	2.78E-05	0.00E+00	1.33E-05	1.64E-05	0.00E+00
137	480979.3	3742956	1.08E-04	2.11E-04	0.00E+00	1.02E-04	2.33E-04	0.00E+00	2.07E-05	3.72E-05	0.00E+00	8.21E-05	1.74E-04	0.00E+00	1.76E-05	2.83E-05	0.00E+00	1.35E-05	1.66E-05	0.00E+00
138	480972.2	3742973	1.10E-04	2.14E-04	0.00E+00	1.04E-04	2.37E-04	0.00E+00	2.10E-05	3.79E-05	0.00E+00	8.35E-05	1.77E-04	0.00E+00	1.80E-05	2.88E-05	0.00E+00	1.37E-05	1.69E-05	0.00E+00
139	480965	3742990	1.12E-04	2.18E-04	0.00E+00	1.06E-04	2.41E-04	0.00E+00	2.14E-05	3.85E-05	0.00E+00	8.50E-05	1.80E-04	0.00E+00	1.83E-05	2.93E-05	0.00E+00	1.40E-05	1.72E-05	0.00E+00
140	480957.8	3743008	1.14E-04	2.22E-04	0.00E+00	1.08E-04	2.46E-04	0.00E+00	2.18E-05	3.92E-05	0.00E+00	8.66E-05	1.83E-04	0.00E+00	1.86E-05	2.99E-05	0.00E+00	1.42E-05	1.75E-05	0.00E+00
141	480950.7	3743025	1.16E-04	2.26E-04	0.00E+00	1.10E-04	2.50E-04	0.00E+00	2.22E-05	4.00E-05	0.00E+00	8.82E-05	1.86E-04	0.00E+00	1.90E-05	3.04E-05	0.00E+00	1.45E-05	1.79E-05	0.00E+00
142	480943.5	3743042	1.18E-04	2.30E-04	0.00E+00	1.12E-04	2.55E-04	0.00E+00	2.26E-05	4.07E-05	0.00E+00	8.98E-05	1.90E-04	0.00E+00	1.93E-05	3.10E-05	0.00E+00	1.48E-05	1.82E-05	0.00E+00
143	480936.4	3743059	1.20E-04	2.35E-04	0.00E+00	1.14E-04	2.60E-04	0.00E+00	2.30E-05	4.15E-05	0.00E+00	9.15E-05	1.93E-04	0.00E+00	1.97E-05	3.16E-05	0.00E+00	1.50E-05	1.85E-05	0.00E+00
144	480929.2	3743077	1.22E-04	2.39E-04	0.00E+00	1.16E-04	2.64E-04	0.00E+00	2.35E-05	4.22E-05	0.00E+00	9.32E-05	1.97E-04	0.00E+00	2.00E-05	3.22E-05	0.00E+00	1.53E-05	1.89E-05	0.00E+00
145	480922.1	3743094	1.25E-04	2.44E-04	0.00E+00	1.18E-04	2.69E-04	0.00E+00	2.39E-05	4.30E-05	0.00E+00	9.50E-05	2.01E-04	0.00E+00	2.04E-05	3.28E-05	0.00E+00	1.56E-05	1.92E-05	0.00E+00
146	480914.9	3743111	1.27E-04	2.48E-04	0.00E+00	1.21E-04	2.74E-04	0.00E+00	2.44E-05	4.39E-05	0.00E+00	9.68E-05	2.05E-04	0.00E+00	2.08E-05	3.34E-05	0.00E+00	1.59E-05	1.96E-05	0.00E+00
147	480907.7	3743128	1.29E-04	2.53E-04	0.00E+00	1.23E-04	2.80E-04	0.00E+00	2.48E-05	4.47E-05	0.00E+00	9.86E-05	2.09E-04	0.00E+00	2.12E-05	3.40E-05	0.00E+00	1.62E-05	2.00E-05	0.00E+00
148	480900.6	3743145	1.32E-04	2.58E-04	0.00E+00	1.25E-04	2.85E-04	0.00E+00	2.53E-05	4.55E-05	0.00E+00	1.00E-04	2.12E-04	0.00E+00	2.16E-05	3.47E-05	0.00E+00	1.65E-05	2.04E-05	0.00E+00
149	480893.4	3743163	1.34E-04	2.62E-04	0.00E+00	1.28E-04	2.90E-04	0.00E+00	2.58E-05	4.64E-05	0.00E+00	1.02E-04	2.16E-04	0.00E+00	2.20E-05	3.53E-05	0.00E+00	1.68E-05	2.07E-05	0.00E+00
150	480886.3	3743180	1.37E-04	2.67E-04	0.00E+00	1.30E-04	2.96E-04	0.00E+00	2.63E-05	4.72E-05	0.00E+00	1.04E-04	2.20E-04	0.00E+00	2.24E-05	3.60E-05	0.00E+00	1.71E-05	2.11E-05	0.00E+00
151	480807.5	3743369	1.66E-04	3.23E-04	0.00E+00	1.57E-04	3.58E-04	0.00E+00	3.18E-05	5.71E-05	0.00E+00	1.26E-04	2.67E-04	0.00E+00	2.71E-05	4.35E-05	0.00E+00	2.07E-05	2.56E-05	0.00E+00
152	480800.4	3743387	1.68E-04	3.28E-04	0.00E+00	1.60E-04	3.63E-04	0.00E+00	3.22E-05	5.80E-05	0.00E+00	1.28E-04	2.71E-04	0.00E+00	2.75E-05	4.42E-05	0.00E+00	2.10E-05	2.59E-05	0.00E+00
153	480776	3743411	1.77E-04	3.46E-04	0.00E+00	1.68E-04	3.82E-04	0.00E+00	3.39E-05	6.11E-05	0.00E+00	1.35E-04	2.85E-04	0.00E+00	2.90E-05	4.65E-05	0.00E+00	2.21E-05	2.73E-05	0.00E+00
154	480758.7	3743418	1.84E-04	3.58E-04	0.00E+00	1.74E-04	3.96E-04	0.00E+00	3.52E-05	6.33E-05	0.00E+00	1.40E-04	2.96E-04	0.00E+00	3.00E-05	4.82E-05	0.00E+00	2.30E-05	2.83E-05	0.00E+00
155	480741.5	3743425	1.90E-04	3.72E-04	0.00E+00	1.81E-04	4.11E-04	0.00E+00	3.65E-05	6.57E-05	0.00E+00	1.45E-04	3.06E-04	0.00E+00	3.11E-05	5.00E-05	0.00E+00	2.38E-05	2.94E-05	0.00E+00
156	480724.2	3743432	1.97E-04	3.85E-04	0.00E+00	1.87E-04	4.26E-04	0.00E+00	3.79E-05	6.81E-05	0.00E+00	1.50E-04	3.18E-04	0.00E+00	3.23E-05	5.18E-05	0.00E+00	2.47E-05	3.05E-05	0.00E+00
157	480707	3743440	2.05E-04	4.00E-04	0.00E+00	1.94E-04	4.42E-04	0.00E+00	3.92E-05	7.06E-05	0.00E+00	1.56E-04	3.29E-04	0.00E+00	3.35E-05	5.38E-05	0.00E+00	2.56E-05	3.16E-05	0.00E+00
158	480689.8	3743447	2.12E-04	4.14E-04	0.00E+00	2.01E-04	4.58E-04	0.00E+00	4.07E-05	7.32E-05	0.00E+00	1.61E-04	3.42E-04	0.00E+00	3.47E-05	5.57E-05	0.00E+00	2.65E-05	3.27E-05	0.00E+00
159	480101.1	3742529	1.15E-02	2.25E-02	0.00E+00	1.09E-02	2.49E-02	0.00E+00	2.21E-03	3.97E-03	0.00E+00	8.76E-03	1.85E-02	0.00E+00	1.88E-03	3.02E-03	0.00E+00	1.44E-03	1.78E-03	0.00E+00
160	480068.8	3742523	1.41E-02	2.75E-02	0.00E+00	1.34E-02	3.04E-02	0.00E+00	2.70E-03	4.86E-03	0.00E+00	1.07E-02	2.27E-02	0.00E+00	2.31E-03	3.70E-03	0.00E+00	1.76E-03	2.17E-03	0.00E+00
161	480050.6	3742523	1.50E-02	2.92E-02	0.00E+00	1.42E-02	3.23E-02	0.00E+00	2.87E-03	5.17E-03	0.00E+00	1.14E-02	2.41E-02	0.00E+00	2.45E-03	3.93E-03	0.00E+00	1.87E-03	2.31E-03	0.00E+00
162	480032.4	3742523	1.53E-02	2.98E-02	0.00E+00	1.45E-02	3.29E-02	0.00E+00	2.93E-03	5.26E-03	0.00E+00	1.16E-02	2.46E-02	0.00E+00	2.50E-03	4.01E-03	0.00E+00	1.91E-03	2.35E-03	0.00E+00
163	480014.2	3742523	1.51E-02	2.95E-02	0.00E+00	1.43E-02	3.26E-02	0.00E+00	2.89E-03	5.20E-03	0.00E+00	1.15E-02	2.43E-02	0.00E+00	2.47E-03	3.96E-03	0.00E+00	1.89E-03	2.33E-03	0.00E+00
164	479996	3742523	1.45E-02	2.83E-02	0.00E+00	1.38E-02	3.14E-02	0.00E+00	2.78E-03	5.01E-03	0.00E+00	1.11E-02	2.34E-02	0.00E+00	2.38E-03	3.81E-03	0.00E+00	1.82E-03	2.24E-03	0.00E+00
165	479977.7	3742523	1.36E-02	2.65E-02	0.00E+00	1.29E-02	2.93E-02	0.00E+00	2.60E-03	4.68E-03	0.00E+00	1.03E-02	2.18E-02	0.00E+00	2.22E-03	3.56E-03	0.00E+00	1.70E-03	2.09E-03	0.00E+00
166	479959.5	3742523	1.22E-02	2.38E-02	0.00E+00	1.16E-02	2.63E-02	0.00E+00	2.34E-03	4.20E-03	0.00E+00	9.28E-03	1.96E-02	0.00E+00	1.99E-03	3.20E-03	0.00E+00	1.52E-03	1.88E-03	0.00E+00
167	479941.3	3742523	1.04E-02	2.03E-02	0.00E+00	9.87E-03	2.25E-02	0.00E+00	2.00E-03	3.59E-03	0.00E+00	7.92E-03	1.68E-02	0.00E+00	1.70E-03	2.73E-03	0.00E+00	1.30E-03	1.61E-03	0.00E+00
168	479923.1	3742523	8.35E-03	1.63E-02	0.00E+00	7.92E-03	1.80E-02	0.00E+00	1.60E-03	2.88E-03	0.00E+00	6.36E-03	1.34E-02	0.00E+00	1.37E-03	2.19E-03	0.00E+00	1.04E-03	1.29E-03	0.00E+00
169	479904.9	3742523	6.35E-03	1.24E-02	0.00E+00	6.02E-03	1.37E-02	0.00E+00	1.22E-03	2.19E-03	0.00E+00	4.83E-03	1.02E-02	0.00E+00	1.04E-03	1.67E-03	0.00E+00	7.94E-04	9.79E-04	0.00E+00
170	480101.2	3742509	9.63E-03	1.88E-02	0.00E+00	9.13E-03	2.08E-02	0.00E+00	1.85E-03	3.32E-03	0.00E+00	7.33E-03	1.55E-02	0.00E+00	1.58E-03	2.53E-03	0.00E+00	1.20E-03	1.49E-03	0.00E+00
171	480135.2	3742535	7.44E-03	1.45E-02	0.00E+00	7.05E-03	1.61E-02	0.00E+00	1.43E-03	2.57E-03	0.00E+00	5.66E-03	1.20E-02	0.00E+00	1.22E-03	1.95E-03	0.00E+00	9.30E-04	1.15E-03	0.00E+00
172	480068.9	3742503	1.10E-02	2.16E-02	0.00E+00	1.05E-02	2.38E-02	0.00E+00	2.12E-03	3.81E-03	0.00E+00	8.41E-03	1.78E-02	0.00E+00	1.81E-03	2.90E-03	0.00E+00	1.38E-03	1.70E-03	0.00E+00
173	480050.7	3742503	1.16E-02	2.26E-02	0.00E+00	1.10E-02	2.50E-02	0.00E+00	2.22E-03	3.99E-03	0.00E+00	8.80E-03	1.86E-02	0.00E+00	1.89E-03	3.04E-03	0.00E+00	1.45E-03	1.78E-03	0.00E+00
174	480032.4	3742503	1.17E-02	2.28E-02	0.00E+00	1.11E-02	2.52E-02	0.00E+00	2.24E-03	4.03E-03	0.00E+00	8.89E-03	1.88E-02	0.00E+00	1.91E-03	3.07E-03	0.00E+00	1.46E-03	1.80E-03	0.00E+00
175	480014.2	3742503	1.15E-02	2.24E-02	0.00E+00	1.09E-02	2.47E-02	0.00E+00	2.20E-03	3.95E-03	0.00E+00	8.72E-03	1.84E-02	0.00E+00	1.87E-03	3.01E-03	0.00E+00	1.43E-03	1.77E-03	0.00E+00
176	479996	3742503	1.09E-02	2.13E-02	0.00E+00	1.04E-02	2.36E-02	0.00E+00	2.10E-03	3.77E-03	0.00E+00	8.32E-03	1.76E-02	0.00E+00	1.79E-03	2.87E-03	0.00E+00	1.37E-03	1.69E-03	0.00E+00
177	479977.8	3742503	1.01E-02	1.97E-02	0.00E+00	9.59E-03	2.18E-02	0.00E+00	1.94E-03	3.49E-03	0.00E+00	7.70E-03	1.63E-02	0.00E+00	1.65E-03	2.66E-03	0.00E+00	1.26E-03	1.56E-03	0.00E+00
178	479959.6	3742503	9.03E-03	1.76E-02	0.00E+00	8.57E-03	1.95E-02	0.00E+00	1.73E-03	3.12E-03	0.00E+00	6.88E-03	1.45E-02	0.00E+00	1.48E-03	2.37E-03	0.00E+00	1.13E-03	1.39E-03	0.00E+00
179	479941.4	3742503	7.74E-03	1.51E-02	0.00E+00	7.34E-03	1.67E-02	0.00E+00	1.48E-03	2.67E-03	0.00E+00	5.89E-03	1.25E-02	0.00E+00	1.27E-03	2.03E-03	0.00E+00	9.69E-04	1.19E-03	0.00E+00
180	479923.2	3742503	6.36E-03	1.24E-02	0.00E+00	6.04E-03	1.37E-02	0.00E+00	1.22E-03	2.20E-03	0.00E+00	4.84E-03	1.02E-02	0.00E+00	1.04E-03	1.67E-03	0.00E+00	7.96E-04	9.82E-04	0.00E+00
181	479905	3742503	5.06E-03	9.89E-03	0.00E+00	4.80E-03	1.09E-02	0.00E+00	9.71E-04	1.75E-03	0.00E+00	3.86E-03	8.15E-03	0.00E+00	8.29E-04	1.33E-03	0.00E+00	6.33E-04	7.81E-04	0.00E+00
182	480101.2	3742489	8.18E-03	1.60E-02	0.00E+00	7.76E-03	1.77E-02	0.00E+00	1.57E-03	2.82E-03	0.00E+00	6.23E-03	1.32E-02	0.00E+00	1.34E-03	2.15E-03	0.00E+00	1.02E-03	1.26E-03	0.00E+00
183	480129.5	3742501	6.99E-03	1.36E-02	0.00E+00	6.63E-03	1.51E-02	0.00E+00	1.34E-03	2.41E-03	0.00E+00	5.32E-03	1.13E-02	0.00E+00	1.14E-03	1.84E-03	0.00E+00	8.74E-04	1.08E-03	0.00E+00
184	480149.4	3742521	5.97E-03	1.17E-02	0.00E+00	5.67E-03	1.29E-02	0.00E+00	1.15E-03	2.06E-03	0.00E+00	4.55E-03	9.62E-03	0.00E+00	9.78E-04	1.57E-03	0.00E+00	7.47E-04	9.22E-04	0.00E+00
185	480068.9	3742483	8.98E-03	1.75E-02	0.00E+00	8.52E-03	1.94E-02	0.00E+00	1.72E-03	3.10E-03	0.00E+00	6.84E-03	1.45E-02	0.00E+00	1.47E-03	2.36E-03	0.00E+00	1.12E-03	1.39E-03	0.00E+00
186	480050.7	3742483	9.27E-03	1.81E-02	0.00E+00	8.80E-03	2.00E-02	0.00E+00	1.78E-03	3.20E-03	0.00E+00	7.06E-03	1.49E-02	0.00E+00	1.52E-03	2.44E-03	0.00E+00	1.16E-03	1.43E-03	0.00E+00
187	480032.5	3742483	9.28E-03	1.81E-02	0.00E+00	8.81E-03	2.00E-02	0.00E+00	1.78E-03	3.20E-03	0.00E+00	7.07E-03	1.49E-02	0.00E+00	1.52E-03	2.44E-03	0.00E+00	1.16E-03	1.43E-03	0.00E+00
188	480014.3	3742483	9.04E-03	1.76E-02	0.00E+00	8.57E-03	1.95E-02	0.00E+00	1.73E-03	3.12E-03	0.00E+00	6.88E-03	1.46E-02	0.00E+00	1.48E-03	2.37E-03	0.00E+00	1.13E-03	1.39E-03	0.00E+00
189	479996.1	3742483	8.56E-03	1.67E-02	0.00E+00	8.12E-03	1.85E-02	0.00E+00	1.64E-03	2.96E-03	0.00E+00	6.52E-03	1.38E-02	0.00E+00	1.40E-03	2.25E-03	0.00E+00	1.07E-03	1.32E-03	0.00E+00
190	479977.9	3742483	7.88E-03	1.54E-02	0.00E+00	7.48E-03	1.70E-02	0.00E+00	1.51E-03	2.72E-03	0.00E+00	6.00E-03	1.27E-02	0.00E+00	1.29E-03	2.07E-03	0.00E+00	9.86E-04	1.22E-03	0.00E+00
191	479959.7	3742483	7.04E-03	1.37E-02	0.00E+00	6.68E-03	1.52E-02	0.00E+00	1.35E-03	2.43E-03	0.00E+00	5.36E-03	1.13E-02	0.00E+00	1.15E-03	1.85E-03	0.00E+00	8.80E-04	1.09E-03	0.00E+00
192	479941.4	3742483	6.08E-03	1.19E-02	0.00E+00	5.77E-03	1.31E-02	0.00E+00	1.17E-03	2.10E-03	0.00E+00	4.63E-03	9.79E-03	0.00E+00	9.95E-04	1.60E-03	0.00E+00	7.61E-04	9.38E-04	0.00E+00
193	479923.2	3742483	5.10E-03	9.96E-03	0.00E+00	4.84E-03	1.10E-02	0.00E+00	9.78E-04	1.76E-03	0.00E+00	3.88E-03	8.21E-03	0.00E+00	8.35E-04	1.34E-03	0.00E+00	6.38E-04	7.87E-04	0.00E+00
194	479905	3742483	4.19E-03	8.17E-03	0.00E+00	3.97E-03	9.04E-03	0.00E+00	8.03E-04	1.44E-03	0.00E+00	3.19E-03	6.74E-03	0.00E+00	6.85E-04	1.10E-03	0.00E+00	5.24E-04	6.46E-04	0.00E+00
195	480101.3	3742469	7.04E-03	1.37E-02	0.00E+00	6.67E-03	1.52E-02	0.00E+00	1.35E-03	2.43E-03	0.00E+00	5.36E-03	1.13E-02	0.00E+00	1.15E-03	1.85E-03	0.00E+00	8.80E-04	1.09E-03	0.00E+00
196	480129.5	3742481	6.31E-03	1.23E-02	0.00E+00	5.99E-03	1.36E-02	0.00E+00	1.21E-03	2.18E-03	0.00E+00	4.80E-03	1.02E-02	0.00E+00	1.03E-03	1.66E-03	0.00E+00	7.89E-04	9.74E-04	0.00E+00
197	480163.6	3742507	4.94E-03	9.65E-03	0.00E+00	4.69E-03	1.07E-02	0.00E+00	9.48E-04	1.71E-03	0.00E+00	3.76E-03	7.96E-03	0.00E+00	8.09E-04	1.30E-03	0.00E+00	6.18E-04	7.63E-04	0.00E+00
198	480175.2	3742535	4.31E-03	8.43E-03	0.00E+00	4.09E-03	9.32E-03	0.00E+00	8.28E-04	1.49E-03	0.00E+00	3.29E-03	6.95E-03	0.00E+00	7.06E-04	1.13E-03	0.00E+00	5.40E-04	6.66E-04	0.00E+00
199	480069	3742463	7.49E-03	1.46E-02	0.00E+00	7.10E-03	1.62E-02	0.00E+00	1.44E-03	2.58E-03	0.00E+00	5.70E-03	1.21E-02	0.00E+00	1.23E-03	1.97E-03	0.00E+00	9.37E-04	1.16E-03	0.00E+00
200	480050.8	3742463	7.63E-03	1.49E-02	0.00E+00	7.24E-03	1.65E-02	0.00E+00	1.46E-03	2.63E-03	0.00E+00	5.81E-03	1.23E-02	0.00E+00	1.25E-03	2.01E-03	0.00E+00	9.55E-04	1.18E-03	0.00E+00
201	480032.6	3742463	7.57E-03	1.48E-02	0.00E+00	7.19E-03	1.64E-02	0.00E+00	1.45E-03	2.61E-03	0.00E+00	5.77E-03	1.22E-02	0.00E+00	1.24E-03	1.99E-03	0.00E+00	9.48E-04	1.17E-03	0.00E+00
202	480014.4	3742463	7.33E-03	1.43E-02	0.00E+00	6.95E-03	1.58E-02	0.00E+00	1.41E-03	2.53E-03	0.00E+00	5.58E-03	1.18E-02	0.00E+00	1.20E-03	1.92E-03	0.00E+00	9.17E-04	1.13E-03	0.00E+00
203	479996.1	3742463	6.91E-03	1.35E-02	0.00E+00	6.55E-03	1.49E-02	0.00E+00	1.33E-03	2.38E-03	0.00E+00	5.26E-03	1.11E-02	0.00E+00	1.13E-03	1.82E-03	0.00E+00	8.64E-04	1.07E-03	0.00E+00
204	479977.9	3742463	6.35E-03	1.24E-02	0.00E+00	6.02E-03	1.37E-02	0.00E+00	1.22E-03	2.19E-03	0.00E+00	4.83E-03	1.02E-02	0.00E+00	1.04E-03	1.67E-03	0.00E+00	7.94E-04	9.80E-04	0.00E+00
205	479959.7	3742463	5.68E-03	1.11E-02	0.00E+00	5.39E-03	1.23E-02	0.00E+00	1.09E-03	1.96E-03	0.00E+00	4.32E-03	9.15E-03	0.00E+00	9.30E-04	1.49E-03	0.00E+00	7.11E-04	8.76E-04	0.00E+00
206	479941.5	3742463	4.95E-03	9.67E-03	0.00E+00	4.70E-03	1.07E-02	0.00E+00	9.50E-04	1.71E-03	0.00E+00	3.77E-03	7.97E-03	0.00E+00	8.10E-04	1.30E-03	0.00E+00	6.19E-04	7.64E-04	0.00E+00
207	479923.3	3742463	4.22E-03	8.24E-03	0.00E+00	4.00E-03	9.12E-03	0.00E+00	8.10E-04	1.46E-03	0.00E+00	3.21E-03	6.80E-03	0.00E+00	6.91E-04	1.11E-03	0.00E+00	5.28E-04	6.51E-04	0.00E+00
208	479905.1	3742463	3.54E-03	6.92E-03	0.00E+00	3.36E-03	7.66E-03	0.00E+00	6.80E-04	1.22E-03	0.00E+00	2.70E-03	5.71E-03	0.00E+00	5.80E-04	9.31E-04	0.00E+00	4.43E-04	5.47E-04	0.00E+00
209	480101.4	3742449	6.11E-03	1.19E-02	0.00E+00	5.80E-03	1.32E-02	0.00E+00	1.17E-03	2.11E-03	0.00E+00	4.65E-03	9.84E-03	0.00E+00	1.00E-03	1.61E-03	0.00E+00	7.64E-04	9.43E-04	0.00E+00
210	480129.6	3742461	5.68E-03	1.11E-02	0.00E+00	5.39E-03	1.23E-02	0.00E+00	1.09E-03	1.96E-03	0.00E+00	4.32E-03	9.14E-03	0.00E+00	9.29E-04	1.49E-03	0.00E+00	7.10E-04	8.76E-04	0.00E+00
211	480157.8	3742473	4.83E-03	9.43E-03	0.00E+00	4.58E-03	1.04E-02	0.00E+00	9.27E-04	1.67E-03	0.00E+00	3.68E-03	7.78E-03	0.00E+00	7.91E-04	1.27E-03	0.00E+00	6.04E-04	7.45E-04	0.00E+00
212	480177.8	3742493	4.18E-03	8.17E-03	0.00E+00	3.97E-03	9.04E-03	0.00E+00	8.03E-04	1.44E-03	0.00E+00	3.19E-03	6.74E-03	0.00E+00	6.85E-04	1.10E-03	0.00E+00	5.23E-04	6.46E-04	0.00E+00
213	480189.4	3742521	3.69E-03	7.21E-03	0.00E+00	3.50E-03	7.97E-03	0.00E+00	7.08E-04	1.27E-03	0.00E+00	2.81E-03	5.94E-03	0.00E+00	6.04E-04	9.70E-04	0.00E+00	4.62E-04	5.70E-04	0.00E+00
214	480069	3742443	6.34E-03

381	480234.4	374232.4	2.09E-03	0.004084	0.00E+00	1.98E-03	4.52E-03	0.00E+00	4.01E-04	7.22E-04	0.00E+00	1.59E-03	3.37E-03	0.00E+00	3.42E-04	5.49E-04	0.00E+00	2.62E-04	3.23E-04	0.00E+00
380	480201.8	374231.1	2.28E-03	0.004451	0.00E+00	2.16E-03	4.92E-03	0.00E+00	4.37E-04	7.87E-04	0.00E+00	1.74E-03	3.67E-03	0.00E+00	3.73E-04	5.99E-04	0.00E+00	2.85E-04	3.52E-04	0.00E+00
379	480169.2	374229.7	2.37E-03	0.004637	0.00E+00	2.25E-03	5.13E-03	0.00E+00	4.56E-04	8.20E-04	0.00E+00	1.81E-03	3.82E-03	0.00E+00	3.89E-04	6.24E-04	0.00E+00	2.97E-04	3.66E-04	0.00E+00
378	480136.7	374228.4	2.36E-03	0.004613	0.00E+00	2.24E-03	5.10E-03	0.00E+00	4.53E-04	8.15E-04	0.00E+00	1.80E-03	3.80E-03	0.00E+00	3.87E-04	6.21E-04	0.00E+00	2.96E-04	3.65E-04	0.00E+00
377	480104.1	374227.0	2.25E-03	0.004389	0.00E+00	2.13E-03	4.85E-03	0.00E+00	4.31E-04	7.76E-04	0.00E+00	1.71E-03	3.62E-03	0.00E+00	3.68E-04	5.90E-04	0.00E+00	2.81E-04	3.47E-04	0.00E+00
376	479905.7	374228.3	1.31E-03	0.002559	0.00E+00	1.24E-03	2.83E-03	0.00E+00	2.51E-04	4.52E-04	0.00E+00	9.98E-04	2.11E-03	0.00E+00	2.14E-04	3.44E-04	0.00E+00	1.64E-04	2.02E-04	0.00E+00
375	479923.9	374228.3	1.43E-03	0.002799	0.00E+00	1.36E-03	3.10E-03	0.00E+00	2.75E-04	4.95E-04	0.00E+00	1.09E-03	2.31E-03	0.00E+00	2.35E-04	3.77E-04	0.00E+00	1.79E-04	2.21E-04	0.00E+00
374	479942.1	374228.3	1.56E-03	0.00305	0.00E+00	1.48E-03	3.37E-03	0.00E+00	3.00E-04	5.39E-04	0.00E+00	1.19E-03	2.52E-03	0.00E+00	2.56E-04	4.10E-04	0.00E+00	1.95E-04	2.41E-04	0.00E+00
373	479960.3	374228.3	1.69E-03	0.003308	0.00E+00	1.61E-03	3.66E-03	0.00E+00	3.25E-04	5.85E-04	0.00E+00	1.29E-03	2.73E-03	0.00E+00	2.77E-04	4.45E-04	0.00E+00	2.12E-04	2.61E-04	0.00E+00
372	479978.5	374228.3	1.83E-03	0.003567	0.00E+00	1.73E-03	3.95E-03	0.00E+00	3.50E-04	6.30E-04	0.00E+00	1.39E-03	2.94E-03	0.00E+00	2.99E-04	4.80E-04	0.00E+00	2.29E-04	2.82E-04	0.00E+00
371	479996.7	374228.3	1.95E-03	0.003817	0.00E+00	1.85E-03	4.22E-03	0.00E+00	3.75E-04	6.75E-04	0.00E+00	1.49E-03	3.15E-03	0.00E+00	3.20E-04	5.14E-04	0.00E+00	2.45E-04	3.02E-04	0.00E+00
370	480014.9	374228.3	2.07E-03	0.004049	0.00E+00	1.97E-03	4.48E-03	0.00E+00	3.98E-04	7.16E-04	0.00E+00	1.58E-03	3.34E-03	0.00E+00	3.39E-04	5.45E-04	0.00E+00	2.59E-04	3.20E-04	0.00E+00
369	480033.1	374228.3	2.18E-03	0.004254	0.00E+00	2.07E-03	4.71E-03	0.00E+00	4.18E-04	7.52E-04	0.00E+00	1.66E-03	3.51E-03	0.00E+00	3.57E-04	5.72E-04	0.00E+00	2.73E-04	3.36E-04	0.00E+00
368	480051.3	374228.3	2.27E-03	0.004424	0.00E+00	2.15E-03	4.89E-03	0.00E+00	4.35E-04	7.82E-04	0.00E+00	1.73E-03	3.65E-03	0.00E+00	3.71E-04	5.95E-04	0.00E+00	2.83E-04	3.50E-04	0.00E+00
367	480069.6	374228.3	2.33E-03	0.004553	0.00E+00	2.21E-03	5.04E-03	0.00E+00	4.47E-04	8.05E-04	0.00E+00	1.78E-03	3.75E-03	0.00E+00	3.82E-04	6.13E-04	0.00E+00	2.92E-04	3.60E-04	0.00E+00
366	480346.5	374251.4	9.46E-04	0.001848	0.00E+00	8.98E-04	2.04E-03	0.00E+00	1.81E-03	3.27E-04	0.00E+00	7.20E-04	1.52E-03	0.00E+00	1.55E-04	2.49E-04	0.00E+00	1.18E-04	1.46E-04	0.00E+00
365	480332.9	374248.1	1.12E-03	0.002191	0.00E+00	1.06E-03	2.42E-03	0.00E+00	2.15E-04	3.87E-04	0.00E+00	8.54E-04	1.81E-03	0.00E+00	1.84E-04	2.95E-04	0.00E+00	1.40E-04	1.73E-04	0.00E+00
364	480319.3	374248.1	1.31E-03	0.002566	0.00E+00	1.25E-03	2.84E-03	0.00E+00	2.52E-04	4.53E-04	0.00E+00	1.00E-03	2.12E-03	0.00E+00	2.15E-04	3.45E-04	0.00E+00	1.64E-04	2.03E-04	0.00E+00
363	480305.7	374241.5	1.50E-03	0.002929	0.00E+00	1.42E-03	3.24E-03	0.00E+00	2.88E-04	5.18E-04	0.00E+00	1.14E-03	2.42E-03	0.00E+00	2.46E-04	3.94E-04	0.00E+00	1.88E-04	2.32E-04	0.00E+00
362	480292.1	374238.2	1.66E-03	0.003232	0.00E+00	1.57E-03	3.58E-03	0.00E+00	3.18E-04	5.71E-04	0.00E+00	1.26E-03	2.67E-03	0.00E+00	2.71E-04	4.35E-04	0.00E+00	2.07E-04	2.55E-04	0.00E+00
361	480268.9	374235.9	1.87E-03	0.003652	0.00E+00	1.77E-03	4.04E-03	0.00E+00	3.59E-04	6.45E-04	0.00E+00	1.42E-03	3.01E-03	0.00E+00	3.06E-04	4.91E-04	0.00E+00	2.34E-04	2.89E-04	0.00E+00
360	480235.9	374234.5	2.17E-03	0.004236	0.00E+00	2.06E-03	4.69E-03	0.00E+00	4.16E-04	7.49E-04	0.00E+00	1.65E-03	3.49E-03	0.00E+00	3.55E-04	5.70E-04	0.00E+00	2.71E-04	3.35E-04	0.00E+00
359	48023	374233.1	2.41E-03	0.004713	0.00E+00	2.29E-03	5.21E-03	0.00E+00	4.63E-04	8.33E-04	0.00E+00	1.84E-03	3.89E-03	0.00E+00	3.95E-04	6.34E-04	0.00E+00	3.02E-04	3.72E-04	0.00E+00
358	480170.1	374231.8	2.56E-03	0.004996	0.00E+00	2.43E-03	5.53E-03	0.00E+00	4.91E-04	8.83E-04	0.00E+00	1.95E-03	4.12E-03	0.00E+00	4.19E-04	6.72E-04	0.00E+00	3.20E-04	3.95E-04	0.00E+00
357	480137.2	374230.4	2.58E-03	0.00503	0.00E+00	2.44E-03	5.56E-03	0.00E+00	4.94E-04	8.89E-04	0.00E+00	1.96E-03	4.15E-03	0.00E+00	4.22E-04	6.77E-04	0.00E+00	3.22E-04	3.98E-04	0.00E+00
356	480104.2	374229.0	2.47E-03	0.004818	0.00E+00	2.34E-03	5.33E-03	0.00E+00	4.73E-04	8.51E-04	0.00E+00	1.88E-03	3.97E-03	0.00E+00	4.04E-04	6.48E-04	0.00E+00	3.09E-04	3.81E-04	0.00E+00
355	479905.6	374230.3	1.43E-03	0.002783	0.00E+00	1.35E-03	3.08E-03	0.00E+00	2.73E-04	4.92E-04	0.00E+00	1.09E-03	2.30E-03	0.00E+00	2.33E-04	3.74E-04	0.00E+00	1.78E-04	2.20E-04	0.00E+00
354	479923.8	374230.3	1.57E-03	0.00306	0.00E+00	1.49E-03	3.39E-03	0.00E+00	3.01E-04	5.41E-04	0.00E+00	1.19E-03	2.52E-03	0.00E+00	2.57E-04	4.12E-04	0.00E+00	1.96E-04	2.42E-04	0.00E+00
353	47994	374230.3	1.72E-03	0.003352	0.00E+00	1.63E-03	3.71E-03	0.00E+00	3.29E-04	5.92E-04	0.00E+00	1.31E-03	2.76E-03	0.00E+00	2.81E-04	4.51E-04	0.00E+00	2.15E-04	2.65E-04	0.00E+00
352	479960.2	374230.3	1.87E-03	0.003652	0.00E+00	1.77E-03	4.04E-03	0.00E+00	3.59E-04	6.45E-04	0.00E+00	1.42E-03	3.01E-03	0.00E+00	3.06E-04	4.91E-04	0.00E+00	2.34E-04	2.89E-04	0.00E+00
351	479978.4	374230.3	2.02E-03	0.003951	0.00E+00	1.92E-03	4.37E-03	0.00E+00	3.88E-04	6.98E-04	0.00E+00	1.54E-03	3.26E-03	0.00E+00	3.31E-04	5.32E-04	0.00E+00	2.53E-04	3.12E-04	0.00E+00
350	479996.6	374230.3	2.17E-03	0.004238	0.00E+00	2.06E-03	4.69E-03	0.00E+00	4.16E-04	7.49E-04	0.00E+00	1.65E-03	3.49E-03	0.00E+00	3.55E-04	5.70E-04	0.00E+00	2.71E-04	3.35E-04	0.00E+00
349	480014.9	374230.3	2.30E-03	0.004501	0.00E+00	2.19E-03	4.98E-03	0.00E+00	4.42E-04	7.95E-04	0.00E+00	1.75E-03	3.71E-03	0.00E+00	3.77E-04	6.06E-04	0.00E+00	2.88E-04	3.56E-04	0.00E+00
348	480033.1	374230.3	2.42E-03	0.004726	0.00E+00	2.30E-03	5.23E-03	0.00E+00	4.64E-04	8.35E-04	0.00E+00	1.84E-03	3.90E-03	0.00E+00	3.96E-04	6.36E-04	0.00E+00	3.03E-04	3.73E-04	0.00E+00
347	480051.3	374230.3	2.51E-03	0.004909	0.00E+00	2.38E-03	5.43E-03	0.00E+00	4.82E-04	8.67E-04	0.00E+00	1.91E-03	4.05E-03	0.00E+00	4.11E-04	6.60E-04	0.00E+00	3.14E-04	3.88E-04	0.00E+00
346	480069.5	374230.3	2.58E-03	0.005042	0.00E+00	2.45E-03	5.58E-03	0.00E+00	4.95E-04	8.91E-04	0.00E+00	1.97E-03	4.16E-03	0.00E+00	4.23E-04	6.78E-04	0.00E+00	3.23E-04	3.98E-04	0.00E+00
345	480087.7	374230.3	2.62E-03	0.005117	0.00E+00	2.49E-03	5.66E-03	0.00E+00	5.00E-04	9.04E-04	0.00E+00	2.00E-03	4.22E-04	0.00E+00	4.29E-04	6.88E-04	0.00E+00	3.28E-04	4.04E-04	0.00E+00
344	480333.1	374253.0	9.92E-04	0.001938	0.00E+00	9.41E-04	2.14E-03	0.00E+00	1.90E-04	3.42E-04	0.00E+00	1.60E-03	3.80E-04	0.00E+00	1.62E-04	2.61E-04	0.00E+00	1.24E-04	1.53E-04	0.00E+00
343	480326.2	374251.3	2.08E-03	0.002122	0.00E+00	1.03E-03	2.35E-03	0.00E+00	5.62E-04	1.01E-03	0.00E+00	2.23E-03	4.72E-03	0.00E+00	4.80E-04	7.70E-04	0.00E+00	3.67E-04	4.52E-04	0.00E+00
342	480319.3	374249.7	1.19E-03	0.002323	0.00E+00	1.13E-03	2.57E-03	0.00E+00	2.28E-04	4.11E-04	0.00E+00	9.06E-04	1.92E-03	0.00E+00	1.95E-04	3.13E-04	0.00E+00	1.49E-04	1.84E-04	0.00E+00
341	480312.5	374248.0	1.30E-03	0.002537	0.00E+00	1.23E-03	2.81E-03	0.00E+00	2.49E-04	4.48E-04	0.00E+00	9.89E-04	2.09E-03	0.00E+00	2.13E-04	3.41E-04	0.00E+00	1.63E-04	2.00E-04	0.00E+00
340	480298.7	374244.7	1.52E-03	0.002974	0.00E+00	1.44E-03	3.29E-03	0.00E+00	2.92E-04	5.26E-04	0.00E+00	1.16E-03	2.45E-03	0.00E+00	2.49E-04	4.00E-04	0.00E+00	1.91E-04	2.35E-04	0.00E+00
339	480291.8	374243.0	1.63E-03	0.003181	0.00E+00	1.55E-03	3.52E-03	0.00E+00	3.12E-04	5.62E-04	0.00E+00	1.24E-03	2.62E-03	0.00E+00	2.67E-04	4.28E-04	0.00E+00	2.04E-04	2.51E-04	0.00E+00
338	480284.9	374241.3	1.64E-03	0.00337	0.00E+00	1.73E-03	3.73E-03	0.00E+00	3.31E-04	5.96E-04	0.00E+00	1.31E-03	2.78E-03	0.00E+00	2.82E-04	4.53E-04	0.00E+00	2.16E-04	2.66E-04	0.00E+00
337	48027	374239.7	1.81E-03	0.003534	0.00E+00	1.72E-03	3.91E-03	0.00E+00	3.47E-04	6.24E-04	0.00E+00	1.38E-03	2.91E-03	0.00E+00	2.96E-04	4.75E-04	0.00E+00	2.26E-04	2.79E-04	0.00E+00
336	480254.5	374237.3	2.06E-03	0.004018	0.00E+00	1.95E-03	4.44E-03	0.00E+00	3.95E-04	7.10E-04	0.00E+00	1.57E-03	3.31E-03	0.00E+00	3.37E-04	5.41E-04	0.00E+00	2.57E-04	3.18E-04	0.00E+00
335	480221.1	374235.9	2.40E-03	0.004687	0.00E+00	2.28E-03	5.18E-03	0.00E+00	4.60E-04	8.28E-04	0.00E+00	1.83E-03	3.87E-03	0.00E+00	3.93E-04	6.31E-04	0.00E+00	3.00E-04	3.70E-04	0.00E+00
334	480204.4	374235.2	2.55E-03	0.004974	0.00E+00	2.42E-03	5.50E-03	0.00E+00	4.89E-04	8.79E-04	0.00E+00	1.94E-03	4.10E-03	0.00E+00	4.17E-04	6.69E-04	0.00E+00	3.19E-04	3.93E-04	0.00E+00
333	480187.8	374234.5	2.67E-03	0.005208	0.00E+00	2.53E-03	5.76E-03	0.00E+00	5.12E-04	9.20E-04	0.00E+00	2.03E-03	4.30E-03	0.00E+00	4.37E-04	7.01E-04	0.00E+00	3.34E-04	4.12E-04	0.00E+00
332	480171.1	374233.8	2.75E-03	0.005378	0.00E+00	2.61E-03	5.95E-03	0.00E+00	5.28E-04	9.50E-04	0.00E+00	2.10E-03	4.44E-03	0.00E+00	4.51E-04	7.24E-04	0.00E+00	3.45E-04	4.25E-04	0.00E+00
331	480154.4	374233.1	2.80E-03	0.005476	0.00E+00	2.66E-03	6.06E-03	0.00E+00	5.38E-04	9.68E-04	0.00E+00	2.14E-03	4.52E-03	0.00E+00	4.59E-04	7.37E-04	0.00E+00	3.51E-04	4.33E-04	0.00E+00
330	480121.1	374231.7	2.79E-03	0.00531	0.00E+00	2.64E-03	6.02E-03	0.00E+00	5.34E-04	9.61E-04	0.00E+00	2.12E-03	4.49E-03	0.00E+00	4.56E-04	7.32E-04	0.00E+00	3.49E-04	4.30E-04	0.00E+00
329	480104.4	374231.0	2.72E-03	0.005311	0.00E+00	2.58E-03	5.87E-03	0.00E+00	5.22E-04	9.39E-04	0.00E+00	2.07E-03	4.38E-03	0.00E+00	4.45E-04	7.15E-04	0.00E+00	3.40E-04	4.20E-04	0.00E+00
328	479905.5	374233.7	1.56E-03	0.003041	0.00E+00	1.48E-03	3.36E-03	0.00E+00	2.99E-04	5.37E-04	0.00E+00	1.19E-03	2.51E-03	0.00E+00	2.55E-04	4.09E-04	0.00E+00	1.95E-04	2.40E-04	0.00E+00
327	479923.7	374232.3	1.72E-03	0.003363	0.00E+00	1.63E-03	3.72E-03	0.00E+00	3.30E-04	5.94E-04	0.00E+00	1.31E-03	2.77E-03	0.00E+00	2.82E-04	4.52E-04	0.00E+00	2.15E-04	2.66E-04	0.00E+00
326	479941.9	374232.3	1.90E-03	3.70E-03	0.00E+00	1.80E-03	4.10E-03	0.00E+00	3.64E-04	6.54E-04	0.00E+00	1.44E-03	3.05E-03	0.00E+00	3.10E-04	4.98E-04	0.00E+00	2.37E-04	2.93E-04	0.00E+00
325	479960.2	374232.3	2.08E-03	4.05E-03	0.00E+00	1.97E-03	4.48E-03	0.00E+00	3.98E-04	7.16E-04	0.00E+00	1.58E-03	3.34E-03	0.00E+00	3.40E-04	5.45E-04	0.00E+00	2.60E-04	3.20E-04	0.00E+00
324	479978.4	374232.3	2.25E-03	4.40E-03	0.00E+00	2.14E-03	4.87E-03	0.00E+00	4.32E-04	7.77E-04	0.00E+00	1.72E-03	3.63E-03	0.00E+00	3.69E-04	5.92E-04	0.00E+00	2.82E-04	3.48E-04	0.00E+00
323	479996.6	374232.3	2.42E-03	4.73E-03	0.00E+00	2.30E-03	5.23E-03	0.00E+00	4.65E-04	8.36E-04	0.00E+00	1.84E-03	3.90E-03	0.00E+00	3.96E-04	6.36E-04	0.00E+00	3.03E-04	3.74E-04	0.00E+00
322	480014.8	374232.3	2.58E-03	5.03E-03	0.00E+00	2.44E-03	5.56E-03	0.00E+00	4.94E-04	8.89E-04	0.00E+00	1.96E-03	4.15E-03	0.00E+00	4.22E-04	6.77E-04	0.00E+00	3.22E-04	3.98E-04	0.00E+00
321	48003	374232.3	2.71E-03	5.29E-03	0.00E+00	2.57E-03	5.85E-03	0.00E+00	5.19E-04	9.34E-04	0.00E+00	2.06E-03	4.36E-03	0.00E+00	4.43E-04	7.11E-04	0.00E+00	3.39E-04	4.18E-04	0.00E+00
320	480051.2	374232.3	2.81E-03	5.48E-03	0.00E+00	2.66E-03	6.07E-03	0.00E+00	5.39E-04	9.69E-04	0.00E+00	2.14E-03	4.52E-03	0.00E+00	4.60E-04	7.38E-04	0.00E+00	3.51E-04	4.33E-04	0.00E+00
319	480069.4	374232.3	2.88E-03	5.62E-03	0.00E+00	2.73E-03	6.22E-03	0.00E+00	5.52E-04	9.93E-04	0.00E+00	2.19E-03	4.63E-03	0.00E+00	4.71E-04	7.56E-04	0.00E+00	3.60E-04	4.44E-04	0.00E+00
318	480314.2	374253.3	1.12E-03	2.20E-03	0.00E+00	1.07E-03	2.43E-03	0.00E+00	2.16E-04	3.88E-04	0.00E+00	8.57E-04	1.81E-03	0.00E+00	1.84E-04	2.96E-04	0.00E+00	1.41E-04	1.74E-04	0.00E+00
317	480301.5	374250.2	1.34E-03	2.62E-03	0.00E+00	1.27E-03	2.90E-03	0.00E+00	2.57E-04	4.63E-04	0.00E+00	1.02E-03	2.16E-03	0.00E+00	2.20E-04	3.52E-04	0.00E+00	1.68E-04	2.07E-04	0.00E+00
316	480288.8	374247.1	1.58E-03	3.08E-03	0.00E+00	1.50E-03	3.41E-03	0.00E+00	3.03E-04	5.45E-04	0.00E+00	1.20E-03	2.54E-03	0.00E+00	2.58E-04	4.15E-04	0.00E+00	1.98E-04	2.44E-04	0.00E+00
315	48027	374244.0	1.81E-03	3.53E-03	0.00E+00	1.72E-03	3.91E-03	0.00E+00	3.47E-04	6.24E-04	0.00E+00	1.38E-03	2.91E-03	0.00E+00	2.96E-04	4.75E-04	0.00E+00	2.26E-04	2.79E-04	0.00E+00
314	480263.3	374240.9	2.00E-03	3.90E-03	0.00E+00	1.89E-03	4.31E-03	0.00E+00	3.83E-04	6.89E-04	0.00E+00	1.52E-03	3.21E-03	0.00E+00	3.27E-04	5.24E-04	0.00E+00	2.50E-04	3.08E-04	0.00E+00
313	480226.2	374238.1	2.44E-03	4.77E-03	0.00E+00	2.32E-03	5.28E-03	0.00E+00	4.69E-04	8.44E-04	0.00E+00	1.86E-03	3.94E-03	0.00E+00	4.00E-04	6.42E-04	0.00E+00	3.06E-04	3.77E-04	0.00E+00
312	480195.4	374236.8	2.78E-03	5.43E-03	0.00E+00	2.64E-03	6.00E-03	0.00E+00	5.33E-04	9.59E-04	0.00E+00	2.12E-03	4.48E-03	0.00E+00	4.55E-04	7.30E-04	0.00E+00	3.48E-04	4.29E-04	0.00E+00
311	480164.6	374235.5	3.01E-03	5.87E-03	0.00E+00	2.85E-03	6.49E-03	0.00E+00	5.77E-04	1.04E-03	0.00E+00	2.29E-03	4.84E-03	0.00E+00	4.92E-04	7.90E-04	0.00E+00	3.76E-04	4.64E-04	0.00E+00
310	480133.8	374234.3	3.08E-03	6.02E-03	0.00E+00	2.93E-03	6.66E-03	0.00E+00	5.91E-04	1.06E-03	0.00E+00	2.35E-03	4.97E-03	0.00E+00	5.05E-04	8.10E-04	0.00E+00	3.86E-04	4.76E-04	0.00E+00
309	48010	374233.0	3.01E-03	5.87E-03	0.00E+00	2.85E-03	6.49E-03	0.00E+00	5.76E-04	1.04E-03	0.00E+00	2.29E-03	4.84E-03	0.00E+00	4.92E-04	7.90E-04	0.00E+00	3.76E-04	4.64E-04	0.00E+00
308	479905.5	374234.3	3.34E-03	6.50E-03	0.00E+00	3.08E-03	6.62E-03	0.00E+00	5.90E-04	1.07E-03	0.00E+00	2.36E-03	4.76E-03	0.00E+00	4.50E-04	7.20E-04	0.00E+00	3.14E-04	4.64E-04	0.00E+00
307	479923.7	374234.3	3.72E-03	6.57E-03	0.00E+00	3.39E-03	7.11E-03	0.00E+00	6.57E-04	1.19E-03	0.00E+00	2.73E-03	5.50E-03	0.00E+00	5.20E-04	8.32E-04	0.00E+00	4.32E-04	5.25E-04	0.00E+00
306	479941.9	374234.3	4.12E-03	7.28E-03	0.00E+00	4.04E-03	8.42E-03	0.00E+00	7.28E-04	1.32E-03	0.00E+00	3.40E-03	6.87E-03	0.00E+00	6.45E-04	1.03E-03	0.00E+00	5.54E-04	6.64E-04	0.00E+00
305	479960.1	374234.3	4.53E-03	8.01E-03	0.00E+00	4.45E-03	9.26E-03	0.00E+00	8.00E-04	1.46E-03	0.00E+00	3.73E-03	7.55E-03	0.00E+00	7.09E-04	1.13E-03	0.00E+00	7.96E-04	9.09E-04	0.00E+00
304	479978.3	374234.3	5.53E-03	9.93E-03	0.00E+00	5.46E-03	1.13E-02	0.00E+00	9.72E-04	1.73E-03	0.00E+00	4.40E-03	8.91E-03	0.00E+00	8.53E-04	1.36E-03	0.00E+00	9.38E-04	1.16E-03	0.00E+00
303	479996.5	374234.3	5.32E-03	9.69E-03	0.00E+00	5.22E-03	1.08E-02	0.00E+00	9.40E-04	1.67E-03	0.00E+00	4.39E-03	8.85E-03	0.00E+00	8.28E-04	1.32E-03	0.00E+00	9.11E-04	1.12E-03	0.00E+00
302	480014.7	374234.3	5.66E-03	1.01E-02	0.00E+00	5.56E-03	1.15E-02	0.00E+00	1.00E-03	1.78E-03	0.00E+00	4.67E-03	9.42E-03	0.00E+00	8.79E-04	1.40E-03	0.00E+00	9.67E-04	1.19E-03	0.00E+00
301	480032.9	374234.3	5.95E-03	1.06E-02	0.00E+00	5.84E-03	1.21E-02	0.00E+00	1.05E-03	1.87E-03	0.00E+00	4.91E-03	9.90E-03	0.00E+00	9.23E-04	1.47E-03	0.00E+00	1.01E-03	1.25E-03	0.00E+00
300	480051.2	374234.3	6.17E-03	1.09E-02	0.00E+00	6.06E-03	1.25E-02	0.00E+00	1.09E-03	1.94E-03	0.00E+00	5.08E-03	1.02E-02	0.00E+00	9.56E-04	1.52E-03	0.00E+00	1.04E-03	1.29E-03	0.00E+00
299	480069.4	374234.3	6.30E-03	1.11E-02	0.00E+00	6.19E-03	1.28E-02	0.00E+00	1.11E-03	1.98E-03	0.00E+00	5.19E-03	1.04E-02	0.00E+00	9.86E-04	1.57E-03	0.00E+00	1.07E-03	1.33E-03	0.00E+00
298	480287.7	374251.7	1.44E-03	2.81E-03	0.00E+00	1.36E-03	3.11E-03	0.00E+00	2.76E-04	4.96E-04	0.00E+00	1.10E-03	2.32E-03	0.00E+00	2.35E-04	3.78E-04	0.00E+00	1.80E-04	2.22E-04	0.00E+00
297	480274.8	374248.6	1.72E-03	3.35E-03	0.00E+00	1.63E-03	3.71E-03	0.00E+00	3.29E-04	5.92E-04	0.00E+00	1.31E-03	2.76E-03	0.00E+00	2.81E-04	4.51E-04	0.00E+00	2.15E-04	2.65E-04	0.00E+00
296	48026	374245.5	1.99E-03	3.88E-03	0.00E+00	1.89E-03	4.29E-03	0.00E+00	3.81E-04	6.86E-04	0.00E+00	1.51E-03	3.20E-03	0.00E+00	3.25E-04	5.22E-04	0.00E+00	2.49E-04	3.07E-04	0.00E+00
295	480249.2	374242.4	2.21E-03	4.31E-03	0.00E+00	2.09E-03	4.77E-03	0.00E+00	4.23E-04	7.62E-04	0.00E+00	1.68E-03	3.55E-03	0.00E+00	3.61E-04	5.80E-04	0.00E+00	2.76E-04	3.41E-04	0.00E+00
294	480227.3	374240.2	2.51E-03	4.90E-03	0.00E+00	2.38E-03	5.42E-03	0.00E+00	4.82E-04	8.66E-04	0.00E+00	1.91E-03	4.04E-03	0.00E+00	4.11E-04	6.60E-04	0.00E+00	3.14E-04	3.87E-04	0.00E+00
293	480196.2	374239.0	2.93E-03	5.72E-03	0.00E+00	2.78E-03

382	480266.9	3742338	1.84E-03	0.003599	0.00E+00	1.75E-03	3.98E-03	0.00E+00	3.54E-04	6.36E-04	0.00E+00	1.40E-03	2.97E-03	0.00E+00	3.02E-04	4.84E-04	0.00E+00	2.31E-04	2.84E-04	0.00E+00
383	480319.7	3742401	1.39E-03	0.002708	0.00E+00	1.32E-03	2.99E-03	0.00E+00	2.66E-04	4.78E-04	0.00E+00	1.06E-03	2.23E-03	0.00E+00	2.27E-04	3.64E-04	0.00E+00	1.73E-04	2.14E-04	0.00E+00
384	480333.1	3742433	1.23E-03	0.002394	0.00E+00	1.16E-03	2.65E-03	0.00E+00	2.35E-04	4.23E-04	0.00E+00	9.33E-04	1.97E-03	0.00E+00	2.01E-04	3.22E-04	0.00E+00	1.53E-04	1.89E-04	0.00E+00
385	480346.6	3742466	1.06E-03	0.002066	0.00E+00	1.00E-03	2.29E-03	0.00E+00	2.03E-04	3.65E-04	0.00E+00	8.06E-04	1.70E-03	0.00E+00	1.73E-04	2.78E-04	0.00E+00	1.32E-04	1.63E-04	0.00E+00
386	480360	3742498	9.02E-04	0.001761	0.00E+00	8.56E-04	1.95E-03	0.00E+00	1.73E-04	3.11E-04	0.00E+00	6.87E-04	1.45E-03	0.00E+00	1.48E-04	2.37E-04	0.00E+00	1.13E-04	1.39E-04	0.00E+00
387	480373.4	3742531	7.68E-04	0.0015	0.00E+00	7.29E-04	1.66E-03	0.00E+00	1.47E-04	2.65E-04	0.00E+00	5.85E-04	1.24E-03	0.00E+00	1.26E-04	2.02E-04	0.00E+00	9.61E-05	1.19E-04	0.00E+00
388	480069.6	3742263	2.12E-03	0.004131	0.00E+00	2.01E-03	4.57E-03	0.00E+00	4.06E-04	7.30E-04	0.00E+00	1.61E-03	3.41E-03	0.00E+00	3.46E-04	5.56E-04	0.00E+00	2.65E-04	3.26E-04	0.00E+00
389	480051.4	3742263	2.05E-03	0.004008	0.00E+00	1.95E-03	4.43E-03	0.00E+00	3.94E-04	7.08E-04	0.00E+00	1.56E-03	3.31E-03	0.00E+00	3.36E-04	5.39E-04	0.00E+00	2.57E-04	3.17E-04	0.00E+00
390	480033.2	3742263	1.97E-03	0.003852	0.00E+00	1.87E-03	4.26E-03	0.00E+00	3.78E-04	6.81E-04	0.00E+00	1.50E-03	3.18E-03	0.00E+00	3.23E-04	5.18E-04	0.00E+00	2.47E-04	3.04E-04	0.00E+00
391	480015	3742263	1.88E-03	0.003667	0.00E+00	1.78E-03	4.06E-03	0.00E+00	3.60E-04	6.48E-04	0.00E+00	1.43E-03	3.02E-03	0.00E+00	3.07E-04	4.93E-04	0.00E+00	2.35E-04	2.90E-04	0.00E+00
392	479996.8	3742263	1.77E-03	0.003461	0.00E+00	1.68E-03	3.83E-03	0.00E+00	3.40E-04	6.12E-04	0.00E+00	1.35E-03	2.85E-03	0.00E+00	2.90E-04	4.66E-04	0.00E+00	2.22E-04	2.74E-04	0.00E+00
393	479978.6	3742263	1.66E-03	0.003242	0.00E+00	1.57E-03	3.59E-03	0.00E+00	3.18E-04	5.73E-04	0.00E+00	1.26E-03	2.67E-03	0.00E+00	2.72E-04	4.36E-04	0.00E+00	2.08E-04	2.56E-04	0.00E+00
394	479960.3	3742263	1.54E-03	0.003016	0.00E+00	1.47E-03	3.34E-03	0.00E+00	2.96E-04	5.33E-04	0.00E+00	1.18E-03	2.49E-03	0.00E+00	2.53E-04	4.06E-04	0.00E+00	1.93E-04	2.38E-04	0.00E+00
395	479942.1	3742263	1.43E-03	0.00279	0.00E+00	1.36E-03	3.09E-03	0.00E+00	2.74E-04	4.93E-04	0.00E+00	1.09E-03	2.30E-03	0.00E+00	2.34E-04	3.75E-04	0.00E+00	1.79E-04	2.21E-04	0.00E+00
396	479923.9	3742263	1.32E-03	0.002571	0.00E+00	1.25E-03	2.84E-03	0.00E+00	2.53E-04	4.54E-04	0.00E+00	1.00E-03	2.12E-03	0.00E+00	2.15E-04	3.46E-04	0.00E+00	1.65E-04	2.03E-04	0.00E+00
397	479905.7	3742263	1.21E-03	0.002361	0.00E+00	1.15E-03	2.61E-03	0.00E+00	2.32E-04	4.17E-04	0.00E+00	9.21E-04	1.95E-03	0.00E+00	1.98E-04	3.18E-04	0.00E+00	1.51E-04	1.87E-04	0.00E+00
398	480104.4	3742220	1.81E-03	0.003532	0.00E+00	1.72E-03	3.91E-03	0.00E+00	3.47E-04	6.24E-04	0.00E+00	1.38E-03	2.91E-03	0.00E+00	2.96E-04	4.75E-04	0.00E+00	2.26E-04	2.79E-04	0.00E+00
399	480137.4	3742234	1.92E-03	0.003759	0.00E+00	1.83E-03	4.16E-03	0.00E+00	3.69E-04	6.64E-04	0.00E+00	1.47E-03	3.10E-03	0.00E+00	3.15E-04	5.06E-04	0.00E+00	2.41E-04	2.97E-04	0.00E+00
400	480170.3	3742248	1.98E-03	0.003857	0.00E+00	1.87E-03	4.27E-03	0.00E+00	3.79E-04	6.82E-04	0.00E+00	1.50E-03	3.18E-03	0.00E+00	3.23E-04	5.19E-04	0.00E+00	2.47E-04	3.05E-04	0.00E+00
401	480203.2	3742261	1.95E-03	0.003807	0.00E+00	1.85E-03	4.21E-03	0.00E+00	3.74E-04	6.73E-04	0.00E+00	1.48E-03	3.14E-03	0.00E+00	3.19E-04	5.12E-04	0.00E+00	2.44E-04	3.01E-04	0.00E+00
402	480236.2	3742275	1.85E-03	0.003613	0.00E+00	1.76E-03	4.00E-03	0.00E+00	3.55E-04	6.38E-04	0.00E+00	1.41E-03	2.98E-03	0.00E+00	3.03E-04	4.86E-04	0.00E+00	2.31E-04	2.86E-04	0.00E+00
403	480269.1	3742289	1.69E-03	0.003304	0.00E+00	1.61E-03	3.65E-03	0.00E+00	3.25E-04	5.84E-04	0.00E+00	1.29E-03	2.72E-03	0.00E+00	2.77E-04	4.45E-04	0.00E+00	2.12E-04	2.61E-04	0.00E+00
404	480368.9	3742399	1.03E-03	0.002011	0.00E+00	9.77E-04	2.22E-03	0.00E+00	1.98E-04	3.55E-04	0.00E+00	7.84E-04	1.66E-03	0.00E+00	1.69E-04	2.71E-04	0.00E+00	1.29E-04	1.59E-04	0.00E+00
405	480382.5	3742432	9.04E-04	0.001765	0.00E+00	8.57E-04	1.95E-03	0.00E+00	1.73E-04	3.12E-04	0.00E+00	6.88E-04	1.46E-03	0.00E+00	1.48E-04	2.37E-04	0.00E+00	1.13E-04	1.39E-04	0.00E+00
406	480396.1	3742465	7.83E-04	0.001529	0.00E+00	7.43E-04	1.69E-03	0.00E+00	1.50E-04	2.70E-04	0.00E+00	5.96E-04	1.26E-03	0.00E+00	1.28E-04	2.06E-04	0.00E+00	9.80E-05	1.21E-04	0.00E+00
407	480409.7	3742498	6.76E-04	0.001321	0.00E+00	6.42E-04	1.46E-03	0.00E+00	1.30E-04	2.33E-04	0.00E+00	5.15E-04	1.09E-03	0.00E+00	1.11E-04	1.78E-04	0.00E+00	8.46E-05	1.04E-04	0.00E+00
408	480423.3	3742531	5.87E-04	0.001147	0.00E+00	5.57E-04	1.27E-03	0.00E+00	1.13E-04	2.03E-04	0.00E+00	4.47E-04	9.45E-04	0.00E+00	9.61E-05	1.54E-04	0.00E+00	7.35E-05	9.06E-05	0.00E+00
409	480069.8	3742213	1.69E-03	0.003301	0.00E+00	1.60E-03	3.65E-03	0.00E+00	3.24E-04	5.83E-04	0.00E+00	1.29E-03	2.72E-03	0.00E+00	2.77E-04	4.44E-04	0.00E+00	2.11E-04	2.61E-04	0.00E+00
410	480051.6	3742213	1.64E-03	0.003195	0.00E+00	1.55E-03	3.53E-03	0.00E+00	3.14E-04	5.65E-04	0.00E+00	1.25E-03	2.63E-03	0.00E+00	2.68E-04	4.30E-04	0.00E+00	2.05E-04	2.52E-04	0.00E+00
411	480033.3	3742213	1.57E-03	0.003069	0.00E+00	1.49E-03	3.39E-03	0.00E+00	3.01E-04	5.42E-04	0.00E+00	1.20E-03	2.53E-03	0.00E+00	2.57E-04	4.13E-04	0.00E+00	1.97E-04	2.43E-04	0.00E+00
412	480015.1	3742213	1.50E-03	0.002926	0.00E+00	1.42E-03	3.24E-03	0.00E+00	2.87E-04	5.17E-04	0.00E+00	1.14E-03	2.41E-03	0.00E+00	2.45E-04	3.94E-04	0.00E+00	1.87E-04	2.31E-04	0.00E+00
413	479996.9	3742213	1.42E-03	0.002772	0.00E+00	1.35E-03	3.07E-03	0.00E+00	2.72E-04	4.90E-04	0.00E+00	1.08E-03	2.29E-03	0.00E+00	2.32E-04	3.73E-04	0.00E+00	1.78E-04	2.19E-04	0.00E+00
414	479978.7	3742213	1.34E-03	0.002609	0.00E+00	1.27E-03	2.89E-03	0.00E+00	2.56E-04	4.61E-04	0.00E+00	1.02E-03	2.15E-03	0.00E+00	2.19E-04	3.51E-04	0.00E+00	1.67E-04	2.06E-04	0.00E+00
415	479960.5	3742213	1.25E-03	0.002444	0.00E+00	1.19E-03	2.70E-03	0.00E+00	2.40E-04	4.32E-04	0.00E+00	9.53E-04	2.02E-03	0.00E+00	2.05E-04	3.29E-04	0.00E+00	1.57E-04	1.93E-04	0.00E+00
416	479942.3	3742213	1.17E-03	0.002278	0.00E+00	1.11E-03	2.52E-03	0.00E+00	2.24E-04	4.03E-04	0.00E+00	8.88E-04	1.88E-03	0.00E+00	1.91E-04	3.07E-04	0.00E+00	1.46E-04	1.80E-04	0.00E+00
417	479924.1	3742213	1.08E-03	0.002117	0.00E+00	1.03E-03	2.34E-03	0.00E+00	2.08E-04	3.74E-04	0.00E+00	8.25E-04	1.75E-03	0.00E+00	1.77E-04	2.85E-04	0.00E+00	1.36E-04	1.67E-04	0.00E+00
418	479905.9	3742213	1.00E-03	0.001962	0.00E+00	9.53E-04	2.17E-03	0.00E+00	1.93E-04	3.47E-04	0.00E+00	7.65E-04	1.62E-03	0.00E+00	1.64E-04	2.64E-04	0.00E+00	1.26E-04	1.55E-04	0.00E+00
419	480104.7	3742170	1.48E-03	0.002899	0.00E+00	1.41E-03	3.21E-03	0.00E+00	2.85E-04	5.12E-04	0.00E+00	1.13E-03	2.39E-03	0.00E+00	2.43E-04	3.90E-04	0.00E+00	1.86E-04	2.29E-04	0.00E+00
420	480137.9	3742184	1.59E-03	0.003108	0.00E+00	1.51E-03	3.44E-03	0.00E+00	3.05E-04	5.49E-04	0.00E+00	1.21E-03	2.56E-03	0.00E+00	2.61E-04	4.18E-04	0.00E+00	1.99E-04	2.46E-04	0.00E+00
421	480154.5	3742191	1.63E-03	0.003183	0.00E+00	1.55E-03	3.52E-03	0.00E+00	3.13E-04	5.63E-04	0.00E+00	1.24E-03	2.62E-03	0.00E+00	2.67E-04	4.28E-04	0.00E+00	2.04E-04	2.52E-04	0.00E+00
422	480187.7	3742205	1.67E-03	0.00326	0.00E+00	1.58E-03	3.61E-03	0.00E+00	3.20E-04	5.76E-04	0.00E+00	1.27E-03	2.69E-03	0.00E+00	2.73E-04	4.39E-04	0.00E+00	2.09E-04	2.58E-04	0.00E+00
423	480204.4	3742212	1.67E-03	0.003259	0.00E+00	1.58E-03	3.60E-03	0.00E+00	3.20E-04	5.76E-04	0.00E+00	1.27E-03	2.69E-03	0.00E+00	2.73E-04	4.38E-04	0.00E+00	2.09E-04	2.58E-04	0.00E+00
424	480221	3742219	1.65E-03	0.00323	0.00E+00	1.57E-03	3.57E-03	0.00E+00	3.17E-04	5.71E-04	0.00E+00	1.26E-03	2.66E-03	0.00E+00	2.71E-04	4.35E-04	0.00E+00	2.07E-04	2.55E-04	0.00E+00
425	480254.2	3742233	1.58E-03	0.003093	0.00E+00	1.50E-03	3.42E-03	0.00E+00	3.04E-04	5.47E-04	0.00E+00	1.21E-03	2.55E-03	0.00E+00	2.59E-04	4.16E-04	0.00E+00	1.98E-04	2.44E-04	0.00E+00
426	480270.8	3742239	1.53E-03	0.00299	0.00E+00	1.45E-03	3.31E-03	0.00E+00	2.94E-04	5.28E-04	0.00E+00	1.17E-03	2.47E-03	0.00E+00	2.51E-04	4.02E-04	0.00E+00	1.92E-04	2.36E-04	0.00E+00
427	480287.4	3742246	1.47E-03	0.002868	0.00E+00	1.39E-03	3.17E-03	0.00E+00	2.82E-04	5.07E-04	0.00E+00	1.12E-03	2.37E-03	0.00E+00	2.40E-04	3.86E-04	0.00E+00	1.84E-04	2.27E-04	0.00E+00
428	480445.8	3742464	6.02E-04	0.001175	0.00E+00	5.71E-04	1.30E-03	0.00E+00	1.15E-04	2.08E-04	0.00E+00	4.58E-04	9.69E-04	0.00E+00	9.85E-05	1.58E-04	0.00E+00	7.53E-05	9.29E-05	0.00E+00
429	480459.5	3742497	5.27E-04	0.00103	0.00E+00	5.00E-04	1.14E-03	0.00E+00	1.01E-04	1.82E-04	0.00E+00	4.01E-04	8.49E-04	0.00E+00	8.63E-05	1.39E-04	0.00E+00	6.60E-05	8.14E-05	0.00E+00
430	480466.3	3742514	4.95E-04	0.000966	0.00E+00	4.69E-04	1.07E-03	0.00E+00	9.49E-05	1.71E-04	0.00E+00	3.77E-04	7.97E-04	0.00E+00	8.10E-05	1.30E-04	0.00E+00	6.19E-05	7.64E-05	0.00E+00
431	480088.1	3742163	1.42E-03	0.002772	0.00E+00	1.35E-03	3.07E-03	0.00E+00	2.72E-04	4.90E-04	0.00E+00	1.08E-03	2.29E-03	0.00E+00	2.32E-04	3.73E-04	0.00E+00	1.78E-04	2.19E-04	0.00E+00
432	480069.9	3742163	1.38E-03	0.002698	0.00E+00	1.31E-03	2.98E-03	0.00E+00	2.65E-04	4.77E-04	0.00E+00	1.05E-03	2.22E-03	0.00E+00	2.26E-04	3.63E-04	0.00E+00	1.73E-04	2.13E-04	0.00E+00
433	480051.7	3742163	1.34E-03	0.002609	0.00E+00	1.27E-03	2.89E-03	0.00E+00	2.56E-04	4.61E-04	0.00E+00	1.02E-03	2.15E-03	0.00E+00	2.19E-04	3.51E-04	0.00E+00	1.67E-04	2.06E-04	0.00E+00
434	480033.5	3742163	1.28E-03	0.002507	0.00E+00	1.22E-03	2.77E-03	0.00E+00	2.46E-04	4.43E-04	0.00E+00	9.78E-04	2.07E-03	0.00E+00	2.10E-04	3.37E-04	0.00E+00	1.61E-04	1.98E-04	0.00E+00
435	480015.3	3742163	1.23E-03	0.002396	0.00E+00	1.16E-03	2.65E-03	0.00E+00	2.35E-04	4.23E-04	0.00E+00	9.34E-04	1.98E-03	0.00E+00	2.01E-04	3.22E-04	0.00E+00	1.53E-04	1.89E-04	0.00E+00
436	479997.1	3742163	1.17E-03	0.002277	0.00E+00	1.11E-03	2.52E-03	0.00E+00	2.24E-04	4.02E-04	0.00E+00	8.88E-04	1.88E-03	0.00E+00	1.91E-04	3.06E-04	0.00E+00	1.46E-04	1.80E-04	0.00E+00
437	479978.9	3742163	1.10E-03	0.002153	0.00E+00	1.05E-03	2.38E-03	0.00E+00	2.11E-04	3.80E-04	0.00E+00	8.40E-04	1.78E-03	0.00E+00	1.80E-04	2.90E-04	0.00E+00	1.38E-04	1.70E-04	0.00E+00
438	479960.7	3742163	1.04E-03	0.002027	0.00E+00	9.85E-04	2.24E-03	0.00E+00	1.99E-04	3.58E-04	0.00E+00	7.91E-04	1.67E-03	0.00E+00	1.70E-04	2.73E-04	0.00E+00	1.30E-04	1.60E-04	0.00E+00
439	479942.4	3742163	9.74E-04	0.001903	0.00E+00	9.24E-04	2.10E-03	0.00E+00	1.87E-04	3.36E-04	0.00E+00	7.42E-04	1.57E-03	0.00E+00	1.59E-04	2.56E-04	0.00E+00	1.22E-04	1.50E-04	0.00E+00
440	479924.2	3742163	9.12E-04	0.00178	0.00E+00	8.65E-04	1.97E-03	0.00E+00	1.75E-04	3.15E-04	0.00E+00	6.94E-04	1.47E-03	0.00E+00	1.49E-04	2.40E-04	0.00E+00	1.14E-04	1.41E-04	0.00E+00
441	479906	3742163	8.51E-04	0.001663	0.00E+00	8.08E-04	1.84E-03	0.00E+00	1.63E-04	2.94E-04	0.00E+00	6.48E-04	1.37E-03	0.00E+00	1.39E-04	2.24E-04	0.00E+00	1.07E-04	1.31E-04	0.00E+00
442	480105	3742120	1.24E-03	0.002419	0.00E+00	1.18E-03	2.68E-03	0.00E+00	2.38E-04	4.28E-04	0.00E+00	9.43E-04	2.00E-03	0.00E+00	2.03E-04	3.26E-04	0.00E+00	1.55E-04	1.91E-04	0.00E+00
443	480121.7	3742127	1.29E-03	0.002518	0.00E+00	1.22E-03	2.78E-03	0.00E+00	2.47E-04	4.45E-04	0.00E+00	9.82E-04	2.08E-03	0.00E+00	2.11E-04	3.39E-04	0.00E+00	1.61E-04	1.99E-04	0.00E+00
444	480138.4	3742134	1.33E-03	0.002605	0.00E+00	1.27E-03	2.88E-03	0.00E+00	2.56E-04	4.60E-04	0.00E+00	1.02E-03	2.15E-03	0.00E+00	2.18E-04	3.50E-04	0.00E+00	1.67E-04	2.06E-04	0.00E+00
445	480155.1	3742141	1.37E-03	0.002679	0.00E+00	1.30E-03	2.96E-03	0.00E+00	2.63E-04	4.73E-04	0.00E+00	1.04E-03	2.21E-03	0.00E+00	2.25E-04	3.60E-04	0.00E+00	1.72E-04	2.12E-04	0.00E+00
446	480171.8	3742148	1.40E-03	0.002737	0.00E+00	1.33E-03	3.03E-03	0.00E+00	2.69E-04	4.84E-04	0.00E+00	1.07E-03	2.26E-03	0.00E+00	2.29E-04	3.68E-04	0.00E+00	1.75E-04	2.16E-04	0.00E+00
447	480188.6	3742155	1.42E-03	0.002778	0.00E+00	1.35E-03	3.07E-03	0.00E+00	2.73E-04	4.91E-04	0.00E+00	1.08E-03	2.29E-03	0.00E+00	2.33E-04	3.74E-04	0.00E+00	1.78E-04	2.20E-04	0.00E+00
448	480205.3	3742162	1.43E-03	0.002799	0.00E+00	1.36E-03	3.10E-03	0.00E+00	2.75E-04	4.95E-04	0.00E+00	1.09E-03	2.31E-03	0.00E+00	2.35E-04	3.77E-04	0.00E+00	1.79E-04	2.21E-04	0.00E+00
449	480222	3742169	1.43E-03	0.0028	0.00E+00	1.36E-03	3.10E-03	0.00E+00	2.75E-04	4.95E-04	0.00E+00	1.09E-03	2.31E-03	0.00E+00	2.35E-04	3.77E-04	0.00E+00	1.79E-04	2.21E-04	0.00E+00
450	480238.7	3742176	1.42E-03	0.002781	0.00E+00	1.35E-03	3.08E-03	0.00E+00	2.73E-04	4.91E-04	0.00E+00	1.08E-03	2.29E-03	0.00E+00	2.33E-04	3.74E-04	0.00E+00	1.78E-04	2.20E-04	0.00E+00
451	480255.4	3742183	1.40E-03	0.002741	0.00E+00	1.33E-03	3.03E-03	0.00E+00	2.69E-04	4.84E-04	0.00E+00	1.07E-03	2.26E-03	0.00E+00	2.30E-04	3.69E-04	0.00E+00	1.76E-04	2.17E-04	0.00E+00
452	480272.1	3742190	1.37E-03	0.002683	0.00E+00	1.30E-03	2.97E-03	0.00E+00	2.64E-04	4.74E-04	0.00E+00	1.05E-03	2.21E-03	0.00E+00	2.25E-04	3.61E-04	0.00E+00	1.72E-04	2.12E-04	0.00E+00
453	480288.8	3742197	1.34E-03	0.002607	0.00E+00	1.27E-03	2.88E-03	0.00E+00	2.56E-04	4.61E-04	0.00E+00	1.02E-03	2.15E-03	0.00E+00	2.19E-04	3.51E-04	0.00E+00	1.67E-04	2.06E-04	0.00E+00
454	480488.6	3742447	5.08E-04	0.000991	0.00E+00	4.82E-04	1.10E-03	0.00E+00	9.74E-05	1.75E-04	0.00E+00	3.86E-04	8.17E-04	0.00E+00	8.31E-05	1.33E-04	0.00E+00	6.35E-05	7.83E-05	0.00E+00
455	480495.5	3742463	4.77E-04	0.000932	0.00E+00	4.53E-04	1.03E-03	0.00E+00	9.16E-05	1.65E-04	0.00E+00	3.63E-04	7.69E-04	0.00E+00	7.81E-05	1.25E-04	0.00E+00	5.97E-05	7.37E-05	0.00E+00
456	480502.4	3742480	4.49E-04	0.000878	0.00E+00	4.26E-04	9.71E-04	0.00E+00	8.62E-05	1.55E-04	0.00E+00	3.42E-04	7.24E-04	0.00E+00	7.36E-05	1.18E-04	0.00E+00	5.62E-05	6.94E-05	0.00E+00
457	480509.3	3742497	4.24E-04	0.000828	0.00E+00	4.02E-04	9.16E-04	0.00E+00	8.13E-05	1.46E-04	0.00E+00	3.23E-04	6.83E-04	0.00E+00	6.94E-05	1.11E-04	0.00E+00	5.30E-05	6.54E-05	0.00E+00
458	480516.2	3742514	4.01E-04	0.000782	0.00E+00	3.80E-04	8.65E-04	0.00E+00	7.69E-05	1.38E-04	0.00E+00	3.05E-04	6.45E-04	0.00E+00	6.56E-05	1.05E-04	0.00E+00	5.01E-05	6.18E-05	0.00E+00
459	480523.1	3742530	3.80E-04	0.000741	0.00E+00	3.60E-04	8.20E-04	0.00E+00	7.28E-05	1.31E-04	0.00E+00	2.89E-04	6.11E-04	0.00E+00	6.21E-05	9.97E-05	0.00E+00	4.75E-05	5.86E-05	0.00E+00
460	480088.3	3742113	1.18E-03	0.002313	0.00E+00	1.12E-03	2.56E-03	0.00E+00	2.27E-04	4.09E-04	0.00E+00	9.02E-04	1.91E-03	0.00E+00	1.94E-04	3.11E-04	0.00E+00	1.48E-04	1.83E-04	0.00E+00
461	480070.1	3742113	1.15E-03	0.002248	0.00E+00	1.09E-03	2.49E-03	0.00E+00	2.21E-04	3.97E-04	0.00E+00	8.77E-04	1.85E-03	0.00E+00	1.88E-04	3.02E-04	0.00E+00	1.44E-04	1.78E-04	0.00E+00
462	480051.9	3742113	1.11E-03	0.002173	0.00E+00	1.06E-03	2.40E-03	0.00E+00	2.13E-04	3.84E-04	0.00E+00	8.47E-04	1.79E-03	0.00E+00	1.82E-04	2.92E-04	0.00E+00	1.39E-04	1.72E-04	0.00E+00
463	480033.7	3742113	1.07E-03	0.002091	0.00E+00	1.02E-03	2.31E-03	0.00E+00	2.05E-04	3.69E-04	0.00E+00	8.15E-04	1.72E-03	0.00E+00	1.75E-04	2.81E-04	0.00E+00	1.34E-04	1.65E-04	0.00E+00
464	480015.4	3742113	1.03E-03	0.002002	0.00E+00	9.72E-04	2.21E-03	0.00E+00	1.97E-04	3.54E-04	0.00E+00	7.80E-04	1.65E-03	0.00E+00	1.68E-04	2.69E-04	0.00E+00	1.28E-04	1.58E-04	0.00E+00
465	479997.2	3742113	9.77E-04	0.001908	0.00E+00	9.27E-04	2.11E-03	0.00E+00	1.87E-04	3.37E-04	0.00E+00	7.44E-04	1.57E-03	0.00E+00	1.60E-04	2.57E-04	0.00E+00	1.22E-04	1.51E-04	0.00E+00
466	479979	3742113	9.28E-04	0.001812	0.00E+00	8.80E-04	2.00E-03	0.00E+00	1.78E-04	3.20E-04	0.00E+00	7.06E-04	1.49E-03	0.00E+00	1.52E-04	2.44E-04	0.00E+00	1.16E-04	1.43E-04	0.00E+00
467	479960.8	3742113	8.78E-04	0.001714	0.00E+00	8.33E-04	1.90E-03	0.00E+00	1.68E-04	3.03E-04	0.00E+00	6.68E-04	1.41E-03	0.00E+00	1.44E-04	2.31E-04	0.00E+00	1.10E-04	1.35E-04	0.00E+00
468	479942.6	3742113	8.28E-04	0.001617	0.00E+00	7.86E-04	1.79E-03	0.00E+00	1.59E-04	2.86E-04	0.00E+00	6.31E-04	1.33E-03	0.00E+00	1.36E-04	2.18E-04	0.00E+00	1.04E-04	1.28E-04	0.00E+00
469	479924.4	3742113	7.80E-04	0.001522	0.00E+00	7.40E-04	1.68E-03	0.00E+00	1.50E-04	2.69E-04	0.00E+00	5.94E-04	1.26E-03	0.00E+00	1.28E-04	2.05E-04	0.00E+00	9.75E-05	1.20E-04	0.00E+00
470	479906.2	3742113	7.32E-04	0.00143	0.00E+00	6.95E-04	1.58E-03	0.00E+00	1.41E-04	2.53E-04	0.00E+00	5.58E-04	1.18E-03	0.00E+00	1.20E-04	1.92E-04	0.00E+00	9.16E-05	1.13E-04	0.00E+00
471	480105.2	3742070

510	480616.9	3742515	2.79E-04	0.000545	0.00E+00	2.65E-04	6.03E-04	0.00E+00	5.35E-05	9.63E-05	0.00E+00	2.13E-04	4.50E-04	0.00E+00	4.57E-05	7.33E-05	0.00E+00	3.49E-05	4.31E-05	0.00E+00
511	480070.4	3742013	8.37E-04	0.001634	0.00E+00	7.94E-04	1.81E-03	0.00E+00	1.60E-04	2.89E-04	0.00E+00	6.37E-04	1.35E-03	0.00E+00	1.37E-04	2.20E-04	0.00E+00	1.05E-04	1.29E-04	0.00E+00
512	480052.2	3742013	8.10E-04	0.001581	0.00E+00	7.68E-04	1.75E-03	0.00E+00	1.55E-04	2.79E-04	0.00E+00	6.16E-04	1.30E-03	0.00E+00	1.33E-04	2.13E-04	0.00E+00	1.01E-04	1.25E-04	0.00E+00
513	480034	3742013	7.81E-04	0.001525	0.00E+00	7.41E-04	1.69E-03	0.00E+00	1.50E-04	2.69E-04	0.00E+00	5.95E-04	1.26E-03	0.00E+00	1.28E-04	2.05E-04	0.00E+00	9.77E-05	1.20E-04	0.00E+00
514	480015.8	3742013	7.50E-04	0.001466	0.00E+00	7.12E-04	1.62E-03	0.00E+00	1.44E-04	2.59E-04	0.00E+00	5.71E-04	1.21E-03	0.00E+00	1.23E-04	1.97E-04	0.00E+00	9.39E-05	1.16E-04	0.00E+00
515	479997.6	3742013	7.19E-04	0.001404	0.00E+00	6.82E-04	1.55E-03	0.00E+00	1.38E-04	2.48E-04	0.00E+00	5.48E-04	1.16E-03	0.00E+00	1.18E-04	1.89E-04	0.00E+00	9.00E-05	1.11E-04	0.00E+00
516	479979.3	3742013	6.87E-04	0.001342	0.00E+00	6.52E-04	1.48E-03	0.00E+00	1.32E-04	2.37E-04	0.00E+00	5.23E-04	1.11E-03	0.00E+00	1.13E-04	1.81E-04	0.00E+00	8.60E-05	1.06E-04	0.00E+00
517	479961.1	3742013	6.55E-04	0.00128	0.00E+00	6.22E-04	1.42E-03	0.00E+00	1.26E-04	2.26E-04	0.00E+00	4.99E-04	1.06E-03	0.00E+00	1.07E-04	1.72E-04	0.00E+00	8.20E-05	1.01E-04	0.00E+00
518	479942.9	3742013	6.24E-04	0.001218	0.00E+00	5.92E-04	1.35E-03	0.00E+00	1.20E-04	2.15E-04	0.00E+00	4.75E-04	1.00E-03	0.00E+00	1.02E-04	1.64E-04	0.00E+00	7.80E-05	9.62E-05	0.00E+00
519	479924.7	3742013	5.92E-04	0.001157	0.00E+00	5.62E-04	1.28E-03	0.00E+00	1.14E-04	2.04E-04	0.00E+00	4.51E-04	9.54E-04	0.00E+00	9.69E-05	1.56E-04	0.00E+00	7.41E-05	9.14E-05	0.00E+00
520	479906.5	3742013	5.62E-04	0.001097	0.00E+00	5.33E-04	1.21E-03	0.00E+00	1.08E-04	1.94E-04	0.00E+00	4.28E-04	9.05E-04	0.00E+00	9.20E-05	1.48E-04	0.00E+00	7.03E-05	8.67E-05	0.00E+00
521	480105	3741970	7.79E-04	0.001522	0.00E+00	7.39E-04	1.68E-03	0.00E+00	1.49E-04	2.69E-04	0.00E+00	5.93E-04	1.25E-03	0.00E+00	1.28E-04	2.05E-04	0.00E+00	9.75E-05	1.20E-04	0.00E+00
522	480137.6	3741984	8.39E-04	0.001639	0.00E+00	7.96E-04	1.81E-03	0.00E+00	1.61E-04	2.90E-04	0.00E+00	6.39E-04	1.35E-03	0.00E+00	1.37E-04	2.21E-04	0.00E+00	1.05E-04	1.30E-04	0.00E+00
523	480170.2	3741997	8.93E-04	0.001743	0.00E+00	8.47E-04	1.93E-03	0.00E+00	1.71E-04	3.08E-04	0.00E+00	6.80E-04	1.44E-03	0.00E+00	1.46E-04	2.34E-04	0.00E+00	1.12E-04	1.38E-04	0.00E+00
524	480202.7	3742011	9.35E-04	0.001826	0.00E+00	8.87E-04	2.02E-03	0.00E+00	1.79E-04	3.23E-04	0.00E+00	7.12E-04	1.51E-03	0.00E+00	1.53E-04	2.46E-04	0.00E+00	1.17E-04	1.44E-04	0.00E+00
525	480235.3	3742024	9.63E-04	0.001881	0.00E+00	9.14E-04	2.08E-03	0.00E+00	1.85E-04	3.32E-04	0.00E+00	7.33E-04	1.55E-03	0.00E+00	1.58E-04	2.53E-04	0.00E+00	1.21E-04	1.49E-04	0.00E+00
526	480267.9	3742038	9.75E-04	0.001904	0.00E+00	9.25E-04	2.11E-03	0.00E+00	1.87E-04	3.36E-04	0.00E+00	7.42E-04	1.57E-03	0.00E+00	1.60E-04	2.56E-04	0.00E+00	1.22E-04	1.50E-04	0.00E+00
527	480300.4	3742052	9.69E-04	0.001892	0.00E+00	9.19E-04	2.09E-03	0.00E+00	1.86E-04	3.34E-04	0.00E+00	7.38E-04	1.56E-03	0.00E+00	1.59E-04	2.55E-04	0.00E+00	1.21E-04	1.50E-04	0.00E+00
528	480333	3742065	9.45E-04	0.001845	0.00E+00	8.96E-04	2.04E-03	0.00E+00	1.81E-04	3.26E-04	0.00E+00	7.19E-04	1.52E-03	0.00E+00	1.55E-04	2.48E-04	0.00E+00	1.18E-04	1.46E-04	0.00E+00
529	480365.6	3742079	9.05E-04	0.001767	0.00E+00	8.58E-04	1.95E-03	0.00E+00	1.74E-04	3.12E-04	0.00E+00	6.89E-04	1.46E-03	0.00E+00	1.48E-04	2.38E-04	0.00E+00	1.13E-04	1.40E-04	0.00E+00
530	480398.1	3742092	8.52E-04	0.001663	0.00E+00	8.08E-04	1.84E-03	0.00E+00	1.63E-04	2.94E-04	0.00E+00	6.49E-04	1.37E-03	0.00E+00	1.39E-04	2.24E-04	0.00E+00	1.07E-04	1.31E-04	0.00E+00
531	480430.7	3742106	7.89E-04	0.001542	0.00E+00	7.49E-04	1.71E-03	0.00E+00	1.51E-04	2.72E-04	0.00E+00	6.01E-04	1.27E-03	0.00E+00	1.29E-04	2.07E-04	0.00E+00	9.88E-05	1.22E-04	0.00E+00
532	480463.3	3742120	7.22E-04	0.001409	0.00E+00	6.85E-04	1.56E-03	0.00E+00	1.38E-04	2.49E-04	0.00E+00	5.50E-04	1.16E-03	0.00E+00	1.18E-04	1.90E-04	0.00E+00	9.03E-05	1.11E-04	0.00E+00
533	480495.8	3742133	6.52E-04	0.001274	0.00E+00	6.19E-04	1.41E-03	0.00E+00	1.25E-04	2.25E-04	0.00E+00	4.97E-04	1.05E-03	0.00E+00	1.07E-04	1.71E-04	0.00E+00	8.16E-05	1.01E-04	0.00E+00
534	480599.5	3742352	3.75E-04	0.000733	0.00E+00	3.56E-04	8.11E-04	0.00E+00	7.20E-05	1.29E-04	0.00E+00	2.86E-04	6.04E-04	0.00E+00	6.14E-05	9.86E-05	0.00E+00	4.69E-05	5.79E-05	0.00E+00
535	480612.9	3742385	3.41E-04	0.000666	0.00E+00	3.23E-04	7.36E-04	0.00E+00	6.54E-05	1.18E-04	0.00E+00	2.60E-04	5.49E-04	0.00E+00	5.58E-05	8.96E-05	0.00E+00	4.27E-05	5.26E-05	0.00E+00
536	480626.4	3742417	3.10E-04	0.000606	0.00E+00	2.94E-04	6.70E-04	0.00E+00	5.95E-05	1.07E-04	0.00E+00	2.36E-04	5.00E-04	0.00E+00	5.08E-05	8.15E-05	0.00E+00	3.88E-05	4.79E-05	0.00E+00
537	480639.8	3742450	2.83E-04	0.000553	0.00E+00	2.69E-04	6.12E-04	0.00E+00	5.43E-05	9.77E-05	0.00E+00	2.16E-04	4.56E-04	0.00E+00	4.64E-05	7.44E-05	0.00E+00	3.54E-05	4.37E-05	0.00E+00
538	480653.3	3742483	2.60E-04	0.000507	0.00E+00	2.47E-04	5.61E-04	0.00E+00	4.98E-05	8.97E-05	0.00E+00	1.98E-04	4.18E-04	0.00E+00	4.25E-05	6.83E-05	0.00E+00	3.25E-05	4.01E-05	0.00E+00
539	480666.7	3742515	2.40E-04	0.000468	0.00E+00	2.28E-04	5.18E-04	0.00E+00	4.60E-05	8.28E-05	0.00E+00	1.83E-04	3.86E-04	0.00E+00	3.93E-05	6.30E-05	0.00E+00	3.00E-05	3.70E-05	0.00E+00
540	480070.6	3741963	7.27E-04	0.001419	0.00E+00	6.89E-04	1.57E-03	0.00E+00	1.39E-04	2.51E-04	0.00E+00	5.53E-04	1.17E-03	0.00E+00	1.19E-04	1.91E-04	0.00E+00	9.09E-05	1.12E-04	0.00E+00
541	480052.3	3741963	7.04E-04	0.001374	0.00E+00	6.68E-04	1.52E-03	0.00E+00	1.35E-04	2.43E-04	0.00E+00	5.36E-04	1.13E-03	0.00E+00	1.15E-04	1.85E-04	0.00E+00	8.80E-05	1.09E-04	0.00E+00
542	480034.1	3741963	6.80E-04	0.001327	0.00E+00	6.45E-04	1.47E-03	0.00E+00	1.30E-04	2.34E-04	0.00E+00	5.17E-04	1.09E-03	0.00E+00	1.11E-04	1.79E-04	0.00E+00	8.50E-05	1.05E-04	0.00E+00
543	480015.9	3741963	6.54E-04	0.001278	0.00E+00	6.21E-04	1.41E-03	0.00E+00	1.26E-04	2.26E-04	0.00E+00	4.98E-04	1.05E-03	0.00E+00	1.07E-04	1.72E-04	0.00E+00	8.19E-05	1.01E-04	0.00E+00
544	479997.7	3741963	6.29E-04	0.001227	0.00E+00	5.96E-04	1.36E-03	0.00E+00	1.21E-04	2.17E-04	0.00E+00	4.79E-04	1.01E-03	0.00E+00	1.03E-04	1.65E-04	0.00E+00	7.86E-05	9.70E-05	0.00E+00
545	479979.5	3741963	6.02E-04	0.001176	0.00E+00	5.71E-04	1.30E-03	0.00E+00	1.16E-04	2.08E-04	0.00E+00	4.59E-04	9.70E-04	0.00E+00	9.86E-05	1.58E-04	0.00E+00	7.54E-05	9.30E-05	0.00E+00
546	479961.3	3741963	5.76E-04	0.001125	0.00E+00	5.47E-04	1.24E-03	0.00E+00	1.10E-04	1.99E-04	0.00E+00	4.39E-04	9.28E-04	0.00E+00	9.43E-05	1.51E-04	0.00E+00	7.21E-05	8.89E-05	0.00E+00
547	479943.1	3741963	5.50E-04	0.001074	0.00E+00	5.22E-04	1.19E-03	0.00E+00	1.05E-04	1.90E-04	0.00E+00	4.19E-04	8.86E-04	0.00E+00	9.00E-05	1.44E-04	0.00E+00	6.88E-05	8.49E-05	0.00E+00
548	479924.9	3741963	5.24E-04	0.001024	0.00E+00	4.97E-04	1.13E-03	0.00E+00	1.01E-04	1.81E-04	0.00E+00	3.99E-04	8.44E-04	0.00E+00	8.58E-05	1.38E-04	0.00E+00	6.56E-05	8.09E-05	0.00E+00
549	479906.7	3741963	4.99E-04	0.000975	0.00E+00	4.74E-04	1.08E-03	0.00E+00	9.58E-05	1.72E-04	0.00E+00	3.80E-04	8.04E-04	0.00E+00	8.17E-05	1.31E-04	0.00E+00	6.25E-05	7.70E-05	0.00E+00
550	480105.3	3741920	6.83E-04	0.001333	0.00E+00	6.48E-04	1.47E-03	0.00E+00	1.31E-04	2.36E-04	0.00E+00	5.20E-04	1.10E-03	0.00E+00	1.12E-04	1.79E-04	0.00E+00	8.54E-05	1.05E-04	0.00E+00
551	480138.1	3741934	7.35E-04	0.001435	0.00E+00	6.97E-04	1.59E-03	0.00E+00	1.41E-04	2.54E-04	0.00E+00	5.60E-04	1.18E-03	0.00E+00	1.20E-04	1.93E-04	0.00E+00	9.19E-05	1.13E-04	0.00E+00
552	480170.8	3741947	7.82E-04	0.001528	0.00E+00	7.42E-04	1.69E-03	0.00E+00	1.50E-04	2.70E-04	0.00E+00	5.96E-04	1.26E-03	0.00E+00	1.28E-04	2.06E-04	0.00E+00	9.79E-05	1.21E-04	0.00E+00
553	480203.6	3741961	8.22E-04	0.001606	0.00E+00	7.80E-04	1.78E-03	0.00E+00	1.58E-04	2.84E-04	0.00E+00	6.26E-04	1.32E-03	0.00E+00	1.35E-04	2.16E-04	0.00E+00	1.03E-04	1.27E-04	0.00E+00
554	480236.3	3741975	8.52E-04	0.001664	0.00E+00	8.08E-04	1.84E-03	0.00E+00	1.63E-04	2.94E-04	0.00E+00	6.49E-04	1.37E-03	0.00E+00	1.39E-04	2.24E-04	0.00E+00	1.07E-04	1.31E-04	0.00E+00
555	480269.1	3741988	8.69E-04	0.001697	0.00E+00	8.25E-04	1.88E-03	0.00E+00	1.67E-04	3.00E-04	0.00E+00	6.62E-04	1.40E-03	0.00E+00	1.42E-04	2.28E-04	0.00E+00	1.09E-04	1.34E-04	0.00E+00
556	480301.9	3742002	8.72E-04	0.001703	0.00E+00	8.28E-04	1.88E-03	0.00E+00	1.67E-04	3.01E-04	0.00E+00	6.64E-04	1.40E-03	0.00E+00	1.43E-04	2.29E-04	0.00E+00	1.09E-04	1.35E-04	0.00E+00
557	480334.6	3742016	8.61E-04	0.001681	0.00E+00	8.17E-04	1.86E-03	0.00E+00	1.65E-04	2.97E-04	0.00E+00	6.56E-04	1.39E-03	0.00E+00	1.41E-04	2.26E-04	0.00E+00	1.08E-04	1.33E-04	0.00E+00
558	480367.4	3742029	8.36E-04	0.001632	0.00E+00	7.93E-04	1.81E-03	0.00E+00	1.60E-04	2.88E-04	0.00E+00	6.36E-04	1.35E-03	0.00E+00	1.37E-04	2.20E-04	0.00E+00	1.05E-04	1.29E-04	0.00E+00
559	480400.1	3742043	7.98E-04	0.001558	0.00E+00	7.57E-04	1.72E-03	0.00E+00	1.53E-04	2.75E-04	0.00E+00	6.08E-04	1.29E-03	0.00E+00	1.31E-04	2.10E-04	0.00E+00	9.98E-05	1.23E-04	0.00E+00
560	480432.9	3742057	7.51E-04	0.001466	0.00E+00	7.12E-04	1.62E-03	0.00E+00	1.44E-04	2.59E-04	0.00E+00	5.72E-04	1.21E-03	0.00E+00	1.23E-04	1.97E-04	0.00E+00	9.39E-05	1.16E-04	0.00E+00
561	480465.7	3742070	6.97E-04	0.00136	0.00E+00	6.61E-04	1.50E-03	0.00E+00	1.34E-04	2.40E-04	0.00E+00	5.30E-04	1.12E-03	0.00E+00	1.14E-04	1.83E-04	0.00E+00	8.71E-05	1.08E-04	0.00E+00
562	480498.4	3742084	6.39E-04	0.001247	0.00E+00	6.06E-04	1.38E-03	0.00E+00	1.23E-04	2.20E-04	0.00E+00	4.86E-04	1.03E-03	0.00E+00	1.05E-04	1.68E-04	0.00E+00	7.99E-05	9.86E-05	0.00E+00
563	480531.2	3742098	5.80E-04	0.001133	0.00E+00	5.50E-04	1.25E-03	0.00E+00	1.11E-04	2.00E-04	0.00E+00	4.42E-04	9.34E-04	0.00E+00	9.49E-05	1.52E-04	0.00E+00	7.26E-05	8.95E-05	0.00E+00
564	480554.3	3742121	5.38E-04	0.001051	0.00E+00	5.11E-04	1.16E-03	0.00E+00	1.03E-04	1.86E-04	0.00E+00	4.10E-04	8.67E-04	0.00E+00	8.81E-05	1.41E-04	0.00E+00	6.73E-05	8.31E-05	0.00E+00
565	480662.5	3742384	2.88E-04	0.000563	0.00E+00	2.74E-04	6.23E-04	0.00E+00	5.53E-05	9.95E-05	0.00E+00	2.20E-04	4.64E-04	0.00E+00	4.72E-05	7.57E-05	0.00E+00	3.61E-05	4.45E-05	0.00E+00
566	480676	3742416	2.64E-04	0.000516	0.00E+00	2.51E-04	5.71E-04	0.00E+00	5.07E-05	9.12E-05	0.00E+00	2.01E-04	4.25E-04	0.00E+00	4.32E-05	6.94E-05	0.00E+00	3.31E-05	4.08E-05	0.00E+00
567	480689.6	3742449	2.43E-04	0.000475	0.00E+00	2.31E-04	5.25E-04	0.00E+00	4.66E-05	8.39E-05	0.00E+00	1.85E-04	3.91E-04	0.00E+00	3.98E-05	6.39E-05	0.00E+00	3.04E-05	3.75E-05	0.00E+00
568	480070.7	3741913	6.37E-04	0.001245	0.00E+00	6.05E-04	1.38E-03	0.00E+00	1.22E-04	2.20E-04	0.00E+00	4.85E-04	1.03E-03	0.00E+00	1.04E-04	1.67E-04	0.00E+00	7.97E-05	9.84E-05	0.00E+00
569	480052.5	3741913	6.18E-04	0.001207	0.00E+00	5.86E-04	1.33E-03	0.00E+00	1.19E-04	2.13E-04	0.00E+00	4.71E-04	9.95E-04	0.00E+00	1.01E-04	1.62E-04	0.00E+00	7.73E-05	9.54E-05	0.00E+00
570	480034.3	3741913	5.97E-04	0.001167	0.00E+00	5.67E-04	1.29E-03	0.00E+00	1.15E-04	2.06E-04	0.00E+00	4.55E-04	9.62E-04	0.00E+00	9.78E-05	1.57E-04	0.00E+00	7.48E-05	9.22E-05	0.00E+00
571	480016.1	3741913	5.76E-04	0.001126	0.00E+00	5.47E-04	1.24E-03	0.00E+00	1.11E-04	1.99E-04	0.00E+00	4.39E-04	9.28E-04	0.00E+00	9.43E-05	1.51E-04	0.00E+00	7.21E-05	8.90E-05	0.00E+00
572	479997.9	3741913	5.55E-04	0.001083	0.00E+00	5.26E-04	1.20E-03	0.00E+00	1.06E-04	1.91E-04	0.00E+00	4.22E-04	8.93E-04	0.00E+00	9.08E-05	1.46E-04	0.00E+00	6.94E-05	8.56E-05	0.00E+00
573	479979.7	3741913	5.33E-04	0.001041	0.00E+00	5.06E-04	1.15E-03	0.00E+00	1.02E-04	1.84E-04	0.00E+00	4.06E-04	8.58E-04	0.00E+00	8.72E-05	1.40E-04	0.00E+00	6.67E-05	8.22E-05	0.00E+00
574	479961.4	3741913	5.11E-04	0.000998	0.00E+00	4.85E-04	1.10E-03	0.00E+00	9.80E-05	1.76E-04	0.00E+00	3.89E-04	8.23E-04	0.00E+00	8.36E-05	1.34E-04	0.00E+00	6.39E-05	7.89E-05	0.00E+00
575	479943.2	3741913	4.89E-04	0.000956	0.00E+00	4.64E-04	1.06E-03	0.00E+00	9.39E-05	1.69E-04	0.00E+00	3.73E-04	7.88E-04	0.00E+00	8.01E-05	1.29E-04	0.00E+00	6.12E-05	7.55E-05	0.00E+00
576	479925	3741913	4.68E-04	0.000914	0.00E+00	4.44E-04	1.01E-03	0.00E+00	8.98E-05	1.61E-04	0.00E+00	3.56E-04	7.54E-04	0.00E+00	7.66E-05	1.23E-04	0.00E+00	5.85E-05	7.22E-05	0.00E+00
577	479906.8	3741913	4.47E-04	0.000873	0.00E+00	4.24E-04	9.66E-04	0.00E+00	8.58E-05	1.54E-04	0.00E+00	3.40E-04	7.20E-04	0.00E+00	7.32E-05	1.17E-04	0.00E+00	5.59E-05	6.90E-05	0.00E+00
578	480105.5	3741870	6.03E-04	0.001178	0.00E+00	5.72E-04	1.30E-03	0.00E+00	1.16E-04	2.08E-04	0.00E+00	4.59E-04	9.72E-04	0.00E+00	9.88E-05	1.59E-04	0.00E+00	7.55E-05	9.31E-05	0.00E+00
579	480138.5	3741884	6.49E-04	0.001267	0.00E+00	6.15E-04	1.40E-03	0.00E+00	1.24E-04	2.24E-04	0.00E+00	4.94E-04	1.04E-03	0.00E+00	1.06E-04	1.70E-04	0.00E+00	8.12E-05	1.00E-04	0.00E+00
580	480171.4	3741898	6.91E-04	0.001349	0.00E+00	6.56E-04	1.49E-03	0.00E+00	1.33E-04	2.38E-04	0.00E+00	5.26E-04	1.11E-03	0.00E+00	1.13E-04	1.82E-04	0.00E+00	8.64E-05	1.07E-04	0.00E+00
581	480204.3	3741911	7.28E-04	0.001421	0.00E+00	6.91E-04	1.57E-03	0.00E+00	1.40E-04	2.51E-04	0.00E+00	5.54E-04	1.17E-03	0.00E+00	1.19E-04	1.91E-04	0.00E+00	9.11E-05	1.12E-04	0.00E+00
582	480237.2	3741925	7.57E-04	0.001479	0.00E+00	7.18E-04	1.64E-03	0.00E+00	1.45E-04	2.61E-04	0.00E+00	5.77E-04	1.22E-03	0.00E+00	1.24E-04	1.99E-04	0.00E+00	9.47E-05	1.17E-04	0.00E+00
583	480270.2	3741939	7.77E-04	0.001518	0.00E+00	7.37E-04	1.68E-03	0.00E+00	1.49E-04	2.68E-04	0.00E+00	5.92E-04	1.25E-03	0.00E+00	1.27E-04	2.04E-04	0.00E+00	9.72E-05	1.20E-04	0.00E+00
584	480303.1	3741953	7.86E-04	0.001536	0.00E+00	7.46E-04	1.70E-03	0.00E+00	1.51E-04	2.71E-04	0.00E+00	5.99E-04	1.27E-03	0.00E+00	1.29E-04	2.07E-04	0.00E+00	9.84E-05	1.21E-04	0.00E+00
585	480336	3741966	7.84E-04	0.001531	0.00E+00	7.44E-04	1.69E-03	0.00E+00	1.50E-04	2.70E-04	0.00E+00	5.97E-04	1.26E-03	0.00E+00	1.28E-04	2.06E-04	0.00E+00	9.81E-05	1.21E-04	0.00E+00
586	480369	3741980	7.69E-04	0.001502	0.00E+00	7.30E-04	1.66E-03	0.00E+00	1.48E-04	2.66E-04	0.00E+00	5.86E-04	1.24E-03	0.00E+00	1.26E-04	2.02E-04	0.00E+00	9.63E-05	1.19E-04	0.00E+00
587	480401.9	3741994	7.44E-04	0.001452	0.00E+00	7.06E-04	1.61E-03	0.00E+00	1.43E-04	2.57E-04	0.00E+00	5.66E-04	1.20E-03	0.00E+00	1.22E-04	1.95E-04	0.00E+00	9.30E-05	1.15E-04	0.00E+00
588	480434.8	3742008	7.09E-04	0.001385	0.00E+00	6.73E-04	1.53E-03	0.00E+00	1.36E-04	2.45E-04	0.00E+00	5.40E-04	1.14E-03	0.00E+00	1.16E-04	1.86E-04	0.00E+00	8.87E-05	1.09E-04	0.00E+00
589	480467.7	3742021	6.67E-04	0.001302	0.00E+00	6.32E-04	1.44E-03	0.00E+00	1.28E-04	2.30E-04	0.00E+00	5.08E-04	1.07E-03	0.00E+00	1.09E-04	1.75E-04	0.00E+00	8.34E-05	1.03E-04	0.00E+00
590	480500.7	3742035	6.19E-04	0.001209	0.00E+00	5.87E-04	1.34E-03	0.00E+00	1.19E-04	2.14E-04	0.00E+00	4.71E-04	9.97E-04	0.00E+00	1.01E-04	1.63E-04	0.00E+00	7.75E-05	9.56E-05	0.00E+00
591	480533.6	3742049	5.70E-04	0.001112	0.00E+00	5.40E-04	1.23E-03	0.00E+00	1.09E-04	1.97E-04	0.00E+00	4.34E-04	9.17E-04	0.00E+00	9.32E-05	1.50E-04	0.00E+00	7.13E-05	8.79E-05	0.00E+00
592	480566.5	3742063	5.19E-04	0.001014	0.00E+00	4.93E-04	1.12E-03	0.00E+00	9.96E-05	1.79E-04	0.00E+00	3.95E-04	8.36E-04	0.00E+00	8.50E-05	1.36E-04	0.00E+00	6.49E-05	8.01E-05	0.00E+00
593	480589.8	3742086	4.84E-04	0.000945	0.00E+00	4.59E-04	1.04E-03	0.00E+00	9.28E-05	1.67E-04	0.00E+00	3.68E-04	7.79E-04	0.00E+00	7.92E-05	1.27E-04	0.00E+00	6.05E-05	7.46E-05	0.00E+00
594	480603.4	3742119	4.59E-04	0.000897	0.00E+00	4.36E-04	9.92E-04	0.00E+00	8.81E-05	1.59E-04	0.00E+00	3.50E-04	7.40E-04	0.00E+00	7.52E-05	1.21E-04	0.00E+00	5.75E-05	7.09E-05	0.00E+00
595	480698.5	3742350	2.69E-04	0.000525	0.00E+00	2.55E-04	5.81E-04	0.00E+00	5.16E-05	9.28E-05	0.00E+00	2.05E-04	4.33E-04	0.00E+00	4.40E-05	7.06E-05	0.00E+00	3.36E-05	4.15E-05	0.00E+00
596	480712.1	3742383	2.47E-04	0.000483	0.00E+00	2.35E-04	5.34E-04	0.00E+00	4.74E-05	8.53E-05	0.00E+00	1.88E-04	3.98E-04	0.00E+00	4.05E-05	6.50E-05	0.00E+00	3.09E-05	3.82E-05	0.00E+00
597	480725.7	3742416	2.28E-04	0.000445	0.00E+00	2.16E-04	4.93E-04	0.00E+00	4.38E-05	7.87E-05	0.00E+00	1.74E-04	3.67E-04	0.00E+00	3.73E-05	5.99E-05	0.00E+00	2.85E-05	3.52E-05	0.00E+00
598	480070.9	3741863	5.64E-04	0.001102	0.00E+00	5.35E-04	1.22E-03	0.00E+00	1.08E-04	1.95E-04	0.00E+00	4.30E-04	9.09E-04	0.00E+00	9.24E-05	1.48E-04	0.00E+00	7.06E-05	8.71E-05	0.00E+00
599	480052.7	3741863

638	479998.2	3741813	4.43E-04	0.000865	0.00E+00	4.20E-04	9.57E-04	0.00E+00	8.50E-05	1.53E-04	0.00E+00	3.37E-04	7.13E-04	0.00E+00	7.25E-05	1.16E-04	0.00E+00	5.54E-05	6.84E-05	0.00E+00
639	479980	3741813	4.27E-04	0.000835	0.00E+00	4.05E-04	9.23E-04	0.00E+00	8.20E-05	1.47E-04	0.00E+00	3.25E-04	6.88E-04	0.00E+00	6.99E-05	1.12E-04	0.00E+00	5.35E-05	6.60E-05	0.00E+00
640	479961.8	3741813	4.12E-04	0.000804	0.00E+00	3.91E-04	8.89E-04	0.00E+00	7.90E-05	1.42E-04	0.00E+00	3.13E-04	6.63E-04	0.00E+00	6.74E-05	1.08E-04	0.00E+00	5.15E-05	6.35E-05	0.00E+00
641	479943.5	3741813	3.96E-04	0.000774	0.00E+00	3.76E-04	8.56E-04	0.00E+00	7.60E-05	1.37E-04	0.00E+00	3.02E-04	6.38E-04	0.00E+00	6.48E-05	1.04E-04	0.00E+00	4.96E-05	6.11E-05	0.00E+00
642	479925.3	3741813	3.81E-04	0.000744	0.00E+00	3.61E-04	8.22E-04	0.00E+00	7.30E-05	1.31E-04	0.00E+00	2.90E-04	6.13E-04	0.00E+00	6.23E-05	1.00E-04	0.00E+00	4.76E-05	5.88E-05	0.00E+00
643	479907.1	3741813	3.66E-04	0.000714	0.00E+00	3.47E-04	7.90E-04	0.00E+00	7.01E-05	1.26E-04	0.00E+00	2.78E-04	5.89E-04	0.00E+00	5.99E-05	9.61E-05	0.00E+00	4.58E-05	5.64E-05	0.00E+00
644	480106	3741770	4.82E-04	0.00094	0.00E+00	4.57E-04	1.04E-03	0.00E+00	9.24E-05	1.66E-04	0.00E+00	3.67E-04	7.75E-04	0.00E+00	7.88E-05	1.27E-04	0.00E+00	6.02E-05	7.43E-05	0.00E+00
645	480139.2	3741784	5.16E-04	0.001008	0.00E+00	4.90E-04	1.11E-03	0.00E+00	9.90E-05	1.78E-04	0.00E+00	3.93E-04	8.31E-04	0.00E+00	8.45E-05	1.36E-04	0.00E+00	6.46E-05	7.97E-05	0.00E+00
646	480155.8	3741791	5.33E-04	0.001041	0.00E+00	5.06E-04	1.15E-03	0.00E+00	1.02E-04	1.84E-04	0.00E+00	4.06E-04	8.58E-04	0.00E+00	8.72E-05	1.40E-04	0.00E+00	6.67E-05	8.23E-05	0.00E+00
647	480189	3741805	5.65E-04	0.001104	0.00E+00	5.36E-04	1.22E-03	0.00E+00	1.08E-04	1.95E-04	0.00E+00	4.30E-04	9.10E-04	0.00E+00	9.25E-05	1.48E-04	0.00E+00	7.07E-05	8.72E-05	0.00E+00
648	480205.6	3741812	5.80E-04	0.001133	0.00E+00	5.50E-04	1.25E-03	0.00E+00	1.11E-04	2.00E-04	0.00E+00	4.42E-04	9.34E-04	0.00E+00	9.49E-05	1.52E-04	0.00E+00	7.26E-05	8.95E-05	0.00E+00
649	480222.2	3741819	5.94E-04	0.00116	0.00E+00	5.63E-04	1.28E-03	0.00E+00	1.14E-04	2.05E-04	0.00E+00	4.52E-04	9.56E-04	0.00E+00	9.72E-05	1.56E-04	0.00E+00	7.43E-05	9.17E-05	0.00E+00
650	480255.4	3741833	6.18E-04	0.001207	0.00E+00	5.86E-04	1.33E-03	0.00E+00	1.19E-04	2.13E-04	0.00E+00	4.71E-04	9.95E-04	0.00E+00	1.01E-04	1.62E-04	0.00E+00	7.73E-05	9.54E-05	0.00E+00
651	480272	3741839	6.28E-04	0.001226	0.00E+00	5.96E-04	1.36E-03	0.00E+00	1.20E-04	2.17E-04	0.00E+00	4.78E-04	1.01E-03	0.00E+00	1.03E-04	1.65E-04	0.00E+00	7.86E-05	9.69E-05	0.00E+00
652	480288.6	3741846	6.36E-04	0.001242	0.00E+00	6.03E-04	1.37E-03	0.00E+00	1.22E-04	2.20E-04	0.00E+00	4.84E-04	1.02E-03	0.00E+00	1.04E-04	1.67E-04	0.00E+00	7.96E-05	9.82E-05	0.00E+00
653	480321.8	3741860	6.47E-04	0.001264	0.00E+00	6.14E-04	1.40E-03	0.00E+00	1.24E-04	2.23E-04	0.00E+00	4.93E-04	1.04E-03	0.00E+00	1.06E-04	1.70E-04	0.00E+00	8.10E-05	9.99E-05	0.00E+00
654	480338.4	3741867	6.50E-04	0.001269	0.00E+00	6.17E-04	1.40E-03	0.00E+00	1.25E-04	2.24E-04	0.00E+00	4.95E-04	1.05E-03	0.00E+00	1.06E-04	1.71E-04	0.00E+00	8.13E-05	1.00E-04	0.00E+00
655	480371.6	3741881	6.49E-04	0.001267	0.00E+00	6.16E-04	1.40E-03	0.00E+00	1.24E-04	2.24E-04	0.00E+00	4.94E-04	1.05E-03	0.00E+00	1.06E-04	1.71E-04	0.00E+00	8.12E-05	1.00E-04	0.00E+00
656	480388.2	3741888	6.46E-04	0.001261	0.00E+00	6.12E-04	1.39E-03	0.00E+00	1.24E-04	2.23E-04	0.00E+00	4.92E-04	1.04E-03	0.00E+00	1.06E-04	1.70E-04	0.00E+00	8.08E-05	9.96E-05	0.00E+00
657	480404.8	3741895	6.40E-04	0.00125	0.00E+00	6.07E-04	1.38E-03	0.00E+00	1.23E-04	2.21E-04	0.00E+00	4.87E-04	1.03E-03	0.00E+00	1.05E-04	1.68E-04	0.00E+00	8.01E-05	9.88E-05	0.00E+00
658	480438	3741909	6.23E-04	0.001217	0.00E+00	5.91E-04	1.35E-03	0.00E+00	1.20E-04	2.15E-04	0.00E+00	4.75E-04	1.00E-03	0.00E+00	1.02E-04	1.64E-04	0.00E+00	7.80E-05	9.62E-05	0.00E+00
659	480454.6	3741916	6.12E-04	0.001196	0.00E+00	5.81E-04	1.32E-03	0.00E+00	1.17E-04	2.11E-04	0.00E+00	4.66E-04	9.86E-04	0.00E+00	1.00E-04	1.61E-04	0.00E+00	7.66E-05	9.45E-05	0.00E+00
660	480487.8	3741930	5.86E-04	0.001144	0.00E+00	5.56E-04	1.27E-03	0.00E+00	1.12E-04	2.02E-04	0.00E+00	4.46E-04	9.43E-04	0.00E+00	9.59E-05	1.54E-04	0.00E+00	7.33E-05	9.04E-05	0.00E+00
661	480504.4	3741936	5.70E-04	0.001114	0.00E+00	5.41E-04	1.23E-03	0.00E+00	1.09E-04	1.97E-04	0.00E+00	4.34E-04	9.19E-04	0.00E+00	9.34E-05	1.50E-04	0.00E+00	7.14E-05	8.80E-05	0.00E+00
662	480521	3741943	5.54E-04	0.001082	0.00E+00	5.26E-04	1.20E-03	0.00E+00	1.06E-04	1.91E-04	0.00E+00	4.22E-04	8.92E-04	0.00E+00	9.07E-05	1.46E-04	0.00E+00	6.93E-05	8.55E-05	0.00E+00
663	480554.2	3741957	5.19E-04	0.001013	0.00E+00	4.92E-04	1.12E-03	0.00E+00	9.95E-05	1.79E-04	0.00E+00	3.95E-04	8.35E-04	0.00E+00	8.49E-05	1.36E-04	0.00E+00	6.49E-05	8.01E-05	0.00E+00
664	480570.8	3741964	5.00E-04	0.000977	0.00E+00	4.75E-04	1.08E-03	0.00E+00	9.60E-05	1.73E-04	0.00E+00	3.81E-04	8.06E-04	0.00E+00	8.19E-05	1.31E-04	0.00E+00	6.26E-05	7.72E-05	0.00E+00
665	480604.1	3741978	4.63E-04	0.000903	0.00E+00	4.39E-04	9.99E-04	0.00E+00	8.87E-05	1.60E-04	0.00E+00	3.52E-04	7.45E-04	0.00E+00	7.57E-05	1.22E-04	0.00E+00	5.79E-05	7.14E-05	0.00E+00
666	480620.7	3741985	4.44E-04	0.000866	0.00E+00	4.21E-04	9.58E-04	0.00E+00	8.51E-05	1.53E-04	0.00E+00	3.38E-04	7.14E-04	0.00E+00	7.26E-05	1.17E-04	0.00E+00	5.55E-05	6.85E-05	0.00E+00
667	480637.3	3741992	4.25E-04	0.000829	0.00E+00	4.03E-04	9.17E-04	0.00E+00	8.15E-05	1.47E-04	0.00E+00	3.23E-04	6.84E-04	0.00E+00	6.95E-05	1.12E-04	0.00E+00	5.31E-05	6.56E-05	0.00E+00
668	480660.7	3742015	3.98E-04	0.000777	0.00E+00	3.77E-04	8.59E-04	0.00E+00	7.63E-05	1.37E-04	0.00E+00	3.03E-04	6.41E-04	0.00E+00	6.51E-05	1.05E-04	0.00E+00	4.98E-05	6.14E-05	0.00E+00
669	480674.4	3742049	3.80E-04	0.000741	0.00E+00	3.60E-04	8.20E-04	0.00E+00	7.28E-05	1.31E-04	0.00E+00	2.89E-04	6.11E-04	0.00E+00	6.21E-05	9.97E-05	0.00E+00	4.75E-05	5.86E-05	0.00E+00
670	480722.4	3742165	3.06E-04	0.000598	0.00E+00	2.90E-04	6.61E-04	0.00E+00	5.87E-05	1.06E-04	0.00E+00	2.33E-04	4.93E-04	0.00E+00	5.01E-05	8.04E-05	0.00E+00	3.83E-05	4.72E-05	0.00E+00
671	480736.1	3742198	2.85E-04	0.000556	0.00E+00	2.70E-04	6.15E-04	0.00E+00	5.46E-05	9.82E-05	0.00E+00	2.17E-04	4.58E-04	0.00E+00	4.66E-05	7.48E-05	0.00E+00	3.56E-05	4.39E-05	0.00E+00
672	480749.8	3742232	2.64E-04	0.000516	0.00E+00	2.51E-04	5.70E-04	0.00E+00	5.07E-05	9.11E-05	0.00E+00	2.01E-04	4.25E-04	0.00E+00	4.32E-05	6.94E-05	0.00E+00	3.30E-05	4.08E-05	0.00E+00
673	480763.5	3742265	2.45E-04	0.000478	0.00E+00	2.32E-04	5.29E-04	0.00E+00	4.69E-05	8.44E-05	0.00E+00	1.86E-04	3.94E-04	0.00E+00	4.00E-05	6.43E-05	0.00E+00	3.06E-05	3.78E-05	0.00E+00
674	480777.2	3742298	2.27E-04	0.000443	0.00E+00	2.15E-04	4.90E-04	0.00E+00	4.35E-05	7.82E-05	0.00E+00	1.73E-04	3.65E-04	0.00E+00	3.71E-05	5.95E-05	0.00E+00	2.84E-05	3.50E-05	0.00E+00
675	480790.9	3742331	2.10E-04	0.00041	0.00E+00	1.99E-04	4.54E-04	0.00E+00	4.03E-05	7.25E-05	0.00E+00	1.60E-04	3.38E-04	0.00E+00	3.44E-05	5.52E-05	0.00E+00	2.63E-05	3.24E-05	0.00E+00
676	480797.8	3742348	2.03E-04	0.000395	0.00E+00	1.92E-04	4.37E-04	0.00E+00	3.88E-05	6.99E-05	0.00E+00	1.54E-04	3.26E-04	0.00E+00	3.31E-05	5.32E-05	0.00E+00	2.53E-05	3.13E-05	0.00E+00
677	480811.5	3742381	1.88E-04	0.000368	0.00E+00	1.79E-04	4.07E-04	0.00E+00	3.61E-05	6.50E-05	0.00E+00	1.43E-04	3.03E-04	0.00E+00	3.08E-05	4.95E-05	0.00E+00	2.36E-05	2.91E-05	0.00E+00
678	480825.2	3742415	1.76E-04	0.000343	0.00E+00	1.67E-04	3.80E-04	0.00E+00	3.37E-05	6.07E-05	0.00E+00	1.34E-04	2.83E-04	0.00E+00	2.88E-05	4.62E-05	0.00E+00	2.20E-05	2.71E-05	0.00E+00
679	480089.4	3741763	4.64E-04	0.000906	0.00E+00	4.40E-04	1.00E-03	0.00E+00	8.90E-05	1.60E-04	0.00E+00	3.53E-04	7.47E-04	0.00E+00	7.60E-05	1.22E-04	0.00E+00	5.81E-05	7.16E-05	0.00E+00
680	480071.2	3741763	4.52E-04	0.000883	0.00E+00	4.29E-04	9.77E-04	0.00E+00	8.67E-05	1.56E-04	0.00E+00	3.44E-04	7.28E-04	0.00E+00	7.40E-05	1.19E-04	0.00E+00	5.66E-05	6.98E-05	0.00E+00
681	480053	3741763	4.40E-04	0.000858	0.00E+00	4.17E-04	9.50E-04	0.00E+00	8.43E-05	1.52E-04	0.00E+00	3.35E-04	7.08E-04	0.00E+00	7.20E-05	1.15E-04	0.00E+00	5.50E-05	6.78E-05	0.00E+00
682	480034.8	3741763	4.27E-04	0.000833	0.00E+00	4.05E-04	9.22E-04	0.00E+00	8.18E-05	1.47E-04	0.00E+00	3.25E-04	6.87E-04	0.00E+00	6.98E-05	1.12E-04	0.00E+00	5.34E-05	6.58E-05	0.00E+00
683	480016.5	3741763	4.13E-04	0.000807	0.00E+00	3.92E-04	8.93E-04	0.00E+00	7.93E-05	1.43E-04	0.00E+00	3.15E-04	6.66E-04	0.00E+00	6.77E-05	1.09E-04	0.00E+00	5.17E-05	6.38E-05	0.00E+00
684	479998.3	3741763	4.00E-04	0.000781	0.00E+00	3.80E-04	8.64E-04	0.00E+00	7.67E-05	1.38E-04	0.00E+00	3.05E-04	6.44E-04	0.00E+00	6.55E-05	1.05E-04	0.00E+00	5.00E-05	6.17E-05	0.00E+00
685	479980.1	3741763	3.87E-04	0.000755	0.00E+00	3.67E-04	8.35E-04	0.00E+00	7.42E-05	1.33E-04	0.00E+00	2.94E-04	6.23E-04	0.00E+00	6.33E-05	1.02E-04	0.00E+00	4.84E-05	5.97E-05	0.00E+00
686	479961.9	3741763	3.73E-04	0.000729	0.00E+00	3.54E-04	8.06E-04	0.00E+00	7.16E-05	1.29E-04	0.00E+00	2.84E-04	6.01E-04	0.00E+00	6.11E-05	9.80E-05	0.00E+00	4.67E-05	5.76E-05	0.00E+00
687	479943.7	3741763	3.60E-04	0.000702	0.00E+00	3.41E-04	7.77E-04	0.00E+00	6.90E-05	1.24E-04	0.00E+00	2.74E-04	5.79E-04	0.00E+00	5.89E-05	9.45E-05	0.00E+00	4.50E-05	5.55E-05	0.00E+00
688	479925.5	3741763	3.47E-04	0.000677	0.00E+00	3.29E-04	7.49E-04	0.00E+00	6.65E-05	1.20E-04	0.00E+00	2.64E-04	5.58E-04	0.00E+00	5.67E-05	9.10E-05	0.00E+00	4.34E-05	5.35E-05	0.00E+00
689	479907.3	3741763	3.34E-04	0.000651	0.00E+00	3.16E-04	7.21E-04	0.00E+00	6.40E-05	1.15E-04	0.00E+00	2.54E-04	5.37E-04	0.00E+00	5.46E-05	8.76E-05	0.00E+00	4.17E-05	5.15E-05	0.00E+00
690	480106.2	3741720	4.34E-04	0.000848	0.00E+00	4.12E-04	9.38E-04	0.00E+00	8.33E-05	1.50E-04	0.00E+00	3.31E-04	7.00E-04	0.00E+00	7.11E-05	1.14E-04	0.00E+00	5.44E-05	6.71E-05	0.00E+00
691	480122.9	3741727	4.50E-04	0.000878	0.00E+00	4.27E-04	9.72E-04	0.00E+00	8.63E-05	1.55E-04	0.00E+00	3.42E-04	7.24E-04	0.00E+00	7.36E-05	1.18E-04	0.00E+00	5.63E-05	6.94E-05	0.00E+00
692	480156.2	3741741	4.80E-04	0.000937	0.00E+00	4.55E-04	1.04E-03	0.00E+00	9.21E-05	1.66E-04	0.00E+00	3.65E-04	7.73E-04	0.00E+00	7.86E-05	1.26E-04	0.00E+00	6.00E-05	7.41E-05	0.00E+00
693	480172.8	3741748	4.95E-04	0.000966	0.00E+00	4.69E-04	1.07E-03	0.00E+00	9.49E-05	1.71E-04	0.00E+00	3.77E-04	7.96E-04	0.00E+00	8.09E-05	1.30E-04	0.00E+00	6.19E-05	7.63E-05	0.00E+00
694	480189.5	3741755	5.09E-04	0.000993	0.00E+00	4.83E-04	1.10E-03	0.00E+00	9.76E-05	1.76E-04	0.00E+00	3.87E-04	8.19E-04	0.00E+00	8.33E-05	1.34E-04	0.00E+00	6.36E-05	7.85E-05	0.00E+00
695	480206.2	3741762	5.22E-04	0.00102	0.00E+00	4.96E-04	1.13E-03	0.00E+00	1.00E-04	1.80E-04	0.00E+00	3.98E-04	8.41E-04	0.00E+00	8.55E-05	1.37E-04	0.00E+00	6.53E-05	8.06E-05	0.00E+00
696	480239.5	3741776	5.47E-04	0.001068	0.00E+00	5.19E-04	1.18E-03	0.00E+00	1.05E-04	1.89E-04	0.00E+00	4.17E-04	8.81E-04	0.00E+00	8.95E-05	1.44E-04	0.00E+00	6.84E-05	8.44E-05	0.00E+00
697	480256.1	3741783	5.58E-04	0.00109	0.00E+00	5.29E-04	1.21E-03	0.00E+00	1.07E-04	1.93E-04	0.00E+00	4.25E-04	8.99E-04	0.00E+00	9.13E-05	1.47E-04	0.00E+00	6.98E-05	8.61E-05	0.00E+00
698	480272.8	3741790	5.68E-04	0.001109	0.00E+00	5.39E-04	1.23E-03	0.00E+00	1.09E-04	1.96E-04	0.00E+00	4.32E-04	9.14E-04	0.00E+00	9.29E-05	1.49E-04	0.00E+00	7.10E-05	8.76E-05	0.00E+00
699	480289.5	3741797	5.76E-04	0.001125	0.00E+00	5.47E-04	1.24E-03	0.00E+00	1.11E-04	1.99E-04	0.00E+00	4.39E-04	9.28E-04	0.00E+00	9.43E-05	1.51E-04	0.00E+00	7.21E-05	8.89E-05	0.00E+00
700	480322.8	3741811	5.89E-04	0.00115	0.00E+00	5.59E-04	1.27E-03	0.00E+00	1.13E-04	2.03E-04	0.00E+00	4.49E-04	9.49E-04	0.00E+00	9.64E-05	1.55E-04	0.00E+00	7.37E-05	9.09E-05	0.00E+00
701	480339.4	3741818	5.93E-04	0.001158	0.00E+00	5.63E-04	1.28E-03	0.00E+00	1.14E-04	2.05E-04	0.00E+00	4.52E-04	9.55E-04	0.00E+00	9.71E-05	1.56E-04	0.00E+00	7.42E-05	9.15E-05	0.00E+00
702	480356.1	3741824	5.96E-04	0.001163	0.00E+00	5.65E-04	1.29E-03	0.00E+00	1.14E-04	2.06E-04	0.00E+00	4.53E-04	9.59E-04	0.00E+00	9.75E-05	1.56E-04	0.00E+00	7.45E-05	9.19E-05	0.00E+00
703	480372.8	3741831	5.96E-04	0.001164	0.00E+00	5.66E-04	1.29E-03	0.00E+00	1.14E-04	2.06E-04	0.00E+00	4.54E-04	9.60E-04	0.00E+00	9.76E-05	1.57E-04	0.00E+00	7.46E-05	9.20E-05	0.00E+00
704	480389.4	3741838	5.95E-04	0.001162	0.00E+00	5.65E-04	1.29E-03	0.00E+00	1.14E-04	2.05E-04	0.00E+00	4.53E-04	9.59E-04	0.00E+00	9.74E-05	1.56E-04	0.00E+00	7.45E-05	9.19E-05	0.00E+00
705	480422.7	3741852	5.88E-04	0.001149	0.00E+00	5.58E-04	1.27E-03	0.00E+00	1.13E-04	2.03E-04	0.00E+00	4.48E-04	9.47E-04	0.00E+00	9.63E-05	1.55E-04	0.00E+00	7.36E-05	9.08E-05	0.00E+00
706	480439.4	3741859	5.82E-04	0.001137	0.00E+00	5.52E-04	1.26E-03	0.00E+00	1.12E-04	2.01E-04	0.00E+00	4.43E-04	9.37E-04	0.00E+00	9.53E-05	1.53E-04	0.00E+00	7.28E-05	8.98E-05	0.00E+00
707	480456.1	3741866	5.74E-04	0.001122	0.00E+00	5.45E-04	1.24E-03	0.00E+00	1.10E-04	1.98E-04	0.00E+00	4.37E-04	9.25E-04	0.00E+00	9.40E-05	1.51E-04	0.00E+00	7.19E-05	8.87E-05	0.00E+00
708	480472.7	3741873	5.65E-04	0.001104	0.00E+00	5.36E-04	1.22E-03	0.00E+00	1.08E-04	1.95E-04	0.00E+00	4.30E-04	9.10E-04	0.00E+00	9.25E-05	1.49E-04	0.00E+00	7.07E-05	8.72E-05	0.00E+00
709	480506	3741887	5.43E-04	0.00106	0.00E+00	5.15E-04	1.17E-03	0.00E+00	1.04E-04	1.87E-04	0.00E+00	4.13E-04	8.74E-04	0.00E+00	8.89E-05	1.43E-04	0.00E+00	6.79E-05	8.38E-05	0.00E+00
710	480522.7	3741894	5.30E-04	0.001035	0.00E+00	5.03E-04	1.14E-03	0.00E+00	1.02E-04	1.83E-04	0.00E+00	4.04E-04	8.54E-04	0.00E+00	8.68E-05	1.39E-04	0.00E+00	6.63E-05	8.18E-05	0.00E+00
711	480539.4	3741901	5.16E-04	0.001008	0.00E+00	4.90E-04	1.11E-03	0.00E+00	9.90E-05	1.78E-04	0.00E+00	3.93E-04	8.31E-04	0.00E+00	8.45E-05	1.36E-04	0.00E+00	6.46E-05	7.97E-05	0.00E+00
712	480556	3741908	5.01E-04	0.000979	0.00E+00	4.76E-04	1.08E-03	0.00E+00	9.62E-05	1.73E-04	0.00E+00	3.82E-04	8.07E-04	0.00E+00	8.21E-05	1.32E-04	0.00E+00	6.27E-05	7.74E-05	0.00E+00
713	480572.7	3741915	4.86E-04	0.000949	0.00E+00	4.61E-04	1.05E-03	0.00E+00	9.32E-05	1.68E-04	0.00E+00	3.70E-04	7.83E-04	0.00E+00	7.95E-05	1.28E-04	0.00E+00	6.08E-05	7.50E-05	0.00E+00
714	480589.3	3741922	4.70E-04	0.000918	0.00E+00	4.46E-04	1.02E-03	0.00E+00	9.02E-05	1.62E-04	0.00E+00	3.58E-04	7.57E-04	0.00E+00	7.69E-05	1.23E-04	0.00E+00	5.88E-05	7.25E-05	0.00E+00
715	480606	3741929	4.54E-04	0.000886	0.00E+00	4.30E-04	9.80E-04	0.00E+00	8.70E-05	1.57E-04	0.00E+00	3.45E-04	7.31E-04	0.00E+00	7.43E-05	1.19E-04	0.00E+00	5.68E-05	7.00E-05	0.00E+00
716	480622.7	3741936	4.37E-04	0.000854	0.00E+00	4.15E-04	9.44E-04	0.00E+00	8.39E-05	1.51E-04	0.00E+00	3.33E-04	7.04E-04	0.00E+00	7.15E-05	1.15E-04	0.00E+00	5.47E-05	6.75E-05	0.00E+00
717	480639.3	3741943	4.21E-04	0.000821	0.00E+00	3.99E-04	9.08E-04	0.00E+00	8.07E-05	1.45E-04	0.00E+00	3.20E-04	6.77E-04	0.00E+00	6.88E-05	1.10E-04	0.00E+00	5.26E-05	6.49E-05	0.00E+00
718	480656	3741950	4.04E-04	0.000789	0.00E+00	3.83E-04	8.72E-04	0.00E+00	7.75E-05	1.39E-04	0.00E+00	3.08E-04	6.50E-04	0.00E+00	6.61E-05	1.06E-04	0.00E+00	5.05E-05	6.23E-05	0.00E+00
719	480778.7	3742181	2.56E-04	0.000499	0.00E+00	2.43E-04	5.52E-04	0.00E+00	4.90E-05	8.82E-05	0.00E+00	1.95E-04	4.12E-04	0.00E+00	4.18E-05	6.72E-05	0.00E+00	3.20E-05	3.95E-05	0.00E+00
720	480785.6	3742197	2.47E-04	0.000482	0.00E+00	2.34E-04	5.33E-04	0.00E+00	4.73E-05	8.51E-05	0.00E+00	1.88E-04	3.97E-04	0.00E+00	4.04E-05	6.48E-05	0.00E+00	3.09E-05	3.81E-05	0.00E+00
721	480792.5	3742214	2.38E-04	0.000465	0.00E+00	2.26E-04	5.14E-04	0.00E+00	4.56E-05	8.21E-05	0.00E+00	1.81E-04	3.83E-04	0.00E+00	3.89E-05	6.25E-05	0.00E+00	2.98E-05	3.67E-05	0.00E+00
722	480806.2	3742247	2.21E-04	0.000432	0.00E+00	2.10E-04	4.78E-04	0.00E+00	4.24E-05	7.63E-05	0.00E+00	1.68E-04	3.56E-04	0.00E+00	3.62E-05	5.81E-05	0.00E+00	2.77E-05	3.41E-05	0.00E+00
723	480813.1	3742264	2.13E-04	0.000417	0.00E+00	2.02E-04	4.61E-04	0.00E+00	4.09E-05	7.36E-05	0.00E+00	1.62E-04	3.43E-04	0.00E+00	3.49E-05	5.60E-05	0.00E+00	2.67E-05	3.29E-05	0.00E+00
724	480820	3742281	2.06E-04	0.000402	0.00E+00	1.95E-04	4.44E-04	0.00E+00	3.95E-05	7.10E-05	0.00E+00	1.57E-04	3.31E-04	0.00E+00	3.37E-05	5.40E-05	0.00E+00	2.57E-05	3.17E-05	0.00E+00
725	480826.8	3742297	1.98E-04	0.000387	0.00E+00	1.88E-04	4.29E-04	0.00E+00	3.81E-05	6.85E-05	0.00E+00	1.51E-04	3.19E-04	0.00E+00	3.25E-05	5.21E-05	0.00E+00	2.48E-05	3.06E-05	0.00E+00
726	480840.6	3742331	1.85E-04	0.000361	0.00E+00	1.75E-04	3.99E-04	0.00E+00	3.55E-05	6.38E-05	0.00E+00	1.41E-04	2.98E-04	0.00E+00	3.02E-05	4.86E-05	0.00E+00	2.31E-05	2.85E-05	0.00E+00
727	480847.5	3742347	1.79E-04	0

766	480540.9	3741852	4.94E-04	0.000964	0.00E+00	4.69E-04	1.07E-03	0.00E+00	9.47E-05	1.70E-04	0.00E+00	3.76E-04	7.95E-04	0.00E+00	8.08E-05	1.30E-04	0.00E+00	6.18E-05	7.62E-05	0.00E+00
767	480557.6	3741859	4.82E-04	0.000941	0.00E+00	4.57E-04	1.04E-03	0.00E+00	9.25E-05	1.66E-04	0.00E+00	3.67E-04	7.76E-04	0.00E+00	7.89E-05	1.27E-04	0.00E+00	6.03E-05	7.44E-05	0.00E+00
768	480574.3	3741866	4.69E-04	0.000917	0.00E+00	4.45E-04	1.01E-03	0.00E+00	9.00E-05	1.62E-04	0.00E+00	3.57E-04	7.56E-04	0.00E+00	7.68E-05	1.23E-04	0.00E+00	5.87E-05	7.24E-05	0.00E+00
769	480591	3741872	4.56E-04	0.000891	0.00E+00	4.33E-04	9.85E-04	0.00E+00	8.75E-05	1.57E-04	0.00E+00	3.47E-04	7.34E-04	0.00E+00	7.46E-05	1.20E-04	0.00E+00	5.71E-05	7.04E-05	0.00E+00
770	480607.8	3741879	4.42E-04	0.000864	0.00E+00	4.20E-04	9.55E-04	0.00E+00	8.48E-05	1.53E-04	0.00E+00	3.37E-04	7.12E-04	0.00E+00	7.24E-05	1.16E-04	0.00E+00	5.53E-05	6.83E-05	0.00E+00
771	480624.5	3741886	4.28E-04	0.000836	0.00E+00	4.06E-04	9.25E-04	0.00E+00	8.21E-05	1.48E-04	0.00E+00	3.26E-04	6.89E-04	0.00E+00	7.01E-05	1.12E-04	0.00E+00	5.36E-05	6.61E-05	0.00E+00
772	480641.2	3741893	4.14E-04	0.000808	0.00E+00	3.92E-04	8.93E-04	0.00E+00	7.93E-05	1.43E-04	0.00E+00	3.15E-04	6.66E-04	0.00E+00	6.77E-05	1.09E-04	0.00E+00	5.17E-05	6.38E-05	0.00E+00
773	480657.9	3741900	3.99E-04	0.000779	0.00E+00	3.78E-04	8.62E-04	0.00E+00	7.65E-05	1.38E-04	0.00E+00	3.04E-04	6.42E-04	0.00E+00	6.53E-05	1.05E-04	0.00E+00	4.99E-05	6.16E-05	0.00E+00
774	480674.6	3741907	3.84E-04	0.00075	0.00E+00	3.65E-04	8.30E-04	0.00E+00	7.37E-05	1.33E-04	0.00E+00	2.93E-04	6.19E-04	0.00E+00	6.29E-05	1.01E-04	0.00E+00	4.81E-05	5.93E-05	0.00E+00
775	480821.3	3742163	2.31E-04	0.000451	0.00E+00	2.19E-04	4.99E-04	0.00E+00	4.43E-05	7.97E-05	0.00E+00	1.76E-04	3.72E-04	0.00E+00	3.78E-05	6.07E-05	0.00E+00	2.89E-05	3.57E-05	0.00E+00
776	480828.2	3742179	2.23E-04	0.000436	0.00E+00	2.12E-04	4.82E-04	0.00E+00	4.28E-05	7.70E-05	0.00E+00	1.70E-04	3.59E-04	0.00E+00	3.65E-05	5.86E-05	0.00E+00	2.79E-05	3.44E-05	0.00E+00
777	480835.1	3742196	2.16E-04	0.000421	0.00E+00	2.05E-04	4.66E-04	0.00E+00	4.14E-05	7.44E-05	0.00E+00	1.64E-04	3.47E-04	0.00E+00	3.53E-05	5.67E-05	0.00E+00	2.70E-05	3.33E-05	0.00E+00
778	480842	3742213	2.08E-04	0.000407	0.00E+00	1.98E-04	4.50E-04	0.00E+00	3.99E-05	7.19E-05	0.00E+00	1.59E-04	3.35E-04	0.00E+00	3.41E-05	5.47E-05	0.00E+00	2.61E-05	3.21E-05	0.00E+00
779	480848.9	3742230	2.01E-04	0.000393	0.00E+00	1.91E-04	4.34E-04	0.00E+00	3.86E-05	6.94E-05	0.00E+00	1.53E-04	3.24E-04	0.00E+00	3.29E-05	5.28E-05	0.00E+00	2.52E-05	3.10E-05	0.00E+00
780	480855.8	3742246	1.94E-04	0.000379	0.00E+00	1.84E-04	4.20E-04	0.00E+00	3.73E-05	6.70E-05	0.00E+00	1.48E-04	3.13E-04	0.00E+00	3.18E-05	5.10E-05	0.00E+00	2.43E-05	3.00E-05	0.00E+00
781	480862.7	3742263	1.88E-04	0.000366	0.00E+00	1.78E-04	4.05E-04	0.00E+00	3.60E-05	6.48E-05	0.00E+00	1.43E-04	3.02E-04	0.00E+00	3.07E-05	4.93E-05	0.00E+00	2.35E-05	2.90E-05	0.00E+00
782	480869.6	3742280	1.81E-04	0.000354	0.00E+00	1.72E-04	3.92E-04	0.00E+00	3.48E-05	6.26E-05	0.00E+00	1.38E-04	2.92E-04	0.00E+00	2.97E-05	4.76E-05	0.00E+00	2.27E-05	2.80E-05	0.00E+00
783	480089.7	3741663	3.81E-04	0.000743	0.00E+00	3.61E-04	8.22E-04	0.00E+00	7.30E-05	1.31E-04	0.00E+00	2.90E-04	6.13E-04	0.00E+00	6.23E-05	1.00E-04	0.00E+00	4.76E-05	5.88E-05	0.00E+00
784	480071.5	3741663	3.71E-04	0.000725	0.00E+00	3.52E-04	8.02E-04	0.00E+00	7.12E-05	1.28E-04	0.00E+00	2.83E-04	5.98E-04	0.00E+00	6.08E-05	9.76E-05	0.00E+00	4.65E-05	5.73E-05	0.00E+00
785	480053.3	3741663	3.62E-04	0.000706	0.00E+00	3.43E-04	7.81E-04	0.00E+00	6.94E-05	1.25E-04	0.00E+00	2.75E-04	5.82E-04	0.00E+00	5.92E-05	9.50E-05	0.00E+00	4.52E-05	5.58E-05	0.00E+00
786	480035.1	3741663	3.52E-04	0.000687	0.00E+00	3.34E-04	7.60E-04	0.00E+00	6.75E-05	1.21E-04	0.00E+00	2.68E-04	5.66E-04	0.00E+00	5.76E-05	9.24E-05	0.00E+00	4.40E-05	5.43E-05	0.00E+00
787	480016.9	3741663	3.42E-04	0.000667	0.00E+00	3.24E-04	7.38E-04	0.00E+00	6.55E-05	1.18E-04	0.00E+00	2.60E-04	5.50E-04	0.00E+00	5.59E-05	8.98E-05	0.00E+00	4.27E-05	5.27E-05	0.00E+00
788	479998.6	3741663	3.32E-04	0.000647	0.00E+00	3.15E-04	7.16E-04	0.00E+00	6.36E-05	1.14E-04	0.00E+00	2.52E-04	5.34E-04	0.00E+00	5.43E-05	8.71E-05	0.00E+00	4.15E-05	5.12E-05	0.00E+00
789	479980.4	3741663	3.21E-04	0.000628	0.00E+00	3.05E-04	6.94E-04	0.00E+00	6.17E-05	1.11E-04	0.00E+00	2.45E-04	5.18E-04	0.00E+00	5.26E-05	8.45E-05	0.00E+00	4.02E-05	4.96E-05	0.00E+00
790	479962.2	3741663	3.11E-04	0.000608	0.00E+00	2.95E-04	6.73E-04	0.00E+00	5.97E-05	1.07E-04	0.00E+00	2.37E-04	5.01E-04	0.00E+00	5.10E-05	8.18E-05	0.00E+00	3.90E-05	4.81E-05	0.00E+00
791	479944	3741663	3.01E-04	0.000588	0.00E+00	2.86E-04	6.51E-04	0.00E+00	5.78E-05	1.04E-04	0.00E+00	2.29E-04	4.85E-04	0.00E+00	4.93E-05	7.92E-05	0.00E+00	3.77E-05	4.65E-05	0.00E+00
792	479925.8	3741663	2.91E-04	0.000569	0.00E+00	2.76E-04	6.29E-04	0.00E+00	5.59E-05	1.01E-04	0.00E+00	2.22E-04	4.69E-04	0.00E+00	4.77E-05	7.65E-05	0.00E+00	3.64E-05	4.50E-05	0.00E+00
793	479907.6	3741663	2.82E-04	0.00055	0.00E+00	2.67E-04	6.08E-04	0.00E+00	5.40E-05	9.71E-05	0.00E+00	2.14E-04	4.53E-04	0.00E+00	4.61E-05	7.40E-05	0.00E+00	3.52E-05	4.34E-05	0.00E+00
794	480106.6	3741620	3.60E-04	0.000702	0.00E+00	3.41E-04	7.77E-04	0.00E+00	6.90E-05	1.24E-04	0.00E+00	2.74E-04	5.79E-04	0.00E+00	5.88E-05	9.45E-05	0.00E+00	4.50E-05	5.55E-05	0.00E+00
795	480123.4	3741627	3.71E-04	0.000725	0.00E+00	3.52E-04	8.02E-04	0.00E+00	7.13E-05	1.28E-04	0.00E+00	2.83E-04	5.98E-04	0.00E+00	6.08E-05	9.76E-05	0.00E+00	4.65E-05	5.73E-05	0.00E+00
796	480140.1	3741634	3.83E-04	0.000749	0.00E+00	3.64E-04	8.28E-04	0.00E+00	7.36E-05	1.32E-04	0.00E+00	2.92E-04	6.17E-04	0.00E+00	6.28E-05	1.01E-04	0.00E+00	4.80E-05	5.92E-05	0.00E+00
797	480156.9	3741641	3.95E-04	0.000772	0.00E+00	3.75E-04	8.54E-04	0.00E+00	7.58E-05	1.36E-04	0.00E+00	3.01E-04	6.37E-04	0.00E+00	6.47E-05	1.04E-04	0.00E+00	4.95E-05	6.10E-05	0.00E+00
798	480173.6	3741648	4.07E-04	0.000795	0.00E+00	3.86E-04	8.79E-04	0.00E+00	7.81E-05	1.40E-04	0.00E+00	3.10E-04	6.55E-04	0.00E+00	6.66E-05	1.07E-04	0.00E+00	5.09E-05	6.28E-05	0.00E+00
799	480190.4	3741655	4.19E-04	0.000817	0.00E+00	3.97E-04	9.04E-04	0.00E+00	8.03E-05	1.44E-04	0.00E+00	3.19E-04	6.74E-04	0.00E+00	6.85E-05	1.10E-04	0.00E+00	5.24E-05	6.46E-05	0.00E+00
800	480207.2	3741662	4.30E-04	0.000839	0.00E+00	4.08E-04	9.28E-04	0.00E+00	8.24E-05	1.48E-04	0.00E+00	3.27E-04	6.92E-04	0.00E+00	7.03E-05	1.13E-04	0.00E+00	5.38E-05	6.63E-05	0.00E+00
801	480223.9	3741669	4.40E-04	0.00086	0.00E+00	4.18E-04	9.51E-04	0.00E+00	8.45E-05	1.52E-04	0.00E+00	3.35E-04	7.09E-04	0.00E+00	7.21E-05	1.16E-04	0.00E+00	5.51E-05	6.80E-05	0.00E+00
802	480240.7	3741676	4.51E-04	0.00088	0.00E+00	4.28E-04	9.74E-04	0.00E+00	8.65E-05	1.56E-04	0.00E+00	3.43E-04	7.26E-04	0.00E+00	7.38E-05	1.18E-04	0.00E+00	5.64E-05	6.96E-05	0.00E+00
803	480257.4	3741683	4.60E-04	0.000899	0.00E+00	4.37E-04	9.95E-04	0.00E+00	8.83E-05	1.59E-04	0.00E+00	3.51E-04	7.41E-04	0.00E+00	7.54E-05	1.21E-04	0.00E+00	5.76E-05	7.11E-05	0.00E+00
804	480274.2	3741690	4.69E-04	0.000917	0.00E+00	4.45E-04	1.01E-03	0.00E+00	9.00E-05	1.62E-04	0.00E+00	3.57E-04	7.56E-04	0.00E+00	7.68E-05	1.23E-04	0.00E+00	5.87E-05	7.24E-05	0.00E+00
805	480291	3741697	4.78E-04	0.000933	0.00E+00	4.53E-04	1.03E-03	0.00E+00	9.16E-05	1.65E-04	0.00E+00	3.64E-04	7.69E-04	0.00E+00	7.82E-05	1.26E-04	0.00E+00	5.98E-05	7.37E-05	0.00E+00
806	480307.7	3741704	4.85E-04	0.000947	0.00E+00	4.60E-04	1.05E-03	0.00E+00	9.30E-05	1.67E-04	0.00E+00	3.69E-04	7.81E-04	0.00E+00	7.94E-05	1.27E-04	0.00E+00	6.07E-05	7.49E-05	0.00E+00
807	480324.5	3741711	4.92E-04	0.00096	0.00E+00	4.66E-04	1.06E-03	0.00E+00	9.43E-05	1.70E-04	0.00E+00	3.74E-04	7.92E-04	0.00E+00	8.05E-05	1.29E-04	0.00E+00	6.15E-05	7.59E-05	0.00E+00
808	480341.2	3741718	4.97E-04	0.000971	0.00E+00	4.72E-04	1.07E-03	0.00E+00	9.53E-05	1.72E-04	0.00E+00	3.78E-04	8.00E-04	0.00E+00	8.13E-05	1.31E-04	0.00E+00	6.22E-05	7.67E-05	0.00E+00
809	480358	3741725	5.01E-04	0.000979	0.00E+00	4.76E-04	1.08E-03	0.00E+00	9.62E-05	1.73E-04	0.00E+00	3.82E-04	8.07E-04	0.00E+00	8.21E-05	1.32E-04	0.00E+00	6.27E-05	7.74E-05	0.00E+00
810	480374.7	3741732	5.05E-04	0.000985	0.00E+00	4.79E-04	1.09E-03	0.00E+00	9.68E-05	1.74E-04	0.00E+00	3.84E-04	8.13E-04	0.00E+00	8.26E-05	1.33E-04	0.00E+00	6.31E-05	7.79E-05	0.00E+00
811	480391.5	3741739	5.07E-04	0.000989	0.00E+00	4.81E-04	1.09E-03	0.00E+00	9.72E-05	1.75E-04	0.00E+00	3.86E-04	8.16E-04	0.00E+00	8.29E-05	1.33E-04	0.00E+00	6.34E-05	7.82E-05	0.00E+00
812	480408.3	3741746	5.07E-04	0.000991	0.00E+00	4.81E-04	1.10E-03	0.00E+00	9.73E-05	1.75E-04	0.00E+00	3.86E-04	8.17E-04	0.00E+00	8.31E-05	1.33E-04	0.00E+00	6.35E-05	7.83E-05	0.00E+00
813	480425	3741753	5.07E-04	0.00099	0.00E+00	4.81E-04	1.10E-03	0.00E+00	9.73E-05	1.75E-04	0.00E+00	3.86E-04	8.17E-04	0.00E+00	8.30E-05	1.33E-04	0.00E+00	6.34E-05	7.83E-05	0.00E+00
814	480441.8	3741760	5.05E-04	0.000987	0.00E+00	4.80E-04	1.09E-03	0.00E+00	9.70E-05	1.74E-04	0.00E+00	3.85E-04	8.14E-04	0.00E+00	8.27E-05	1.33E-04	0.00E+00	6.32E-05	7.80E-05	0.00E+00
815	480458.5	3741767	5.03E-04	0.000981	0.00E+00	4.77E-04	1.09E-03	0.00E+00	9.64E-05	1.73E-04	0.00E+00	3.83E-04	8.09E-04	0.00E+00	8.23E-05	1.32E-04	0.00E+00	6.29E-05	7.76E-05	0.00E+00
816	480475.3	3741774	4.98E-04	0.000973	0.00E+00	4.73E-04	1.08E-03	0.00E+00	9.56E-05	1.72E-04	0.00E+00	3.80E-04	8.03E-04	0.00E+00	8.16E-05	1.31E-04	0.00E+00	6.24E-05	7.69E-05	0.00E+00
817	480492	3741781	4.93E-04	0.000963	0.00E+00	4.68E-04	1.07E-03	0.00E+00	9.46E-05	1.70E-04	0.00E+00	3.75E-04	7.94E-04	0.00E+00	8.07E-05	1.30E-04	0.00E+00	6.17E-05	7.61E-05	0.00E+00
818	480508.8	3741788	4.87E-04	0.00095	0.00E+00	4.62E-04	1.05E-03	0.00E+00	9.34E-05	1.68E-04	0.00E+00	3.71E-04	7.84E-04	0.00E+00	7.97E-05	1.28E-04	0.00E+00	6.09E-05	7.51E-05	0.00E+00
819	480525.6	3741795	4.79E-04	0.000936	0.00E+00	4.55E-04	1.04E-03	0.00E+00	9.19E-05	1.65E-04	0.00E+00	3.65E-04	7.72E-04	0.00E+00	7.84E-05	1.26E-04	0.00E+00	6.00E-05	7.40E-05	0.00E+00
820	480542.3	3741802	4.71E-04	0.000919	0.00E+00	4.47E-04	1.02E-03	0.00E+00	9.03E-05	1.62E-04	0.00E+00	3.58E-04	7.58E-04	0.00E+00	7.70E-05	1.24E-04	0.00E+00	5.89E-05	7.26E-05	0.00E+00
821	480559.1	3741809	4.61E-04	0.000901	0.00E+00	4.38E-04	9.97E-04	0.00E+00	8.85E-05	1.59E-04	0.00E+00	3.51E-04	7.43E-04	0.00E+00	7.55E-05	1.21E-04	0.00E+00	5.77E-05	7.12E-05	0.00E+00
822	480575.8	3741816	4.51E-04	0.000881	0.00E+00	4.28E-04	9.75E-04	0.00E+00	8.65E-05	1.56E-04	0.00E+00	3.44E-04	7.27E-04	0.00E+00	7.38E-05	1.19E-04	0.00E+00	5.64E-05	6.96E-05	0.00E+00
823	480592.6	3741823	4.40E-04	0.00086	0.00E+00	4.18E-04	9.51E-04	0.00E+00	8.45E-05	1.52E-04	0.00E+00	3.35E-04	7.09E-04	0.00E+00	7.21E-05	1.16E-04	0.00E+00	5.51E-05	6.79E-05	0.00E+00
824	480609.3	3741830	4.29E-04	0.000837	0.00E+00	4.07E-04	9.26E-04	0.00E+00	8.22E-05	1.48E-04	0.00E+00	3.26E-04	6.90E-04	0.00E+00	7.02E-05	1.13E-04	0.00E+00	5.36E-05	6.62E-05	0.00E+00
825	480626.1	3741837	4.17E-04	0.000814	0.00E+00	3.95E-04	9.00E-04	0.00E+00	7.99E-05	1.44E-04	0.00E+00	3.17E-04	6.71E-04	0.00E+00	6.82E-05	1.09E-04	0.00E+00	5.21E-05	6.43E-05	0.00E+00
826	480642.9	3741844	4.04E-04	0.00079	0.00E+00	3.84E-04	8.73E-04	0.00E+00	7.76E-05	1.40E-04	0.00E+00	3.08E-04	6.51E-04	0.00E+00	6.62E-05	1.06E-04	0.00E+00	5.06E-05	6.24E-05	0.00E+00
827	480659.6	3741851	3.92E-04	0.000765	0.00E+00	3.72E-04	8.46E-04	0.00E+00	7.51E-05	1.35E-04	0.00E+00	2.98E-04	6.31E-04	0.00E+00	6.41E-05	1.03E-04	0.00E+00	4.90E-05	6.04E-05	0.00E+00
828	480676.4	3741858	3.79E-04	0.00074	0.00E+00	3.59E-04	8.18E-04	0.00E+00	7.26E-05	1.31E-04	0.00E+00	2.88E-04	6.10E-04	0.00E+00	6.20E-05	9.95E-05	0.00E+00	4.74E-05	5.84E-05	0.00E+00
829	480884.7	3742195	1.90E-04	0.000371	0.00E+00	1.80E-04	4.10E-04	0.00E+00	3.64E-05	6.56E-05	0.00E+00	1.45E-04	3.06E-04	0.00E+00	3.11E-05	4.99E-05	0.00E+00	2.38E-05	2.93E-05	0.00E+00
830	480891.6	3742212	1.84E-04	0.000359	0.00E+00	1.74E-04	3.97E-04	0.00E+00	3.53E-05	6.34E-05	0.00E+00	1.40E-04	2.96E-04	0.00E+00	3.01E-05	4.83E-05	0.00E+00	2.30E-05	2.84E-05	0.00E+00
831	480089.9	3741613	3.48E-04	0.000679	0.00E+00	3.30E-04	7.51E-04	0.00E+00	6.67E-05	1.20E-04	0.00E+00	2.65E-04	5.60E-04	0.00E+00	5.69E-05	9.13E-05	0.00E+00	4.35E-05	5.36E-05	0.00E+00
832	480071.6	3741613	3.39E-04	0.000662	0.00E+00	3.22E-04	7.33E-04	0.00E+00	6.51E-05	1.17E-04	0.00E+00	2.58E-04	5.46E-04	0.00E+00	5.55E-05	8.91E-05	0.00E+00	4.24E-05	5.23E-05	0.00E+00
833	480053.4	3741613	3.31E-04	0.000646	0.00E+00	3.14E-04	7.14E-04	0.00E+00	6.34E-05	1.14E-04	0.00E+00	2.52E-04	5.32E-04	0.00E+00	5.41E-05	8.69E-05	0.00E+00	4.14E-05	5.10E-05	0.00E+00
834	480035.2	3741613	3.22E-04	0.000629	0.00E+00	3.05E-04	6.95E-04	0.00E+00	6.17E-05	1.11E-04	0.00E+00	2.45E-04	5.18E-04	0.00E+00	5.27E-05	8.46E-05	0.00E+00	4.03E-05	4.97E-05	0.00E+00
835	480017	3741613	3.13E-04	0.000611	0.00E+00	2.97E-04	6.76E-04	0.00E+00	6.00E-05	1.08E-04	0.00E+00	2.38E-04	5.04E-04	0.00E+00	5.12E-05	8.22E-05	0.00E+00	3.92E-05	4.83E-05	0.00E+00
836	479998.8	3741613	3.04E-04	0.000594	0.00E+00	2.89E-04	6.57E-04	0.00E+00	5.83E-05	1.05E-04	0.00E+00	2.32E-04	4.90E-04	0.00E+00	4.98E-05	7.99E-05	0.00E+00	3.80E-05	4.69E-05	0.00E+00
837	479980.6	3741613	2.95E-04	0.000576	0.00E+00	2.80E-04	6.38E-04	0.00E+00	5.66E-05	1.02E-04	0.00E+00	2.25E-04	4.75E-04	0.00E+00	4.83E-05	7.76E-05	0.00E+00	3.69E-05	4.56E-05	0.00E+00
838	479962.4	3741613	2.86E-04	0.000559	0.00E+00	2.72E-04	6.18E-04	0.00E+00	5.49E-05	9.88E-05	0.00E+00	2.18E-04	4.61E-04	0.00E+00	4.69E-05	7.52E-05	0.00E+00	3.58E-05	4.42E-05	0.00E+00
839	479944.2	3741613	2.77E-04	0.000542	0.00E+00	2.63E-04	5.99E-04	0.00E+00	5.32E-05	9.57E-05	0.00E+00	2.11E-04	4.47E-04	0.00E+00	4.54E-05	7.29E-05	0.00E+00	3.47E-05	4.28E-05	0.00E+00
840	479926	3741613	2.69E-04	0.000525	0.00E+00	2.55E-04	5.81E-04	0.00E+00	5.16E-05	9.28E-05	0.00E+00	2.05E-04	4.33E-04	0.00E+00	4.40E-05	7.06E-05	0.00E+00	3.36E-05	4.15E-05	0.00E+00
841	479907.7	3741613	2.60E-04	0.000508	0.00E+00	2.47E-04	5.62E-04	0.00E+00	4.99E-05	8.98E-05	0.00E+00	1.98E-04	4.19E-04	0.00E+00	4.26E-05	6.84E-05	0.00E+00	3.25E-05	4.02E-05	0.00E+00
842	480106.8	3741570	3.29E-04	0.000643	0.00E+00	3.12E-04	7.11E-04	0.00E+00	6.32E-05	1.14E-04	0.00E+00	2.51E-04	5.30E-04	0.00E+00	5.39E-05	8.65E-05	0.00E+00	4.12E-05	5.08E-05	0.00E+00
843	480123.6	3741577	3.40E-04	0.000664	0.00E+00	3.23E-04	7.34E-04	0.00E+00	6.52E-05	1.17E-04	0.00E+00	2.59E-04	5.48E-04	0.00E+00	5.57E-05	8.93E-05	0.00E+00	4.25E-05	5.25E-05	0.00E+00
844	480140.4	3741584	3.51E-04	0.000685	0.00E+00	3.33E-04	7.57E-04	0.00E+00	6.73E-05	1.21E-04	0.00E+00	2.67E-04	5.65E-04	0.00E+00	5.74E-05	9.21E-05	0.00E+00	4.39E-05	5.41E-05	0.00E+00
845	480157.2	3741591	3.61E-04	0.000706	0.00E+00	3.43E-04	7.80E-04	0.00E+00	6.93E-05	1.25E-04	0.00E+00	2.75E-04	5.82E-04	0.00E+00	5.91E-05	9.49E-05	0.00E+00	4.52E-05	5.58E-05	0.00E+00
846	480174	3741598	3.72E-04	0.000726	0.00E+00	3.53E-04	8.03E-04	0.00E+00	7.13E-05	1.28E-04	0.00E+00	2.83E-04	5.99E-04	0.00E+00	6.09E-05	9.77E-05	0.00E+00	4.65E-05	5.74E-05	0.00E+00
847	480190.8	3741605	3.82E-04	0.000746	0.00E+00	3.63E-04	8.26E-04	0.00E+00	7.33E-05	1.32E-04	0.00E+00	2.91E-04	6.15E-04	0.00E+00	6.26E-05	1.00E-04	0.00E+00	4.78E-05	5.90E-05	0.00E+00
848	480207.6	3741612	3.92E-04	0.000766	0.00E+00	3.72E-04	8.47E-04	0.00E+00	7.53E-05	1.35E-04	0.00E+00	2.99E-04	6.32E-04	0.00E+00	6.42E-05	1.03E-04	0.00E+00	4.91E-05	6.06E-05	0.00E+00
849	480224.4	3741619	4.02E-04	0.000785	0.00E+00	3.82E-04	8.69E-04	0.00E+00	7.71E-05	1.39E-04	0.00E+00	3.06E-04	6.48E-04	0.00E+00	6.58E-05	1.06E-04	0.00E+00	5.03E-05	6.21E-05	0.00E+00
850	480241.2	3741626	4.12E-04	0.000804	0.00E+00	3.91E-04	8.89E-04	0.00E+00	7.90E-05	1.42E-04	0.00E+00	3.13E-04	6.63E-04	0.00E+00	6.74E-05	1.08E-04	0.00E+00	5.15E-05	6.35E-05	0.00E+00
851	480258	3741633	4.21E-04	0.000821	0.00E+00	3.99E-04	9.09E-04	0.00E+00	8.07E-05	1.45E-04	0.00E+00	3.20E-04	6.77E-04	0.00E+00	6.89E-05	1.11E-04	0.00E+00	5.26E-05	6.49E-05	0.00E+00
852	480274.8	3741640	4.29E-04	0.000838	0.00E+00	4.07E-04	9.27E-04	0.00E+00	8.23E-05	1.48E-04	0.00E+00	3.27E-04	6.91E-04	0.00E+00	7.02E-05	1.13E-04	0.00E+00	5.37E-05	6.62E-05	0.00E+00
853	480291.6	3741647	4.37E-04	0.000853	0.00E+00	4.15E-04	9.44E-04	0.00E+00	8.38E-05	1.51E-04	0.00E+00	3.33E-04	7.04E-04	0.00E+00	7.15E-05	1.15E-04	0.00E+00	5.47E-05	6.75E-05	0.00E+00
854	480308.4	3741654	4.44E-04	0.000868	0.00E+00	4.22E-04	9.60E-04	0.00E+00	8.52E-05	1.53E-04	0.00E+00	3.38E-04	7.15E-04	0.00E+00	7.27E-05	1.17E-04	0.00E+00	5.56E-05	6.86E-05	0.00E+00
855	480325.2	3741661	4.51E-

894	479788.2	3742410	1.08E-03	0.00211	0.00E+00	1.03E-03	2.33E-03	0.00E+00	2.07E-04	3.73E-04	0.00E+00	8.23E-04	1.74E-03	0.00E+00	1.77E-04	2.84E-04	0.00E+00	1.35E-04	1.67E-04	0.00E+00
895	479805.8	3742403	1.17E-03	0.002294	0.00E+00	1.11E-03	2.54E-03	0.00E+00	2.25E-04	4.05E-04	0.00E+00	8.94E-04	1.89E-03	0.00E+00	1.92E-04	3.09E-04	0.00E+00	1.47E-04	1.81E-04	0.00E+00
896	479823.4	3742396	1.28E-03	0.002498	0.00E+00	1.21E-03	2.76E-03	0.00E+00	2.45E-04	4.41E-04	0.00E+00	9.74E-04	2.06E-03	0.00E+00	2.09E-04	3.36E-04	0.00E+00	1.60E-04	1.97E-04	0.00E+00
897	479840.9	3742389	1.39E-03	0.002724	0.00E+00	1.32E-03	3.01E-03	0.00E+00	2.68E-04	4.81E-04	0.00E+00	1.06E-03	2.25E-03	0.00E+00	2.28E-04	3.66E-04	0.00E+00	1.75E-04	2.15E-04	0.00E+00
898	479858.5	3742382	1.52E-03	0.00297	0.00E+00	1.44E-03	3.29E-03	0.00E+00	2.92E-04	5.25E-04	0.00E+00	1.16E-03	2.45E-03	0.00E+00	2.49E-04	4.00E-04	0.00E+00	1.90E-04	2.35E-04	0.00E+00
899	479756.5	3742403	8.84E-04	0.001726	0.00E+00	8.38E-04	1.91E-03	0.00E+00	1.70E-04	3.05E-04	0.00E+00	6.73E-04	1.42E-03	0.00E+00	1.45E-04	2.32E-04	0.00E+00	1.11E-04	1.36E-04	0.00E+00
900	479773.7	3742396	9.51E-04	0.001858	0.00E+00	9.02E-04	2.05E-03	0.00E+00	1.82E-04	3.28E-04	0.00E+00	7.24E-04	1.53E-03	0.00E+00	1.56E-04	2.50E-04	0.00E+00	1.19E-04	1.47E-04	0.00E+00
901	479790.9	3742389	1.03E-03	0.002003	0.00E+00	9.73E-04	2.22E-03	0.00E+00	1.97E-04	3.54E-04	0.00E+00	7.81E-04	1.65E-03	0.00E+00	1.68E-04	2.69E-04	0.00E+00	1.28E-04	1.58E-04	0.00E+00
902	479808.1	3742382	1.11E-03	0.002163	0.00E+00	1.05E-03	2.39E-03	0.00E+00	2.12E-04	3.82E-04	0.00E+00	8.44E-04	1.78E-03	0.00E+00	1.81E-04	2.91E-04	0.00E+00	1.39E-04	1.71E-04	0.00E+00
903	479825.3	3742375	1.20E-03	0.00234	0.00E+00	1.14E-03	2.59E-03	0.00E+00	2.30E-04	4.13E-04	0.00E+00	9.12E-04	1.93E-03	0.00E+00	1.96E-04	3.15E-04	0.00E+00	1.50E-04	1.85E-04	0.00E+00
904	479842.4	3742368	1.30E-03	0.002533	0.00E+00	1.23E-03	2.80E-03	0.00E+00	2.49E-04	4.48E-04	0.00E+00	9.88E-04	2.09E-03	0.00E+00	2.12E-04	3.41E-04	0.00E+00	1.62E-04	2.00E-04	0.00E+00
905	479859.6	3742361	1.40E-03	0.002741	0.00E+00	1.33E-03	3.03E-03	0.00E+00	2.69E-04	4.84E-04	0.00E+00	1.07E-03	2.26E-03	0.00E+00	2.30E-04	3.69E-04	0.00E+00	1.76E-04	2.17E-04	0.00E+00
906	479742.6	3742389	7.91E-04	0.001545	0.00E+00	7.51E-04	1.71E-03	0.00E+00	1.52E-04	2.73E-04	0.00E+00	6.02E-04	1.27E-03	0.00E+00	1.29E-04	2.08E-04	0.00E+00	9.90E-05	1.22E-04	0.00E+00
907	479760	3742382	8.48E-04	0.001656	0.00E+00	8.05E-04	1.83E-03	0.00E+00	1.63E-04	2.93E-04	0.00E+00	6.46E-04	1.37E-03	0.00E+00	1.39E-04	2.23E-04	0.00E+00	1.06E-04	1.31E-04	0.00E+00
908	479777.5	3742375	9.11E-04	0.001778	0.00E+00	8.64E-04	1.97E-03	0.00E+00	1.75E-04	3.14E-04	0.00E+00	6.93E-04	1.47E-03	0.00E+00	1.49E-04	2.39E-04	0.00E+00	1.14E-04	1.41E-04	0.00E+00
909	479795	3742368	9.79E-04	0.001913	0.00E+00	9.29E-04	2.12E-03	0.00E+00	1.88E-04	3.38E-04	0.00E+00	7.46E-04	1.58E-03	0.00E+00	1.60E-04	2.57E-04	0.00E+00	1.23E-04	1.51E-04	0.00E+00
910	479812.4	3742361	1.06E-03	0.00206	0.00E+00	1.00E-03	2.28E-03	0.00E+00	2.02E-04	3.64E-04	0.00E+00	8.03E-04	1.70E-03	0.00E+00	1.73E-04	2.77E-04	0.00E+00	1.32E-04	1.63E-04	0.00E+00
911	479829.9	3742353	1.14E-03	0.002221	0.00E+00	1.08E-03	2.46E-03	0.00E+00	2.18E-04	3.93E-04	0.00E+00	8.66E-04	1.83E-03	0.00E+00	1.86E-04	2.99E-04	0.00E+00	1.42E-04	1.76E-04	0.00E+00
912	479847.3	3742346	1.23E-03	0.002396	0.00E+00	1.16E-03	2.65E-03	0.00E+00	2.35E-04	4.23E-04	0.00E+00	9.34E-04	1.98E-03	0.00E+00	2.01E-04	3.22E-04	0.00E+00	1.53E-04	1.89E-04	0.00E+00
913	479864.8	3742339	1.32E-03	0.002582	0.00E+00	1.25E-03	2.86E-03	0.00E+00	2.54E-04	4.56E-04	0.00E+00	1.01E-03	2.13E-03	0.00E+00	2.16E-04	3.47E-04	0.00E+00	1.65E-04	2.04E-04	0.00E+00
914	479728.7	3742375	7.13E-04	0.001393	0.00E+00	6.77E-04	1.54E-03	0.00E+00	1.37E-04	2.46E-04	0.00E+00	5.43E-04	1.15E-03	0.00E+00	1.17E-04	1.87E-04	0.00E+00	8.92E-05	1.10E-04	0.00E+00
915	479746.4	3742367	7.62E-04	0.001488	0.00E+00	7.23E-04	1.65E-03	0.00E+00	1.46E-04	2.63E-04	0.00E+00	5.80E-04	1.23E-03	0.00E+00	1.25E-04	2.00E-04	0.00E+00	9.53E-05	1.18E-04	0.00E+00
916	479764.1	3742360	8.15E-04	0.001592	0.00E+00	7.73E-04	1.76E-03	0.00E+00	1.56E-04	2.81E-04	0.00E+00	6.21E-04	1.31E-03	0.00E+00	1.33E-04	2.14E-04	0.00E+00	1.02E-04	1.26E-04	0.00E+00
917	479781.7	3742353	8.73E-04	0.001705	0.00E+00	8.28E-04	1.89E-03	0.00E+00	1.67E-04	3.01E-04	0.00E+00	6.65E-04	1.41E-03	0.00E+00	1.43E-04	2.29E-04	0.00E+00	1.09E-04	1.35E-04	0.00E+00
918	479799.4	3742346	9.37E-04	0.001829	0.00E+00	8.89E-04	2.02E-03	0.00E+00	1.80E-04	3.23E-04	0.00E+00	7.13E-04	1.51E-03	0.00E+00	1.53E-04	2.46E-04	0.00E+00	1.17E-04	1.45E-04	0.00E+00
919	479817.1	3742339	1.01E-03	0.001965	0.00E+00	9.55E-04	2.17E-03	0.00E+00	1.93E-04	3.47E-04	0.00E+00	7.66E-04	1.62E-03	0.00E+00	1.65E-04	2.64E-04	0.00E+00	1.26E-04	1.55E-04	0.00E+00
920	479834.8	3742331	1.08E-03	0.002112	0.00E+00	1.03E-03	2.34E-03	0.00E+00	2.07E-04	3.73E-04	0.00E+00	8.24E-04	1.74E-03	0.00E+00	1.77E-04	2.84E-04	0.00E+00	1.35E-04	1.67E-04	0.00E+00
921	479852.5	3742324	1.16E-03	0.00227	0.00E+00	1.10E-03	2.51E-03	0.00E+00	2.23E-04	4.01E-04	0.00E+00	8.85E-04	1.87E-03	0.00E+00	1.90E-04	3.05E-04	0.00E+00	1.45E-04	1.79E-04	0.00E+00
922	479870.2	3742317	1.25E-03	0.002437	0.00E+00	1.18E-03	2.70E-03	0.00E+00	2.39E-04	4.31E-04	0.00E+00	9.50E-04	2.01E-03	0.00E+00	2.04E-04	3.28E-04	0.00E+00	1.56E-04	1.93E-04	0.00E+00
923	479714.6	3742360	6.47E-04	0.001263	0.00E+00	6.14E-04	1.40E-03	0.00E+00	1.24E-04	2.23E-04	0.00E+00	4.92E-04	1.04E-03	0.00E+00	1.06E-04	1.70E-04	0.00E+00	8.09E-05	9.98E-05	0.00E+00
924	479731.9	3742353	6.87E-04	0.001342	0.00E+00	6.52E-04	1.48E-03	0.00E+00	1.32E-04	2.37E-04	0.00E+00	5.23E-04	1.11E-03	0.00E+00	1.12E-04	1.81E-04	0.00E+00	8.60E-05	1.06E-04	0.00E+00
925	479749.3	3742346	7.31E-04	0.001428	0.00E+00	6.94E-04	1.58E-03	0.00E+00	1.40E-04	2.52E-04	0.00E+00	5.57E-04	1.18E-03	0.00E+00	1.20E-04	1.92E-04	0.00E+00	9.15E-05	1.13E-04	0.00E+00
926	479766.7	3742339	7.79E-04	0.001521	0.00E+00	7.39E-04	1.68E-03	0.00E+00	1.49E-04	2.69E-04	0.00E+00	5.93E-04	1.25E-03	0.00E+00	1.27E-04	2.05E-04	0.00E+00	9.75E-05	1.20E-04	0.00E+00
927	479784	3742332	8.31E-04	0.001623	0.00E+00	7.88E-04	1.79E-03	0.00E+00	1.59E-04	2.87E-04	0.00E+00	6.33E-04	1.34E-03	0.00E+00	1.36E-04	2.18E-04	0.00E+00	1.04E-04	1.28E-04	0.00E+00
928	479801.4	3742325	8.88E-04	0.001733	0.00E+00	8.42E-04	1.92E-03	0.00E+00	1.70E-04	3.06E-04	0.00E+00	6.76E-04	1.43E-03	0.00E+00	1.45E-04	2.33E-04	0.00E+00	1.11E-04	1.37E-04	0.00E+00
929	479818.8	3742318	9.49E-04	0.001853	0.00E+00	9.00E-04	2.05E-03	0.00E+00	1.82E-04	3.27E-04	0.00E+00	7.23E-04	1.53E-03	0.00E+00	1.55E-04	2.49E-04	0.00E+00	1.19E-04	1.46E-04	0.00E+00
930	479836.2	3742311	1.01E-03	0.001982	0.00E+00	9.63E-04	2.19E-03	0.00E+00	1.95E-04	3.50E-04	0.00E+00	7.73E-04	1.63E-03	0.00E+00	1.66E-04	2.67E-04	0.00E+00	1.27E-04	1.57E-04	0.00E+00
931	479853.5	3742304	1.09E-03	0.002119	0.00E+00	1.03E-03	2.34E-03	0.00E+00	2.08E-04	3.74E-04	0.00E+00	8.26E-04	1.75E-03	0.00E+00	1.78E-04	2.85E-04	0.00E+00	1.36E-04	1.67E-04	0.00E+00
932	479870.9	3742297	1.16E-03	0.002262	0.00E+00	1.10E-03	2.50E-03	0.00E+00	2.22E-04	4.00E-04	0.00E+00	8.82E-04	1.87E-03	0.00E+00	1.90E-04	3.04E-04	0.00E+00	1.45E-04	1.79E-04	0.00E+00
933	479700.6	3742346	5.90E-04	0.001152	0.00E+00	5.60E-04	1.27E-03	0.00E+00	1.13E-04	2.04E-04	0.00E+00	4.49E-04	9.50E-04	0.00E+00	9.66E-05	1.55E-04	0.00E+00	7.38E-05	9.11E-05	0.00E+00
934	479718.2	3742339	6.25E-04	0.001221	0.00E+00	5.93E-04	1.35E-03	0.00E+00	1.20E-04	2.16E-04	0.00E+00	4.76E-04	1.01E-03	0.00E+00	1.02E-04	1.64E-04	0.00E+00	7.82E-05	9.65E-05	0.00E+00
935	479735.8	3742332	6.63E-04	0.001295	0.00E+00	6.29E-04	1.43E-03	0.00E+00	1.27E-04	2.29E-04	0.00E+00	5.05E-04	1.07E-03	0.00E+00	1.09E-04	1.74E-04	0.00E+00	8.30E-05	1.02E-04	0.00E+00
936	479753.4	3742325	7.04E-04	0.001376	0.00E+00	6.68E-04	1.52E-03	0.00E+00	1.35E-04	2.43E-04	0.00E+00	5.36E-04	1.13E-03	0.00E+00	1.15E-04	1.85E-04	0.00E+00	8.81E-05	1.09E-04	0.00E+00
937	479770.9	3742317	7.49E-04	0.001463	0.00E+00	7.11E-04	1.62E-03	0.00E+00	1.44E-04	2.59E-04	0.00E+00	5.70E-04	1.21E-03	0.00E+00	1.23E-04	1.97E-04	0.00E+00	9.37E-05	1.16E-04	0.00E+00
938	479788.5	3742310	7.98E-04	0.001558	0.00E+00	7.57E-04	1.72E-03	0.00E+00	1.53E-04	2.75E-04	0.00E+00	6.07E-04	1.28E-03	0.00E+00	1.31E-04	2.10E-04	0.00E+00	9.98E-05	1.23E-04	0.00E+00
939	479806.1	3742303	8.50E-04	0.00166	0.00E+00	8.07E-04	1.84E-03	0.00E+00	1.63E-04	2.93E-04	0.00E+00	6.47E-04	1.37E-03	0.00E+00	1.39E-04	2.23E-04	0.00E+00	1.06E-04	1.31E-04	0.00E+00
940	479823.7	3742296	9.07E-04	0.001771	0.00E+00	8.60E-04	1.96E-03	0.00E+00	1.74E-04	3.13E-04	0.00E+00	6.90E-04	1.46E-03	0.00E+00	1.48E-04	2.38E-04	0.00E+00	1.13E-04	1.40E-04	0.00E+00
941	479841.3	3742289	9.67E-04	0.001889	0.00E+00	9.18E-04	2.09E-03	0.00E+00	1.86E-04	3.34E-04	0.00E+00	7.36E-04	1.56E-03	0.00E+00	1.58E-04	2.54E-04	0.00E+00	1.21E-04	1.49E-04	0.00E+00
942	479858.8	3742282	1.03E-03	0.002013	0.00E+00	9.78E-04	2.23E-03	0.00E+00	1.98E-04	3.56E-04	0.00E+00	7.85E-04	1.66E-03	0.00E+00	1.69E-04	2.71E-04	0.00E+00	1.29E-04	1.59E-04	0.00E+00
943	479665.6	3742310	4.79E-04	0.000935	0.00E+00	4.54E-04	1.03E-03	0.00E+00	9.18E-05	1.65E-04	0.00E+00	3.64E-04	7.71E-04	0.00E+00	7.83E-05	1.26E-04	0.00E+00	5.99E-05	7.39E-05	0.00E+00
944	479683.2	3742303	5.03E-04	0.000983	0.00E+00	4.78E-04	1.09E-03	0.00E+00	9.66E-05	1.74E-04	0.00E+00	3.83E-04	8.11E-04	0.00E+00	8.24E-05	1.32E-04	0.00E+00	6.30E-05	7.77E-05	0.00E+00
945	479700.8	3742296	5.30E-04	0.001035	0.00E+00	5.03E-04	1.14E-03	0.00E+00	1.02E-04	1.83E-04	0.00E+00	4.04E-04	8.54E-04	0.00E+00	8.67E-05	1.39E-04	0.00E+00	6.63E-05	8.18E-05	0.00E+00
946	479718.4	3742289	5.58E-04	0.001091	0.00E+00	5.30E-04	1.21E-03	0.00E+00	1.07E-04	1.93E-04	0.00E+00	4.25E-04	8.99E-04	0.00E+00	9.14E-05	1.47E-04	0.00E+00	6.99E-05	8.62E-05	0.00E+00
947	479735.9	3742282	5.89E-04	0.00115	0.00E+00	5.59E-04	1.27E-03	0.00E+00	1.13E-04	2.03E-04	0.00E+00	4.48E-04	9.48E-04	0.00E+00	9.64E-05	1.55E-04	0.00E+00	7.37E-05	9.09E-05	0.00E+00
948	479753.5	3742275	6.22E-04	0.001214	0.00E+00	5.90E-04	1.34E-03	0.00E+00	1.19E-04	2.15E-04	0.00E+00	4.74E-04	1.00E-03	0.00E+00	1.02E-04	1.63E-04	0.00E+00	7.78E-05	9.60E-05	0.00E+00
949	479771.1	3742267	6.57E-04	0.001284	0.00E+00	6.24E-04	1.42E-03	0.00E+00	1.26E-04	2.27E-04	0.00E+00	5.00E-04	1.06E-03	0.00E+00	1.08E-04	1.73E-04	0.00E+00	8.22E-05	1.01E-04	0.00E+00
950	479788.7	3742260	6.95E-04	0.001358	0.00E+00	6.60E-04	1.50E-03	0.00E+00	1.33E-04	2.40E-04	0.00E+00	5.30E-04	1.12E-03	0.00E+00	1.14E-04	1.83E-04	0.00E+00	8.70E-05	1.07E-04	0.00E+00
951	479806.3	3742253	7.36E-04	0.001438	0.00E+00	6.98E-04	1.59E-03	0.00E+00	1.41E-04	2.54E-04	0.00E+00	5.61E-04	1.19E-03	0.00E+00	1.20E-04	1.93E-04	0.00E+00	9.21E-05	1.14E-04	0.00E+00
952	479823.8	3742246	7.80E-04	0.001523	0.00E+00	7.40E-04	1.68E-03	0.00E+00	1.50E-04	2.69E-04	0.00E+00	5.94E-04	1.26E-03	0.00E+00	1.28E-04	2.05E-04	0.00E+00	9.75E-05	1.20E-04	0.00E+00
953	479841.4	3742239	8.25E-04	0.001612	0.00E+00	7.83E-04	1.78E-03	0.00E+00	1.58E-04	2.85E-04	0.00E+00	6.29E-04	1.33E-03	0.00E+00	1.35E-04	2.17E-04	0.00E+00	1.03E-04	1.27E-04	0.00E+00
954	479859	3742232	8.73E-04	0.001705	0.00E+00	8.28E-04	1.89E-03	0.00E+00	1.67E-04	3.01E-04	0.00E+00	6.65E-04	1.41E-03	0.00E+00	1.43E-04	2.29E-04	0.00E+00	1.09E-04	1.35E-04	0.00E+00
955	479630.6	3742275	3.98E-04	0.000777	0.00E+00	3.77E-04	8.59E-04	0.00E+00	7.63E-05	1.37E-04	0.00E+00	3.03E-04	6.41E-04	0.00E+00	6.51E-05	1.05E-04	0.00E+00	4.98E-05	6.14E-05	0.00E+00
956	479648.2	3742267	4.16E-04	0.000812	0.00E+00	3.95E-04	8.99E-04	0.00E+00	7.98E-05	1.44E-04	0.00E+00	3.17E-04	6.70E-04	0.00E+00	6.81E-05	1.09E-04	0.00E+00	5.20E-05	6.42E-05	0.00E+00
957	479665.8	3742260	4.35E-04	0.00085	0.00E+00	4.13E-04	9.40E-04	0.00E+00	8.35E-05	1.50E-04	0.00E+00	3.31E-04	7.01E-04	0.00E+00	7.13E-05	1.14E-04	0.00E+00	5.45E-05	6.72E-05	0.00E+00
958	479683.4	3742253	4.56E-04	0.00089	0.00E+00	4.32E-04	9.85E-04	0.00E+00	8.74E-05	1.57E-04	0.00E+00	3.47E-04	7.34E-04	0.00E+00	7.46E-05	1.20E-04	0.00E+00	5.70E-05	7.03E-05	0.00E+00
959	479700.9	3742246	4.78E-04	0.000933	0.00E+00	4.53E-04	1.03E-03	0.00E+00	9.16E-05	1.65E-04	0.00E+00	3.64E-04	7.69E-04	0.00E+00	7.82E-05	1.25E-04	0.00E+00	5.98E-05	7.37E-05	0.00E+00
960	479718.5	3742239	5.01E-04	0.000978	0.00E+00	4.75E-04	1.08E-03	0.00E+00	9.61E-05	1.73E-04	0.00E+00	3.81E-04	8.07E-04	0.00E+00	8.20E-05	1.32E-04	0.00E+00	6.27E-05	7.73E-05	0.00E+00
961	479736.1	3742232	5.26E-04	0.001027	0.00E+00	4.99E-04	1.14E-03	0.00E+00	1.01E-04	1.81E-04	0.00E+00	4.00E-04	8.47E-04	0.00E+00	8.61E-05	1.38E-04	0.00E+00	6.58E-05	8.12E-05	0.00E+00
962	479753.7	3742225	5.53E-04	0.001079	0.00E+00	5.24E-04	1.19E-03	0.00E+00	1.06E-04	1.91E-04	0.00E+00	4.21E-04	8.90E-04	0.00E+00	9.05E-05	1.45E-04	0.00E+00	6.91E-05	8.53E-05	0.00E+00
963	479771.3	3742217	5.81E-04	0.001135	0.00E+00	5.51E-04	1.26E-03	0.00E+00	1.12E-04	2.01E-04	0.00E+00	4.43E-04	9.36E-04	0.00E+00	9.51E-05	1.53E-04	0.00E+00	7.27E-05	8.97E-05	0.00E+00
964	479788.8	3742210	6.12E-04	0.001195	0.00E+00	5.80E-04	1.32E-03	0.00E+00	1.17E-04	2.11E-04	0.00E+00	4.66E-04	9.85E-04	0.00E+00	1.00E-04	1.61E-04	0.00E+00	7.65E-05	9.44E-05	0.00E+00
965	479806.4	3742203	6.44E-04	0.001258	0.00E+00	6.11E-04	1.39E-03	0.00E+00	1.24E-04	2.22E-04	0.00E+00	4.90E-04	1.04E-03	0.00E+00	1.05E-04	1.69E-04	0.00E+00	8.06E-05	9.94E-05	0.00E+00
966	479824	3742196	6.78E-04	0.001324	0.00E+00	6.43E-04	1.46E-03	0.00E+00	1.30E-04	2.34E-04	0.00E+00	5.16E-04	1.09E-03	0.00E+00	1.11E-04	1.78E-04	0.00E+00	8.48E-05	1.05E-04	0.00E+00
967	479841.6	3742189	7.14E-04	0.001393	0.00E+00	6.77E-04	1.54E-03	0.00E+00	1.37E-04	2.46E-04	0.00E+00	5.43E-04	1.15E-03	0.00E+00	1.17E-04	1.87E-04	0.00E+00	8.93E-05	1.10E-04	0.00E+00
968	479859.2	3742182	7.50E-04	0.001466	0.00E+00	7.12E-04	1.62E-03	0.00E+00	1.44E-04	2.59E-04	0.00E+00	5.71E-04	1.21E-03	0.00E+00	1.23E-04	1.97E-04	0.00E+00	9.39E-05	1.16E-04	0.00E+00
969	479876.7	3742175	7.88E-04	0.001539	0.00E+00	7.48E-04	1.70E-03	0.00E+00	1.51E-04	2.72E-04	0.00E+00	6.00E-04	1.27E-03	0.00E+00	1.29E-04	2.07E-04	0.00E+00	9.86E-05	1.22E-04	0.00E+00
970	479595.6	3742239	3.37E-04	0.000658	0.00E+00	3.20E-04	7.28E-04	0.00E+00	6.46E-05	1.16E-04	0.00E+00	2.57E-04	5.43E-04	0.00E+00	5.52E-05	8.85E-05	0.00E+00	4.22E-05	5.20E-05	0.00E+00
971	479613.2	3742232	3.51E-04	0.000685	0.00E+00	3.33E-04	7.58E-04	0.00E+00	6.73E-05	1.21E-04	0.00E+00	2.67E-04	5.65E-04	0.00E+00	5.74E-05	9.22E-05	0.00E+00	4.39E-05	5.41E-05	0.00E+00
972	479630.8	3742225	3.65E-04	0.000713	0.00E+00	3.47E-04	7.89E-04	0.00E+00	7.01E-05	1.26E-04	0.00E+00	2.78E-04	5.88E-04	0.00E+00	5.98E-05	9.60E-05	0.00E+00	4.57E-05	5.64E-05	0.00E+00
973	479648.4	3742217	3.81E-04	0.000743	0.00E+00	3.61E-04	8.22E-04	0.00E+00	7.30E-05	1.31E-04	0.00E+00	2.90E-04	6.13E-04	0.00E+00	6.23E-05	1.00E-04	0.00E+00	4.76E-05	5.87E-05	0.00E+00
974	479665.9	3742210	3.97E-04	0.000775	0.00E+00	3.77E-04	8.57E-04	0.00E+00	7.61E-05	1.37E-04	0.00E+00	3.02E-04	6.39E-04	0.00E+00	6.50E-05	1.04E-04	0.00E+00	4.96E-05	6.12E-05	0.00E+00
975	479683.5	3742203	4.14E-04	0.000808	0.00E+00	3.93E-04	8.94E-04	0.00E+00	7.94E-05	1.43E-04	0.00E+00	3.15E-04	6.67E-04	0.00E+00	6.78E-05	1.09E-04	0.00E+00	5.18E-05	6.39E-05	0.00E+00
976	479701.1	3742196	4.32E-04	0.000844	0.00E+00	4.10E-04	9.34E-04	0.00E+00	8.29E-05	1.49E-04	0.00E+00	3.29E-04	6.96E-04	0.00E+00	7.08E-05	1.14E-04	0.00E+00	5.41E-05	6.67E-05	0.00E+00
977	479718.7	3742189	4.52E-04	0.000882	0.00E+00	4.29E-04	9.76E-04	0.00E+00	8.66E-05	1.56E-04	0.00E+00	3.44E-04	7.27E-04	0.00E+00	7.39E-05	1.19E-04	0.00E+00	5.65E-05	6.97E-05	0.00E+00
978	479736.3	3742182	4.72E-04	0.000923	0.00E+00	4.48E-04	1.02E-03	0.00E+00	9.06E-05	1.63E-04	0.00E+00	3.60E-04	7.61E-04	0.00E+00	7.73E-05	1.24E-04	0.00E+00	5.91E-05	7.29E-05	0.00E+00
979	479753.8	3742175	4.94E-04	0.000966	0.00E+00	4.69E-04	1.07E-03	0.00E+00	9.48E-05	1.71E-04	0.00E+00	3.77E-04	7.96E-04	0.00E+00	8.09E-05	1.30E-04	0.00E+00	6.19E-05	7.63E-05	0.00E+00
980	479771.4	3742167	5.18E-04	0.001011	0.00E+00	4.91E-04	1.12E-03	0.00E+00	9.93E-05	1.79E-04	0.00E+00	3.94E-04	8.34E-04	0.00E+00	8.47E-05	1.36E-04	0.00E+00	6.48E-05	7.99E-05	0.00E+00
981	479789	3742160	5.42E-04	0.001059	0.00E+00	5.15E-04	1.17E-03	0.00E+00	1.04E-04	1.87E-04	0.00E+00	4.13E-04	8.73E-04	0.00E+00	8.88E-05	1.43E-04	0.00E+00	6.79E-05	8.37E-05	0.00E+00
982	479806.6	3742153	5.69E-04	0.00111	0.00E+00	5.39E-04	1.23E-03	0.00E+00	1.09E-04	1.96E-04	0.00E+00	4.33E-04	9.16E-04	0.00E+00	9.31E-05	1.49E-04	0.00E+00	7.11E-05	8.77E-05	0.00E+00
983	479824.2	3

1022	479806.9	3742053	4.54E-04	0.000887	0.00E+00	4.31E-04	9.81E-04	0.00E+00	8.71E-05	1.57E-04	0.00E+00	3.46E-04	7.31E-04	0.00E+00	7.43E-05	1.19E-04	0.00E+00	5.68E-05	7.01E-05	0.00E+00
1023	479824.5	3742046	4.73E-04	0.000923	0.00E+00	4.48E-04	1.02E-03	0.00E+00	9.06E-05	1.63E-04	0.00E+00	3.60E-04	7.61E-04	0.00E+00	7.73E-05	1.24E-04	0.00E+00	5.91E-05	7.29E-05	0.00E+00
1024	479842	3742039	4.91E-04	0.00096	0.00E+00	4.66E-04	1.06E-03	0.00E+00	9.43E-05	1.70E-04	0.00E+00	3.74E-04	7.91E-04	0.00E+00	8.04E-05	1.29E-04	0.00E+00	6.15E-05	7.58E-05	0.00E+00
1025	479859.6	3742032	5.11E-04	0.000997	0.00E+00	4.84E-04	1.10E-03	0.00E+00	9.79E-05	1.76E-04	0.00E+00	3.89E-04	8.22E-04	0.00E+00	8.36E-05	1.34E-04	0.00E+00	6.39E-05	7.88E-05	0.00E+00
1026	479877.2	3742025	5.30E-04	0.001035	0.00E+00	5.03E-04	1.14E-03	0.00E+00	1.02E-04	1.83E-04	0.00E+00	4.03E-04	8.53E-04	0.00E+00	8.67E-05	1.39E-04	0.00E+00	6.63E-05	8.18E-05	0.00E+00
1027	479490.6	3742132	2.23E-04	0.000435	0.00E+00	2.11E-04	4.81E-04	0.00E+00	4.27E-05	7.69E-05	0.00E+00	1.70E-04	3.59E-04	0.00E+00	3.65E-05	5.85E-05	0.00E+00	2.79E-05	3.44E-05	0.00E+00
1028	479508.2	3742125	2.30E-04	0.000448	0.00E+00	2.18E-04	4.96E-04	0.00E+00	4.41E-05	7.93E-05	0.00E+00	1.75E-04	3.70E-04	0.00E+00	3.76E-05	6.03E-05	0.00E+00	2.87E-05	3.54E-05	0.00E+00
1029	479525.8	3742117	2.37E-04	0.000462	0.00E+00	2.25E-04	5.12E-04	0.00E+00	4.54E-05	8.17E-05	0.00E+00	1.80E-04	3.81E-04	0.00E+00	3.88E-05	6.22E-05	0.00E+00	2.96E-05	3.65E-05	0.00E+00
1030	479543.4	3742110	2.44E-04	0.000477	0.00E+00	2.32E-04	5.28E-04	0.00E+00	4.69E-05	8.43E-05	0.00E+00	1.86E-04	3.93E-04	0.00E+00	4.00E-05	6.42E-05	0.00E+00	3.06E-05	3.77E-05	0.00E+00
1031	479560.9	3742103	2.52E-04	0.000492	0.00E+00	2.39E-04	5.44E-04	0.00E+00	4.83E-05	8.70E-05	0.00E+00	1.92E-04	4.06E-04	0.00E+00	4.12E-05	6.62E-05	0.00E+00	3.15E-05	3.89E-05	0.00E+00
1032	479578.5	3742096	2.60E-04	0.000508	0.00E+00	2.47E-04	5.62E-04	0.00E+00	4.99E-05	8.97E-05	0.00E+00	1.98E-04	4.19E-04	0.00E+00	4.26E-05	6.83E-05	0.00E+00	3.25E-05	4.01E-05	0.00E+00
1033	479596.1	3742089	2.68E-04	0.000524	0.00E+00	2.55E-04	5.80E-04	0.00E+00	5.15E-05	9.26E-05	0.00E+00	2.04E-04	4.32E-04	0.00E+00	4.39E-05	7.05E-05	0.00E+00	3.36E-05	4.14E-05	0.00E+00
1034	479613.7	3742082	2.77E-04	0.000542	0.00E+00	2.63E-04	5.99E-04	0.00E+00	5.32E-05	9.57E-05	0.00E+00	2.11E-04	4.47E-04	0.00E+00	4.54E-05	7.29E-05	0.00E+00	3.47E-05	4.28E-05	0.00E+00
1035	479631.3	3742075	2.87E-04	0.00056	0.00E+00	2.72E-04	6.19E-04	0.00E+00	5.50E-05	9.89E-05	0.00E+00	2.18E-04	4.62E-04	0.00E+00	4.69E-05	7.53E-05	0.00E+00	3.59E-05	4.42E-05	0.00E+00
1036	479648.8	3742067	2.96E-04	0.000579	0.00E+00	2.81E-04	6.40E-04	0.00E+00	5.68E-05	1.02E-04	0.00E+00	2.26E-04	4.77E-04	0.00E+00	4.85E-05	7.79E-05	0.00E+00	3.71E-05	4.57E-05	0.00E+00
1037	479666.4	3742060	3.07E-04	0.000599	0.00E+00	2.91E-04	6.62E-04	0.00E+00	5.88E-05	1.06E-04	0.00E+00	2.33E-04	4.94E-04	0.00E+00	5.02E-05	8.05E-05	0.00E+00	3.84E-05	4.73E-05	0.00E+00
1038	479684	3742053	3.17E-04	0.00062	0.00E+00	3.01E-04	6.85E-04	0.00E+00	6.09E-05	1.10E-04	0.00E+00	2.42E-04	5.11E-04	0.00E+00	5.19E-05	8.34E-05	0.00E+00	3.97E-05	4.90E-05	0.00E+00
1039	479701.6	3742046	3.29E-04	0.000642	0.00E+00	3.12E-04	7.10E-04	0.00E+00	6.31E-05	1.13E-04	0.00E+00	2.50E-04	5.29E-04	0.00E+00	5.38E-05	8.64E-05	0.00E+00	4.11E-05	5.07E-05	0.00E+00
1040	479719.1	3742039	3.41E-04	0.000666	0.00E+00	3.23E-04	7.36E-04	0.00E+00	6.54E-05	1.18E-04	0.00E+00	2.60E-04	5.49E-04	0.00E+00	5.58E-05	8.95E-05	0.00E+00	4.26E-05	5.26E-05	0.00E+00
1041	479736.7	3742032	3.54E-04	0.00069	0.00E+00	3.35E-04	7.64E-04	0.00E+00	6.78E-05	1.22E-04	0.00E+00	2.69E-04	5.69E-04	0.00E+00	5.79E-05	9.29E-05	0.00E+00	4.42E-05	5.46E-05	0.00E+00
1042	479754.3	3742025	3.67E-04	0.000716	0.00E+00	3.48E-04	7.92E-04	0.00E+00	7.04E-05	1.27E-04	0.00E+00	2.79E-04	5.91E-04	0.00E+00	6.00E-05	9.64E-05	0.00E+00	4.59E-05	5.66E-05	0.00E+00
1043	479771.9	3742017	3.81E-04	0.000743	0.00E+00	3.61E-04	8.22E-04	0.00E+00	7.30E-05	1.31E-04	0.00E+00	2.90E-04	6.13E-04	0.00E+00	6.23E-05	1.00E-04	0.00E+00	4.76E-05	5.87E-05	0.00E+00
1044	479789.5	3742010	3.95E-04	0.000772	0.00E+00	3.75E-04	8.53E-04	0.00E+00	7.58E-05	1.36E-04	0.00E+00	3.01E-04	6.36E-04	0.00E+00	6.47E-05	1.04E-04	0.00E+00	4.94E-05	6.10E-05	0.00E+00
1045	479807	3742003	4.10E-04	0.000801	0.00E+00	3.89E-04	8.86E-04	0.00E+00	7.87E-05	1.42E-04	0.00E+00	3.12E-04	6.60E-04	0.00E+00	6.71E-05	1.08E-04	0.00E+00	5.13E-05	6.33E-05	0.00E+00
1046	479824.6	3741996	4.25E-04	0.000831	0.00E+00	4.04E-04	9.19E-04	0.00E+00	8.16E-05	1.47E-04	0.00E+00	3.24E-04	6.85E-04	0.00E+00	6.96E-05	1.12E-04	0.00E+00	5.32E-05	6.56E-05	0.00E+00
1047	479842.2	3741989	4.41E-04	0.000861	0.00E+00	4.18E-04	9.53E-04	0.00E+00	8.46E-05	1.52E-04	0.00E+00	3.36E-04	7.10E-04	0.00E+00	7.22E-05	1.16E-04	0.00E+00	5.52E-05	6.81E-05	0.00E+00
1048	479859.8	3741982	4.57E-04	0.000892	0.00E+00	4.33E-04	9.87E-04	0.00E+00	8.76E-05	1.58E-04	0.00E+00	3.48E-04	7.36E-04	0.00E+00	7.48E-05	1.20E-04	0.00E+00	5.72E-05	7.05E-05	0.00E+00
1049	479877.4	3741975	4.73E-04	0.000923	0.00E+00	4.49E-04	1.02E-03	0.00E+00	9.07E-05	1.63E-04	0.00E+00	3.60E-04	7.61E-04	0.00E+00	7.74E-05	1.24E-04	0.00E+00	5.92E-05	7.30E-05	0.00E+00
1050	479455.6	3742096	1.98E-04	0.000387	0.00E+00	1.88E-04	4.28E-04	0.00E+00	3.80E-05	6.84E-05	0.00E+00	1.51E-04	3.19E-04	0.00E+00	3.24E-05	5.21E-05	0.00E+00	2.48E-05	3.06E-05	0.00E+00
1051	479473.2	3742089	2.04E-04	0.000398	0.00E+00	1.93E-04	4.40E-04	0.00E+00	3.91E-05	7.03E-05	0.00E+00	1.55E-04	3.28E-04	0.00E+00	3.34E-05	5.36E-05	0.00E+00	2.55E-05	3.15E-05	0.00E+00
1052	479490.8	3742082	2.10E-04	0.000409	0.00E+00	1.99E-04	4.53E-04	0.00E+00	4.02E-05	7.24E-05	0.00E+00	1.60E-04	3.38E-04	0.00E+00	3.43E-05	5.51E-05	0.00E+00	2.62E-05	3.24E-05	0.00E+00
1053	479508.4	3742075	2.16E-04	0.000421	0.00E+00	2.05E-04	4.66E-04	0.00E+00	4.14E-05	7.45E-05	0.00E+00	1.64E-04	3.47E-04	0.00E+00	3.53E-05	5.67E-05	0.00E+00	2.70E-05	3.33E-05	0.00E+00
1054	479525.9	3742067	2.22E-04	0.000434	0.00E+00	2.11E-04	4.80E-04	0.00E+00	4.26E-05	7.66E-05	0.00E+00	1.69E-04	3.58E-04	0.00E+00	3.63E-05	5.83E-05	0.00E+00	2.78E-05	3.43E-05	0.00E+00
1055	479543.5	3742060	2.29E-04	0.000446	0.00E+00	2.17E-04	4.94E-04	0.00E+00	4.38E-05	7.89E-05	0.00E+00	1.74E-04	3.68E-04	0.00E+00	3.74E-05	6.00E-05	0.00E+00	2.86E-05	3.53E-05	0.00E+00
1056	479561.1	3742053	2.35E-04	0.00046	0.00E+00	2.23E-04	5.08E-04	0.00E+00	4.51E-05	8.12E-05	0.00E+00	1.79E-04	3.79E-04	0.00E+00	3.85E-05	6.18E-05	0.00E+00	2.94E-05	3.63E-05	0.00E+00
1057	479578.7	3742046	2.42E-04	0.000473	0.00E+00	2.30E-04	5.24E-04	0.00E+00	4.65E-05	8.37E-05	0.00E+00	1.85E-04	3.90E-04	0.00E+00	3.97E-05	6.37E-05	0.00E+00	3.03E-05	3.74E-05	0.00E+00
1058	479596.3	3742039	2.50E-04	0.000488	0.00E+00	2.37E-04	5.40E-04	0.00E+00	4.79E-05	8.62E-05	0.00E+00	1.90E-04	4.02E-04	0.00E+00	4.09E-05	6.56E-05	0.00E+00	3.13E-05	3.86E-05	0.00E+00
1059	479613.8	3742032	2.58E-04	0.000503	0.00E+00	2.44E-04	5.56E-04	0.00E+00	4.94E-05	8.89E-05	0.00E+00	1.96E-04	4.15E-04	0.00E+00	4.21E-05	6.77E-05	0.00E+00	3.22E-05	3.97E-05	0.00E+00
1060	479631.4	3742025	2.66E-04	0.000519	0.00E+00	2.52E-04	5.74E-04	0.00E+00	5.10E-05	9.17E-05	0.00E+00	2.02E-04	4.28E-04	0.00E+00	4.35E-05	6.98E-05	0.00E+00	3.32E-05	4.10E-05	0.00E+00
1061	479649	3742017	2.74E-04	0.000535	0.00E+00	2.60E-04	5.92E-04	0.00E+00	5.26E-05	9.46E-05	0.00E+00	2.09E-04	4.42E-04	0.00E+00	4.49E-05	7.20E-05	0.00E+00	3.43E-05	4.23E-05	0.00E+00
1062	479666.6	3742010	2.83E-04	0.000553	0.00E+00	2.69E-04	6.12E-04	0.00E+00	5.43E-05	9.77E-05	0.00E+00	2.16E-04	4.56E-04	0.00E+00	4.64E-05	7.44E-05	0.00E+00	3.54E-05	4.37E-05	0.00E+00
1063	479684.1	3742003	2.93E-04	0.000572	0.00E+00	2.78E-04	6.32E-04	0.00E+00	5.62E-05	1.01E-04	0.00E+00	2.23E-04	4.71E-04	0.00E+00	4.79E-05	7.69E-05	0.00E+00	3.66E-05	4.52E-05	0.00E+00
1064	479701.7	3741996	3.03E-04	0.000591	0.00E+00	2.87E-04	6.54E-04	0.00E+00	5.81E-05	1.04E-04	0.00E+00	2.30E-04	4.87E-04	0.00E+00	4.95E-05	7.95E-05	0.00E+00	3.79E-05	4.67E-05	0.00E+00
1065	479719.3	3741989	3.13E-04	0.000612	0.00E+00	2.97E-04	6.76E-04	0.00E+00	6.01E-05	1.08E-04	0.00E+00	2.38E-04	5.04E-04	0.00E+00	5.13E-05	8.23E-05	0.00E+00	3.92E-05	4.83E-05	0.00E+00
1066	479736.9	3741982	3.24E-04	0.000633	0.00E+00	3.07E-04	7.00E-04	0.00E+00	6.22E-05	1.12E-04	0.00E+00	2.47E-04	5.22E-04	0.00E+00	5.30E-05	8.52E-05	0.00E+00	4.05E-05	5.00E-05	0.00E+00
1067	479754.5	3741975	3.36E-04	0.000655	0.00E+00	3.18E-04	7.25E-04	0.00E+00	6.44E-05	1.16E-04	0.00E+00	2.55E-04	5.40E-04	0.00E+00	5.49E-05	8.82E-05	0.00E+00	4.20E-05	5.18E-05	0.00E+00
1068	479772	3741967	3.47E-04	0.000678	0.00E+00	3.30E-04	7.50E-04	0.00E+00	6.66E-05	1.20E-04	0.00E+00	2.65E-04	5.59E-04	0.00E+00	5.69E-05	9.13E-05	0.00E+00	4.35E-05	5.36E-05	0.00E+00
1069	479789.6	3741960	3.60E-04	0.000702	0.00E+00	3.41E-04	7.77E-04	0.00E+00	6.90E-05	1.24E-04	0.00E+00	2.74E-04	5.79E-04	0.00E+00	5.89E-05	9.45E-05	0.00E+00	4.50E-05	5.55E-05	0.00E+00
1070	479807.2	3741953	3.72E-04	0.000727	0.00E+00	3.53E-04	8.04E-04	0.00E+00	7.14E-05	1.28E-04	0.00E+00	2.84E-04	6.00E-04	0.00E+00	6.09E-05	9.78E-05	0.00E+00	4.66E-05	5.75E-05	0.00E+00
1071	479824.8	3741946	3.85E-04	0.000752	0.00E+00	3.66E-04	8.32E-04	0.00E+00	7.39E-05	1.33E-04	0.00E+00	2.93E-04	6.20E-04	0.00E+00	6.31E-05	1.01E-04	0.00E+00	4.82E-05	5.95E-05	0.00E+00
1072	479842.4	3741939	3.98E-04	0.000778	0.00E+00	3.78E-04	8.61E-04	0.00E+00	7.64E-05	1.37E-04	0.00E+00	3.03E-04	6.42E-04	0.00E+00	6.52E-05	1.05E-04	0.00E+00	4.98E-05	6.15E-05	0.00E+00
1073	479859.9	3741932	4.12E-04	0.000804	0.00E+00	3.91E-04	8.89E-04	0.00E+00	7.90E-05	1.42E-04	0.00E+00	3.14E-04	6.63E-04	0.00E+00	6.74E-05	1.08E-04	0.00E+00	5.15E-05	6.35E-05	0.00E+00
1074	479877.5	3741925	4.25E-04	0.00083	0.00E+00	4.03E-04	9.18E-04	0.00E+00	8.15E-05	1.47E-04	0.00E+00	3.24E-04	6.85E-04	0.00E+00	6.96E-05	1.12E-04	0.00E+00	5.32E-05	6.56E-05	0.00E+00
1075	479420.6	3742060	1.78E-04	0.000347	0.00E+00	1.69E-04	3.84E-04	0.00E+00	3.41E-05	6.13E-05	0.00E+00	1.35E-04	2.86E-04	0.00E+00	2.91E-05	4.67E-05	0.00E+00	2.22E-05	2.74E-05	0.00E+00
1076	479438.2	3742053	1.82E-04	0.000356	0.00E+00	1.73E-04	3.94E-04	0.00E+00	3.50E-05	6.30E-05	0.00E+00	1.39E-04	2.94E-04	0.00E+00	2.99E-05	4.79E-05	0.00E+00	2.28E-05	2.82E-05	0.00E+00
1077	479455.8	3742046	1.87E-04	0.000366	0.00E+00	1.78E-04	4.05E-04	0.00E+00	3.59E-05	6.46E-05	0.00E+00	1.43E-04	3.02E-04	0.00E+00	3.07E-05	4.92E-05	0.00E+00	2.34E-05	2.89E-05	0.00E+00
1078	479473.4	3742039	1.92E-04	0.000375	0.00E+00	1.82E-04	4.15E-04	0.00E+00	3.69E-05	6.64E-05	0.00E+00	1.46E-04	3.10E-04	0.00E+00	3.15E-05	5.05E-05	0.00E+00	2.41E-05	2.97E-05	0.00E+00
1079	479490.9	3742032	1.97E-04	0.000386	0.00E+00	1.87E-04	4.27E-04	0.00E+00	3.79E-05	6.81E-05	0.00E+00	1.50E-04	3.18E-04	0.00E+00	3.23E-05	5.19E-05	0.00E+00	2.47E-05	3.05E-05	0.00E+00
1080	479508.5	3742025	2.03E-04	0.000396	0.00E+00	1.92E-04	4.38E-04	0.00E+00	3.89E-05	7.00E-05	0.00E+00	1.54E-04	3.27E-04	0.00E+00	3.32E-05	5.33E-05	0.00E+00	2.54E-05	3.13E-05	0.00E+00
1081	479526.1	3742017	2.08E-04	0.000407	0.00E+00	1.98E-04	4.50E-04	0.00E+00	4.00E-05	7.19E-05	0.00E+00	1.59E-04	3.36E-04	0.00E+00	3.41E-05	5.47E-05	0.00E+00	2.61E-05	3.22E-05	0.00E+00
1082	479543.7	3742010	2.14E-04	0.000418	0.00E+00	2.03E-04	4.63E-04	0.00E+00	4.11E-05	7.39E-05	0.00E+00	1.63E-04	3.45E-04	0.00E+00	3.51E-05	5.63E-05	0.00E+00	2.68E-05	3.31E-05	0.00E+00
1083	479561.3	3742003	2.20E-04	0.00043	0.00E+00	2.09E-04	4.76E-04	0.00E+00	4.22E-05	7.60E-05	0.00E+00	1.68E-04	3.55E-04	0.00E+00	3.60E-05	5.78E-05	0.00E+00	2.75E-05	3.40E-05	0.00E+00
1084	479578.8	3741996	2.26E-04	0.000442	0.00E+00	2.15E-04	4.89E-04	0.00E+00	4.34E-05	7.81E-05	0.00E+00	1.72E-04	3.65E-04	0.00E+00	3.71E-05	5.95E-05	0.00E+00	2.83E-05	3.49E-05	0.00E+00
1085	479596.4	3741989	2.33E-04	0.000455	0.00E+00	2.21E-04	5.03E-04	0.00E+00	4.47E-05	8.04E-05	0.00E+00	1.77E-04	3.75E-04	0.00E+00	3.81E-05	6.12E-05	0.00E+00	2.91E-05	3.60E-05	0.00E+00
1086	479614	3741982	2.40E-04	0.000468	0.00E+00	2.28E-04	5.18E-04	0.00E+00	4.60E-05	8.28E-05	0.00E+00	1.83E-04	3.86E-04	0.00E+00	3.93E-05	6.30E-05	0.00E+00	3.00E-05	3.70E-05	0.00E+00
1087	479631.6	3741975	2.47E-04	0.000482	0.00E+00	2.34E-04	5.34E-04	0.00E+00	4.74E-05	8.53E-05	0.00E+00	1.88E-04	3.98E-04	0.00E+00	4.04E-05	6.49E-05	0.00E+00	3.09E-05	3.81E-05	0.00E+00
1088	479649.1	3741967	2.55E-04	0.000497	0.00E+00	2.42E-04	5.50E-04	0.00E+00	4.88E-05	8.79E-05	0.00E+00	1.94E-04	4.10E-04	0.00E+00	4.17E-05	6.69E-05	0.00E+00	3.19E-05	3.93E-05	0.00E+00
1089	479666.7	3741960	2.63E-04	0.000513	0.00E+00	2.49E-04	5.67E-04	0.00E+00	5.04E-05	9.06E-05	0.00E+00	2.00E-04	4.23E-04	0.00E+00	4.30E-05	6.90E-05	0.00E+00	3.29E-05	4.05E-05	0.00E+00
1090	479684.3	3741953	2.71E-04	0.000529	0.00E+00	2.57E-04	5.85E-04	0.00E+00	5.20E-05	9.35E-05	0.00E+00	2.06E-04	4.36E-04	0.00E+00	4.44E-05	7.12E-05	0.00E+00	3.39E-05	4.18E-05	0.00E+00
1091	479701.9	3741946	2.80E-04	0.000546	0.00E+00	2.65E-04	6.04E-04	0.00E+00	5.37E-05	9.65E-05	0.00E+00	2.13E-04	4.50E-04	0.00E+00	4.58E-05	7.35E-05	0.00E+00	3.50E-05	4.32E-05	0.00E+00
1092	479719.5	3741939	2.89E-04	0.000564	0.00E+00	2.74E-04	6.24E-04	0.00E+00	5.54E-05	9.97E-05	0.00E+00	2.20E-04	4.65E-04	0.00E+00	4.73E-05	7.59E-05	0.00E+00	3.61E-05	4.46E-05	0.00E+00
1093	479737	3741932	2.98E-04	0.000583	0.00E+00	2.83E-04	6.44E-04	0.00E+00	5.72E-05	1.03E-04	0.00E+00	2.27E-04	4.80E-04	0.00E+00	4.88E-05	7.84E-05	0.00E+00	3.73E-05	4.60E-05	0.00E+00
1094	479754.6	3741925	3.08E-04	0.000602	0.00E+00	2.92E-04	6.66E-04	0.00E+00	5.91E-05	1.06E-04	0.00E+00	2.35E-04	4.96E-04	0.00E+00	5.04E-05	8.10E-05	0.00E+00	3.86E-05	4.76E-05	0.00E+00
1095	479772.2	3741917	3.18E-04	0.000622	0.00E+00	3.02E-04	6.88E-04	0.00E+00	6.11E-05	1.10E-04	0.00E+00	2.42E-04	5.13E-04	0.00E+00	5.21E-05	8.37E-05	0.00E+00	3.98E-05	4.91E-05	0.00E+00
1096	479789.8	3741910	3.29E-04	0.000642	0.00E+00	3.12E-04	7.11E-04	0.00E+00	6.31E-05	1.14E-04	0.00E+00	2.51E-04	5.30E-04	0.00E+00	5.38E-05	8.64E-05	0.00E+00	4.12E-05	5.08E-05	0.00E+00
1097	479807.4	3741903	3.40E-04	0.000664	0.00E+00	3.22E-04	7.34E-04	0.00E+00	6.52E-05	1.17E-04	0.00E+00	2.59E-04	5.47E-04	0.00E+00	5.56E-05	8.93E-05	0.00E+00	4.25E-05	5.24E-05	0.00E+00
1098	479824.9	3741896	3.51E-04	0.000685	0.00E+00	3.33E-04	7.58E-04	0.00E+00	6.73E-05	1.21E-04	0.00E+00	2.67E-04	5.65E-04	0.00E+00	5.74E-05	9.22E-05	0.00E+00	4.39E-05	5.41E-05	0.00E+00
1099	479842.5	3741889	3.62E-04	0.000707	0.00E+00	3.43E-04	7.82E-04	0.00E+00	6.94E-05	1.25E-04	0.00E+00	2.76E-04	5.83E-04	0.00E+00	5.93E-05	9.51E-05	0.00E+00	4.53E-05	5.59E-05	0.00E+00
1100	479860.1	3741882	3.73E-04	0.000729	0.00E+00	3.54E-04	8.06E-04	0.00E+00	7.16E-05	1.29E-04	0.00E+00	2.84E-04	6.01E-04	0.00E+00	6.11E-05	9.81E-05	0.00E+00	4.67E-05	5.76E-05	0.00E+00
1101	479877.7	3741875	3.85E-04	0.000751	0.00E+00	3.65E-04	8.31E-04	0.00E+00	7.38E-05	1.33E-04	0.00E+00	2.93E-04	6.19E-04	0.00E+00	6.29E-05	1.01E-04	0.00E+00	4.81E-05	5.93E-05	0.00E+00
1102	479385.6	3742025	1.60E-04	0.000313	0.00E+00	1.52E-04	3.47E-04	0.00E+00	3.08E-05	5.54E-05	0.00E+00	1.22E-04	2.58E-04	0.00E+00	2.63E-05	4.22E-05	0.00E+00	2.01E-05	2.48E-05	0.00E+00
1103	479403.2	3742018	1.64E-04	0.000321	0.00E+00	1.56E-04	3.55E-04	0.00E+00	3.15E-05	5.68E-05	0.00E+00	1.25E-04	2.65E-04	0.00E+00	2.69E-05	4.32E-05	0.00E+00	2.06E-05	2.54E-05	0.00E+00
1104	479420.8	3742010	1.69E-04	0.000329	0.00E+00	1.60E-04	3.64E-04	0.00E+00	3.23E-05	5.82E-05	0.00E+00	1.28E-04	2.71E-04	0.00E+00	2.76E-05	4.43E-05	0.00E+00	2.11E-05	2.60E-05	0.00E+00
1105	479438.4	3742003	1.73E-04	0.000337	0.00E+00	1.64E-04	3.73E-04	0.00E+00	3.31E-05	5.96E-05	0.00E+00	1.32E-04	2.78E-04	0.00E+00	2.83E-05	4.54E-05	0.00E+00	2.16E-05	2.67E-05	0.00E+00
1106	479455.9	3741996	1.77E-04	0.000346	0.00E+00	1.68E-04	3.82E-04	0.00E+00	3.40E-05	6.11E-05	0.00E+00	1.35E-04	2.85E-04	0.00E+00	2.90E-05	4.65E-05	0.00E+00	2.22E-05	2.73E-05	0.00E+00
1107	479473.5	3741989	1.82E-04	0.000354	0.00E+00	1.72E-04	3.92E-04	0.00E+00	3.48E-05	6.26E-05	0.00E+00	1.38E-04	2.92E-04	0.00E+00	2.97E-05	4.77E-05	0.00E+00	2.27E-05	2.80E-05	0.00E+00
1108	479491.1	3741982	1.86E-04	0.000363	0.00E+00	1.77E-04	4.02E-04	0.00E+00	3.57E-05	6.42E-05	0.00E+00	1.42E-04	3.00E-04	0.00E+00	3.05E-05	4.89E-05	0.00E+00	2.33E-05	2.87E-05	0.00E+00
1109	479508.7	3741975	1.91E-04	0.000373	0.00E+00	1.81E-04	4.12E-04	0.00E+00	3.66E-05	6.59E-05	0.00E+00	1.45E-04	3.07E-04	0.00E+00	3.12E-05	5.02E-05	0.00E+00	2.39E-05	2.95E-05	0.00E+00
1110	479526.3	3741967	1.96E-04	0.000382	0.00E+00	1.86E-04	4.23E-04	0.00E+00	3.76E-05	6.76E-05	0.00E+00	1.49E-04

1150	479684.6	3741853	2.34E-04	0.000458	0.00E+00	2.22E-04	5.06E-04	0.00E+00	4.50E-05	8.09E-05	0.00E+00	1.78E-04	3.77E-04	0.00E+00	3.84E-05	6.16E-05	0.00E+00	2.93E-05	3.62E-05	0.00E+00
1151	479702.2	3741846	2.41E-04	0.000471	0.00E+00	2.29E-04	5.21E-04	0.00E+00	4.63E-05	8.32E-05	0.00E+00	1.84E-04	3.88E-04	0.00E+00	3.95E-05	6.34E-05	0.00E+00	3.02E-05	3.72E-05	0.00E+00
1152	479719.8	3741839	2.48E-04	0.000485	0.00E+00	2.36E-04	5.36E-04	0.00E+00	4.76E-05	8.57E-05	0.00E+00	1.89E-04	4.00E-04	0.00E+00	4.06E-05	6.52E-05	0.00E+00	3.11E-05	3.83E-05	0.00E+00
1153	479737.4	3741832	2.56E-04	0.000499	0.00E+00	2.43E-04	5.52E-04	0.00E+00	4.90E-05	8.82E-05	0.00E+00	1.95E-04	4.12E-04	0.00E+00	4.18E-05	6.72E-05	0.00E+00	3.20E-05	3.94E-05	0.00E+00
1154	479754.9	3741825	2.63E-04	0.000514	0.00E+00	2.50E-04	5.68E-04	0.00E+00	5.05E-05	9.08E-05	0.00E+00	2.00E-04	4.24E-04	0.00E+00	4.31E-05	6.91E-05	0.00E+00	3.29E-05	4.06E-05	0.00E+00
1155	479772.5	3741817	2.71E-04	0.000529	0.00E+00	2.57E-04	5.85E-04	0.00E+00	5.20E-05	9.35E-05	0.00E+00	2.06E-04	4.36E-04	0.00E+00	4.43E-05	7.12E-05	0.00E+00	3.39E-05	4.18E-05	0.00E+00
1156	479790.1	3741810	2.79E-04	0.000545	0.00E+00	2.65E-04	6.02E-04	0.00E+00	5.35E-05	9.62E-05	0.00E+00	2.12E-04	4.49E-04	0.00E+00	4.56E-05	7.33E-05	0.00E+00	3.49E-05	4.30E-05	0.00E+00
1157	479807.7	3741803	2.87E-04	0.00056	0.00E+00	2.72E-04	6.20E-04	0.00E+00	5.50E-05	9.90E-05	0.00E+00	2.18E-04	4.62E-04	0.00E+00	4.70E-05	7.54E-05	0.00E+00	3.59E-05	4.43E-05	0.00E+00
1158	479825.2	3741796	2.95E-04	0.000576	0.00E+00	2.80E-04	6.37E-04	0.00E+00	5.66E-05	1.02E-04	0.00E+00	2.25E-04	4.75E-04	0.00E+00	4.83E-05	7.75E-05	0.00E+00	3.69E-05	4.55E-05	0.00E+00
1159	479842.8	3741789	3.03E-04	0.000592	0.00E+00	2.88E-04	6.55E-04	0.00E+00	5.82E-05	1.05E-04	0.00E+00	2.31E-04	4.89E-04	0.00E+00	4.97E-05	7.97E-05	0.00E+00	3.80E-05	4.68E-05	0.00E+00
1160	479860.4	3741782	3.12E-04	0.000609	0.00E+00	2.96E-04	6.73E-04	0.00E+00	5.98E-05	1.08E-04	0.00E+00	2.37E-04	5.02E-04	0.00E+00	5.10E-05	8.19E-05	0.00E+00	3.90E-05	4.81E-05	0.00E+00
1161	479878	3741775	3.20E-04	0.000625	0.00E+00	3.04E-04	6.91E-04	0.00E+00	6.14E-05	1.10E-04	0.00E+00	2.44E-04	5.15E-04	0.00E+00	5.24E-05	8.41E-05	0.00E+00	4.00E-05	4.94E-05	0.00E+00
1162	479315.6	3741953	1.33E-04	0.00026	0.00E+00	1.26E-04	2.88E-04	0.00E+00	2.56E-05	4.60E-05	0.00E+00	1.01E-04	2.15E-04	0.00E+00	2.18E-05	3.50E-05	0.00E+00	1.67E-05	2.06E-05	0.00E+00
1163	479333.2	3741946	1.36E-04	0.000266	0.00E+00	1.29E-04	2.94E-04	0.00E+00	2.61E-05	4.70E-05	0.00E+00	1.04E-04	2.19E-04	0.00E+00	2.23E-05	3.58E-05	0.00E+00	1.70E-05	2.10E-05	0.00E+00
1164	479350.8	3741939	1.39E-04	0.000272	0.00E+00	1.32E-04	3.01E-04	0.00E+00	2.67E-05	4.80E-05	0.00E+00	1.06E-04	2.24E-04	0.00E+00	2.28E-05	3.66E-05	0.00E+00	1.74E-05	2.15E-05	0.00E+00
1165	479368.4	3741932	1.42E-04	0.000278	0.00E+00	1.35E-04	3.07E-04	0.00E+00	2.73E-05	4.91E-05	0.00E+00	1.08E-04	2.29E-04	0.00E+00	2.33E-05	3.74E-05	0.00E+00	1.78E-05	2.19E-05	0.00E+00
1166	479385.9	3741925	1.45E-04	0.000284	0.00E+00	1.38E-04	3.14E-04	0.00E+00	2.79E-05	5.01E-05	0.00E+00	1.11E-04	2.34E-04	0.00E+00	2.38E-05	3.82E-05	0.00E+00	1.82E-05	2.24E-05	0.00E+00
1167	479403.5	3741918	1.48E-04	0.00029	0.00E+00	1.41E-04	3.21E-04	0.00E+00	2.85E-05	5.12E-05	0.00E+00	1.13E-04	2.39E-04	0.00E+00	2.43E-05	3.90E-05	0.00E+00	1.86E-05	2.29E-05	0.00E+00
1168	479421.1	3741910	1.52E-04	0.000296	0.00E+00	1.44E-04	3.28E-04	0.00E+00	2.91E-05	5.24E-05	0.00E+00	1.16E-04	2.44E-04	0.00E+00	2.48E-05	3.99E-05	0.00E+00	1.90E-05	2.34E-05	0.00E+00
1169	479438.7	3741903	1.55E-04	0.000303	0.00E+00	1.47E-04	3.35E-04	0.00E+00	2.98E-05	5.35E-05	0.00E+00	1.18E-04	2.50E-04	0.00E+00	2.54E-05	4.08E-05	0.00E+00	1.94E-05	2.39E-05	0.00E+00
1170	479456.3	3741896	1.59E-04	0.00031	0.00E+00	1.51E-04	3.43E-04	0.00E+00	3.04E-05	5.48E-05	0.00E+00	1.21E-04	2.56E-04	0.00E+00	2.60E-05	4.17E-05	0.00E+00	1.98E-05	2.45E-05	0.00E+00
1171	479473.8	3741889	1.62E-04	0.000317	0.00E+00	1.54E-04	3.51E-04	0.00E+00	3.11E-05	5.60E-05	0.00E+00	1.24E-04	2.61E-04	0.00E+00	2.66E-05	4.26E-05	0.00E+00	2.03E-05	2.50E-05	0.00E+00
1172	479491.4	3741882	1.66E-04	0.000324	0.00E+00	1.57E-04	3.59E-04	0.00E+00	3.18E-05	5.73E-05	0.00E+00	1.26E-04	2.67E-04	0.00E+00	2.72E-05	4.36E-05	0.00E+00	2.08E-05	2.56E-05	0.00E+00
1173	479509	3741875	1.70E-04	0.000332	0.00E+00	1.61E-04	3.67E-04	0.00E+00	3.26E-05	5.86E-05	0.00E+00	1.29E-04	2.74E-04	0.00E+00	2.78E-05	4.46E-05	0.00E+00	2.13E-05	2.62E-05	0.00E+00
1174	479526.6	3741868	1.74E-04	0.00034	0.00E+00	1.65E-04	3.76E-04	0.00E+00	3.34E-05	6.00E-05	0.00E+00	1.32E-04	2.80E-04	0.00E+00	2.85E-05	4.57E-05	0.00E+00	2.18E-05	2.68E-05	0.00E+00
1175	479544.1	3741860	1.78E-04	0.000348	0.00E+00	1.69E-04	3.85E-04	0.00E+00	3.42E-05	6.15E-05	0.00E+00	1.36E-04	2.87E-04	0.00E+00	2.92E-05	4.68E-05	0.00E+00	2.23E-05	2.75E-05	0.00E+00
1176	479561.7	3741853	1.83E-04	0.000356	0.00E+00	1.73E-04	3.94E-04	0.00E+00	3.50E-05	6.30E-05	0.00E+00	1.39E-04	2.94E-04	0.00E+00	2.99E-05	4.80E-05	0.00E+00	2.28E-05	2.82E-05	0.00E+00
1177	479579.3	3741846	1.87E-04	0.000365	0.00E+00	1.77E-04	4.04E-04	0.00E+00	3.59E-05	6.46E-05	0.00E+00	1.42E-04	3.01E-04	0.00E+00	3.06E-05	4.92E-05	0.00E+00	2.34E-05	2.89E-05	0.00E+00
1178	479596.9	3741839	1.92E-04	0.000375	0.00E+00	1.82E-04	4.14E-04	0.00E+00	3.68E-05	6.62E-05	0.00E+00	1.46E-04	3.09E-04	0.00E+00	3.14E-05	5.04E-05	0.00E+00	2.40E-05	2.96E-05	0.00E+00
1179	479614.5	3741832	1.97E-04	0.000384	0.00E+00	1.87E-04	4.25E-04	0.00E+00	3.78E-05	6.79E-05	0.00E+00	1.50E-04	3.17E-04	0.00E+00	3.22E-05	5.17E-05	0.00E+00	2.46E-05	3.04E-05	0.00E+00
1180	479632	3741825	2.02E-04	0.000395	0.00E+00	1.92E-04	4.36E-04	0.00E+00	3.88E-05	6.97E-05	0.00E+00	1.54E-04	3.25E-04	0.00E+00	3.31E-05	5.31E-05	0.00E+00	2.53E-05	3.12E-05	0.00E+00
1181	479649.6	3741817	2.07E-04	0.000405	0.00E+00	1.97E-04	4.48E-04	0.00E+00	3.98E-05	7.16E-05	0.00E+00	1.58E-04	3.34E-04	0.00E+00	3.40E-05	5.45E-05	0.00E+00	2.60E-05	3.20E-05	0.00E+00
1182	479667.2	3741810	2.13E-04	0.000416	0.00E+00	2.02E-04	4.60E-04	0.00E+00	4.09E-05	7.35E-05	0.00E+00	1.62E-04	3.43E-04	0.00E+00	3.49E-05	5.60E-05	0.00E+00	2.67E-05	3.29E-05	0.00E+00
1183	479684.8	3741803	2.19E-04	0.000428	0.00E+00	2.08E-04	4.73E-04	0.00E+00	4.20E-05	7.56E-05	0.00E+00	1.67E-04	3.53E-04	0.00E+00	3.58E-05	5.75E-05	0.00E+00	2.74E-05	3.38E-05	0.00E+00
1184	479702.4	3741796	2.25E-04	0.000439	0.00E+00	2.13E-04	4.86E-04	0.00E+00	4.32E-05	7.76E-05	0.00E+00	1.71E-04	3.62E-04	0.00E+00	3.68E-05	5.91E-05	0.00E+00	2.82E-05	3.47E-05	0.00E+00
1185	479719.9	3741789	2.31E-04	0.000452	0.00E+00	2.19E-04	5.00E-04	0.00E+00	4.44E-05	7.98E-05	0.00E+00	1.76E-04	3.72E-04	0.00E+00	3.79E-05	6.08E-05	0.00E+00	2.89E-05	3.57E-05	0.00E+00
1186	479737.5	3741782	2.38E-04	0.000464	0.00E+00	2.26E-04	5.14E-04	0.00E+00	4.56E-05	8.20E-05	0.00E+00	1.81E-04	3.83E-04	0.00E+00	3.89E-05	6.25E-05	0.00E+00	2.97E-05	3.67E-05	0.00E+00
1187	479755.1	3741775	2.44E-04	0.000477	0.00E+00	2.32E-04	5.28E-04	0.00E+00	4.69E-05	8.43E-05	0.00E+00	1.86E-04	3.94E-04	0.00E+00	4.00E-05	6.42E-05	0.00E+00	3.06E-05	3.77E-05	0.00E+00
1188	479772.7	3741767	2.51E-04	0.000491	0.00E+00	2.38E-04	5.43E-04	0.00E+00	4.82E-05	8.67E-05	0.00E+00	1.91E-04	4.05E-04	0.00E+00	4.11E-05	6.60E-05	0.00E+00	3.14E-05	3.88E-05	0.00E+00
1189	479790.2	3741760	2.58E-04	0.000504	0.00E+00	2.45E-04	5.58E-04	0.00E+00	4.95E-05	8.91E-05	0.00E+00	1.97E-04	4.16E-04	0.00E+00	4.23E-05	6.78E-05	0.00E+00	3.23E-05	3.98E-05	0.00E+00
1190	479807.8	3741753	2.65E-04	0.000518	0.00E+00	2.52E-04	5.73E-04	0.00E+00	5.09E-05	9.15E-05	0.00E+00	2.02E-04	4.27E-04	0.00E+00	4.34E-05	6.97E-05	0.00E+00	3.32E-05	4.09E-05	0.00E+00
1191	479825.4	3741746	2.72E-04	0.000532	0.00E+00	2.58E-04	5.88E-04	0.00E+00	5.22E-05	9.40E-05	0.00E+00	2.07E-04	4.39E-04	0.00E+00	4.46E-05	7.16E-05	0.00E+00	3.41E-05	4.20E-05	0.00E+00
1192	479843	3741739	2.80E-04	0.000546	0.00E+00	2.65E-04	6.04E-04	0.00E+00	5.36E-05	9.65E-05	0.00E+00	2.13E-04	4.50E-04	0.00E+00	4.58E-05	7.35E-05	0.00E+00	3.50E-05	4.31E-05	0.00E+00
1193	479860.6	3741732	2.87E-04	0.00056	0.00E+00	2.72E-04	6.19E-04	0.00E+00	5.50E-05	9.90E-05	0.00E+00	2.18E-04	4.62E-04	0.00E+00	4.69E-05	7.53E-05	0.00E+00	3.59E-05	4.43E-05	0.00E+00
1194	479878.1	3741725	2.94E-04	0.000574	0.00E+00	2.79E-04	6.35E-04	0.00E+00	5.64E-05	1.01E-04	0.00E+00	2.24E-04	4.73E-04	0.00E+00	4.81E-05	7.72E-05	0.00E+00	3.68E-05	4.54E-05	0.00E+00
1195	479280.6	3741918	1.22E-04	0.000239	0.00E+00	1.16E-04	2.64E-04	0.00E+00	2.35E-05	4.22E-05	0.00E+00	9.32E-05	1.97E-04	0.00E+00	2.00E-05	3.21E-05	0.00E+00	1.53E-05	1.89E-05	0.00E+00
1196	479298.2	3741910	1.25E-04	0.000244	0.00E+00	1.18E-04	2.70E-04	0.00E+00	2.40E-05	4.31E-05	0.00E+00	9.51E-05	2.01E-04	0.00E+00	2.04E-05	3.28E-05	0.00E+00	1.56E-05	1.93E-05	0.00E+00
1197	479315.8	3741903	1.27E-04	0.000249	0.00E+00	1.21E-04	2.75E-04	0.00E+00	2.44E-05	4.40E-05	0.00E+00	9.70E-05	2.05E-04	0.00E+00	2.09E-05	3.35E-05	0.00E+00	1.59E-05	1.97E-05	0.00E+00
1198	479333.4	3741896	1.30E-04	0.000254	0.00E+00	1.23E-04	2.81E-04	0.00E+00	2.49E-05	4.49E-05	0.00E+00	9.90E-05	2.09E-04	0.00E+00	2.13E-05	3.42E-05	0.00E+00	1.63E-05	2.01E-05	0.00E+00
1199	479350.9	3741889	1.33E-04	0.000259	0.00E+00	1.26E-04	2.87E-04	0.00E+00	2.55E-05	4.58E-05	0.00E+00	1.01E-04	2.14E-04	0.00E+00	2.17E-05	3.49E-05	0.00E+00	1.66E-05	2.05E-05	0.00E+00
1200	479368.5	3741882	1.35E-04	0.000265	0.00E+00	1.29E-04	2.93E-04	0.00E+00	2.60E-05	4.68E-05	0.00E+00	1.03E-04	2.18E-04	0.00E+00	2.22E-05	3.56E-05	0.00E+00	1.70E-05	2.09E-05	0.00E+00
1201	479386.1	3741875	1.38E-04	0.00027	0.00E+00	1.31E-04	2.99E-04	0.00E+00	2.65E-05	4.77E-05	0.00E+00	1.05E-04	2.23E-04	0.00E+00	2.26E-05	3.63E-05	0.00E+00	1.73E-05	2.13E-05	0.00E+00
1202	479403.7	3741868	1.41E-04	0.000276	0.00E+00	1.34E-04	3.05E-04	0.00E+00	2.71E-05	4.87E-05	0.00E+00	1.08E-04	2.27E-04	0.00E+00	2.31E-05	3.71E-05	0.00E+00	1.77E-05	2.18E-05	0.00E+00
1203	479421.3	3741860	1.44E-04	0.000282	0.00E+00	1.37E-04	3.11E-04	0.00E+00	2.77E-05	4.98E-05	0.00E+00	1.10E-04	2.32E-04	0.00E+00	2.36E-05	3.79E-05	0.00E+00	1.80E-05	2.23E-05	0.00E+00
1204	479438.8	3741853	1.47E-04	0.000288	0.00E+00	1.40E-04	3.18E-04	0.00E+00	2.83E-05	5.08E-05	0.00E+00	1.12E-04	2.37E-04	0.00E+00	2.41E-05	3.87E-05	0.00E+00	1.84E-05	2.27E-05	0.00E+00
1205	479456.4	3741846	1.50E-04	0.000294	0.00E+00	1.43E-04	3.25E-04	0.00E+00	2.89E-05	5.19E-05	0.00E+00	1.15E-04	2.42E-04	0.00E+00	2.46E-05	3.95E-05	0.00E+00	1.88E-05	2.32E-05	0.00E+00
1206	479474	3741839	1.54E-04	0.0003	0.00E+00	1.46E-04	3.32E-04	0.00E+00	2.95E-05	5.30E-05	0.00E+00	1.17E-04	2.48E-04	0.00E+00	2.52E-05	4.04E-05	0.00E+00	1.92E-05	2.37E-05	0.00E+00
1207	479491.6	3741832	1.57E-04	0.000307	0.00E+00	1.49E-04	3.39E-04	0.00E+00	3.01E-05	5.42E-05	0.00E+00	1.20E-04	2.53E-04	0.00E+00	2.57E-05	4.13E-05	0.00E+00	1.97E-05	2.42E-05	0.00E+00
1208	479509.1	3741825	1.61E-04	0.000314	0.00E+00	1.52E-04	3.47E-04	0.00E+00	3.08E-05	5.54E-05	0.00E+00	1.22E-04	2.59E-04	0.00E+00	2.63E-05	4.22E-05	0.00E+00	2.01E-05	2.48E-05	0.00E+00
1209	479526.7	3741818	1.64E-04	0.000321	0.00E+00	1.56E-04	3.55E-04	0.00E+00	3.15E-05	5.67E-05	0.00E+00	1.25E-04	2.65E-04	0.00E+00	2.69E-05	4.32E-05	0.00E+00	2.06E-05	2.54E-05	0.00E+00
1210	479544.3	3741810	1.68E-04	0.000328	0.00E+00	1.60E-04	3.63E-04	0.00E+00	3.23E-05	5.80E-05	0.00E+00	1.28E-04	2.71E-04	0.00E+00	2.75E-05	4.42E-05	0.00E+00	2.10E-05	2.60E-05	0.00E+00
1211	479561.9	3741803	1.72E-04	0.000336	0.00E+00	1.63E-04	3.72E-04	0.00E+00	3.30E-05	5.94E-05	0.00E+00	1.31E-04	2.77E-04	0.00E+00	2.82E-05	4.52E-05	0.00E+00	2.15E-05	2.66E-05	0.00E+00
1212	479579.5	3741796	1.76E-04	0.000344	0.00E+00	1.67E-04	3.81E-04	0.00E+00	3.38E-05	6.09E-05	0.00E+00	1.34E-04	2.84E-04	0.00E+00	2.89E-05	4.63E-05	0.00E+00	2.21E-05	2.72E-05	0.00E+00
1213	479597	3741789	1.81E-04	0.000353	0.00E+00	1.71E-04	3.90E-04	0.00E+00	3.47E-05	6.23E-05	0.00E+00	1.38E-04	2.91E-04	0.00E+00	2.96E-05	4.75E-05	0.00E+00	2.26E-05	2.79E-05	0.00E+00
1214	479614.6	3741782	1.85E-04	0.000362	0.00E+00	1.76E-04	4.00E-04	0.00E+00	3.55E-05	6.39E-05	0.00E+00	1.41E-04	2.98E-04	0.00E+00	3.03E-05	4.86E-05	0.00E+00	2.32E-05	2.86E-05	0.00E+00
1215	479632.2	3741775	1.90E-04	0.000371	0.00E+00	1.80E-04	4.10E-04	0.00E+00	3.64E-05	6.55E-05	0.00E+00	1.45E-04	3.06E-04	0.00E+00	3.11E-05	4.99E-05	0.00E+00	2.38E-05	2.93E-05	0.00E+00
1216	479649.8	3741767	1.95E-04	0.00038	0.00E+00	1.85E-04	4.21E-04	0.00E+00	3.74E-05	6.72E-05	0.00E+00	1.48E-04	3.14E-04	0.00E+00	3.19E-05	5.12E-05	0.00E+00	2.44E-05	3.01E-05	0.00E+00
1217	479667.4	3741760	2.00E-04	0.00039	0.00E+00	1.90E-04	4.32E-04	0.00E+00	3.83E-05	6.89E-05	0.00E+00	1.52E-04	3.22E-04	0.00E+00	3.27E-05	5.25E-05	0.00E+00	2.50E-05	3.08E-05	0.00E+00
1218	479684.9	3741753	2.05E-04	0.0004	0.00E+00	1.95E-04	4.43E-04	0.00E+00	3.93E-05	7.08E-05	0.00E+00	1.56E-04	3.30E-04	0.00E+00	3.36E-05	5.39E-05	0.00E+00	2.57E-05	3.16E-05	0.00E+00
1219	479702.5	3741746	2.10E-04	0.000411	0.00E+00	2.00E-04	4.55E-04	0.00E+00	4.04E-05	7.26E-05	0.00E+00	1.60E-04	3.39E-04	0.00E+00	3.44E-05	5.53E-05	0.00E+00	2.63E-05	3.25E-05	0.00E+00
1220	479720.1	3741739	2.16E-04	0.000422	0.00E+00	2.05E-04	4.67E-04	0.00E+00	4.14E-05	7.46E-05	0.00E+00	1.65E-04	3.48E-04	0.00E+00	3.54E-05	5.68E-05	0.00E+00	2.70E-05	3.33E-05	0.00E+00
1221	479737.7	3741732	2.22E-04	0.000433	0.00E+00	2.10E-04	4.79E-04	0.00E+00	4.25E-05	7.65E-05	0.00E+00	1.69E-04	3.57E-04	0.00E+00	3.63E-05	5.83E-05	0.00E+00	2.77E-05	3.42E-05	0.00E+00
1222	479755.2	3741725	2.28E-04	0.000445	0.00E+00	2.16E-04	4.92E-04	0.00E+00	4.37E-05	7.86E-05	0.00E+00	1.73E-04	3.67E-04	0.00E+00	3.73E-05	5.98E-05	0.00E+00	2.85E-05	3.51E-05	0.00E+00
1223	479772.8	3741717	2.34E-04	0.000456	0.00E+00	2.22E-04	5.05E-04	0.00E+00	4.48E-05	8.06E-05	0.00E+00	1.78E-04	3.76E-04	0.00E+00	3.83E-05	6.14E-05	0.00E+00	2.92E-05	3.61E-05	0.00E+00
1224	479790.4	3741710	2.40E-04	0.000468	0.00E+00	2.28E-04	5.18E-04	0.00E+00	4.60E-05	8.28E-05	0.00E+00	1.83E-04	3.86E-04	0.00E+00	3.93E-05	6.30E-05	0.00E+00	3.00E-05	3.70E-05	0.00E+00
1225	479808	3741703	2.46E-04	0.00048	0.00E+00	2.33E-04	5.31E-04	0.00E+00	4.72E-05	8.49E-05	0.00E+00	1.87E-04	3.96E-04	0.00E+00	4.03E-05	6.46E-05	0.00E+00	3.08E-05	3.80E-05	0.00E+00
1226	479825.6	3741696	2.52E-04	0.000493	0.00E+00	2.39E-04	5.45E-04	0.00E+00	4.84E-05	8.71E-05	0.00E+00	1.92E-04	4.06E-04	0.00E+00	4.13E-05	6.63E-05	0.00E+00	3.16E-05	3.89E-05	0.00E+00
1227	479843.1	3741689	2.59E-04	0.000505	0.00E+00	2.45E-04	5.59E-04	0.00E+00	4.96E-05	8.92E-05	0.00E+00	1.97E-04	4.16E-04	0.00E+00	4.23E-05	6.79E-05	0.00E+00	3.24E-05	3.99E-05	0.00E+00
1228	479860.7	3741682	2.65E-04	0.000517	0.00E+00	2.51E-04	5.72E-04	0.00E+00	5.08E-05	9.14E-05	0.00E+00	2.02E-04	4.27E-04	0.00E+00	4.34E-05	6.96E-05	0.00E+00	3.31E-05	4.09E-05	0.00E+00
1229	479878.3	3741675	2.71E-04	0.00053	0.00E+00	2.57E-04	5.86E-04	0.00E+00	5.20E-05	9.36E-05	0.00E+00	2.06E-04	4.37E-04	0.00E+00	4.44E-05	7.12E-05	0.00E+00	3.39E-05	4.19E-05	0.00E+00
1230	479245.6	3741882	1.13E-04	0.00022	0.00E+00	1.07E-04	2.44E-04	0.00E+00	2.16E-05	3.89E-05	0.00E+00	8.59E-05	1.82E-04	0.00E+00	1.85E-05	2.97E-05	0.00E+00	1.41E-05	1.74E-05	0.00E+00
1231	479263.2	3741875	1.15E-04	0.000225	0.00E+00	1.09E-04	2.49E-04	0.00E+00	2.21E-05	3.97E-05	0.00E+00	8.76E-05	1.85E-04	0.00E+00	1.88E-05	3.02E-05	0.00E+00	1.44E-05	1.78E-05	0.00E+00
1232	479280.8	3741868	1.17E-04	0.000229	0.00E+00	1.11E-04	2.53E-04	0.00E+00	2.25E-05	4.05E-05	0.00E+00	8.93E-05	1.89E-04	0.00E+00	1.92E-05	3.08E-05	0.00E+00	1.47E-05	1.81E-05	0.00E+00
1233	479298.4	3741860	1.20E-04	0.000233	0.00E+00	1.13E-04	2.58E-04	0.00E+00	2.29E-05	4.13E-05	0.00E+00	9.10E-05	1.93E-04	0.00E+00	1.96E-05	3.14E-05	0.00E+00	1.50E-05	1.85E-05	0.00E+00
1234	479315.9	3741853	1.22E-04	0.000238	0.00E+00	1.16E-04	2.63E-04	0.00E+00	2.34E-05	4.21E-05	0.00E+00	9.28E-05	1.96E-04	0.00E+00	2.00E-05	3.20E-05	0.00E+00	1.52E-05	1.88E-05	0.00E+00
1235	479333.5	3741846	1.24E-04	0.000243	0.00E+00	1.18E-04	2.68E-04	0.00E+00	2.38E-05	4.29E-05	0.00E+00	9.46E-05	2.00E-04	0.00E+00	2.03E-05	3.26E-05	0.00E+00	1.55E-05	1.92E-05	0.00E+00
1236	479351.1	3741839	1.27E-04	0.000247	0.00E+00	1.20E-04	2.74E-04	0.00E+00	2.43E-05	4.37E-05	0.00E+00	9.65E-05	2.04E-04	0.00E+00	2.07E-05	3.33E-05	0.00E+00	1.59E-05	1.96E-05	0.00E+00
1237	479368.7	3741832	1.29E-04	0.000252	0.00E+00	1.23E-04	2.79E-04	0.00E+00	2.48E-05	4.46E-05	0.00E+00	9.84E-05	2.08E-04	0.00E+00	2.11E-05	3.39E-05	0.00E+00	1.62E-05	1.99E-05	0.00E+00
1238	479386.3	3741825	1.32E-04	0.000257	0.00E+00	1.25E-04	2.85E-04	0.00E+00	2.53E-05	4.55E-05	0.00E+00	1.00E-04

1278	479404	3741768	1.28E-04	0.00025	0.00E+00	1.22E-04	2.77E-04	0.00E+00	2.46E-05	4.42E-05	0.00E+00	9.75E-05	2.06E-04	0.00E+00	2.10E-05	3.37E-05	0.00E+00	1.60E-05	1.98E-05	0.00E+00
1279	479421.6	3741760	1.31E-04	0.000255	0.00E+00	1.24E-04	2.82E-04	0.00E+00	2.50E-05	4.51E-05	0.00E+00	9.94E-05	2.10E-04	0.00E+00	2.14E-05	3.43E-05	0.00E+00	1.63E-05	2.02E-05	0.00E+00
1280	479439.1	3741753	1.33E-04	0.00026	0.00E+00	1.26E-04	2.88E-04	0.00E+00	2.55E-05	4.60E-05	0.00E+00	1.01E-04	2.14E-04	0.00E+00	2.18E-05	3.50E-05	0.00E+00	1.67E-05	2.05E-05	0.00E+00
1281	479456.7	3741746	1.36E-04	0.000265	0.00E+00	1.29E-04	2.93E-04	0.00E+00	2.61E-05	4.69E-05	0.00E+00	1.03E-04	2.19E-04	0.00E+00	2.22E-05	3.57E-05	0.00E+00	1.70E-05	2.10E-05	0.00E+00
1282	479474.3	3741739	1.39E-04	0.000271	0.00E+00	1.31E-04	2.99E-04	0.00E+00	2.66E-05	4.78E-05	0.00E+00	1.06E-04	2.23E-04	0.00E+00	2.27E-05	3.64E-05	0.00E+00	1.73E-05	2.14E-05	0.00E+00
1283	479491.9	3741732	1.41E-04	0.000276	0.00E+00	1.34E-04	3.06E-04	0.00E+00	2.71E-05	4.88E-05	0.00E+00	1.08E-04	2.28E-04	0.00E+00	2.32E-05	3.72E-05	0.00E+00	1.77E-05	2.18E-05	0.00E+00
1284	479509.5	3741725	1.44E-04	0.000282	0.00E+00	1.37E-04	3.12E-04	0.00E+00	2.77E-05	4.98E-05	0.00E+00	1.10E-04	2.33E-04	0.00E+00	2.36E-05	3.79E-05	0.00E+00	1.81E-05	2.23E-05	0.00E+00
1285	479527	3741718	1.48E-04	0.000288	0.00E+00	1.40E-04	3.19E-04	0.00E+00	2.83E-05	5.09E-05	0.00E+00	1.12E-04	2.38E-04	0.00E+00	2.41E-05	3.88E-05	0.00E+00	1.85E-05	2.28E-05	0.00E+00
1286	479544.6	3741710	1.51E-04	0.000294	0.00E+00	1.43E-04	3.26E-04	0.00E+00	2.89E-05	5.20E-05	0.00E+00	1.15E-04	2.43E-04	0.00E+00	2.47E-05	3.96E-05	0.00E+00	1.89E-05	2.33E-05	0.00E+00
1287	479562.2	3741703	1.54E-04	0.000301	0.00E+00	1.46E-04	3.33E-04	0.00E+00	2.96E-05	5.32E-05	0.00E+00	1.17E-04	2.48E-04	0.00E+00	2.52E-05	4.05E-05	0.00E+00	1.93E-05	2.38E-05	0.00E+00
1288	479579.8	3741696	1.58E-04	0.000308	0.00E+00	1.49E-04	3.40E-04	0.00E+00	3.02E-05	5.44E-05	0.00E+00	1.20E-04	2.54E-04	0.00E+00	2.58E-05	4.14E-05	0.00E+00	1.97E-05	2.43E-05	0.00E+00
1289	479597.4	3741689	1.61E-04	0.000315	0.00E+00	1.53E-04	3.48E-04	0.00E+00	3.09E-05	5.56E-05	0.00E+00	1.23E-04	2.60E-04	0.00E+00	2.64E-05	4.23E-05	0.00E+00	2.02E-05	2.49E-05	0.00E+00
1290	479614.9	3741682	1.65E-04	0.000322	0.00E+00	1.56E-04	3.56E-04	0.00E+00	3.16E-05	5.69E-05	0.00E+00	1.26E-04	2.66E-04	0.00E+00	2.70E-05	4.33E-05	0.00E+00	2.06E-05	2.54E-05	0.00E+00
1291	479632.5	3741675	1.69E-04	0.00033	0.00E+00	1.60E-04	3.64E-04	0.00E+00	3.24E-05	5.82E-05	0.00E+00	1.28E-04	2.72E-04	0.00E+00	2.76E-05	4.43E-05	0.00E+00	2.11E-05	2.60E-05	0.00E+00
1292	479650.1	3741667	1.73E-04	0.000337	0.00E+00	1.64E-04	3.73E-04	0.00E+00	3.31E-05	5.96E-05	0.00E+00	1.32E-04	2.78E-04	0.00E+00	2.83E-05	4.54E-05	0.00E+00	2.16E-05	2.67E-05	0.00E+00
1293	479667.7	3741660	1.77E-04	0.000345	0.00E+00	1.68E-04	3.82E-04	0.00E+00	3.39E-05	6.10E-05	0.00E+00	1.35E-04	2.85E-04	0.00E+00	2.89E-05	4.65E-05	0.00E+00	2.21E-05	2.73E-05	0.00E+00
1294	479685.2	3741653	1.81E-04	0.000354	0.00E+00	1.72E-04	3.91E-04	0.00E+00	3.47E-05	6.25E-05	0.00E+00	1.38E-04	2.92E-04	0.00E+00	2.96E-05	4.76E-05	0.00E+00	2.27E-05	2.80E-05	0.00E+00
1295	479702.8	3741646	1.85E-04	0.000362	0.00E+00	1.76E-04	4.01E-04	0.00E+00	3.56E-05	6.40E-05	0.00E+00	1.41E-04	2.99E-04	0.00E+00	3.04E-05	4.87E-05	0.00E+00	2.32E-05	2.86E-05	0.00E+00
1296	479720.4	3741639	1.90E-04	0.000371	0.00E+00	1.80E-04	4.10E-04	0.00E+00	3.64E-05	6.56E-05	0.00E+00	1.45E-04	3.06E-04	0.00E+00	3.11E-05	4.99E-05	0.00E+00	2.38E-05	2.93E-05	0.00E+00
1297	479738	3741632	1.95E-04	0.00038	0.00E+00	1.85E-04	4.20E-04	0.00E+00	3.73E-05	6.71E-05	0.00E+00	1.48E-04	3.13E-04	0.00E+00	3.18E-05	5.11E-05	0.00E+00	2.43E-05	3.00E-05	0.00E+00
1298	479755.6	3741625	1.99E-04	0.000389	0.00E+00	1.89E-04	4.30E-04	0.00E+00	3.82E-05	6.88E-05	0.00E+00	1.52E-04	3.21E-04	0.00E+00	3.26E-05	5.23E-05	0.00E+00	2.49E-05	3.07E-05	0.00E+00
1299	479773.1	3741617	2.04E-04	0.000398	0.00E+00	1.94E-04	4.41E-04	0.00E+00	3.91E-05	7.04E-05	0.00E+00	1.55E-04	3.29E-04	0.00E+00	3.34E-05	5.36E-05	0.00E+00	2.55E-05	3.15E-05	0.00E+00
1300	479790.7	3741610	2.09E-04	0.000408	0.00E+00	1.98E-04	4.51E-04	0.00E+00	4.01E-05	7.21E-05	0.00E+00	1.59E-04	3.36E-04	0.00E+00	3.42E-05	5.49E-05	0.00E+00	2.61E-05	3.22E-05	0.00E+00
1301	479808.3	3741603	2.14E-04	0.000417	0.00E+00	2.03E-04	4.62E-04	0.00E+00	4.10E-05	7.38E-05	0.00E+00	1.63E-04	3.44E-04	0.00E+00	3.50E-05	5.61E-05	0.00E+00	2.67E-05	3.30E-05	0.00E+00
1302	479825.9	3741596	2.19E-04	0.000427	0.00E+00	2.07E-04	4.72E-04	0.00E+00	4.19E-05	7.54E-05	0.00E+00	1.66E-04	3.52E-04	0.00E+00	3.58E-05	5.74E-05	0.00E+00	2.74E-05	3.37E-05	0.00E+00
1303	479843.5	3741589	2.24E-04	0.000437	0.00E+00	2.12E-04	4.83E-04	0.00E+00	4.29E-05	7.71E-05	0.00E+00	1.70E-04	3.60E-04	0.00E+00	3.66E-05	5.87E-05	0.00E+00	2.80E-05	3.45E-05	0.00E+00
1304	479861	3741582	2.28E-04	0.000446	0.00E+00	2.17E-04	4.93E-04	0.00E+00	4.38E-05	7.88E-05	0.00E+00	1.74E-04	3.68E-04	0.00E+00	3.74E-05	6.00E-05	0.00E+00	2.86E-05	3.53E-05	0.00E+00
1305	479878.6	3741575	2.33E-04	0.000456	0.00E+00	2.21E-04	5.04E-04	0.00E+00	4.48E-05	8.05E-05	0.00E+00	1.78E-04	3.76E-04	0.00E+00	3.82E-05	6.13E-05	0.00E+00	2.92E-05	3.60E-05	0.00E+00
1306	479779.9	3742622	2.03E-03	0.003963	0.00E+00	1.93E-03	4.38E-03	0.00E+00	3.89E-04	7.00E-04	0.00E+00	1.55E-03	3.27E-03	0.00E+00	3.32E-04	5.33E-04	0.00E+00	2.54E-04	3.13E-04	0.00E+00
1307	479779.8	3742640	2.15E-03	0.004204	0.00E+00	2.04E-03	4.65E-03	0.00E+00	4.13E-04	7.43E-04	0.00E+00	1.64E-03	3.47E-03	0.00E+00	3.52E-04	5.66E-04	0.00E+00	2.69E-04	3.32E-04	0.00E+00
1308	479779.7	3742659	2.28E-03	0.004455	0.00E+00	2.16E-03	4.93E-03	0.00E+00	4.38E-04	7.87E-04	0.00E+00	1.74E-03	3.67E-03	0.00E+00	3.73E-04	5.99E-04	0.00E+00	2.85E-04	3.52E-04	0.00E+00
1309	479760.1	3742585	1.51E-03	0.002954	0.00E+00	1.43E-03	3.27E-03	0.00E+00	2.90E-04	5.22E-04	0.00E+00	1.15E-03	2.44E-03	0.00E+00	2.48E-04	3.97E-04	0.00E+00	1.89E-04	2.33E-04	0.00E+00
1310	479759.9	3742622	1.68E-03	0.003274	0.00E+00	1.59E-03	3.62E-03	0.00E+00	3.22E-04	5.79E-04	0.00E+00	1.28E-03	2.70E-03	0.00E+00	2.74E-04	4.40E-04	0.00E+00	2.10E-04	2.59E-04	0.00E+00
1311	479759.8	3742640	1.77E-03	0.003453	0.00E+00	1.68E-03	3.82E-03	0.00E+00	3.39E-04	6.10E-04	0.00E+00	1.35E-03	2.85E-03	0.00E+00	2.89E-04	4.65E-04	0.00E+00	2.21E-04	2.73E-04	0.00E+00
1312	479759.7	3742659	1.86E-03	0.003639	0.00E+00	1.77E-03	4.03E-03	0.00E+00	3.57E-04	6.43E-04	0.00E+00	1.42E-03	3.00E-03	0.00E+00	3.05E-04	4.90E-04	0.00E+00	2.33E-04	2.88E-04	0.00E+00
1313	479759.7	3742677	1.96E-03	0.003828	0.00E+00	1.86E-03	4.23E-03	0.00E+00	3.76E-04	6.76E-04	0.00E+00	1.49E-03	3.16E-03	0.00E+00	3.21E-04	5.15E-04	0.00E+00	2.45E-04	3.03E-04	0.00E+00
1314	479760.8	3742518	1.26E-03	0.002456	0.00E+00	1.19E-03	2.72E-03	0.00E+00	2.41E-04	4.34E-04	0.00E+00	9.58E-04	2.03E-03	0.00E+00	2.06E-04	3.30E-04	0.00E+00	1.57E-04	1.94E-04	0.00E+00
1315	479740.1	3742585	1.29E-03	0.002517	0.00E+00	1.22E-03	2.78E-03	0.00E+00	2.47E-04	4.45E-04	0.00E+00	9.82E-04	2.08E-03	0.00E+00	2.11E-04	3.39E-04	0.00E+00	1.61E-04	1.99E-04	0.00E+00
1316	479740	3742603	1.35E-03	0.002637	0.00E+00	1.28E-03	2.92E-03	0.00E+00	2.59E-04	4.66E-04	0.00E+00	1.03E-03	2.17E-03	0.00E+00	2.21E-04	3.55E-04	0.00E+00	1.69E-04	2.08E-04	0.00E+00
1317	479739.9	3742622	1.42E-03	0.002764	0.00E+00	1.34E-03	3.06E-03	0.00E+00	2.72E-04	4.88E-04	0.00E+00	1.08E-03	2.28E-03	0.00E+00	2.32E-04	3.72E-04	0.00E+00	1.77E-04	2.18E-04	0.00E+00
1318	479739.7	3742659	1.56E-03	0.003042	0.00E+00	1.48E-03	3.36E-03	0.00E+00	2.99E-04	5.38E-04	0.00E+00	1.19E-03	2.51E-03	0.00E+00	2.55E-04	4.09E-04	0.00E+00	1.95E-04	2.40E-04	0.00E+00
1319	479739.7	3742677	1.63E-03	0.003188	0.00E+00	1.55E-03	3.53E-03	0.00E+00	3.13E-04	5.63E-04	0.00E+00	1.24E-03	2.63E-03	0.00E+00	2.67E-04	4.29E-04	0.00E+00	2.04E-04	2.52E-04	0.00E+00
1320	479739.6	3742695	1.71E-03	0.003333	0.00E+00	1.62E-03	3.69E-03	0.00E+00	3.27E-04	5.89E-04	0.00E+00	1.30E-03	2.75E-03	0.00E+00	2.79E-04	4.48E-04	0.00E+00	2.14E-04	2.63E-04	0.00E+00
1321	479740.5	3742518	1.09E-03	0.002138	0.00E+00	1.04E-03	2.36E-03	0.00E+00	2.10E-04	3.78E-04	0.00E+00	8.34E-04	1.76E-03	0.00E+00	1.79E-04	2.88E-04	0.00E+00	1.37E-04	1.69E-04	0.00E+00
1322	479754	3742486	1.10E-03	0.002147	0.00E+00	1.04E-03	2.37E-03	0.00E+00	2.11E-04	3.79E-04	0.00E+00	8.37E-04	1.77E-03	0.00E+00	1.80E-04	2.89E-04	0.00E+00	1.38E-04	1.70E-04	0.00E+00
1323	479767.5	3742455	1.09E-03	0.002134	0.00E+00	1.04E-03	2.36E-03	0.00E+00	2.10E-04	3.77E-04	0.00E+00	8.32E-04	1.76E-03	0.00E+00	1.79E-04	2.87E-04	0.00E+00	1.37E-04	1.69E-04	0.00E+00
1324	479720.1	3742585	1.12E-03	0.00218	0.00E+00	1.06E-03	2.41E-03	0.00E+00	2.14E-04	3.85E-04	0.00E+00	8.50E-04	1.80E-03	0.00E+00	1.83E-04	2.93E-04	0.00E+00	1.40E-04	1.72E-04	0.00E+00
1325	479720	3742603	1.16E-03	0.002274	0.00E+00	1.10E-03	2.52E-03	0.00E+00	2.23E-04	4.02E-04	0.00E+00	8.87E-04	1.88E-03	0.00E+00	1.91E-04	3.06E-04	0.00E+00	1.46E-04	1.80E-04	0.00E+00
1326	479719.9	3742622	1.22E-03	0.002373	0.00E+00	1.15E-03	2.63E-03	0.00E+00	2.33E-04	4.19E-04	0.00E+00	9.25E-04	1.96E-03	0.00E+00	1.99E-04	3.19E-04	0.00E+00	1.52E-04	1.88E-04	0.00E+00
1327	479719.8	3742640	1.27E-03	0.002479	0.00E+00	1.20E-03	2.74E-03	0.00E+00	2.43E-04	4.38E-04	0.00E+00	9.67E-04	2.04E-03	0.00E+00	2.08E-04	3.33E-04	0.00E+00	1.59E-04	1.96E-04	0.00E+00
1328	479719.6	3742695	1.44E-03	0.00282	0.00E+00	1.37E-03	3.12E-03	0.00E+00	2.77E-04	4.98E-04	0.00E+00	1.10E-03	2.33E-03	0.00E+00	2.36E-04	3.79E-04	0.00E+00	1.81E-04	2.23E-04	0.00E+00
1329	479720.2	3742519	9.63E-04	0.001881	0.00E+00	9.14E-04	2.08E-03	0.00E+00	1.85E-04	3.32E-04	0.00E+00	7.33E-04	1.55E-03	0.00E+00	1.58E-04	2.53E-04	0.00E+00	1.20E-04	1.49E-04	0.00E+00
1330	479733.6	3742487	9.69E-04	0.001893	0.00E+00	9.20E-04	2.09E-03	0.00E+00	1.86E-04	3.34E-04	0.00E+00	7.38E-04	1.56E-03	0.00E+00	1.59E-04	2.55E-04	0.00E+00	1.21E-04	1.50E-04	0.00E+00
1331	479746.9	3742456	9.68E-04	0.001889	0.00E+00	9.18E-04	2.09E-03	0.00E+00	1.86E-04	3.34E-04	0.00E+00	7.37E-04	1.56E-03	0.00E+00	1.58E-04	2.54E-04	0.00E+00	1.21E-04	1.49E-04	0.00E+00
1332	479700.1	3742585	9.79E-04	0.001911	0.00E+00	9.29E-04	2.11E-03	0.00E+00	1.88E-04	3.38E-04	0.00E+00	7.45E-04	1.58E-03	0.00E+00	1.60E-04	2.57E-04	0.00E+00	1.22E-04	1.51E-04	0.00E+00
1333	479700	3742603	1.02E-03	0.001987	0.00E+00	9.65E-04	2.20E-03	0.00E+00	1.95E-04	3.51E-04	0.00E+00	7.75E-04	1.64E-03	0.00E+00	1.67E-04	2.67E-04	0.00E+00	1.27E-04	1.57E-04	0.00E+00
1334	479699.9	3742621	1.06E-03	0.002066	0.00E+00	1.00E-03	2.29E-03	0.00E+00	2.03E-04	3.65E-04	0.00E+00	8.06E-04	1.70E-03	0.00E+00	1.73E-04	2.78E-04	0.00E+00	1.32E-04	1.63E-04	0.00E+00
1335	479699.8	3742640	1.10E-03	0.00215	0.00E+00	1.04E-03	2.38E-03	0.00E+00	2.11E-04	3.80E-04	0.00E+00	8.38E-04	1.77E-03	0.00E+00	1.80E-04	2.89E-04	0.00E+00	1.38E-04	1.70E-04	0.00E+00
1336	479699.7	3742658	1.15E-03	0.002238	0.00E+00	1.09E-03	2.48E-03	0.00E+00	2.20E-04	3.95E-04	0.00E+00	8.72E-04	1.85E-03	0.00E+00	1.88E-04	3.01E-04	0.00E+00	1.43E-04	1.77E-04	0.00E+00
1337	479699.7	3742677	1.19E-03	0.002329	0.00E+00	1.13E-03	2.58E-03	0.00E+00	2.29E-04	4.12E-04	0.00E+00	9.08E-04	1.92E-03	0.00E+00	1.95E-04	3.13E-04	0.00E+00	1.49E-04	1.84E-04	0.00E+00
1338	479700	3742519	8.55E-04	0.001669	0.00E+00	8.11E-04	1.85E-03	0.00E+00	1.64E-04	2.95E-04	0.00E+00	6.51E-04	1.38E-03	0.00E+00	1.40E-04	2.25E-04	0.00E+00	1.07E-04	1.32E-04	0.00E+00
1339	479713.2	3742488	8.62E-04	0.001683	0.00E+00	8.17E-04	1.86E-03	0.00E+00	1.65E-04	2.97E-04	0.00E+00	6.56E-04	1.39E-03	0.00E+00	1.41E-04	2.26E-04	0.00E+00	1.08E-04	1.33E-04	0.00E+00
1340	479726.4	3742457	8.63E-04	0.001685	0.00E+00	8.18E-04	1.86E-03	0.00E+00	1.65E-04	2.98E-04	0.00E+00	6.57E-04	1.39E-03	0.00E+00	1.41E-04	2.27E-04	0.00E+00	1.08E-04	1.33E-04	0.00E+00
1341	479739.6	3742426	8.57E-04	0.001674	0.00E+00	8.13E-04	1.85E-03	0.00E+00	1.64E-04	2.96E-04	0.00E+00	6.53E-04	1.38E-03	0.00E+00	1.40E-04	2.25E-04	0.00E+00	1.07E-04	1.32E-04	0.00E+00
1342	479680.1	3742584	8.67E-04	0.001693	0.00E+00	8.22E-04	1.87E-03	0.00E+00	1.66E-04	2.99E-04	0.00E+00	6.60E-04	1.40E-03	0.00E+00	1.42E-04	2.28E-04	0.00E+00	1.08E-04	1.34E-04	0.00E+00
1343	479680	3742603	8.98E-04	0.001754	0.00E+00	8.52E-04	1.94E-03	0.00E+00	1.72E-04	3.10E-04	0.00E+00	6.84E-04	1.45E-03	0.00E+00	1.47E-04	2.36E-04	0.00E+00	1.12E-04	1.39E-04	0.00E+00
1344	479679.9	3742621	9.31E-04	0.001819	0.00E+00	8.84E-04	2.01E-03	0.00E+00	1.79E-04	3.21E-04	0.00E+00	7.09E-04	1.50E-03	0.00E+00	1.52E-04	2.45E-04	0.00E+00	1.17E-04	1.44E-04	0.00E+00
1345	479679.8	3742640	9.66E-04	0.001887	0.00E+00	9.17E-04	2.09E-03	0.00E+00	1.85E-04	3.33E-04	0.00E+00	7.36E-04	1.56E-03	0.00E+00	1.58E-04	2.54E-04	0.00E+00	1.21E-04	1.49E-04	0.00E+00
1346	479679.7	3742658	1.00E-03	0.001958	0.00E+00	9.51E-04	2.17E-03	0.00E+00	1.92E-04	3.46E-04	0.00E+00	7.63E-04	1.61E-03	0.00E+00	1.64E-04	2.63E-04	0.00E+00	1.25E-04	1.55E-04	0.00E+00
1347	479679.7	3742677	1.04E-03	0.002032	0.00E+00	9.87E-04	2.25E-03	0.00E+00	2.00E-04	3.59E-04	0.00E+00	7.92E-04	1.68E-03	0.00E+00	1.70E-04	2.73E-04	0.00E+00	1.30E-04	1.61E-04	0.00E+00
1348	479679.6	3742695	1.08E-03	0.002108	0.00E+00	1.02E-03	2.33E-03	0.00E+00	2.07E-04	3.72E-04	0.00E+00	8.22E-04	1.74E-03	0.00E+00	1.77E-04	2.84E-04	0.00E+00	1.35E-04	1.67E-04	0.00E+00
1349	479679.9	3742519	7.65E-04	0.001494	0.00E+00	7.26E-04	1.65E-03	0.00E+00	1.47E-04	2.64E-04	0.00E+00	5.82E-04	1.23E-03	0.00E+00	1.25E-04	2.01E-04	0.00E+00	9.57E-05	1.18E-04	0.00E+00
1350	479693	3742489	7.72E-04	0.001507	0.00E+00	7.32E-04	1.67E-03	0.00E+00	1.48E-04	2.66E-04	0.00E+00	5.88E-04	1.24E-03	0.00E+00	1.26E-04	2.03E-04	0.00E+00	9.65E-05	1.19E-04	0.00E+00
1351	479706	3742458	7.74E-04	0.001512	0.00E+00	7.35E-04	1.67E-03	0.00E+00	1.49E-04	2.67E-04	0.00E+00	5.90E-04	1.25E-03	0.00E+00	1.27E-04	2.03E-04	0.00E+00	9.69E-05	1.20E-04	0.00E+00
1352	479719.1	3742427	7.72E-04	0.001508	0.00E+00	7.32E-04	1.67E-03	0.00E+00	1.48E-04	2.66E-04	0.00E+00	5.88E-04	1.24E-03	0.00E+00	1.26E-04	2.03E-04	0.00E+00	9.66E-05	1.19E-04	0.00E+00
1353	479660.1	3742584	7.75E-04	0.001513	0.00E+00	7.35E-04	1.67E-03	0.00E+00	1.49E-04	2.67E-04	0.00E+00	5.90E-04	1.25E-03	0.00E+00	1.27E-04	2.03E-04	0.00E+00	9.69E-05	1.20E-04	0.00E+00
1354	479660	3742603	8.01E-04	0.001564	0.00E+00	7.60E-04	1.73E-03	0.00E+00	1.54E-04	2.76E-04	0.00E+00	6.10E-04	1.29E-03	0.00E+00	1.31E-04	2.10E-04	0.00E+00	1.00E-04	1.24E-04	0.00E+00
1355	479659.9	3742621	8.28E-04	0.001617	0.00E+00	7.86E-04	1.79E-03	0.00E+00	1.59E-04	2.86E-04	0.00E+00	6.31E-04	1.33E-03	0.00E+00	1.36E-04	2.18E-04	0.00E+00	1.04E-04	1.28E-04	0.00E+00
1356	479659.8	3742640	8.57E-04	0.001673	0.00E+00	8.13E-04	1.85E-03	0.00E+00	1.64E-04	2.96E-04	0.00E+00	6.52E-04	1.38E-03	0.00E+00	1.40E-04	2.25E-04	0.00E+00	1.07E-04	1.32E-04	0.00E+00
1357	479659.7	3742658	8.87E-04	0.001731	0.00E+00	8.41E-04	1.91E-03	0.00E+00	1.70E-04	3.06E-04	0.00E+00	6.75E-04	1.43E-03	0.00E+00	1.45E-04	2.33E-04	0.00E+00	1.11E-04	1.37E-04	0.00E+00
1358	479659.7	3742677	9.18E-04	0.001792	0.00E+00	8.71E-04	1.98E-03	0.00E+00	1.76E-04	3.17E-04	0.00E+00	6.99E-04	1.48E-03	0.00E+00	1.50E-04	2.41E-04	0.00E+00	1.15E-04	1.42E-04	0.00E+00
1359	479659.6	3742695	9.50E-04	0.001854	0.00E+00	9.01E-04	2.05E-03	0.00E+00	1.82E-04	3.28E-04	0.00E+00	7.23E-04	1.53E-03	0.00E+00	1.55E-04	2.49E-04	0.00E+00	1.19E-04	1.47E-04	0.00E+00
1360	479661.5	3742515	6.90E-04	0.001348	0.00E+00	6.55E-04	1.49E-03	0.00E+00	1.32E-04	2.38E-04	0.00E+00	5.25E-04	1.11E-03	0.00E+00	1.13E-04	1.81E-04	0.00E+00	8.63E-05	1.07E-04	0.00E+00
1361	479668.6	3742499	6.94E-04	0.001355	0.00E+00	6.58E-04	1.50E-03	0.00E+00	1.33E-04	2.39E-04	0.00E+00	5.28E-04	1.12E-03	0.00E+00	1.14E-04	1.82E-04	0.00E+00	8.68E-05	1.07E-04	0.00E+00
1362	479675.7	3742482	6.97E-04	0.001361	0.00E+00	6.61E-04	1.51E-03	0.00E+00	1.34E-04	2.40E-04	0.00E+00	5.31E-04	1.12E-03	0.00E+00	1.14E-04	1.83E-04	0.00E+00	8.72E-05	1.08E-04	0.00E+00
1363	479682.8	3742465	6.99E-04	0.001365	0.00E+00	6.63E-04	1.51E-03	0.00E+00	1.34E-04	2.41E-04	0.00E+00	5.32E-04	1.13E-03	0.00E+00	1.14E-04	1.84E-04	0.00E+00	8.74E-05	1.08E-04	0.00E+00
1364	479689.9	3742448	7.00E-04	0.001366	0.00E+00	6.64E-04	1.51E-03	0.00E+00	1.34E-04	2.41E-04	0.00E+00	5.33E-04	1.13E-03	0.00E+00	1.15E-04	1.84E-04	0.00E+00	8.75E-05	1.08E-04	0.00E+00
1365	479697	3742432	6.99E-04	0.001365	0.00E+00	6.63E-04	1.51E-03	0.00E+00	1.34E-04	2.41E-04	0.00E+00	5.32E-04	1.13E-03	0.00E+00	1.14E-04	1.84E-04	0.00E+00	8.75E-05	1.08E-04	0.00E+00
1366	479704	3742415	6.98E-04	0.001362	0.00E+00	6.62E-04	1.51E-03	0.00E+00	1.34E-04	2.41E-04	0.00E+00	5.31E-04	1.12E-03	0.00E+00

1406	479550.1	3742584	4.67E-04	0.000912	0.00E+00	4.43E-04	1.01E-03	0.00E+00	8.96E-05	1.61E-04	0.00E+00	3.56E-04	7.52E-04	0.00E+00	7.64E-05	1.23E-04	0.00E+00	5.84E-05	7.21E-05	0.00E+00
1407	479550	3742602	4.78E-04	0.000934	0.00E+00	4.54E-04	1.03E-03	0.00E+00	9.18E-05	1.65E-04	0.00E+00	3.64E-04	7.70E-04	0.00E+00	7.83E-05	1.26E-04	0.00E+00	5.98E-05	7.38E-05	0.00E+00
1408	479549.9	3742621	4.90E-04	0.000957	0.00E+00	4.65E-04	1.06E-03	0.00E+00	9.40E-05	1.69E-04	0.00E+00	3.73E-04	7.89E-04	0.00E+00	8.02E-05	1.29E-04	0.00E+00	6.13E-05	7.56E-05	0.00E+00
1409	479549.8	3742639	5.02E-04	0.000981	0.00E+00	4.77E-04	1.08E-03	0.00E+00	9.64E-05	1.73E-04	0.00E+00	3.82E-04	8.09E-04	0.00E+00	8.22E-05	1.32E-04	0.00E+00	6.28E-05	7.75E-05	0.00E+00
1410	479549.8	3742658	5.15E-04	0.001005	0.00E+00	4.88E-04	1.11E-03	0.00E+00	9.87E-05	1.78E-04	0.00E+00	3.92E-04	8.29E-04	0.00E+00	8.43E-05	1.35E-04	0.00E+00	6.44E-05	7.94E-05	0.00E+00
1411	479549.7	3742676	5.27E-04	0.00103	0.00E+00	5.00E-04	1.14E-03	0.00E+00	1.01E-04	1.82E-04	0.00E+00	4.02E-04	8.49E-04	0.00E+00	8.63E-05	1.39E-04	0.00E+00	6.60E-05	8.14E-05	0.00E+00
1412	479549.6	3742694	5.40E-04	0.001055	0.00E+00	5.13E-04	1.17E-03	0.00E+00	1.04E-04	1.86E-04	0.00E+00	4.11E-04	8.70E-04	0.00E+00	8.84E-05	1.42E-04	0.00E+00	6.76E-05	8.34E-05	0.00E+00
1413	479521.4	3742515	3.85E-04	0.000751	0.00E+00	3.65E-04	8.31E-04	0.00E+00	7.38E-05	1.33E-04	0.00E+00	2.93E-04	6.19E-04	0.00E+00	6.29E-05	1.01E-04	0.00E+00	4.81E-05	5.94E-05	0.00E+00
1414	479528.5	3742498	3.86E-04	0.000754	0.00E+00	3.66E-04	8.34E-04	0.00E+00	7.41E-05	1.33E-04	0.00E+00	2.94E-04	6.22E-04	0.00E+00	6.32E-05	1.01E-04	0.00E+00	4.83E-05	5.96E-05	0.00E+00
1415	479542.6	3742465	3.89E-04	0.00076	0.00E+00	3.69E-04	8.41E-04	0.00E+00	7.47E-05	1.34E-04	0.00E+00	2.96E-04	6.27E-04	0.00E+00	6.37E-05	1.02E-04	0.00E+00	4.87E-05	6.01E-05	0.00E+00
1416	479549.6	3742448	3.91E-04	0.000763	0.00E+00	3.71E-04	8.44E-04	0.00E+00	7.49E-05	1.35E-04	0.00E+00	2.97E-04	6.29E-04	0.00E+00	6.39E-05	1.03E-04	0.00E+00	4.89E-05	6.03E-05	0.00E+00
1417	479556.7	3742432	3.92E-04	0.000765	0.00E+00	3.72E-04	8.47E-04	0.00E+00	7.52E-05	1.35E-04	0.00E+00	2.98E-04	6.31E-04	0.00E+00	6.41E-05	1.03E-04	0.00E+00	4.90E-05	6.05E-05	0.00E+00
1418	479570.8	3742398	3.94E-04	0.000769	0.00E+00	3.74E-04	8.51E-04	0.00E+00	7.56E-05	1.36E-04	0.00E+00	3.00E-04	6.34E-04	0.00E+00	6.45E-05	1.04E-04	0.00E+00	4.93E-05	6.08E-05	0.00E+00
1419	479577.9	3742382	3.94E-04	0.00077	0.00E+00	3.74E-04	8.52E-04	0.00E+00	7.57E-05	1.36E-04	0.00E+00	3.00E-04	6.35E-04	0.00E+00	6.46E-05	1.04E-04	0.00E+00	4.94E-05	6.09E-05	0.00E+00
1420	479584.9	3742365	3.95E-04	0.000771	0.00E+00	3.74E-04	8.52E-04	0.00E+00	7.57E-05	1.36E-04	0.00E+00	3.00E-04	6.35E-04	0.00E+00	6.46E-05	1.04E-04	0.00E+00	4.94E-05	6.09E-05	0.00E+00
1421	479599	3742332	3.94E-04	0.000769	0.00E+00	3.73E-04	8.50E-04	0.00E+00	7.55E-05	1.36E-04	0.00E+00	3.00E-04	6.34E-04	0.00E+00	6.44E-05	1.03E-04	0.00E+00	4.92E-05	6.07E-05	0.00E+00
1422	479606.1	3742315	3.92E-04	0.000766	0.00E+00	3.72E-04	8.48E-04	0.00E+00	7.53E-05	1.35E-04	0.00E+00	2.99E-04	6.32E-04	0.00E+00	6.42E-05	1.03E-04	0.00E+00	4.91E-05	6.06E-05	0.00E+00
1423	479500.1	3742583	3.88E-04	0.000758	0.00E+00	3.68E-04	8.38E-04	0.00E+00	7.44E-05	1.34E-04	0.00E+00	2.95E-04	6.25E-04	0.00E+00	6.35E-05	1.02E-04	0.00E+00	4.85E-05	5.99E-05	0.00E+00
1424	479500	3742602	3.97E-04	0.000774	0.00E+00	3.76E-04	8.56E-04	0.00E+00	7.61E-05	1.37E-04	0.00E+00	3.02E-04	6.39E-04	0.00E+00	6.49E-05	1.04E-04	0.00E+00	4.96E-05	6.12E-05	0.00E+00
1425	479499.9	3742620	4.05E-04	0.000791	0.00E+00	3.84E-04	8.75E-04	0.00E+00	7.77E-05	1.40E-04	0.00E+00	3.09E-04	6.53E-04	0.00E+00	6.63E-05	1.06E-04	0.00E+00	5.07E-05	6.25E-05	0.00E+00
1426	479499.8	3742639	4.14E-04	0.000809	0.00E+00	3.93E-04	8.94E-04	0.00E+00	7.94E-05	1.43E-04	0.00E+00	3.15E-04	6.67E-04	0.00E+00	6.78E-05	1.09E-04	0.00E+00	5.18E-05	6.39E-05	0.00E+00
1427	479499.8	3742657	4.23E-04	0.000826	0.00E+00	4.01E-04	9.13E-04	0.00E+00	8.11E-05	1.46E-04	0.00E+00	3.22E-04	6.81E-04	0.00E+00	6.92E-05	1.11E-04	0.00E+00	5.29E-05	6.53E-05	0.00E+00
1428	479499.7	3742676	4.32E-04	0.000844	0.00E+00	4.10E-04	9.33E-04	0.00E+00	8.29E-05	1.49E-04	0.00E+00	3.29E-04	6.96E-04	0.00E+00	7.07E-05	1.13E-04	0.00E+00	5.40E-05	6.67E-05	0.00E+00
1429	479499.6	3742694	4.41E-04	0.000862	0.00E+00	4.19E-04	9.53E-04	0.00E+00	8.47E-05	1.52E-04	0.00E+00	3.36E-04	7.11E-04	0.00E+00	7.22E-05	1.16E-04	0.00E+00	5.52E-05	6.81E-05	0.00E+00
1430	479471.5	3742514	3.26E-04	0.000637	0.00E+00	3.09E-04	7.04E-04	0.00E+00	6.25E-05	1.13E-04	0.00E+00	2.48E-04	5.25E-04	0.00E+00	5.34E-05	8.57E-05	0.00E+00	4.08E-05	5.03E-05	0.00E+00
1431	479478.7	3742498	3.27E-04	0.000639	0.00E+00	3.10E-04	7.07E-04	0.00E+00	6.28E-05	1.13E-04	0.00E+00	2.49E-04	5.27E-04	0.00E+00	5.36E-05	8.60E-05	0.00E+00	4.09E-05	5.05E-05	0.00E+00
1432	479485.8	3742481	3.28E-04	0.000641	0.00E+00	3.12E-04	7.09E-04	0.00E+00	6.30E-05	1.13E-04	0.00E+00	2.50E-04	5.29E-04	0.00E+00	5.38E-05	8.63E-05	0.00E+00	4.11E-05	5.07E-05	0.00E+00
1433	479492.9	3742464	3.30E-04	0.000644	0.00E+00	3.13E-04	7.12E-04	0.00E+00	6.32E-05	1.14E-04	0.00E+00	2.51E-04	5.31E-04	0.00E+00	5.39E-05	8.66E-05	0.00E+00	4.12E-05	5.09E-05	0.00E+00
1434	479500	3742447	3.31E-04	0.000646	0.00E+00	3.14E-04	7.14E-04	0.00E+00	6.34E-05	1.14E-04	0.00E+00	2.52E-04	5.33E-04	0.00E+00	5.41E-05	8.69E-05	0.00E+00	4.14E-05	5.10E-05	0.00E+00
1435	479507.1	3742430	3.32E-04	0.000648	0.00E+00	3.15E-04	7.17E-04	0.00E+00	6.36E-05	1.14E-04	0.00E+00	2.53E-04	5.34E-04	0.00E+00	5.43E-05	8.72E-05	0.00E+00	4.15E-05	5.12E-05	0.00E+00
1436	479514.2	3742414	3.33E-04	0.00065	0.00E+00	3.16E-04	7.19E-04	0.00E+00	6.38E-05	1.15E-04	0.00E+00	2.53E-04	5.36E-04	0.00E+00	5.45E-05	8.74E-05	0.00E+00	4.16E-05	5.13E-05	0.00E+00
1437	479521.3	3742397	3.34E-04	0.000651	0.00E+00	3.16E-04	7.20E-04	0.00E+00	6.40E-05	1.15E-04	0.00E+00	2.54E-04	5.37E-04	0.00E+00	5.46E-05	8.76E-05	0.00E+00	4.17E-05	5.15E-05	0.00E+00
1438	479528.4	3742380	3.34E-04	0.000653	0.00E+00	3.17E-04	7.22E-04	0.00E+00	6.42E-05	1.15E-04	0.00E+00	2.55E-04	5.39E-04	0.00E+00	5.47E-05	8.79E-05	0.00E+00	4.18E-05	5.16E-05	0.00E+00
1439	479535.5	3742363	3.35E-04	0.000654	0.00E+00	3.18E-04	7.23E-04	0.00E+00	6.42E-05	1.16E-04	0.00E+00	2.55E-04	5.39E-04	0.00E+00	5.48E-05	8.80E-05	0.00E+00	4.19E-05	5.17E-05	0.00E+00
1440	479542.6	3742346	3.35E-04	0.000654	0.00E+00	3.18E-04	7.24E-04	0.00E+00	6.43E-05	1.16E-04	0.00E+00	2.55E-04	5.40E-04	0.00E+00	5.49E-05	8.80E-05	0.00E+00	4.19E-05	5.17E-05	0.00E+00
1441	479549.7	3742330	3.35E-04	0.000654	0.00E+00	3.18E-04	7.24E-04	0.00E+00	6.43E-05	1.16E-04	0.00E+00	2.55E-04	5.40E-04	0.00E+00	5.48E-05	8.80E-05	0.00E+00	4.19E-05	5.17E-05	0.00E+00
1442	479556.8	3742313	3.35E-04	0.000654	0.00E+00	3.18E-04	7.23E-04	0.00E+00	6.42E-05	1.16E-04	0.00E+00	2.55E-04	5.39E-04	0.00E+00	5.48E-05	8.79E-05	0.00E+00	4.19E-05	5.17E-05	0.00E+00
1443	479563.9	3742296	3.34E-04	0.000652	0.00E+00	3.17E-04	7.22E-04	0.00E+00	6.41E-05	1.15E-04	0.00E+00	2.54E-04	5.38E-04	0.00E+00	5.47E-05	8.78E-05	0.00E+00	4.18E-05	5.16E-05	0.00E+00
1444	479571	3742279	3.33E-04	0.000651	0.00E+00	3.16E-04	7.20E-04	0.00E+00	6.39E-05	1.15E-04	0.00E+00	2.54E-04	5.36E-04	0.00E+00	5.45E-05	8.75E-05	0.00E+00	4.17E-05	5.14E-05	0.00E+00
1445	479578.1	3742263	3.32E-04	0.000648	0.00E+00	3.15E-04	7.17E-04	0.00E+00	6.37E-05	1.15E-04	0.00E+00	2.53E-04	5.35E-04	0.00E+00	5.43E-05	8.72E-05	0.00E+00	4.15E-05	5.12E-05	0.00E+00
1446	479450.1	3742583	3.29E-04	0.000642	0.00E+00	3.12E-04	7.10E-04	0.00E+00	6.31E-05	1.13E-04	0.00E+00	2.50E-04	5.30E-04	0.00E+00	5.38E-05	8.64E-05	0.00E+00	4.11E-05	5.08E-05	0.00E+00
1447	479450	3742602	3.35E-04	0.000655	0.00E+00	3.18E-04	7.24E-04	0.00E+00	6.43E-05	1.16E-04	0.00E+00	2.55E-04	5.40E-04	0.00E+00	5.49E-05	8.81E-05	0.00E+00	4.20E-05	5.18E-05	0.00E+00
1448	479449.9	3742620	3.42E-04	0.000668	0.00E+00	3.24E-04	7.38E-04	0.00E+00	6.56E-05	1.18E-04	0.00E+00	2.60E-04	5.51E-04	0.00E+00	5.60E-05	8.98E-05	0.00E+00	4.28E-05	5.28E-05	0.00E+00
1449	479449.8	3742639	3.48E-04	0.00068	0.00E+00	3.31E-04	7.53E-04	0.00E+00	6.68E-05	1.20E-04	0.00E+00	2.65E-04	5.61E-04	0.00E+00	5.70E-05	9.15E-05	0.00E+00	4.36E-05	5.38E-05	0.00E+00
1450	479449.8	3742657	3.55E-04	0.000694	0.00E+00	3.37E-04	7.67E-04	0.00E+00	6.82E-05	1.23E-04	0.00E+00	2.71E-04	5.72E-04	0.00E+00	5.82E-05	9.33E-05	0.00E+00	4.45E-05	5.48E-05	0.00E+00
1451	479449.7	3742675	3.62E-04	0.000707	0.00E+00	3.44E-04	7.82E-04	0.00E+00	6.95E-05	1.25E-04	0.00E+00	2.76E-04	5.83E-04	0.00E+00	5.93E-05	9.52E-05	0.00E+00	4.53E-05	5.59E-05	0.00E+00
1452	479449.6	3742694	3.69E-04	0.000721	0.00E+00	3.50E-04	7.98E-04	0.00E+00	7.08E-05	1.27E-04	0.00E+00	2.81E-04	5.95E-04	0.00E+00	6.04E-05	9.70E-05	0.00E+00	4.62E-05	5.70E-05	0.00E+00
1453	479421.7	3742514	2.81E-04	0.000548	0.00E+00	2.66E-04	6.07E-04	0.00E+00	5.39E-05	9.69E-05	0.00E+00	2.14E-04	4.52E-04	0.00E+00	4.60E-05	7.38E-05	0.00E+00	3.51E-05	4.33E-05	0.00E+00
1454	479428.8	3742497	2.82E-04	0.00055	0.00E+00	2.67E-04	6.09E-04	0.00E+00	5.40E-05	9.72E-05	0.00E+00	2.15E-04	4.54E-04	0.00E+00	4.61E-05	7.40E-05	0.00E+00	3.52E-05	4.35E-05	0.00E+00
1455	479435.9	3742480	2.83E-04	0.000552	0.00E+00	2.68E-04	6.10E-04	0.00E+00	5.42E-05	9.75E-05	0.00E+00	2.15E-04	4.55E-04	0.00E+00	4.63E-05	7.42E-05	0.00E+00	3.54E-05	4.36E-05	0.00E+00
1456	479443.1	3742463	2.83E-04	0.000554	0.00E+00	2.69E-04	6.12E-04	0.00E+00	5.44E-05	9.78E-05	0.00E+00	2.16E-04	4.57E-04	0.00E+00	4.64E-05	7.45E-05	0.00E+00	3.55E-05	4.37E-05	0.00E+00
1457	479450.2	3742446	2.84E-04	0.000555	0.00E+00	2.70E-04	6.14E-04	0.00E+00	5.45E-05	9.81E-05	0.00E+00	2.17E-04	4.58E-04	0.00E+00	4.65E-05	7.47E-05	0.00E+00	3.56E-05	4.39E-05	0.00E+00
1458	479457.4	3742429	2.85E-04	0.000557	0.00E+00	2.71E-04	6.16E-04	0.00E+00	5.47E-05	9.84E-05	0.00E+00	2.17E-04	4.59E-04	0.00E+00	4.67E-05	7.49E-05	0.00E+00	3.57E-05	4.40E-05	0.00E+00
1459	479464.5	3742413	2.86E-04	0.000559	0.00E+00	2.71E-04	6.18E-04	0.00E+00	5.49E-05	9.87E-05	0.00E+00	2.18E-04	4.61E-04	0.00E+00	4.68E-05	7.52E-05	0.00E+00	3.58E-05	4.41E-05	0.00E+00
1460	479471.7	3742396	2.87E-04	0.00056	0.00E+00	2.72E-04	6.20E-04	0.00E+00	5.50E-05	9.90E-05	0.00E+00	2.18E-04	4.62E-04	0.00E+00	4.69E-05	7.54E-05	0.00E+00	3.59E-05	4.43E-05	0.00E+00
1461	479478.8	3742379	2.88E-04	0.000561	0.00E+00	2.73E-04	6.21E-04	0.00E+00	5.51E-05	9.92E-05	0.00E+00	2.19E-04	4.63E-04	0.00E+00	4.71E-05	7.55E-05	0.00E+00	3.60E-05	4.44E-05	0.00E+00
1462	479485.9	3742362	2.88E-04	0.000563	0.00E+00	2.73E-04	6.22E-04	0.00E+00	5.53E-05	9.94E-05	0.00E+00	2.19E-04	4.64E-04	0.00E+00	4.71E-05	7.57E-05	0.00E+00	3.60E-05	4.45E-05	0.00E+00
1463	479493.1	3742345	2.89E-04	0.000563	0.00E+00	2.74E-04	6.23E-04	0.00E+00	5.53E-05	9.96E-05	0.00E+00	2.20E-04	4.65E-04	0.00E+00	4.72E-05	7.58E-05	0.00E+00	3.61E-05	4.45E-05	0.00E+00
1464	479500.2	3742328	2.89E-04	0.000564	0.00E+00	2.74E-04	6.24E-04	0.00E+00	5.54E-05	9.97E-05	0.00E+00	2.20E-04	4.65E-04	0.00E+00	4.73E-05	7.59E-05	0.00E+00	3.61E-05	4.46E-05	0.00E+00
1465	479507.4	3742311	2.89E-04	0.000564	0.00E+00	2.74E-04	6.24E-04	0.00E+00	5.54E-05	9.97E-05	0.00E+00	2.20E-04	4.65E-04	0.00E+00	4.73E-05	7.59E-05	0.00E+00	3.62E-05	4.46E-05	0.00E+00
1466	479514.5	3742294	2.89E-04	0.000564	0.00E+00	2.74E-04	6.24E-04	0.00E+00	5.54E-05	9.97E-05	0.00E+00	2.20E-04	4.65E-04	0.00E+00	4.73E-05	7.59E-05	0.00E+00	3.61E-05	4.46E-05	0.00E+00
1467	479521.7	3742278	2.89E-04	0.000563	0.00E+00	2.74E-04	6.23E-04	0.00E+00	5.53E-05	9.96E-05	0.00E+00	2.20E-04	4.65E-04	0.00E+00	4.72E-05	7.58E-05	0.00E+00	3.61E-05	4.45E-05	0.00E+00
1468	479528.8	3742261	2.88E-04	0.000562	0.00E+00	2.73E-04	6.22E-04	0.00E+00	5.52E-05	9.94E-05	0.00E+00	2.19E-04	4.64E-04	0.00E+00	4.71E-05	7.56E-05	0.00E+00	3.60E-05	4.44E-05	0.00E+00
1469	479535.9	3742244	2.87E-04	0.000561	0.00E+00	2.72E-04	6.20E-04	0.00E+00	5.51E-05	9.91E-05	0.00E+00	2.19E-04	4.62E-04	0.00E+00	4.70E-05	7.54E-05	0.00E+00	3.59E-05	4.43E-05	0.00E+00
1470	479543.1	3742227	2.86E-04	0.000559	0.00E+00	2.71E-04	6.18E-04	0.00E+00	5.49E-05	9.87E-05	0.00E+00	2.18E-04	4.61E-04	0.00E+00	4.68E-05	7.52E-05	0.00E+00	3.58E-05	4.42E-05	0.00E+00
1471	479400.1	3742583	2.83E-04	0.000553	0.00E+00	2.69E-04	6.11E-04	0.00E+00	5.43E-05	9.77E-05	0.00E+00	2.16E-04	4.56E-04	0.00E+00	4.63E-05	7.44E-05	0.00E+00	3.54E-05	4.37E-05	0.00E+00
1472	479400	3742601	2.88E-04	0.000563	0.00E+00	2.73E-04	6.22E-04	0.00E+00	5.53E-05	9.94E-05	0.00E+00	2.19E-04	4.64E-04	0.00E+00	4.72E-05	7.57E-05	0.00E+00	3.60E-05	4.45E-05	0.00E+00
1473	479399.9	3742620	2.93E-04	0.000573	0.00E+00	2.78E-04	6.33E-04	0.00E+00	5.63E-05	1.01E-04	0.00E+00	2.23E-04	4.72E-04	0.00E+00	4.80E-05	7.70E-05	0.00E+00	3.67E-05	4.53E-05	0.00E+00
1474	479399.8	3742638	2.99E-04	0.000583	0.00E+00	2.83E-04	6.45E-04	0.00E+00	5.73E-05	1.03E-04	0.00E+00	2.27E-04	4.81E-04	0.00E+00	4.89E-05	7.84E-05	0.00E+00	3.73E-05	4.61E-05	0.00E+00
1475	479399.8	3742657	3.04E-04	0.000593	0.00E+00	2.88E-04	6.56E-04	0.00E+00	5.83E-05	1.05E-04	0.00E+00	2.31E-04	4.89E-04	0.00E+00	4.97E-05	7.98E-05	0.00E+00	3.80E-05	4.69E-05	0.00E+00
1476	479399.7	3742675	3.09E-04	0.000604	0.00E+00	2.93E-04	6.68E-04	0.00E+00	5.93E-05	1.07E-04	0.00E+00	2.35E-04	4.98E-04	0.00E+00	5.06E-05	8.12E-05	0.00E+00	3.87E-05	4.77E-05	0.00E+00
1477	479399.6	3742694	3.15E-04	0.000614	0.00E+00	2.98E-04	6.80E-04	0.00E+00	6.03E-05	1.09E-04	0.00E+00	2.40E-04	5.07E-04	0.00E+00	5.15E-05	8.27E-05	0.00E+00	3.94E-05	4.86E-05	0.00E+00
1478	479371.8	3742513	2.45E-04	0.000479	0.00E+00	2.32E-04	5.29E-04	0.00E+00	4.70E-05	8.46E-05	0.00E+00	1.87E-04	3.95E-04	0.00E+00	4.01E-05	6.44E-05	0.00E+00	3.07E-05	3.78E-05	0.00E+00
1479	479378.9	3742496	2.46E-04	0.00048	0.00E+00	2.33E-04	5.31E-04	0.00E+00	4.71E-05	8.48E-05	0.00E+00	1.87E-04	3.96E-04	0.00E+00	4.02E-05	6.46E-05	0.00E+00	3.07E-05	3.79E-05	0.00E+00
1480	479386.1	3742479	2.46E-04	0.000481	0.00E+00	2.34E-04	5.32E-04	0.00E+00	4.73E-05	8.50E-05	0.00E+00	1.88E-04	3.97E-04	0.00E+00	4.03E-05	6.47E-05	0.00E+00	3.08E-05	3.80E-05	0.00E+00
1481	479393.3	3742463	2.47E-04	0.000483	0.00E+00	2.34E-04	5.34E-04	0.00E+00	4.74E-05	8.53E-05	0.00E+00	1.88E-04	3.98E-04	0.00E+00	4.04E-05	6.49E-05	0.00E+00	3.09E-05	3.81E-05	0.00E+00
1482	479400.4	3742446	2.48E-04	0.000484	0.00E+00	2.35E-04	5.35E-04	0.00E+00	4.75E-05	8.55E-05	0.00E+00	1.89E-04	3.99E-04	0.00E+00	4.06E-05	6.51E-05	0.00E+00	3.10E-05	3.82E-05	0.00E+00
1483	479407.6	3742429	2.48E-04	0.000485	0.00E+00	2.36E-04	5.37E-04	0.00E+00	4.77E-05	8.57E-05	0.00E+00	1.89E-04	4.00E-04	0.00E+00	4.07E-05	6.53E-05	0.00E+00	3.11E-05	3.83E-05	0.00E+00
1484	479414.8	3742412	2.49E-04	0.000486	0.00E+00	2.36E-04	5.38E-04	0.00E+00	4.78E-05	8.60E-05	0.00E+00	1.90E-04	4.01E-04	0.00E+00	4.08E-05	6.55E-05	0.00E+00	3.12E-05	3.84E-05	0.00E+00
1485	479422	3742395	2.50E-04	0.000488	0.00E+00	2.37E-04	5.40E-04	0.00E+00	4.79E-05	8.62E-05	0.00E+00	1.90E-04	4.02E-04	0.00E+00	4.09E-05	6.56E-05	0.00E+00	3.12E-05	3.85E-05	0.00E+00
1486	479429.1	3742378	2.50E-04	0.000489	0.00E+00	2.38E-04	5.41E-04	0.00E+00	4.80E-05	8.64E-05	0.00E+00	1.91E-04	4.03E-04	0.00E+00	4.10E-05	6.58E-05	0.00E+00	3.13E-05	3.86E-05	0.00E+00
1487	479436.3	3742361	2.51E-04	0.00049	0.00E+00	2.38E-04	5.42E-04	0.00E+00	4.81E-05	8.66E-05	0.00E+00	1.91E-04	4.04E-04	0.00E+00	4.11E-05	6.59E-05	0.00E+00	3.14E-05	3.87E-05	0.00E+00
1488	479443.5	3742344	2.51E-04	0.000491	0.00E+00	2.39E-04	5.43E-04	0.00E+00	4.82E-05	8.68E-05	0.00E+00	1.91E-04	4.05E-04	0.00E+00	4.12E-05	6.61E-05	0.00E+00	3.15E-05	3.88E-05	0.00E+00
1489	479450.7	3742327	2.52E-04	0.000492	0.00E+00	2.39E-04	5.44E-04	0.00E+00	4.83E-05	8.69E-05	0.00E+00	1.92E-04	4.06E-04	0.00E+00	4.12E-05	6.62E-05	0.00E+00	3.15E-05	3.89E-05	0.00E+00
1490	479457.8	3742310	2.52E-04	0.000492	0.00E+00	2.39E-04	5.45E-04	0.00E+00	4.84E-05	8.70E-05	0.00E+00	1.92E-04	4.06E-04	0.00E+00	4.13E-05	6.62E-05	0.00E+00	3.15E-05	3.89E-05	0.00E+00
1491	479465	3742293	2.52E-04	0.000493	0.00E+00	2.39E-04	5.45E-04	0.00E+00	4.84E-05	8.71E-05	0.00E+00	1.92E-04	4.06E-04	0.00E+00	4.13E-05	6.63E-05	0.00E+00	3.16E-05	3.89E-05	0.00E+00
1492	479472.2	3742276	2.52E-04	0.000493	0.00E+00	2.39E-04	5.45E-04	0.00E+00	4.84E-05	8.71E-05	0.00E+00	1.92E-04	4.06E-04	0.00E+00	4.13E-05	6.63E-05	0.00E+00	3.16E-05	3.89E-05	0.00E+00
1493	479479.4	3742259	2.52E-04	0.000492	0.00E+00	2.39E-04	5.45E-04	0.00E+00	4.84E-05	8.70E-05	0.00E+00	1.92E-04	4.06E-04	0.00E+00	4.13E-05	6.63E-05	0.00E+00	3.16E-05	3.89E-05	0.00E+00
1494	479486.5	3742242	2.52E-04	0.000492	0.00E+00	2.39E-04	5.44E-04	0.00E+00	4.83E-05	8.69E-05	0.00E+00	1.92E-04	4.06

1534	479410.4	3742185	1.98E-04	0.000387	0.00E+00	1.88E-04	4.28E-04	0.00E+00	3.80E-05	6.84E-05	0.00E+00	1.51E-04	3.19E-04	0.00E+00	3.24E-05	5.20E-05	0.00E+00	2.48E-05	3.06E-05	0.00E+00
1535	479424.3	3742152	1.97E-04	0.000385	0.00E+00	1.87E-04	4.26E-04	0.00E+00	3.79E-05	6.81E-05	0.00E+00	1.50E-04	3.18E-04	0.00E+00	3.23E-05	5.18E-05	0.00E+00	2.47E-05	3.05E-05	0.00E+00
1536	479438.3	3742119	1.96E-04	0.000383	0.00E+00	1.86E-04	4.24E-04	0.00E+00	3.76E-05	6.77E-05	0.00E+00	1.49E-04	3.16E-04	0.00E+00	3.21E-05	5.15E-05	0.00E+00	2.45E-05	3.03E-05	0.00E+00
1537	479250.1	3742582	1.94E-04	0.000379	0.00E+00	1.84E-04	4.19E-04	0.00E+00	3.72E-05	6.69E-05	0.00E+00	1.48E-04	3.12E-04	0.00E+00	3.17E-05	5.10E-05	0.00E+00	2.43E-05	2.99E-05	0.00E+00
1538	479250	3742601	1.97E-04	0.000384	0.00E+00	1.87E-04	4.25E-04	0.00E+00	3.77E-05	6.79E-05	0.00E+00	1.50E-04	3.17E-04	0.00E+00	3.22E-05	5.17E-05	0.00E+00	2.46E-05	3.04E-05	0.00E+00
1539	479249.9	3742619	2.00E-04	0.00039	0.00E+00	1.89E-04	4.31E-04	0.00E+00	3.83E-05	6.89E-05	0.00E+00	1.52E-04	3.21E-04	0.00E+00	3.27E-05	5.24E-05	0.00E+00	2.50E-05	3.08E-05	0.00E+00
1540	479249.9	3742638	2.02E-04	0.000395	0.00E+00	1.92E-04	4.37E-04	0.00E+00	3.88E-05	6.98E-05	0.00E+00	1.54E-04	3.26E-04	0.00E+00	3.31E-05	5.32E-05	0.00E+00	2.53E-05	3.12E-05	0.00E+00
1541	479249.8	3742656	2.05E-04	0.000401	0.00E+00	1.95E-04	4.43E-04	0.00E+00	3.94E-05	7.08E-05	0.00E+00	1.56E-04	3.30E-04	0.00E+00	3.36E-05	5.39E-05	0.00E+00	2.57E-05	3.17E-05	0.00E+00
1542	479249.7	3742674	2.08E-04	0.000406	0.00E+00	1.97E-04	4.49E-04	0.00E+00	3.99E-05	7.18E-05	0.00E+00	1.58E-04	3.35E-04	0.00E+00	3.40E-05	5.46E-05	0.00E+00	2.60E-05	3.21E-05	0.00E+00
1543	479249.6	3742693	2.11E-04	0.000411	0.00E+00	2.00E-04	4.55E-04	0.00E+00	4.04E-05	7.27E-05	0.00E+00	1.60E-04	3.39E-04	0.00E+00	3.45E-05	5.54E-05	0.00E+00	2.64E-05	3.25E-05	0.00E+00
1544	479277.2	3742382	1.75E-04	0.000343	0.00E+00	1.66E-04	3.79E-04	0.00E+00	3.37E-05	6.06E-05	0.00E+00	1.34E-04	2.83E-04	0.00E+00	2.87E-05	4.61E-05	0.00E+00	2.20E-05	2.71E-05	0.00E+00
1545	479291.2	3742348	1.76E-04	0.000344	0.00E+00	1.67E-04	3.80E-04	0.00E+00	3.38E-05	6.08E-05	0.00E+00	1.34E-04	2.84E-04	0.00E+00	2.88E-05	4.63E-05	0.00E+00	2.20E-05	2.72E-05	0.00E+00
1546	479305.2	3742315	1.77E-04	0.000345	0.00E+00	1.68E-04	3.82E-04	0.00E+00	3.39E-05	6.10E-05	0.00E+00	1.35E-04	2.85E-04	0.00E+00	2.89E-05	4.64E-05	0.00E+00	2.21E-05	2.73E-05	0.00E+00
1547	479319.2	3742282	1.77E-04	0.000346	0.00E+00	1.68E-04	3.83E-04	0.00E+00	3.40E-05	6.12E-05	0.00E+00	1.35E-04	2.86E-04	0.00E+00	2.90E-05	4.66E-05	0.00E+00	2.22E-05	2.74E-05	0.00E+00
1548	479333.2	3742249	1.78E-04	0.000347	0.00E+00	1.69E-04	3.84E-04	0.00E+00	3.41E-05	6.14E-05	0.00E+00	1.35E-04	2.86E-04	0.00E+00	2.91E-05	4.67E-05	0.00E+00	2.23E-05	2.74E-05	0.00E+00
1549	479347.2	3742216	1.78E-04	0.000348	0.00E+00	1.69E-04	3.85E-04	0.00E+00	3.42E-05	6.15E-05	0.00E+00	1.36E-04	2.87E-04	0.00E+00	2.92E-05	4.68E-05	0.00E+00	2.23E-05	2.75E-05	0.00E+00
1550	479361.2	3742183	1.78E-04	0.000348	0.00E+00	1.69E-04	3.85E-04	0.00E+00	3.42E-05	6.15E-05	0.00E+00	1.36E-04	2.87E-04	0.00E+00	2.92E-05	4.68E-05	0.00E+00	2.23E-05	2.75E-05	0.00E+00
1551	479375.2	3742150	1.78E-04	0.000347	0.00E+00	1.69E-04	3.84E-04	0.00E+00	3.41E-05	6.14E-05	0.00E+00	1.35E-04	2.86E-04	0.00E+00	2.91E-05	4.67E-05	0.00E+00	2.22E-05	2.74E-05	0.00E+00
1552	479389.2	3742117	1.77E-04	0.000346	0.00E+00	1.68E-04	3.83E-04	0.00E+00	3.40E-05	6.11E-05	0.00E+00	1.35E-04	2.85E-04	0.00E+00	2.90E-05	4.65E-05	0.00E+00	2.22E-05	2.73E-05	0.00E+00
1553	479403.2	3742084	1.76E-04	0.000344	0.00E+00	1.67E-04	3.80E-04	0.00E+00	3.38E-05	6.08E-05	0.00E+00	1.34E-04	2.84E-04	0.00E+00	2.88E-05	4.63E-05	0.00E+00	2.20E-05	2.72E-05	0.00E+00
1554	479200.1	3742582	1.74E-04	0.00034	0.00E+00	1.65E-04	3.76E-04	0.00E+00	3.34E-05	6.01E-05	0.00E+00	1.33E-04	2.80E-04	0.00E+00	2.85E-05	4.58E-05	0.00E+00	2.18E-05	2.69E-05	0.00E+00
1555	479200	3742600	1.76E-04	0.000345	0.00E+00	1.67E-04	3.81E-04	0.00E+00	3.39E-05	6.09E-05	0.00E+00	1.34E-04	2.84E-04	0.00E+00	2.89E-05	4.64E-05	0.00E+00	2.21E-05	2.72E-05	0.00E+00
1556	479199.9	3742619	1.79E-04	0.000349	0.00E+00	1.70E-04	3.86E-04	0.00E+00	3.43E-05	6.17E-05	0.00E+00	1.36E-04	2.88E-04	0.00E+00	2.93E-05	4.70E-05	0.00E+00	2.24E-05	2.76E-05	0.00E+00
1557	479199.9	3742637	1.81E-04	0.000354	0.00E+00	1.72E-04	3.91E-04	0.00E+00	3.47E-05	6.25E-05	0.00E+00	1.38E-04	2.92E-04	0.00E+00	2.96E-05	4.76E-05	0.00E+00	2.27E-05	2.79E-05	0.00E+00
1558	479199.8	3742656	1.83E-04	0.000358	0.00E+00	1.74E-04	3.96E-04	0.00E+00	3.52E-05	6.33E-05	0.00E+00	1.40E-04	2.95E-04	0.00E+00	3.00E-05	4.82E-05	0.00E+00	2.29E-05	2.83E-05	0.00E+00
1559	479199.7	3742674	1.86E-04	0.000363	0.00E+00	1.76E-04	4.01E-04	0.00E+00	3.56E-05	6.41E-05	0.00E+00	1.41E-04	2.99E-04	0.00E+00	3.04E-05	4.88E-05	0.00E+00	2.32E-05	2.87E-05	0.00E+00
1560	479199.6	3742693	1.88E-04	0.000367	0.00E+00	1.78E-04	4.06E-04	0.00E+00	3.61E-05	6.49E-05	0.00E+00	1.43E-04	3.03E-04	0.00E+00	3.08E-05	4.94E-05	0.00E+00	2.35E-05	2.90E-05	0.00E+00
1561	479276.8	3742264	1.60E-04	0.000313	0.00E+00	1.52E-04	3.46E-04	0.00E+00	3.07E-05	5.53E-05	0.00E+00	1.22E-04	2.58E-04	0.00E+00	2.62E-05	4.21E-05	0.00E+00	2.01E-05	2.47E-05	0.00E+00
1562	479283.8	3742248	1.61E-04	0.000313	0.00E+00	1.52E-04	3.47E-04	0.00E+00	3.08E-05	5.54E-05	0.00E+00	1.22E-04	2.59E-04	0.00E+00	2.63E-05	4.22E-05	0.00E+00	2.01E-05	2.48E-05	0.00E+00
1563	479297.9	3742214	1.61E-04	0.000314	0.00E+00	1.53E-04	3.48E-04	0.00E+00	3.09E-05	5.55E-05	0.00E+00	1.23E-04	2.59E-04	0.00E+00	2.63E-05	4.23E-05	0.00E+00	2.01E-05	2.48E-05	0.00E+00
1564	479311.9	3742181	1.61E-04	0.000315	0.00E+00	1.53E-04	3.48E-04	0.00E+00	3.09E-05	5.56E-05	0.00E+00	1.23E-04	2.59E-04	0.00E+00	2.64E-05	4.23E-05	0.00E+00	2.02E-05	2.49E-05	0.00E+00
1565	479326	3742148	1.61E-04	0.000314	0.00E+00	1.53E-04	3.48E-04	0.00E+00	3.09E-05	5.56E-05	0.00E+00	1.23E-04	2.59E-04	0.00E+00	2.64E-05	4.23E-05	0.00E+00	2.01E-05	2.48E-05	0.00E+00
1566	479340.1	3742115	1.61E-04	0.000314	0.00E+00	1.52E-04	3.47E-04	0.00E+00	3.08E-05	5.55E-05	0.00E+00	1.22E-04	2.59E-04	0.00E+00	2.63E-05	4.22E-05	0.00E+00	2.01E-05	2.48E-05	0.00E+00
1567	479354.1	3742081	1.60E-04	0.000313	0.00E+00	1.52E-04	3.46E-04	0.00E+00	3.07E-05	5.52E-05	0.00E+00	1.22E-04	2.58E-04	0.00E+00	2.62E-05	4.21E-05	0.00E+00	2.00E-05	2.47E-05	0.00E+00
1568	479368.2	3742048	1.59E-04	0.000311	0.00E+00	1.51E-04	3.44E-04	0.00E+00	3.05E-05	5.49E-05	0.00E+00	1.21E-04	2.56E-04	0.00E+00	2.60E-05	4.18E-05	0.00E+00	1.99E-05	2.46E-05	0.00E+00
1569	479150.1	3742582	1.57E-04	0.000307	0.00E+00	1.49E-04	3.40E-04	0.00E+00	3.02E-05	5.43E-05	0.00E+00	1.20E-04	2.53E-04	0.00E+00	2.58E-05	4.13E-05	0.00E+00	1.97E-05	2.43E-05	0.00E+00
1570	479150	3742600	1.59E-04	0.000311	0.00E+00	1.51E-04	3.44E-04	0.00E+00	3.06E-05	5.50E-05	0.00E+00	1.21E-04	2.57E-04	0.00E+00	2.61E-05	4.19E-05	0.00E+00	1.99E-05	2.46E-05	0.00E+00
1571	479149.9	3742619	1.61E-04	0.000315	0.00E+00	1.53E-04	3.48E-04	0.00E+00	3.09E-05	5.57E-05	0.00E+00	1.23E-04	2.60E-04	0.00E+00	2.64E-05	4.24E-05	0.00E+00	2.02E-05	2.49E-05	0.00E+00
1572	479149.9	3742637	1.63E-04	0.000319	0.00E+00	1.55E-04	3.53E-04	0.00E+00	3.13E-05	5.64E-05	0.00E+00	1.24E-04	2.63E-04	0.00E+00	2.67E-05	4.29E-05	0.00E+00	2.04E-05	2.52E-05	0.00E+00
1573	479149.8	3742655	1.65E-04	0.000323	0.00E+00	1.57E-04	3.57E-04	0.00E+00	3.17E-05	5.70E-05	0.00E+00	1.26E-04	2.66E-04	0.00E+00	2.71E-05	4.34E-05	0.00E+00	2.07E-05	2.55E-05	0.00E+00
1574	479149.7	3742674	1.67E-04	0.000327	0.00E+00	1.59E-04	3.61E-04	0.00E+00	3.21E-05	5.77E-05	0.00E+00	1.27E-04	2.69E-04	0.00E+00	2.74E-05	4.40E-05	0.00E+00	2.09E-05	2.58E-05	0.00E+00
1575	479149.6	3742692	1.69E-04	0.000331	0.00E+00	1.61E-04	3.66E-04	0.00E+00	3.25E-05	5.84E-05	0.00E+00	1.29E-04	2.73E-04	0.00E+00	2.77E-05	4.45E-05	0.00E+00	2.12E-05	2.61E-05	0.00E+00
1576	479227.3	3742263	1.46E-04	0.000284	0.00E+00	1.38E-04	3.14E-04	0.00E+00	2.79E-05	5.02E-05	0.00E+00	1.11E-04	2.34E-04	0.00E+00	2.38E-05	3.82E-05	0.00E+00	1.82E-05	2.25E-05	0.00E+00
1577	479234.3	3742246	1.46E-04	0.000285	0.00E+00	1.38E-04	3.15E-04	0.00E+00	2.80E-05	5.03E-05	0.00E+00	1.11E-04	2.35E-04	0.00E+00	2.39E-05	3.83E-05	0.00E+00	1.82E-05	2.25E-05	0.00E+00
1578	479241.4	3742229	1.46E-04	0.000285	0.00E+00	1.38E-04	3.15E-04	0.00E+00	2.80E-05	5.04E-05	0.00E+00	1.11E-04	2.35E-04	0.00E+00	2.39E-05	3.83E-05	0.00E+00	1.83E-05	2.25E-05	0.00E+00
1579	479255.5	3742196	1.46E-04	0.000286	0.00E+00	1.39E-04	3.16E-04	0.00E+00	2.81E-05	5.05E-05	0.00E+00	1.11E-04	2.36E-04	0.00E+00	2.39E-05	3.84E-05	0.00E+00	1.83E-05	2.26E-05	0.00E+00
1580	479262.6	3742179	1.46E-04	0.000286	0.00E+00	1.39E-04	3.16E-04	0.00E+00	2.81E-05	5.05E-05	0.00E+00	1.11E-04	2.36E-04	0.00E+00	2.40E-05	3.85E-05	0.00E+00	1.83E-05	2.26E-05	0.00E+00
1581	479269.6	3742163	1.46E-04	0.000286	0.00E+00	1.39E-04	3.16E-04	0.00E+00	2.81E-05	5.05E-05	0.00E+00	1.12E-04	2.36E-04	0.00E+00	2.40E-05	3.85E-05	0.00E+00	1.83E-05	2.26E-05	0.00E+00
1582	479283.8	3742129	1.46E-04	0.000286	0.00E+00	1.39E-04	3.16E-04	0.00E+00	2.81E-05	5.06E-05	0.00E+00	1.12E-04	2.36E-04	0.00E+00	2.40E-05	3.85E-05	0.00E+00	1.83E-05	2.26E-05	0.00E+00
1583	479290.8	3742113	1.46E-04	0.000286	0.00E+00	1.39E-04	3.16E-04	0.00E+00	2.81E-05	5.05E-05	0.00E+00	1.11E-04	2.36E-04	0.00E+00	2.40E-05	3.85E-05	0.00E+00	1.83E-05	2.26E-05	0.00E+00
1584	479304.9	3742079	1.46E-04	0.000285	0.00E+00	1.39E-04	3.16E-04	0.00E+00	2.80E-05	5.04E-05	0.00E+00	1.11E-04	2.35E-04	0.00E+00	2.39E-05	3.84E-05	0.00E+00	1.83E-05	2.25E-05	0.00E+00
1585	479312	3742063	1.46E-04	0.000285	0.00E+00	1.38E-04	3.15E-04	0.00E+00	2.80E-05	5.03E-05	0.00E+00	1.11E-04	2.35E-04	0.00E+00	2.39E-05	3.83E-05	0.00E+00	1.82E-05	2.25E-05	0.00E+00
1586	479319	3742046	1.46E-04	0.000284	0.00E+00	1.38E-04	3.14E-04	0.00E+00	2.79E-05	5.02E-05	0.00E+00	1.11E-04	2.34E-04	0.00E+00	2.38E-05	3.82E-05	0.00E+00	1.82E-05	2.25E-05	0.00E+00
1587	479333.2	3742012	1.45E-04	0.000283	0.00E+00	1.37E-04	3.13E-04	0.00E+00	2.78E-05	4.99E-05	0.00E+00	1.10E-04	2.33E-04	0.00E+00	2.37E-05	3.80E-05	0.00E+00	1.81E-05	2.23E-05	0.00E+00
1588	479100.1	3742581	1.43E-04	0.00028	0.00E+00	1.36E-04	3.09E-04	0.00E+00	2.75E-05	4.94E-05	0.00E+00	1.09E-04	2.31E-04	0.00E+00	2.34E-05	3.76E-05	0.00E+00	1.79E-05	2.21E-05	0.00E+00
1589	479100	3742600	1.45E-04	0.000283	0.00E+00	1.37E-04	3.13E-04	0.00E+00	2.78E-05	5.00E-05	0.00E+00	1.10E-04	2.33E-04	0.00E+00	2.37E-05	3.81E-05	0.00E+00	1.81E-05	2.24E-05	0.00E+00
1590	479099.9	3742618	1.47E-04	0.000286	0.00E+00	1.39E-04	3.17E-04	0.00E+00	2.81E-05	5.06E-05	0.00E+00	1.12E-04	2.36E-04	0.00E+00	2.40E-05	3.85E-05	0.00E+00	1.83E-05	2.26E-05	0.00E+00
1591	479099.9	3742637	1.48E-04	0.000289	0.00E+00	1.41E-04	3.20E-04	0.00E+00	2.84E-05	5.12E-05	0.00E+00	1.13E-04	2.39E-04	0.00E+00	2.43E-05	3.89E-05	0.00E+00	1.85E-05	2.29E-05	0.00E+00
1592	479099.8	3742655	1.50E-04	0.000293	0.00E+00	1.42E-04	3.24E-04	0.00E+00	2.88E-05	5.17E-05	0.00E+00	1.14E-04	2.41E-04	0.00E+00	2.45E-05	3.94E-05	0.00E+00	1.88E-05	2.31E-05	0.00E+00
1593	479099.7	3742674	1.52E-04	0.000296	0.00E+00	1.44E-04	3.28E-04	0.00E+00	2.91E-05	5.23E-05	0.00E+00	1.15E-04	2.44E-04	0.00E+00	2.48E-05	3.98E-05	0.00E+00	1.90E-05	2.34E-05	0.00E+00
1594	479099.6	3742692	1.53E-04	0.000299	0.00E+00	1.45E-04	3.31E-04	0.00E+00	2.94E-05	5.29E-05	0.00E+00	1.17E-04	2.47E-04	0.00E+00	2.51E-05	4.03E-05	0.00E+00	1.92E-05	2.37E-05	0.00E+00
1595	479170.6	3742278	1.33E-04	0.000259	0.00E+00	1.26E-04	2.87E-04	0.00E+00	2.55E-05	4.58E-05	0.00E+00	1.01E-04	2.14E-04	0.00E+00	2.17E-05	3.49E-05	0.00E+00	1.66E-05	2.05E-05	0.00E+00
1596	479177.7	3742261	1.33E-04	0.000259	0.00E+00	1.26E-04	2.87E-04	0.00E+00	2.55E-05	4.59E-05	0.00E+00	1.01E-04	2.14E-04	0.00E+00	2.17E-05	3.49E-05	0.00E+00	1.66E-05	2.05E-05	0.00E+00
1597	479184.8	3742245	1.33E-04	0.00026	0.00E+00	1.26E-04	2.87E-04	0.00E+00	2.55E-05	4.59E-05	0.00E+00	1.01E-04	2.14E-04	0.00E+00	2.18E-05	3.50E-05	0.00E+00	1.66E-05	2.05E-05	0.00E+00
1598	479191.9	3742228	1.33E-04	0.00026	0.00E+00	1.26E-04	2.88E-04	0.00E+00	2.56E-05	4.60E-05	0.00E+00	1.01E-04	2.15E-04	0.00E+00	2.18E-05	3.50E-05	0.00E+00	1.67E-05	2.06E-05	0.00E+00
1599	479199	3742211	1.33E-04	0.000261	0.00E+00	1.27E-04	2.88E-04	0.00E+00	2.56E-05	4.60E-05	0.00E+00	1.02E-04	2.15E-04	0.00E+00	2.18E-05	3.51E-05	0.00E+00	1.67E-05	2.06E-05	0.00E+00
1600	479206.1	3742194	1.34E-04	0.000261	0.00E+00	1.27E-04	2.89E-04	0.00E+00	2.56E-05	4.61E-05	0.00E+00	1.02E-04	2.15E-04	0.00E+00	2.19E-05	3.51E-05	0.00E+00	1.67E-05	2.06E-05	0.00E+00
1601	479213.1	3742178	1.34E-04	0.000261	0.00E+00	1.27E-04	2.89E-04	0.00E+00	2.57E-05	4.62E-05	0.00E+00	1.02E-04	2.15E-04	0.00E+00	2.19E-05	3.51E-05	0.00E+00	1.67E-05	2.06E-05	0.00E+00
1602	479220.2	3742161	1.34E-04	0.000261	0.00E+00	1.27E-04	2.89E-04	0.00E+00	2.57E-05	4.62E-05	0.00E+00	1.02E-04	2.16E-04	0.00E+00	2.19E-05	3.52E-05	0.00E+00	1.67E-05	2.07E-05	0.00E+00
1603	479227.3	3742144	1.34E-04	0.000262	0.00E+00	1.27E-04	2.89E-04	0.00E+00	2.57E-05	4.62E-05	0.00E+00	1.02E-04	2.16E-04	0.00E+00	2.19E-05	3.52E-05	0.00E+00	1.68E-05	2.07E-05	0.00E+00
1604	479234.4	3742127	1.34E-04	0.000262	0.00E+00	1.27E-04	2.89E-04	0.00E+00	2.57E-05	4.62E-05	0.00E+00	1.02E-04	2.16E-04	0.00E+00	2.19E-05	3.52E-05	0.00E+00	1.68E-05	2.07E-05	0.00E+00
1605	479241.5	3742111	1.34E-04	0.000262	0.00E+00	1.27E-04	2.89E-04	0.00E+00	2.57E-05	4.62E-05	0.00E+00	1.02E-04	2.16E-04	0.00E+00	2.19E-05	3.52E-05	0.00E+00	1.68E-05	2.07E-05	0.00E+00
1606	479248.6	3742094	1.34E-04	0.000262	0.00E+00	1.27E-04	2.89E-04	0.00E+00	2.57E-05	4.62E-05	0.00E+00	1.02E-04	2.16E-04	0.00E+00	2.19E-05	3.52E-05	0.00E+00	1.68E-05	2.07E-05	0.00E+00
1607	479255.6	3742077	1.34E-04	0.000261	0.00E+00	1.27E-04	2.89E-04	0.00E+00	2.57E-05	4.62E-05	0.00E+00	1.02E-04	2.16E-04	0.00E+00	2.19E-05	3.52E-05	0.00E+00	1.67E-05	2.07E-05	0.00E+00
1608	479262.7	3742061	1.34E-04	0.000261	0.00E+00	1.27E-04	2.89E-04	0.00E+00	2.57E-05	4.62E-05	0.00E+00	1.02E-04	2.15E-04	0.00E+00	2.19E-05	3.51E-05	0.00E+00	1.67E-05	2.06E-05	0.00E+00
1609	479269.8	3742044	1.34E-04	0.000261	0.00E+00	1.27E-04	2.88E-04	0.00E+00	2.56E-05	4.61E-05	0.00E+00	1.02E-04	2.15E-04	0.00E+00	2.19E-05	3.51E-05	0.00E+00	1.67E-05	2.06E-05	0.00E+00
1610	479276.9	3742027	1.33E-04	0.00026	0.00E+00	1.27E-04	2.88E-04	0.00E+00	2.56E-05	4.60E-05	0.00E+00	1.02E-04	2.15E-04	0.00E+00	2.18E-05	3.50E-05	0.00E+00	1.67E-05	2.06E-05	0.00E+00
1611	479284	3742010	1.33E-04	0.00026	0.00E+00	1.26E-04	2.87E-04	0.00E+00	2.55E-05	4.59E-05	0.00E+00	1.01E-04	2.14E-04	0.00E+00	2.18E-05	3.50E-05	0.00E+00	1.66E-05	2.05E-05	0.00E+00
1612	479291.1	3741994	1.33E-04	0.000259	0.00E+00	1.26E-04	2.87E-04	0.00E+00	2.55E-05	4.58E-05	0.00E+00	1.01E-04	2.14E-04	0.00E+00	2.17E-05	3.49E-05	0.00E+00	1.66E-05	2.05E-05	0.00E+00
1613	479298.1	3741977	1.32E-04	0.000258	0.00E+00	1.26E-04	2.86E-04	0.00E+00	2.54E-05	4.57E-05	0.00E+00	1.01E-04	2.13E-04	0.00E+00	2.17E-05	3.48E-05	0.00E+00	1.66E-05	2.04E-05	0.00E+00
1614	479121	3742277	1.22E-04	0.000238	0.00E+00	1.15E-04	2.63E-04	0.00E+00	2.33E-05	4.20E-05	0.00E+00	9.27E-05	1.96E-04	0.00E+00	1.99E-05	3.20E-05	0.00E+00	1.52E-05	1.88E-05	0.00E+00
1615	479128.1	3742260	1.22E-04	0.000238	0.00E+00	1.16E-04	2.63E-04	0.00E+00	2.34E-05	4.21E-05	0.00E+00	9.28E-05	1.96E-04	0.00E+00	1.99E-05	3.20E-05	0.00E+00	1.52E-05	1.88E-05	0.00E+00
1616	479135.2	3742243	1.22E-04	0.000238	0.00E+00	1.16E-04	2.64E-04	0.00E+00	2.34E-05	4.21E-05	0.00E+00	9.30E-05	1.97E-04	0.00E+00	2.00E-05	3.21E-05	0.00E+00	1.53E-05	1.88E-05	0.00E+00
1617	479142.3	3742227	1.22E-04	0.000239	0.00E+00	1.16E-04	2.64E-04	0.00E+00	2.35E-05	4.22E-05	0.00E+00	9.31E-05	1.97E-04	0.00E+00	2.00E-05	3.21E-05	0.00E+00	1.53E-05	1.89E-05	0.00E+00
1618	479149.4	3742210	1.22E-04	0.000239	0.00E+00	1.16E-04	2.64E-04	0.00E+00	2.35E-05	4.22E-05	0.00E+00	9.32E-05	1.97E-04	0.00E+00	2.00E-05	3.22E-05	0.00E+00	1.53E-05	1.89E-05	0.00E+00
1619	479156.5	3742193	1.23E-04	0.000239	0.00E+00	1.16E-04	2.65E-04	0.00E+00	2.35E-05	4.23E-05	0.00E+00	9.33E-05	1.97E-04	0.00E+00	2.01E-05	3.22E-05	0.00E+00	1.53E-05	1.89E-05	0.00E+00
1620	479163.6	3742176	1.23E-04	0.00024	0.00E+00	1.16E-04	2.65E-04	0.00E+00	2.35E-05	4.24E-05	0.00E+00	9.35E-05	1.98E-04	0.00E+00	2.01E-05	3.22E-05	0.00E+00	1.54E-05	1.89E-05	0.00E+00
1621	479170.8	3742159	1.23E-04	0.00024	0.00E+00	1.17E-04	2.65E-04	0.00E+00	2.36E-05	4.24E-05	0.00E+00	9.36E-05	1.98E-04	0.00E+00	2.01E-05	3.23E-05	0.00E+00	1.54E-05	1.90E-05	0.00E+00
1622	479177.9	3742143	1.23E-04	0.00024	0.00E+00	1.17E-04	2.66E-04	0.00E+00	2.36E-05	4.24E-05	0.00E+00	9.36E-05	1.98E-

1662	479143.1	3741988	1.05E-04	0.000206	0.00E+00	9.99E-05	2.27E-04	0.00E+00	2.02E-05	3.63E-05	0.00E+00	8.01E-05	1.69E-04	0.00E+00	1.72E-05	2.77E-05	0.00E+00	1.32E-05	1.62E-05	0.00E+00
1663	479150.2	3741971	1.05E-04	0.000205	0.00E+00	9.98E-05	2.27E-04	0.00E+00	2.02E-05	3.63E-05	0.00E+00	8.01E-05	1.69E-04	0.00E+00	1.72E-05	2.76E-05	0.00E+00	1.32E-05	1.62E-05	0.00E+00
1664	479157.4	3741954	1.05E-04	0.000205	0.00E+00	9.96E-05	2.27E-04	0.00E+00	2.01E-05	3.62E-05	0.00E+00	8.00E-05	1.69E-04	0.00E+00	1.72E-05	2.76E-05	0.00E+00	1.31E-05	1.62E-05	0.00E+00
1665	479164.5	3741937	1.05E-04	0.000205	0.00E+00	9.95E-05	2.27E-04	0.00E+00	2.01E-05	3.62E-05	0.00E+00	7.99E-05	1.69E-04	0.00E+00	1.72E-05	2.76E-05	0.00E+00	1.31E-05	1.62E-05	0.00E+00
1666	479171.6	3741920	1.05E-04	0.000204	0.00E+00	9.93E-05	2.26E-04	0.00E+00	2.01E-05	3.61E-05	0.00E+00	7.97E-05	1.69E-04	0.00E+00	1.71E-05	2.75E-05	0.00E+00	1.31E-05	1.62E-05	0.00E+00
1667	479178.8	3741904	1.04E-04	0.000204	0.00E+00	9.91E-05	2.26E-04	0.00E+00	2.00E-05	3.60E-05	0.00E+00	7.95E-05	1.68E-04	0.00E+00	1.71E-05	2.74E-05	0.00E+00	1.31E-05	1.61E-05	0.00E+00
1668	479185.9	3741887	1.04E-04	0.000203	0.00E+00	9.88E-05	2.25E-04	0.00E+00	2.00E-05	3.60E-05	0.00E+00	7.93E-05	1.68E-04	0.00E+00	1.71E-05	2.74E-05	0.00E+00	1.30E-05	1.61E-05	0.00E+00
1669	479193.1	3741870	1.04E-04	0.000203	0.00E+00	9.86E-05	2.24E-04	0.00E+00	1.99E-05	3.59E-05	0.00E+00	7.91E-05	1.67E-04	0.00E+00	1.70E-05	2.73E-05	0.00E+00	1.30E-05	1.60E-05	0.00E+00
1670	479730.1	3742716	1.65E-03	0.003217	0.00E+00	1.56E-03	3.56E-03	0.00E+00	3.16E-04	5.68E-04	0.00E+00	1.25E-03	2.65E-03	0.00E+00	2.70E-04	4.33E-04	0.00E+00	2.06E-04	2.54E-04	0.00E+00
1671	479718.9	3742733	1.55E-03	0.003031	0.00E+00	1.47E-03	3.35E-03	0.00E+00	2.98E-04	5.36E-04	0.00E+00	1.18E-03	2.50E-03	0.00E+00	2.54E-04	4.08E-04	0.00E+00	1.94E-04	2.40E-04	0.00E+00
1672	479710.5	3742716	1.41E-03	0.002749	0.00E+00	1.34E-03	3.04E-03	0.00E+00	2.70E-04	4.86E-04	0.00E+00	1.07E-03	2.27E-03	0.00E+00	2.30E-04	3.70E-04	0.00E+00	1.76E-04	2.17E-04	0.00E+00
1673	479715.6	3742765	1.60E-03	0.003118	0.00E+00	1.51E-03	3.45E-03	0.00E+00	3.06E-04	5.51E-04	0.00E+00	1.22E-03	2.57E-03	0.00E+00	2.61E-04	4.19E-04	0.00E+00	2.00E-04	2.46E-04	0.00E+00
1674	479707.3	3742749	1.46E-03	0.002849	0.00E+00	1.38E-03	3.15E-03	0.00E+00	2.80E-04	5.03E-04	0.00E+00	1.11E-03	2.35E-03	0.00E+00	2.39E-04	3.83E-04	0.00E+00	1.83E-04	2.25E-04	0.00E+00
1675	479698.9	3742733	1.33E-03	0.002599	0.00E+00	1.26E-03	2.87E-03	0.00E+00	2.55E-04	4.59E-04	0.00E+00	1.01E-03	2.14E-03	0.00E+00	2.18E-04	3.50E-04	0.00E+00	1.66E-04	2.05E-04	0.00E+00
1676	479704.3	3742782	1.50E-03	0.002926	0.00E+00	1.42E-03	3.24E-03	0.00E+00	2.87E-04	5.17E-04	0.00E+00	1.14E-03	2.41E-03	0.00E+00	2.45E-04	3.94E-04	0.00E+00	1.87E-04	2.31E-04	0.00E+00
1677	479696	3742765	1.38E-03	0.00269	0.00E+00	1.31E-03	2.98E-03	0.00E+00	2.64E-04	4.75E-04	0.00E+00	1.05E-03	2.22E-03	0.00E+00	2.25E-04	3.62E-04	0.00E+00	1.72E-04	2.13E-04	0.00E+00
1678	479687.6	3742749	1.26E-03	0.002468	0.00E+00	1.20E-03	2.73E-03	0.00E+00	2.42E-04	4.36E-04	0.00E+00	9.62E-04	2.04E-03	0.00E+00	2.07E-04	3.32E-04	0.00E+00	1.58E-04	1.95E-04	0.00E+00
1679	479670.9	3742717	1.06E-03	0.002076	0.00E+00	1.01E-03	2.30E-03	0.00E+00	2.04E-04	3.67E-04	0.00E+00	8.10E-04	1.71E-03	0.00E+00	1.74E-04	2.79E-04	0.00E+00	1.33E-04	1.64E-04	0.00E+00
1680	479693.1	3742798	1.41E-03	0.002751	0.00E+00	1.34E-03	3.04E-03	0.00E+00	2.70E-04	4.86E-04	0.00E+00	1.07E-03	2.27E-03	0.00E+00	2.31E-04	3.70E-04	0.00E+00	1.76E-04	2.17E-04	0.00E+00
1681	479684.7	3742782	1.30E-03	0.002543	0.00E+00	1.24E-03	2.81E-03	0.00E+00	2.50E-04	4.49E-04	0.00E+00	9.92E-04	2.10E-03	0.00E+00	2.13E-04	3.42E-04	0.00E+00	1.63E-04	2.01E-04	0.00E+00
1682	479676.3	3742766	1.20E-03	0.002345	0.00E+00	1.14E-03	2.59E-03	0.00E+00	2.30E-04	4.14E-04	0.00E+00	9.14E-04	1.93E-03	0.00E+00	1.97E-04	3.16E-04	0.00E+00	1.50E-04	1.85E-04	0.00E+00
1683	479668	3742750	1.11E-03	0.00216	0.00E+00	1.05E-03	2.39E-03	0.00E+00	2.12E-04	3.82E-04	0.00E+00	8.42E-04	1.78E-03	0.00E+00	1.81E-04	2.91E-04	0.00E+00	1.38E-04	1.71E-04	0.00E+00
1684	479659.6	3742734	1.02E-03	0.001991	0.00E+00	9.67E-04	2.20E-03	0.00E+00	1.96E-04	3.52E-04	0.00E+00	7.76E-04	1.64E-03	0.00E+00	1.67E-04	2.68E-04	0.00E+00	1.28E-04	1.57E-04	0.00E+00
1685	479651.3	3742718	9.41E-04	0.001837	0.00E+00	8.92E-04	2.03E-03	0.00E+00	1.80E-04	3.25E-04	0.00E+00	7.16E-04	1.51E-03	0.00E+00	1.54E-04	2.47E-04	0.00E+00	1.18E-04	1.45E-04	0.00E+00
1686	479681.6	3742815	1.32E-03	0.002586	0.00E+00	1.26E-03	2.86E-03	0.00E+00	2.54E-04	4.57E-04	0.00E+00	1.01E-03	2.13E-03	0.00E+00	2.17E-04	3.48E-04	0.00E+00	1.66E-04	2.04E-04	0.00E+00
1687	479673.2	3742799	1.23E-03	0.002402	0.00E+00	1.17E-03	2.66E-03	0.00E+00	2.36E-04	4.25E-04	0.00E+00	9.37E-04	1.98E-03	0.00E+00	2.01E-04	3.23E-04	0.00E+00	1.54E-04	1.90E-04	0.00E+00
1688	479664.9	3742782	1.14E-03	0.002226	0.00E+00	1.08E-03	2.46E-03	0.00E+00	2.19E-04	3.93E-04	0.00E+00	8.68E-04	1.84E-03	0.00E+00	1.87E-04	3.00E-04	0.00E+00	1.43E-04	1.76E-04	0.00E+00
1689	479656.5	3742766	1.05E-03	0.00206	0.00E+00	1.00E-03	2.28E-03	0.00E+00	2.02E-04	3.64E-04	0.00E+00	8.03E-04	1.70E-03	0.00E+00	1.73E-04	2.77E-04	0.00E+00	1.32E-04	1.63E-04	0.00E+00
1690	479648.2	3742750	9.76E-04	0.001905	0.00E+00	9.26E-04	2.11E-03	0.00E+00	1.87E-04	3.37E-04	0.00E+00	7.43E-04	1.57E-03	0.00E+00	1.60E-04	2.56E-04	0.00E+00	1.22E-04	1.51E-04	0.00E+00
1691	479639.8	3742734	9.03E-04	0.001764	0.00E+00	8.57E-04	1.95E-03	0.00E+00	1.73E-04	3.12E-04	0.00E+00	6.88E-04	1.45E-03	0.00E+00	1.48E-04	2.37E-04	0.00E+00	1.13E-04	1.39E-04	0.00E+00
1692	479631.4	3742718	8.38E-04	0.001636	0.00E+00	7.95E-04	1.81E-03	0.00E+00	1.61E-04	2.89E-04	0.00E+00	6.38E-04	1.35E-03	0.00E+00	1.37E-04	2.20E-04	0.00E+00	1.05E-04	1.29E-04	0.00E+00
1693	479670.3	3742832	1.25E-03	0.002438	0.00E+00	1.18E-03	2.70E-03	0.00E+00	2.39E-04	4.31E-04	0.00E+00	9.51E-04	2.01E-03	0.00E+00	2.04E-04	3.28E-04	0.00E+00	1.56E-04	1.93E-04	0.00E+00
1694	479662	3742815	1.17E-03	0.002275	0.00E+00	1.11E-03	2.52E-03	0.00E+00	2.23E-04	4.02E-04	0.00E+00	8.87E-04	1.88E-03	0.00E+00	1.91E-04	3.06E-04	0.00E+00	1.46E-04	1.80E-04	0.00E+00
1695	479653.6	3742799	1.08E-03	0.002118	0.00E+00	1.03E-03	2.34E-03	0.00E+00	2.08E-04	3.74E-04	0.00E+00	8.26E-04	1.75E-03	0.00E+00	1.78E-04	2.85E-04	0.00E+00	1.36E-04	1.67E-04	0.00E+00
1696	479645.2	3742783	1.01E-03	0.001968	0.00E+00	9.56E-04	2.18E-03	0.00E+00	1.93E-04	3.48E-04	0.00E+00	7.67E-04	1.62E-03	0.00E+00	1.65E-04	2.65E-04	0.00E+00	1.26E-04	1.56E-04	0.00E+00
1697	479636.9	3742767	9.36E-04	0.001827	0.00E+00	8.88E-04	2.02E-03	0.00E+00	1.80E-04	3.23E-04	0.00E+00	7.13E-04	1.51E-03	0.00E+00	1.53E-04	2.46E-04	0.00E+00	1.17E-04	1.44E-04	0.00E+00
1698	479628.5	3742751	8.69E-04	0.001698	0.00E+00	8.25E-04	1.88E-03	0.00E+00	1.67E-04	3.00E-04	0.00E+00	6.62E-04	1.40E-03	0.00E+00	1.42E-04	2.28E-04	0.00E+00	1.09E-04	1.34E-04	0.00E+00
1699	479620.2	3742735	8.09E-04	0.001579	0.00E+00	7.67E-04	1.75E-03	0.00E+00	1.55E-04	2.79E-04	0.00E+00	6.16E-04	1.30E-03	0.00E+00	1.32E-04	2.12E-04	0.00E+00	1.01E-04	1.25E-04	0.00E+00
1700	479611.8	3742718	7.53E-04	0.001471	0.00E+00	7.15E-04	1.63E-03	0.00E+00	1.44E-04	2.60E-04	0.00E+00	5.73E-04	1.21E-03	0.00E+00	1.23E-04	1.98E-04	0.00E+00	9.42E-05	1.16E-04	0.00E+00
1701	479637.7	3742865	1.05E-03	0.002055	0.00E+00	9.99E-04	2.27E-03	0.00E+00	2.02E-04	3.63E-04	0.00E+00	8.01E-04	1.69E-03	0.00E+00	1.72E-04	2.77E-04	0.00E+00	1.32E-04	1.62E-04	0.00E+00
1702	479629.3	3742849	9.90E-04	0.001933	0.00E+00	9.39E-04	2.14E-03	0.00E+00	1.90E-04	3.42E-04	0.00E+00	7.54E-04	1.59E-03	0.00E+00	1.62E-04	2.60E-04	0.00E+00	1.24E-04	1.53E-04	0.00E+00
1703	479620.9	3742833	9.29E-04	0.001814	0.00E+00	8.81E-04	2.01E-03	0.00E+00	1.78E-04	3.21E-04	0.00E+00	7.07E-04	1.50E-03	0.00E+00	1.52E-04	2.44E-04	0.00E+00	1.16E-04	1.43E-04	0.00E+00
1704	479612.6	3742816	8.70E-04	0.001699	0.00E+00	8.26E-04	1.88E-03	0.00E+00	1.67E-04	3.00E-04	0.00E+00	6.63E-04	1.40E-03	0.00E+00	1.42E-04	2.29E-04	0.00E+00	1.09E-04	1.34E-04	0.00E+00
1705	479604.2	3742800	8.15E-04	0.001591	0.00E+00	7.73E-04	1.76E-03	0.00E+00	1.56E-04	2.81E-04	0.00E+00	6.20E-04	1.31E-03	0.00E+00	1.33E-04	2.14E-04	0.00E+00	1.02E-04	1.26E-04	0.00E+00
1706	479595.8	3742784	7.62E-04	0.001489	0.00E+00	7.23E-04	1.65E-03	0.00E+00	1.46E-04	2.63E-04	0.00E+00	5.81E-04	1.23E-03	0.00E+00	1.25E-04	2.00E-04	0.00E+00	9.54E-05	1.18E-04	0.00E+00
1707	479587.5	3742768	7.14E-04	0.001394	0.00E+00	6.77E-04	1.54E-03	0.00E+00	1.37E-04	2.46E-04	0.00E+00	5.44E-04	1.15E-03	0.00E+00	1.17E-04	1.88E-04	0.00E+00	8.93E-05	1.10E-04	0.00E+00
1708	479579.1	3742752	6.69E-04	0.001307	0.00E+00	6.35E-04	1.45E-03	0.00E+00	1.28E-04	2.31E-04	0.00E+00	5.10E-04	1.08E-03	0.00E+00	1.10E-04	1.76E-04	0.00E+00	8.38E-05	1.03E-04	0.00E+00
1709	479570.7	3742735	6.29E-04	0.001228	0.00E+00	5.96E-04	1.36E-03	0.00E+00	1.21E-04	2.17E-04	0.00E+00	4.79E-04	1.01E-03	0.00E+00	1.03E-04	1.65E-04	0.00E+00	7.86E-05	9.70E-05	0.00E+00
1710	479562.4	3742719	5.91E-04	0.001155	0.00E+00	5.61E-04	1.28E-03	0.00E+00	1.13E-04	2.04E-04	0.00E+00	4.50E-04	9.52E-04	0.00E+00	9.68E-05	1.55E-04	0.00E+00	7.40E-05	9.12E-05	0.00E+00
1711	479613.4	3742915	9.51E-04	0.001858	0.00E+00	9.02E-04	2.05E-03	0.00E+00	1.82E-04	3.28E-04	0.00E+00	7.24E-04	1.53E-03	0.00E+00	1.56E-04	2.50E-04	0.00E+00	1.19E-04	1.47E-04	0.00E+00
1712	479605.1	3742898	9.03E-04	0.001763	0.00E+00	8.57E-04	1.95E-03	0.00E+00	1.73E-04	3.12E-04	0.00E+00	6.88E-04	1.45E-03	0.00E+00	1.48E-04	2.37E-04	0.00E+00	1.13E-04	1.39E-04	0.00E+00
1713	479596.7	3742882	8.55E-04	0.001669	0.00E+00	8.11E-04	1.85E-03	0.00E+00	1.64E-04	2.95E-04	0.00E+00	6.51E-04	1.38E-03	0.00E+00	1.40E-04	2.25E-04	0.00E+00	1.07E-04	1.32E-04	0.00E+00
1714	479588.4	3742866	8.08E-04	0.001577	0.00E+00	7.66E-04	1.74E-03	0.00E+00	1.55E-04	2.79E-04	0.00E+00	6.15E-04	1.30E-03	0.00E+00	1.32E-04	2.12E-04	0.00E+00	1.01E-04	1.25E-04	0.00E+00
1715	479580	3742850	7.62E-04	0.001487	0.00E+00	7.23E-04	1.64E-03	0.00E+00	1.46E-04	2.63E-04	0.00E+00	5.80E-04	1.23E-03	0.00E+00	1.25E-04	2.00E-04	0.00E+00	9.53E-05	1.18E-04	0.00E+00
1716	479571.6	3742834	7.18E-04	0.001401	0.00E+00	6.81E-04	1.55E-03	0.00E+00	1.38E-04	2.48E-04	0.00E+00	5.46E-04	1.16E-03	0.00E+00	1.17E-04	1.89E-04	0.00E+00	8.98E-05	1.11E-04	0.00E+00
1717	479563.3	3742817	6.76E-04	0.00132	0.00E+00	6.41E-04	1.46E-03	0.00E+00	1.30E-04	2.33E-04	0.00E+00	5.15E-04	1.09E-03	0.00E+00	1.11E-04	1.78E-04	0.00E+00	8.46E-05	1.04E-04	0.00E+00
1718	479554.9	3742801	6.37E-04	0.001243	0.00E+00	6.04E-04	1.38E-03	0.00E+00	1.22E-04	2.20E-04	0.00E+00	4.85E-04	1.03E-03	0.00E+00	1.04E-04	1.67E-04	0.00E+00	7.97E-05	9.83E-05	0.00E+00
1719	479546.6	3742785	6.00E-04	0.001172	0.00E+00	5.70E-04	1.30E-03	0.00E+00	1.15E-04	2.07E-04	0.00E+00	4.57E-04	9.67E-04	0.00E+00	9.83E-05	1.58E-04	0.00E+00	7.51E-05	9.26E-05	0.00E+00
1720	479538.2	3742769	5.67E-04	0.001106	0.00E+00	5.37E-04	1.22E-03	0.00E+00	1.09E-04	1.95E-04	0.00E+00	4.31E-04	9.12E-04	0.00E+00	9.27E-05	1.49E-04	0.00E+00	7.09E-05	8.74E-05	0.00E+00
1721	479529.8	3742753	5.35E-04	0.001045	0.00E+00	5.08E-04	1.16E-03	0.00E+00	1.03E-04	1.85E-04	0.00E+00	4.08E-04	8.62E-04	0.00E+00	8.76E-05	1.41E-04	0.00E+00	6.70E-05	8.26E-05	0.00E+00
1722	479521.5	3742737	5.07E-04	0.000989	0.00E+00	4.81E-04	1.09E-03	0.00E+00	9.72E-05	1.75E-04	0.00E+00	3.86E-04	8.16E-04	0.00E+00	8.29E-05	1.33E-04	0.00E+00	6.34E-05	7.82E-05	0.00E+00
1723	479513.1	3742720	4.80E-04	0.000937	0.00E+00	4.55E-04	1.04E-03	0.00E+00	9.21E-05	1.66E-04	0.00E+00	3.66E-04	7.73E-04	0.00E+00	7.86E-05	1.26E-04	0.00E+00	6.01E-05	7.41E-05	0.00E+00
1724	479589.5	3742965	8.62E-04	0.001683	0.00E+00	8.18E-04	1.86E-03	0.00E+00	1.65E-04	2.97E-04	0.00E+00	6.56E-04	1.39E-03	0.00E+00	1.41E-04	2.26E-04	0.00E+00	1.08E-04	1.33E-04	0.00E+00
1725	479581.2	3742949	8.25E-04	0.00161	0.00E+00	7.82E-04	1.78E-03	0.00E+00	1.58E-04	2.85E-04	0.00E+00	6.28E-04	1.33E-03	0.00E+00	1.35E-04	2.17E-04	0.00E+00	1.03E-04	1.27E-04	0.00E+00
1726	479572.8	3742932	7.87E-04	0.001536	0.00E+00	7.46E-04	1.70E-03	0.00E+00	1.51E-04	2.71E-04	0.00E+00	5.99E-04	1.27E-03	0.00E+00	1.29E-04	2.07E-04	0.00E+00	9.84E-05	1.21E-04	0.00E+00
1727	479564.4	3742916	7.49E-04	0.001462	0.00E+00	7.10E-04	1.62E-03	0.00E+00	1.44E-04	2.58E-04	0.00E+00	5.70E-04	1.21E-03	0.00E+00	1.23E-04	1.97E-04	0.00E+00	9.36E-05	1.16E-04	0.00E+00
1728	479556.1	3742900	7.11E-04	0.001388	0.00E+00	6.74E-04	1.54E-03	0.00E+00	1.36E-04	2.45E-04	0.00E+00	5.41E-04	1.14E-03	0.00E+00	1.16E-04	1.87E-04	0.00E+00	8.89E-05	1.10E-04	0.00E+00
1729	479547.7	3742884	6.74E-04	0.001316	0.00E+00	6.40E-04	1.46E-03	0.00E+00	1.29E-04	2.33E-04	0.00E+00	5.13E-04	1.09E-03	0.00E+00	1.10E-04	1.77E-04	0.00E+00	8.43E-05	1.04E-04	0.00E+00
1730	479539.3	3742868	6.39E-04	0.001247	0.00E+00	6.06E-04	1.38E-03	0.00E+00	1.23E-04	2.20E-04	0.00E+00	4.86E-04	1.03E-03	0.00E+00	1.05E-04	1.68E-04	0.00E+00	7.99E-05	9.86E-05	0.00E+00
1731	479531	3742851	6.05E-04	0.001181	0.00E+00	5.74E-04	1.31E-03	0.00E+00	1.16E-04	2.09E-04	0.00E+00	4.60E-04	9.74E-04	0.00E+00	9.90E-05	1.59E-04	0.00E+00	7.57E-05	9.33E-05	0.00E+00
1732	479522.6	3742835	5.73E-04	0.001118	0.00E+00	5.43E-04	1.24E-03	0.00E+00	1.10E-04	1.98E-04	0.00E+00	4.36E-04	9.22E-04	0.00E+00	9.37E-05	1.50E-04	0.00E+00	7.16E-05	8.84E-05	0.00E+00
1733	479514.3	3742819	5.42E-04	0.001059	0.00E+00	5.15E-04	1.17E-03	0.00E+00	1.04E-04	1.87E-04	0.00E+00	4.13E-04	8.73E-04	0.00E+00	8.88E-05	1.42E-04	0.00E+00	6.79E-05	8.37E-05	0.00E+00
1734	479505.9	3742803	5.14E-04	0.001004	0.00E+00	4.88E-04	1.11E-03	0.00E+00	9.86E-05	1.77E-04	0.00E+00	3.91E-04	8.28E-04	0.00E+00	8.41E-05	1.35E-04	0.00E+00	6.43E-05	7.93E-05	0.00E+00
1735	479497.5	3742787	4.88E-04	0.000953	0.00E+00	4.63E-04	1.05E-03	0.00E+00	9.36E-05	1.68E-04	0.00E+00	3.71E-04	7.86E-04	0.00E+00	7.98E-05	1.28E-04	0.00E+00	6.10E-05	7.53E-05	0.00E+00
1736	479489.2	3742771	4.63E-04	0.000905	0.00E+00	4.40E-04	1.00E-03	0.00E+00	8.89E-05	1.60E-04	0.00E+00	3.53E-04	7.46E-04	0.00E+00	7.58E-05	1.22E-04	0.00E+00	5.80E-05	7.15E-05	0.00E+00
1737	479480.8	3742754	4.41E-04	0.00086	0.00E+00	4.18E-04	9.52E-04	0.00E+00	8.45E-05	1.52E-04	0.00E+00	3.36E-04	7.10E-04	0.00E+00	7.21E-05	1.16E-04	0.00E+00	5.51E-05	6.80E-05	0.00E+00
1738	479472.4	3742738	4.20E-04	0.000819	0.00E+00	3.98E-04	9.06E-04	0.00E+00	8.05E-05	1.45E-04	0.00E+00	3.19E-04	6.76E-04	0.00E+00	6.87E-05	1.10E-04	0.00E+00	5.25E-05	6.48E-05	0.00E+00
1739	479464.1	3742722	4.00E-04	0.000781	0.00E+00	3.80E-04	8.64E-04	0.00E+00	7.67E-05	1.38E-04	0.00E+00	3.05E-04	6.44E-04	0.00E+00	6.55E-05	1.05E-04	0.00E+00	5.00E-05	6.17E-05	0.00E+00
1740	479556.8	3742998	7.52E-04	0.001468	0.00E+00	7.13E-04	1.62E-03	0.00E+00	1.44E-04	2.59E-04	0.00E+00	5.72E-04	1.21E-03	0.00E+00	1.23E-04	1.97E-04	0.00E+00	9.40E-05	1.16E-04	0.00E+00
1741	479548.4	3742982	7.21E-04	0.001409	0.00E+00	6.84E-04	1.56E-03	0.00E+00	1.38E-04	2.49E-04	0.00E+00	5.49E-04	1.16E-03	0.00E+00	1.18E-04	1.90E-04	0.00E+00	9.03E-05	1.11E-04	0.00E+00
1742	479540	3742965	6.91E-04	0.001349	0.00E+00	6.55E-04	1.49E-03	0.00E+00	1.33E-04	2.38E-04	0.00E+00	5.26E-04	1.11E-03	0.00E+00	1.13E-04	1.82E-04	0.00E+00	8.64E-05	1.07E-04	0.00E+00
1743	479531.7	3742949	6.60E-04	0.001289	0.00E+00	6.26E-04	1.43E-03	0.00E+00	1.27E-04	2.28E-04	0.00E+00	5.03E-04	1.06E-03	0.00E+00	1.08E-04	1.73E-04	0.00E+00	8.26E-05	1.02E-04	0.00E+00
1744	479523.3	3742933	6.30E-04	0.00123	0.00E+00	5.98E-04	1.36E-03	0.00E+00	1.21E-04	2.17E-04	0.00E+00	4.80E-04	1.01E-03	0.00E+00	1.03E-04	1.65E-04	0.00E+00	7.88E-05	9.72E-05	0.00E+00
1745	479515	3742917	6.00E-04	0.001172	0.00E+00	5.69E-04	1.30E-03	0.00E+00	1.15E-04	2.07E-04	0.00E+00	4.57E-04	9.66E-04	0.00E+00	9.82E-05	1.58E-04	0.00E+00	7.51E-05	9.26E-05	0.00E+00
1746	479506.6	3742901	5.71E-04	0.001115	0.00E+00	5.42E-04	1.23E-03	0.00E+00	1.10E-04	1.97E-04	0.00E+00	4.35E-04	9.20E-04	0.00E+00	9.35E-05	1.50E-04	0.00E+00	7.14E-05	8.81E-05	0.00E+00
1747	479498.2	3742885	5.43E-04	0.001061	0.00E+00	5.15E-04	1.17E-03	0.00E+00	1.04E-04	1.87E-04	0.00E+00	4.14E-04	8.75E-04	0.00E+00	8.89E-05	1.43E-04	0.00E+00	6.80E-05	8.38E-05	0.00E+00
1748	479489.9	3742868	5.17E-04	0.001009	0.00E+00	4.90E-04	1.12E-03	0.00E+00	9.91E-05	1.78E-04	0.00E+00	3.93E-04	8.32E-04	0.00E+00	8.45E-05	1.36E-04	0.00E+00	6.46E-05	7.97E-05	0.00E+00
1749	479481.5	3742852	4.91E-04	0.000959	0.00E+00	4.66E-04	1.06E-03	0.00E+00	9.42E-05	1.70E-04	0.00E+00	3.74E-04	7.91E-04	0.00E+00	8.04E-05	1.29E-04	0.00E+00	6.15E-05	7.58E-05	0.00E+00
1750	479473.1	3742836	4.68E-04	0.000913	0.00E+00	4.44E-04	1.01E-03	0.00E+00	8.97E-05	1.61E-04	0.00E+00	3.56E-04

1790	479416.3	3742919	4.10E-04	0.0008	0.00E+00	3.89E-04	8.85E-04	0.00E+00	7.86E-05	1.41E-04	0.00E+00	3.12E-04	6.60E-04	0.00E+00	6.70E-05	1.08E-04	0.00E+00	5.13E-05	6.32E-05	0.00E+00
1791	479407.9	3742903	3.92E-04	0.000766	0.00E+00	3.72E-04	8.47E-04	0.00E+00	7.53E-05	1.35E-04	0.00E+00	2.99E-04	6.32E-04	0.00E+00	6.42E-05	1.03E-04	0.00E+00	4.91E-05	6.05E-05	0.00E+00
1792	479399.5	3742887	3.76E-04	0.000734	0.00E+00	3.57E-04	8.12E-04	0.00E+00	7.21E-05	1.30E-04	0.00E+00	2.86E-04	6.05E-04	0.00E+00	6.15E-05	9.88E-05	0.00E+00	4.70E-05	5.80E-05	0.00E+00
1793	479391.2	3742870	3.60E-04	0.000704	0.00E+00	3.42E-04	7.78E-04	0.00E+00	6.91E-05	1.24E-04	0.00E+00	2.74E-04	5.80E-04	0.00E+00	5.90E-05	9.47E-05	0.00E+00	4.51E-05	5.56E-05	0.00E+00
1794	479382.8	3742854	3.46E-04	0.000675	0.00E+00	3.28E-04	7.47E-04	0.00E+00	6.63E-05	1.19E-04	0.00E+00	2.63E-04	5.57E-04	0.00E+00	5.66E-05	9.08E-05	0.00E+00	4.32E-05	5.33E-05	0.00E+00
1795	479374.5	3742838	3.32E-04	0.000648	0.00E+00	3.15E-04	7.17E-04	0.00E+00	6.36E-05	1.14E-04	0.00E+00	2.53E-04	5.34E-04	0.00E+00	5.43E-05	8.72E-05	0.00E+00	4.15E-05	5.12E-05	0.00E+00
1796	479366.1	3742822	3.19E-04	0.000622	0.00E+00	3.02E-04	6.88E-04	0.00E+00	6.11E-05	1.10E-04	0.00E+00	2.43E-04	5.13E-04	0.00E+00	5.22E-05	8.37E-05	0.00E+00	3.99E-05	4.92E-05	0.00E+00
1797	479357.7	3742806	3.06E-04	0.000599	0.00E+00	2.91E-04	6.62E-04	0.00E+00	5.88E-05	1.06E-04	0.00E+00	2.33E-04	4.94E-04	0.00E+00	5.02E-05	8.05E-05	0.00E+00	3.83E-05	4.73E-05	0.00E+00
1798	479349.4	3742790	2.95E-04	0.000576	0.00E+00	2.80E-04	6.37E-04	0.00E+00	5.66E-05	1.02E-04	0.00E+00	2.25E-04	4.75E-04	0.00E+00	4.83E-05	7.75E-05	0.00E+00	3.69E-05	4.55E-05	0.00E+00
1799	479341	3742773	2.84E-04	0.000555	0.00E+00	2.70E-04	6.14E-04	0.00E+00	5.45E-05	9.80E-05	0.00E+00	2.16E-04	4.57E-04	0.00E+00	4.65E-05	7.46E-05	0.00E+00	3.55E-05	4.38E-05	0.00E+00
1800	479332.6	3742757	2.74E-04	0.000535	0.00E+00	2.60E-04	5.91E-04	0.00E+00	5.25E-05	9.45E-05	0.00E+00	2.09E-04	4.41E-04	0.00E+00	4.48E-05	7.19E-05	0.00E+00	3.43E-05	4.23E-05	0.00E+00
1801	479324.3	3742741	2.64E-04	0.000516	0.00E+00	2.51E-04	5.71E-04	0.00E+00	5.07E-05	9.12E-05	0.00E+00	2.01E-04	4.25E-04	0.00E+00	4.32E-05	6.94E-05	0.00E+00	3.30E-05	4.08E-05	0.00E+00
1802	479315.9	3742725	2.55E-04	0.000498	0.00E+00	2.42E-04	5.51E-04	0.00E+00	4.89E-05	8.80E-05	0.00E+00	1.94E-04	4.11E-04	0.00E+00	4.17E-05	6.70E-05	0.00E+00	3.19E-05	3.93E-05	0.00E+00
1803	479477.5	3743134	5.66E-04	0.001105	0.00E+00	5.37E-04	1.22E-03	0.00E+00	1.09E-04	1.95E-04	0.00E+00	4.31E-04	9.11E-04	0.00E+00	9.26E-05	1.49E-04	0.00E+00	7.08E-05	8.73E-05	0.00E+00
1804	479469.1	3743118	5.50E-04	0.001073	0.00E+00	5.21E-04	1.19E-03	0.00E+00	1.05E-04	1.90E-04	0.00E+00	4.18E-04	8.85E-04	0.00E+00	8.99E-05	1.44E-04	0.00E+00	6.88E-05	8.48E-05	0.00E+00
1805	479460.8	3743102	5.33E-04	0.001041	0.00E+00	5.06E-04	1.15E-03	0.00E+00	1.02E-04	1.84E-04	0.00E+00	4.06E-04	8.58E-04	0.00E+00	8.72E-05	1.40E-04	0.00E+00	6.67E-05	8.22E-05	0.00E+00
1806	479452.4	3743085	5.16E-04	0.001007	0.00E+00	4.89E-04	1.11E-03	0.00E+00	9.89E-05	1.78E-04	0.00E+00	3.93E-04	8.31E-04	0.00E+00	8.44E-05	1.35E-04	0.00E+00	6.45E-05	7.96E-05	0.00E+00
1807	479444	3743069	4.98E-04	0.000973	0.00E+00	4.73E-04	1.08E-03	0.00E+00	9.56E-05	1.72E-04	0.00E+00	3.79E-04	8.02E-04	0.00E+00	8.16E-05	1.31E-04	0.00E+00	6.23E-05	7.69E-05	0.00E+00
1808	479435.7	3743053	4.81E-04	0.000939	0.00E+00	4.56E-04	1.04E-03	0.00E+00	9.22E-05	1.66E-04	0.00E+00	3.66E-04	7.74E-04	0.00E+00	7.87E-05	1.26E-04	0.00E+00	6.01E-05	7.42E-05	0.00E+00
1809	479427.3	3743037	4.63E-04	0.000905	0.00E+00	4.39E-04	1.00E-03	0.00E+00	8.89E-05	1.60E-04	0.00E+00	3.53E-04	7.46E-04	0.00E+00	7.58E-05	1.22E-04	0.00E+00	5.80E-05	7.15E-05	0.00E+00
1810	479418.9	3743021	4.46E-04	0.000871	0.00E+00	4.23E-04	9.63E-04	0.00E+00	8.55E-05	1.54E-04	0.00E+00	3.39E-04	7.18E-04	0.00E+00	7.30E-05	1.17E-04	0.00E+00	5.58E-05	6.88E-05	0.00E+00
1811	479410.6	3743004	4.29E-04	0.000837	0.00E+00	4.07E-04	9.26E-04	0.00E+00	8.22E-05	1.48E-04	0.00E+00	3.26E-04	6.90E-04	0.00E+00	7.02E-05	1.13E-04	0.00E+00	5.36E-05	6.62E-05	0.00E+00
1812	479402.2	3742988	4.12E-04	0.000804	0.00E+00	3.91E-04	8.90E-04	0.00E+00	7.90E-05	1.42E-04	0.00E+00	3.14E-04	6.63E-04	0.00E+00	6.74E-05	1.08E-04	0.00E+00	5.15E-05	6.36E-05	0.00E+00
1813	479393.8	3742972	3.96E-04	0.000773	0.00E+00	3.75E-04	8.55E-04	0.00E+00	7.59E-05	1.37E-04	0.00E+00	3.01E-04	6.37E-04	0.00E+00	6.48E-05	1.04E-04	0.00E+00	4.95E-05	6.11E-05	0.00E+00
1814	479385.5	3742956	3.80E-04	0.000742	0.00E+00	3.60E-04	8.21E-04	0.00E+00	7.29E-05	1.31E-04	0.00E+00	2.89E-04	6.12E-04	0.00E+00	6.22E-05	9.98E-05	0.00E+00	4.75E-05	5.86E-05	0.00E+00
1815	479377.1	3742940	3.65E-04	0.000712	0.00E+00	3.46E-04	7.88E-04	0.00E+00	7.00E-05	1.26E-04	0.00E+00	2.78E-04	5.88E-04	0.00E+00	5.97E-05	9.59E-05	0.00E+00	4.56E-05	5.63E-05	0.00E+00
1816	479368.7	3742923	3.50E-04	0.000684	0.00E+00	3.32E-04	7.57E-04	0.00E+00	6.72E-05	1.21E-04	0.00E+00	2.67E-04	5.64E-04	0.00E+00	5.74E-05	9.21E-05	0.00E+00	4.38E-05	5.41E-05	0.00E+00
1817	479360.4	3742907	3.37E-04	0.000658	0.00E+00	3.19E-04	7.27E-04	0.00E+00	6.46E-05	1.16E-04	0.00E+00	2.56E-04	5.42E-04	0.00E+00	5.51E-05	8.85E-05	0.00E+00	4.21E-05	5.20E-05	0.00E+00
1818	479352	3742891	3.24E-04	0.000632	0.00E+00	3.07E-04	6.99E-04	0.00E+00	6.21E-05	1.12E-04	0.00E+00	2.46E-04	5.21E-04	0.00E+00	5.30E-05	8.50E-05	0.00E+00	4.05E-05	5.00E-05	0.00E+00
1819	479343.6	3742875	3.11E-04	0.000608	0.00E+00	2.95E-04	6.72E-04	0.00E+00	5.97E-05	1.07E-04	0.00E+00	2.37E-04	5.01E-04	0.00E+00	5.10E-05	8.18E-05	0.00E+00	3.89E-05	4.80E-05	0.00E+00
1820	479335.3	3742859	3.00E-04	0.000585	0.00E+00	2.84E-04	6.47E-04	0.00E+00	5.75E-05	1.03E-04	0.00E+00	2.28E-04	4.83E-04	0.00E+00	4.90E-05	7.87E-05	0.00E+00	3.75E-05	4.62E-05	0.00E+00
1821	479326.9	3742843	2.89E-04	0.000564	0.00E+00	2.74E-04	6.23E-04	0.00E+00	5.54E-05	9.96E-05	0.00E+00	2.20E-04	4.65E-04	0.00E+00	4.72E-05	7.58E-05	0.00E+00	3.61E-05	4.45E-05	0.00E+00
1822	479318.5	3742826	2.78E-04	0.000543	0.00E+00	2.64E-04	6.01E-04	0.00E+00	5.34E-05	9.60E-05	0.00E+00	2.12E-04	4.48E-04	0.00E+00	4.55E-05	7.31E-05	0.00E+00	3.48E-05	4.29E-05	0.00E+00
1823	479310.2	3742810	2.68E-04	0.000524	0.00E+00	2.55E-04	5.80E-04	0.00E+00	5.15E-05	9.26E-05	0.00E+00	2.04E-04	4.32E-04	0.00E+00	4.39E-05	7.05E-05	0.00E+00	3.36E-05	4.14E-05	0.00E+00
1824	479301.8	3742794	2.59E-04	0.000506	0.00E+00	2.46E-04	5.60E-04	0.00E+00	4.97E-05	8.94E-05	0.00E+00	1.97E-04	4.17E-04	0.00E+00	4.24E-05	6.81E-05	0.00E+00	3.24E-05	4.00E-05	0.00E+00
1825	479293.4	3742778	2.50E-04	0.000489	0.00E+00	2.37E-04	5.41E-04	0.00E+00	4.80E-05	8.64E-05	0.00E+00	1.91E-04	4.03E-04	0.00E+00	4.10E-05	6.58E-05	0.00E+00	3.13E-05	3.86E-05	0.00E+00
1826	479285.1	3742762	2.42E-04	0.000472	0.00E+00	2.30E-04	5.23E-04	0.00E+00	4.64E-05	8.35E-05	0.00E+00	1.84E-04	3.90E-04	0.00E+00	3.96E-05	6.36E-05	0.00E+00	3.03E-05	3.73E-05	0.00E+00
1827	479276.7	3742745	2.34E-04	0.000457	0.00E+00	2.22E-04	5.05E-04	0.00E+00	4.49E-05	8.07E-05	0.00E+00	1.78E-04	3.77E-04	0.00E+00	3.83E-05	6.15E-05	0.00E+00	2.93E-05	3.61E-05	0.00E+00
1828	479268.3	3742729	2.26E-04	0.000442	0.00E+00	2.15E-04	4.89E-04	0.00E+00	4.34E-05	7.81E-05	0.00E+00	1.72E-04	3.65E-04	0.00E+00	3.71E-05	5.95E-05	0.00E+00	2.83E-05	3.49E-05	0.00E+00
1829	479260	3742713	2.19E-04	0.000428	0.00E+00	2.08E-04	4.74E-04	0.00E+00	4.21E-05	7.57E-05	0.00E+00	1.67E-04	3.53E-04	0.00E+00	3.59E-05	5.76E-05	0.00E+00	2.74E-05	3.38E-05	0.00E+00
1830	479451.4	3743180	5.20E-04	0.001015	0.00E+00	4.93E-04	1.12E-03	0.00E+00	9.97E-05	1.79E-04	0.00E+00	3.96E-04	8.37E-04	0.00E+00	8.50E-05	1.36E-04	0.00E+00	6.50E-05	8.02E-05	0.00E+00
1831	479443	3743164	5.06E-04	0.000988	0.00E+00	4.80E-04	1.09E-03	0.00E+00	9.71E-05	1.75E-04	0.00E+00	3.85E-04	8.15E-04	0.00E+00	8.29E-05	1.33E-04	0.00E+00	6.33E-05	7.81E-05	0.00E+00
1832	479434.7	3743148	4.92E-04	0.000961	0.00E+00	4.67E-04	1.06E-03	0.00E+00	9.44E-05	1.70E-04	0.00E+00	3.75E-04	7.93E-04	0.00E+00	8.06E-05	1.29E-04	0.00E+00	6.16E-05	7.60E-05	0.00E+00
1833	479426.3	3743131	4.78E-04	0.000933	0.00E+00	4.54E-04	1.03E-03	0.00E+00	9.17E-05	1.65E-04	0.00E+00	3.64E-04	7.70E-04	0.00E+00	7.82E-05	1.26E-04	0.00E+00	5.98E-05	7.38E-05	0.00E+00
1834	479418	3743115	4.63E-04	0.000905	0.00E+00	4.40E-04	1.00E-03	0.00E+00	8.89E-05	1.60E-04	0.00E+00	3.53E-04	7.46E-04	0.00E+00	7.58E-05	1.22E-04	0.00E+00	5.80E-05	7.15E-05	0.00E+00
1835	479409.6	3743099	4.49E-04	0.000876	0.00E+00	4.26E-04	9.69E-04	0.00E+00	8.60E-05	1.55E-04	0.00E+00	3.42E-04	7.22E-04	0.00E+00	7.34E-05	1.18E-04	0.00E+00	5.61E-05	6.92E-05	0.00E+00
1836	479401.2	3743083	4.34E-04	0.000847	0.00E+00	4.11E-04	9.37E-04	0.00E+00	8.32E-05	1.50E-04	0.00E+00	3.30E-04	6.98E-04	0.00E+00	7.10E-05	1.14E-04	0.00E+00	5.43E-05	6.69E-05	0.00E+00
1837	479392.9	3743067	4.19E-04	0.000818	0.00E+00	3.97E-04	9.04E-04	0.00E+00	8.03E-05	1.45E-04	0.00E+00	3.19E-04	6.74E-04	0.00E+00	6.85E-05	1.10E-04	0.00E+00	5.24E-05	6.46E-05	0.00E+00
1838	479384.5	3743050	4.04E-04	0.000789	0.00E+00	3.83E-04	8.72E-04	0.00E+00	7.75E-05	1.39E-04	0.00E+00	3.08E-04	6.50E-04	0.00E+00	6.61E-05	1.06E-04	0.00E+00	5.05E-05	6.23E-05	0.00E+00
1839	479376.1	3743034	3.89E-04	0.00076	0.00E+00	3.69E-04	8.41E-04	0.00E+00	7.47E-05	1.34E-04	0.00E+00	2.96E-04	6.27E-04	0.00E+00	6.37E-05	1.02E-04	0.00E+00	4.87E-05	6.01E-05	0.00E+00
1840	479367.8	3743018	3.75E-04	0.000732	0.00E+00	3.56E-04	8.10E-04	0.00E+00	7.19E-05	1.29E-04	0.00E+00	2.86E-04	6.04E-04	0.00E+00	6.14E-05	9.85E-05	0.00E+00	4.69E-05	5.79E-05	0.00E+00
1841	479359.4	3743002	3.61E-04	0.000705	0.00E+00	3.43E-04	7.80E-04	0.00E+00	6.93E-05	1.25E-04	0.00E+00	2.75E-04	5.82E-04	0.00E+00	5.91E-05	9.49E-05	0.00E+00	4.52E-05	5.57E-05	0.00E+00
1842	479351	3742986	3.48E-04	0.000679	0.00E+00	3.30E-04	7.51E-04	0.00E+00	6.67E-05	1.20E-04	0.00E+00	2.65E-04	5.60E-04	0.00E+00	5.69E-05	9.13E-05	0.00E+00	4.35E-05	5.37E-05	0.00E+00
1843	479342.7	3742970	3.35E-04	0.000653	0.00E+00	3.17E-04	7.23E-04	0.00E+00	6.42E-05	1.15E-04	0.00E+00	2.55E-04	5.39E-04	0.00E+00	5.48E-05	8.79E-05	0.00E+00	4.19E-05	5.16E-05	0.00E+00
1844	479334.3	3742953	3.22E-04	0.000629	0.00E+00	3.06E-04	6.96E-04	0.00E+00	6.18E-05	1.11E-04	0.00E+00	2.45E-04	5.19E-04	0.00E+00	5.27E-05	8.46E-05	0.00E+00	4.03E-05	4.97E-05	0.00E+00
1845	479326	3742937	3.10E-04	0.000606	0.00E+00	2.94E-04	6.70E-04	0.00E+00	5.95E-05	1.07E-04	0.00E+00	2.36E-04	5.00E-04	0.00E+00	5.08E-05	8.15E-05	0.00E+00	3.88E-05	4.79E-05	0.00E+00
1846	479317.6	3742921	2.99E-04	0.000584	0.00E+00	2.84E-04	6.46E-04	0.00E+00	5.73E-05	1.03E-04	0.00E+00	2.28E-04	4.81E-04	0.00E+00	4.89E-05	7.85E-05	0.00E+00	3.74E-05	4.61E-05	0.00E+00
1847	479309.2	3742905	2.88E-04	0.000563	0.00E+00	2.73E-04	6.22E-04	0.00E+00	5.53E-05	9.94E-05	0.00E+00	2.19E-04	4.64E-04	0.00E+00	4.72E-05	7.57E-05	0.00E+00	3.60E-05	4.45E-05	0.00E+00
1848	479300.9	3742889	2.78E-04	0.000543	0.00E+00	2.64E-04	6.00E-04	0.00E+00	5.33E-05	9.59E-05	0.00E+00	2.12E-04	4.48E-04	0.00E+00	4.55E-05	7.30E-05	0.00E+00	3.48E-05	4.29E-05	0.00E+00
1849	479292.5	3742872	2.68E-04	0.000524	0.00E+00	2.54E-04	5.79E-04	0.00E+00	5.14E-05	9.25E-05	0.00E+00	2.04E-04	4.32E-04	0.00E+00	4.39E-05	7.05E-05	0.00E+00	3.36E-05	4.14E-05	0.00E+00
1850	479284.1	3742856	2.59E-04	0.000506	0.00E+00	2.46E-04	5.59E-04	0.00E+00	4.97E-05	8.94E-05	0.00E+00	1.97E-04	4.17E-04	0.00E+00	4.24E-05	6.80E-05	0.00E+00	3.24E-05	4.00E-05	0.00E+00
1851	479275.8	3742840	2.50E-04	0.000489	0.00E+00	2.37E-04	5.41E-04	0.00E+00	4.80E-05	8.64E-05	0.00E+00	1.91E-04	4.03E-04	0.00E+00	4.10E-05	6.58E-05	0.00E+00	3.13E-05	3.86E-05	0.00E+00
1852	479267.4	3742824	2.42E-04	0.000473	0.00E+00	2.30E-04	5.23E-04	0.00E+00	4.64E-05	8.35E-05	0.00E+00	1.84E-04	3.90E-04	0.00E+00	3.96E-05	6.36E-05	0.00E+00	3.03E-05	3.74E-05	0.00E+00
1853	479259	3742808	2.34E-04	0.000457	0.00E+00	2.22E-04	5.06E-04	0.00E+00	4.49E-05	8.08E-05	0.00E+00	1.78E-04	3.77E-04	0.00E+00	3.83E-05	6.15E-05	0.00E+00	2.93E-05	3.61E-05	0.00E+00
1854	479250.7	3742792	2.27E-04	0.000443	0.00E+00	2.15E-04	4.90E-04	0.00E+00	4.35E-05	7.83E-05	0.00E+00	1.73E-04	3.65E-04	0.00E+00	3.71E-05	5.96E-05	0.00E+00	2.84E-05	3.50E-05	0.00E+00
1855	479242.3	3742775	2.20E-04	0.000429	0.00E+00	2.08E-04	4.75E-04	0.00E+00	4.21E-05	7.58E-05	0.00E+00	1.67E-04	3.54E-04	0.00E+00	3.60E-05	5.77E-05	0.00E+00	2.75E-05	3.39E-05	0.00E+00
1856	479233.9	3742759	2.13E-04	0.000416	0.00E+00	2.02E-04	4.60E-04	0.00E+00	4.08E-05	7.35E-05	0.00E+00	1.62E-04	3.43E-04	0.00E+00	3.49E-05	5.59E-05	0.00E+00	2.66E-05	3.29E-05	0.00E+00
1857	479225.6	3742743	2.06E-04	0.000403	0.00E+00	1.96E-04	4.46E-04	0.00E+00	3.96E-05	7.13E-05	0.00E+00	1.57E-04	3.33E-04	0.00E+00	3.38E-05	5.42E-05	0.00E+00	2.58E-05	3.19E-05	0.00E+00
1858	479217.2	3742727	2.00E-04	0.000391	0.00E+00	1.90E-04	4.33E-04	0.00E+00	3.84E-05	6.91E-05	0.00E+00	1.53E-04	3.23E-04	0.00E+00	3.28E-05	5.26E-05	0.00E+00	2.51E-05	3.09E-05	0.00E+00
1859	479208.9	3742711	1.94E-04	0.00038	0.00E+00	1.84E-04	4.20E-04	0.00E+00	3.73E-05	6.71E-05	0.00E+00	1.48E-04	3.13E-04	0.00E+00	3.18E-05	5.11E-05	0.00E+00	2.43E-05	3.00E-05	0.00E+00
1860	479427.7	3743231	4.82E-04	0.000941	0.00E+00	4.57E-04	1.04E-03	0.00E+00	9.24E-05	1.66E-04	0.00E+00	3.67E-04	7.76E-04	0.00E+00	7.89E-05	1.27E-04	0.00E+00	6.03E-05	7.44E-05	0.00E+00
1861	479419.3	3743214	4.71E-04	0.00092	0.00E+00	4.47E-04	1.02E-03	0.00E+00	9.03E-05	1.63E-04	0.00E+00	3.59E-04	7.58E-04	0.00E+00	7.71E-05	1.24E-04	0.00E+00	5.89E-05	7.27E-05	0.00E+00
1862	479411	3743198	4.60E-04	0.000897	0.00E+00	4.36E-04	9.93E-04	0.00E+00	8.81E-05	1.59E-04	0.00E+00	3.50E-04	7.40E-04	0.00E+00	7.52E-05	1.21E-04	0.00E+00	5.75E-05	7.09E-05	0.00E+00
1863	479402.6	3743182	4.48E-04	0.000874	0.00E+00	4.25E-04	9.67E-04	0.00E+00	8.59E-05	1.54E-04	0.00E+00	3.41E-04	7.21E-04	0.00E+00	7.33E-05	1.18E-04	0.00E+00	5.60E-05	6.91E-05	0.00E+00
1864	479394.2	3743166	4.35E-04	0.00085	0.00E+00	4.13E-04	9.40E-04	0.00E+00	8.35E-05	1.50E-04	0.00E+00	3.31E-04	7.01E-04	0.00E+00	7.12E-05	1.14E-04	0.00E+00	5.45E-05	6.72E-05	0.00E+00
1865	479385.9	3743150	4.23E-04	0.000826	0.00E+00	4.01E-04	9.13E-04	0.00E+00	8.11E-05	1.46E-04	0.00E+00	3.22E-04	6.81E-04	0.00E+00	6.92E-05	1.11E-04	0.00E+00	5.29E-05	6.52E-05	0.00E+00
1866	479377.5	3743133	4.10E-04	0.000801	0.00E+00	3.89E-04	8.86E-04	0.00E+00	7.86E-05	1.41E-04	0.00E+00	3.12E-04	6.60E-04	0.00E+00	6.71E-05	1.08E-04	0.00E+00	5.13E-05	6.33E-05	0.00E+00
1867	479369.1	3743117	3.97E-04	0.000776	0.00E+00	3.77E-04	8.58E-04	0.00E+00	7.62E-05	1.37E-04	0.00E+00	3.02E-04	6.40E-04	0.00E+00	6.50E-05	1.04E-04	0.00E+00	4.97E-05	6.13E-05	0.00E+00
1868	479360.8	3743101	3.84E-04	0.000751	0.00E+00	3.65E-04	8.30E-04	0.00E+00	7.37E-05	1.33E-04	0.00E+00	2.93E-04	6.19E-04	0.00E+00	6.29E-05	1.01E-04	0.00E+00	4.81E-05	5.93E-05	0.00E+00
1869	479352.4	3743085	3.72E-04	0.000726	0.00E+00	3.53E-04	8.03E-04	0.00E+00	7.13E-05	1.28E-04	0.00E+00	2.83E-04	5.98E-04	0.00E+00	6.08E-05	9.76E-05	0.00E+00	4.65E-05	5.73E-05	0.00E+00
1870	479344	3743069	3.59E-04	0.000701	0.00E+00	3.41E-04	7.75E-04	0.00E+00	6.89E-05	1.24E-04	0.00E+00	2.73E-04	5.78E-04	0.00E+00	5.88E-05	9.43E-05	0.00E+00	4.49E-05	5.54E-05	0.00E+00
1871	479335.7	3743052	3.47E-04	0.000677	0.00E+00	3.29E-04	7.49E-04	0.00E+00	6.65E-05	1.20E-04	0.00E+00	2.64E-04	5.58E-04	0.00E+00	5.67E-05	9.11E-05	0.00E+00	4.34E-05	5.35E-05	0.00E+00
1872	479327.3	3743036	3.35E-04	0.000653	0.00E+00	3.17E-04	7.23E-04	0.00E+00	6.42E-05	1.15E-04	0.00E+00	2.55E-04	5.39E-04	0.00E+00	5.48E-05	8.79E-05	0.00E+00	4.19E-05	5.16E-05	0.00E+00
1873	479318.9	3743020	3.23E-04	0.00063	0.00E+00	3.06E-04	6.97E-04	0.00E+00	6.19E-05	1.11E-04	0.00E+00	2.46E-04	5.20E-04	0.00E+00	5.28E-05	8.48E-05	0.00E+00	4.04E-05	4.98E-05	0.00E+00
1874	479310.6	3743004	3.11E-04	0.000608	0.00E+00	2.95E-04	6.72E-04	0.00E+00	5.97E-05	1.07E-04	0.00E+00	2.37E-04	5.01E-04	0.00E+00	5.10E-05	8.18E-05	0.00E+00	3.89E-05	4.80E-05	0.00E+00
1875	479302.2	3742988	3.00E-04	0.000586	0.00E+00	2.85E-04	6.49E-04	0.00E+00	5.76E-05	1.04E-04	0.00E+00	2.29E-04	4.84E-04	0.00E+00	4.91E-05	7.89E-05	0.00E+00	3.76E-05	4.63E-05	0.00E+00
1876	479293.8	3742972	2.90E-04	0.000566	0.00E+00	2.75E-04	6.26E-04	0.00E+00	5.56E-05	1.00E-04	0.00E+00	2.21E-04	4.67E-04	0.00E+00	4.74E-05	7.61E-05	0.00E+00	3.62E-05	4.47E-05	0.00E+00
1877	479285.5	3742955	2.80E-04	0.000546	0.00E+00	2.65E-04	6.04E-04	0.00E+00	5.36E-05	9.65E-05	0.00E+00	2.13E-04	4.50E-04	0.00E+00	4.58E-05	7.35E-05	0.00E+00	3.50E-05	4.31E-05	0.00E+00
1878	479277.1	3742939	2.70E-04	0.000527	0.00E+00	2.56E-04	5.83E-04	0.00E+00	5.18E-05	9.32E-05	0.00E+00	2.06E-04	4.35E-04

1918	479194.5	3742876	2.10E-04	0.000409	0.00E+00	1.99E-04	4.53E-04	0.00E+00	4.02E-05	7.23E-05	0.00E+00	1.60E-04	3.37E-04	0.00E+00	3.43E-05	5.51E-05	0.00E+00	2.62E-05	3.23E-05	0.00E+00
1919	479186.2	3742860	2.03E-04	0.000397	0.00E+00	1.93E-04	4.39E-04	0.00E+00	3.90E-05	7.02E-05	0.00E+00	1.55E-04	3.28E-04	0.00E+00	3.33E-05	5.34E-05	0.00E+00	2.54E-05	3.14E-05	0.00E+00
1920	479177.8	3742844	1.98E-04	0.000386	0.00E+00	1.87E-04	4.27E-04	0.00E+00	3.79E-05	6.82E-05	0.00E+00	1.50E-04	3.18E-04	0.00E+00	3.23E-05	5.19E-05	0.00E+00	2.47E-05	3.05E-05	0.00E+00
1921	479169.5	3742827	1.92E-04	0.000375	0.00E+00	1.82E-04	4.15E-04	0.00E+00	3.68E-05	6.62E-05	0.00E+00	1.46E-04	3.09E-04	0.00E+00	3.14E-05	5.04E-05	0.00E+00	2.40E-05	2.96E-05	0.00E+00
1922	479161.1	3742811	1.87E-04	0.000364	0.00E+00	1.77E-04	4.03E-04	0.00E+00	3.58E-05	6.44E-05	0.00E+00	1.42E-04	3.01E-04	0.00E+00	3.05E-05	4.90E-05	0.00E+00	2.33E-05	2.88E-05	0.00E+00
1923	479152.7	3742795	1.81E-04	0.000354	0.00E+00	1.72E-04	3.92E-04	0.00E+00	3.48E-05	6.26E-05	0.00E+00	1.38E-04	2.92E-04	0.00E+00	2.97E-05	4.77E-05	0.00E+00	2.27E-05	2.80E-05	0.00E+00
1924	479144.4	3742779	1.77E-04	0.000345	0.00E+00	1.68E-04	3.81E-04	0.00E+00	3.39E-05	6.09E-05	0.00E+00	1.34E-04	2.84E-04	0.00E+00	2.89E-05	4.64E-05	0.00E+00	2.21E-05	2.73E-05	0.00E+00
1925	479136	3742763	1.72E-04	0.000336	0.00E+00	1.63E-04	3.71E-04	0.00E+00	3.30E-05	5.93E-05	0.00E+00	1.31E-04	2.77E-04	0.00E+00	2.81E-05	4.52E-05	0.00E+00	2.15E-05	2.65E-05	0.00E+00
1926	479127.6	3742746	1.67E-04	0.000327	0.00E+00	1.59E-04	3.61E-04	0.00E+00	3.21E-05	5.77E-05	0.00E+00	1.27E-04	2.69E-04	0.00E+00	2.74E-05	4.40E-05	0.00E+00	2.09E-05	2.58E-05	0.00E+00
1927	479119.3	3742730	1.63E-04	0.000318	0.00E+00	1.55E-04	3.52E-04	0.00E+00	3.13E-05	5.62E-05	0.00E+00	1.24E-04	2.62E-04	0.00E+00	2.67E-05	4.28E-05	0.00E+00	2.04E-05	2.51E-05	0.00E+00
1928	479110.9	3742714	1.59E-04	0.00031	0.00E+00	1.51E-04	3.43E-04	0.00E+00	3.05E-05	5.48E-05	0.00E+00	1.21E-04	2.56E-04	0.00E+00	2.60E-05	4.17E-05	0.00E+00	1.99E-05	2.45E-05	0.00E+00
1929	479372.3	3743316	4.10E-04	0.000801	0.00E+00	3.89E-04	8.86E-04	0.00E+00	7.87E-05	1.42E-04	0.00E+00	3.12E-04	6.61E-04	0.00E+00	6.71E-05	1.08E-04	0.00E+00	5.13E-05	6.33E-05	0.00E+00
1930	479364	3743300	4.02E-04	0.000786	0.00E+00	3.82E-04	8.69E-04	0.00E+00	7.72E-05	1.39E-04	0.00E+00	3.06E-04	6.48E-04	0.00E+00	6.58E-05	1.06E-04	0.00E+00	5.03E-05	6.21E-05	0.00E+00
1931	479355.6	3743284	3.94E-04	0.000769	0.00E+00	3.74E-04	8.51E-04	0.00E+00	7.56E-05	1.36E-04	0.00E+00	3.00E-04	6.34E-04	0.00E+00	6.45E-05	1.03E-04	0.00E+00	4.93E-05	6.08E-05	0.00E+00
1932	479347.2	3743268	3.85E-04	0.000752	0.00E+00	3.65E-04	8.32E-04	0.00E+00	7.39E-05	1.33E-04	0.00E+00	2.93E-04	6.20E-04	0.00E+00	6.30E-05	1.01E-04	0.00E+00	4.82E-05	5.94E-05	0.00E+00
1933	479338.9	3743252	3.76E-04	0.000735	0.00E+00	3.57E-04	8.12E-04	0.00E+00	7.22E-05	1.30E-04	0.00E+00	2.86E-04	6.06E-04	0.00E+00	6.16E-05	9.88E-05	0.00E+00	4.71E-05	5.81E-05	0.00E+00
1934	479330.5	3743235	3.67E-04	0.000716	0.00E+00	3.48E-04	7.92E-04	0.00E+00	7.04E-05	1.27E-04	0.00E+00	2.79E-04	5.91E-04	0.00E+00	6.00E-05	9.64E-05	0.00E+00	4.59E-05	5.66E-05	0.00E+00
1935	479322.1	3743219	3.57E-04	0.000698	0.00E+00	3.39E-04	7.72E-04	0.00E+00	6.86E-05	1.23E-04	0.00E+00	2.72E-04	5.76E-04	0.00E+00	5.85E-05	9.39E-05	0.00E+00	4.47E-05	5.52E-05	0.00E+00
1936	479313.8	3743203	3.48E-04	0.000679	0.00E+00	3.30E-04	7.51E-04	0.00E+00	6.67E-05	1.20E-04	0.00E+00	2.65E-04	5.60E-04	0.00E+00	5.69E-05	9.14E-05	0.00E+00	4.35E-05	5.37E-05	0.00E+00
1937	479305.4	3743187	3.38E-04	0.00066	0.00E+00	3.21E-04	7.30E-04	0.00E+00	6.48E-05	1.17E-04	0.00E+00	2.57E-04	5.44E-04	0.00E+00	5.53E-05	8.88E-05	0.00E+00	4.23E-05	5.22E-05	0.00E+00
1938	479297	3743171	3.28E-04	0.000641	0.00E+00	3.12E-04	7.09E-04	0.00E+00	6.30E-05	1.13E-04	0.00E+00	2.50E-04	5.29E-04	0.00E+00	5.37E-05	8.63E-05	0.00E+00	4.11E-05	5.07E-05	0.00E+00
1939	479288.7	3743154	3.19E-04	0.000622	0.00E+00	3.02E-04	6.88E-04	0.00E+00	6.11E-05	1.10E-04	0.00E+00	2.43E-04	5.13E-04	0.00E+00	5.21E-05	8.37E-05	0.00E+00	3.99E-05	4.92E-05	0.00E+00
1940	479280.3	3743138	3.09E-04	0.000603	0.00E+00	2.93E-04	6.67E-04	0.00E+00	5.93E-05	1.07E-04	0.00E+00	2.35E-04	4.98E-04	0.00E+00	5.06E-05	8.12E-05	0.00E+00	3.87E-05	4.77E-05	0.00E+00
1941	479271.9	3743122	3.00E-04	0.000585	0.00E+00	2.84E-04	6.47E-04	0.00E+00	5.75E-05	1.03E-04	0.00E+00	2.28E-04	4.82E-04	0.00E+00	4.90E-05	7.87E-05	0.00E+00	3.75E-05	4.62E-05	0.00E+00
1942	479263.6	3743106	2.90E-04	0.000567	0.00E+00	2.75E-04	6.27E-04	0.00E+00	5.57E-05	1.00E-04	0.00E+00	2.21E-04	4.67E-04	0.00E+00	4.75E-05	7.62E-05	0.00E+00	3.63E-05	4.48E-05	0.00E+00
1943	479255.2	3743090	2.81E-04	0.000549	0.00E+00	2.67E-04	6.07E-04	0.00E+00	5.39E-05	9.70E-05	0.00E+00	2.14E-04	4.53E-04	0.00E+00	4.60E-05	7.38E-05	0.00E+00	3.52E-05	4.34E-05	0.00E+00
1944	479246.8	3743074	2.72E-04	0.000531	0.00E+00	2.58E-04	5.88E-04	0.00E+00	5.22E-05	9.39E-05	0.00E+00	2.07E-04	4.38E-04	0.00E+00	4.45E-05	7.15E-05	0.00E+00	3.40E-05	4.20E-05	0.00E+00
1945	479238.5	3743057	2.63E-04	0.000515	0.00E+00	2.50E-04	5.69E-04	0.00E+00	5.05E-05	9.09E-05	0.00E+00	2.01E-04	4.24E-04	0.00E+00	4.31E-05	6.92E-05	0.00E+00	3.30E-05	4.07E-05	0.00E+00
1946	479230.1	3743041	2.55E-04	0.000498	0.00E+00	2.42E-04	5.51E-04	0.00E+00	4.89E-05	8.80E-05	0.00E+00	1.94E-04	4.11E-04	0.00E+00	4.18E-05	6.70E-05	0.00E+00	3.19E-05	3.94E-05	0.00E+00
1947	479221.7	3743025	2.47E-04	0.000482	0.00E+00	2.34E-04	5.34E-04	0.00E+00	4.74E-05	8.53E-05	0.00E+00	1.88E-04	3.98E-04	0.00E+00	4.04E-05	6.49E-05	0.00E+00	3.09E-05	3.81E-05	0.00E+00
1948	479213.4	3743009	2.39E-04	0.000467	0.00E+00	2.27E-04	5.17E-04	0.00E+00	4.59E-05	8.26E-05	0.00E+00	1.82E-04	3.85E-04	0.00E+00	3.92E-05	6.29E-05	0.00E+00	2.99E-05	3.69E-05	0.00E+00
1949	479205	3742993	2.32E-04	0.000453	0.00E+00	2.20E-04	5.01E-04	0.00E+00	4.45E-05	8.00E-05	0.00E+00	1.77E-04	3.73E-04	0.00E+00	3.79E-05	6.09E-05	0.00E+00	2.90E-05	3.58E-05	0.00E+00
1950	479196.6	3742976	2.25E-04	0.000439	0.00E+00	2.13E-04	4.85E-04	0.00E+00	4.31E-05	7.76E-05	0.00E+00	1.71E-04	3.62E-04	0.00E+00	3.68E-05	5.90E-05	0.00E+00	2.81E-05	3.47E-05	0.00E+00
1951	479188.3	3742960	2.18E-04	0.000426	0.00E+00	2.07E-04	4.71E-04	0.00E+00	4.18E-05	7.52E-05	0.00E+00	1.66E-04	3.51E-04	0.00E+00	3.57E-05	5.73E-05	0.00E+00	2.73E-05	3.36E-05	0.00E+00
1952	479179.9	3742944	2.11E-04	0.000413	0.00E+00	2.01E-04	4.57E-04	0.00E+00	4.06E-05	7.30E-05	0.00E+00	1.61E-04	3.41E-04	0.00E+00	3.46E-05	5.56E-05	0.00E+00	2.65E-05	3.26E-05	0.00E+00
1953	479171.5	3742928	2.05E-04	0.000401	0.00E+00	1.95E-04	4.43E-04	0.00E+00	3.94E-05	7.08E-05	0.00E+00	1.56E-04	3.31E-04	0.00E+00	3.36E-05	5.39E-05	0.00E+00	2.57E-05	3.17E-05	0.00E+00
1954	479163.2	3742912	1.99E-04	0.000389	0.00E+00	1.89E-04	4.31E-04	0.00E+00	3.82E-05	6.88E-05	0.00E+00	1.52E-04	3.21E-04	0.00E+00	3.26E-05	5.24E-05	0.00E+00	2.49E-05	3.08E-05	0.00E+00
1955	479154.8	3742895	1.94E-04	0.000378	0.00E+00	1.84E-04	4.18E-04	0.00E+00	3.72E-05	6.68E-05	0.00E+00	1.47E-04	3.12E-04	0.00E+00	3.17E-05	5.09E-05	0.00E+00	2.42E-05	2.99E-05	0.00E+00
1956	479146.4	3742879	1.88E-04	0.000368	0.00E+00	1.79E-04	4.07E-04	0.00E+00	3.61E-05	6.50E-05	0.00E+00	1.43E-04	3.03E-04	0.00E+00	3.08E-05	4.95E-05	0.00E+00	2.36E-05	2.91E-05	0.00E+00
1957	479138.1	3742863	1.83E-04	0.000358	0.00E+00	1.74E-04	3.96E-04	0.00E+00	3.51E-05	6.32E-05	0.00E+00	1.39E-04	2.95E-04	0.00E+00	3.00E-05	4.81E-05	0.00E+00	2.29E-05	2.83E-05	0.00E+00
1958	479129.7	3742847	1.78E-04	0.000348	0.00E+00	1.69E-04	3.85E-04	0.00E+00	3.42E-05	6.15E-05	0.00E+00	1.36E-04	2.87E-04	0.00E+00	2.92E-05	4.68E-05	0.00E+00	2.23E-05	2.75E-05	0.00E+00
1959	479121.3	3742831	1.74E-04	0.000339	0.00E+00	1.65E-04	3.75E-04	0.00E+00	3.33E-05	5.99E-05	0.00E+00	1.32E-04	2.79E-04	0.00E+00	2.84E-05	4.56E-05	0.00E+00	2.17E-05	2.68E-05	0.00E+00
1960	479113	3742815	1.69E-04	0.00033	0.00E+00	1.60E-04	3.65E-04	0.00E+00	3.24E-05	5.83E-05	0.00E+00	1.29E-04	2.72E-04	0.00E+00	2.77E-05	4.44E-05	0.00E+00	2.11E-05	2.61E-05	0.00E+00
1961	479104.6	3742798	1.65E-04	0.000321	0.00E+00	1.56E-04	3.56E-04	0.00E+00	3.16E-05	5.68E-05	0.00E+00	1.25E-04	2.65E-04	0.00E+00	2.69E-05	4.33E-05	0.00E+00	2.06E-05	2.54E-05	0.00E+00
1962	479096.2	3742782	1.60E-04	0.000313	0.00E+00	1.52E-04	3.47E-04	0.00E+00	3.08E-05	5.54E-05	0.00E+00	1.22E-04	2.58E-04	0.00E+00	2.63E-05	4.22E-05	0.00E+00	2.01E-05	2.48E-05	0.00E+00
1963	479325.6	3743322	3.64E-04	0.000712	0.00E+00	3.46E-04	7.87E-04	0.00E+00	6.99E-05	1.26E-04	0.00E+00	2.77E-04	5.87E-04	0.00E+00	5.96E-05	9.57E-05	0.00E+00	4.56E-05	5.62E-05	0.00E+00
1964	479317.3	3743306	3.57E-04	0.000697	0.00E+00	3.38E-04	7.71E-04	0.00E+00	6.84E-05	1.23E-04	0.00E+00	2.72E-04	5.75E-04	0.00E+00	5.84E-05	9.37E-05	0.00E+00	4.46E-05	5.51E-05	0.00E+00
1965	479308.9	3743290	3.49E-04	0.000681	0.00E+00	3.31E-04	7.54E-04	0.00E+00	6.69E-05	1.20E-04	0.00E+00	2.66E-04	5.62E-04	0.00E+00	5.71E-05	9.17E-05	0.00E+00	4.36E-05	5.38E-05	0.00E+00
1966	479300.5	3743274	3.41E-04	0.000665	0.00E+00	3.23E-04	7.36E-04	0.00E+00	6.54E-05	1.18E-04	0.00E+00	2.59E-04	5.49E-04	0.00E+00	5.58E-05	8.95E-05	0.00E+00	4.26E-05	5.26E-05	0.00E+00
1967	479292.2	3743258	3.32E-04	0.000649	0.00E+00	3.15E-04	7.18E-04	0.00E+00	6.38E-05	1.15E-04	0.00E+00	2.53E-04	5.35E-04	0.00E+00	5.44E-05	8.73E-05	0.00E+00	4.16E-05	5.13E-05	0.00E+00
1968	479283.8	3743241	3.24E-04	0.000633	0.00E+00	3.07E-04	7.00E-04	0.00E+00	6.22E-05	1.12E-04	0.00E+00	2.47E-04	5.22E-04	0.00E+00	5.30E-05	8.51E-05	0.00E+00	4.05E-05	5.00E-05	0.00E+00
1969	479275.4	3743225	3.16E-04	0.000616	0.00E+00	2.99E-04	6.82E-04	0.00E+00	6.05E-05	1.09E-04	0.00E+00	2.40E-04	5.08E-04	0.00E+00	5.16E-05	8.29E-05	0.00E+00	3.95E-05	4.87E-05	0.00E+00
1970	479267.1	3743209	3.07E-04	0.0006	0.00E+00	2.91E-04	6.63E-04	0.00E+00	5.89E-05	1.06E-04	0.00E+00	2.34E-04	4.94E-04	0.00E+00	5.03E-05	8.07E-05	0.00E+00	3.84E-05	4.74E-05	0.00E+00
1971	479258.7	3743193	2.99E-04	0.000583	0.00E+00	2.83E-04	6.45E-04	0.00E+00	5.73E-05	1.03E-04	0.00E+00	2.27E-04	4.81E-04	0.00E+00	4.89E-05	7.84E-05	0.00E+00	3.73E-05	4.61E-05	0.00E+00
1972	479250.3	3743177	2.90E-04	0.000566	0.00E+00	2.75E-04	6.26E-04	0.00E+00	5.56E-05	1.00E-04	0.00E+00	2.21E-04	4.67E-04	0.00E+00	4.75E-05	7.62E-05	0.00E+00	3.63E-05	4.48E-05	0.00E+00
1973	479242	3743161	2.82E-04	0.00055	0.00E+00	2.67E-04	6.08E-04	0.00E+00	5.40E-05	9.72E-05	0.00E+00	2.14E-04	4.53E-04	0.00E+00	4.61E-05	7.40E-05	0.00E+00	3.52E-05	4.35E-05	0.00E+00
1974	479233.6	3743144	2.73E-04	0.000534	0.00E+00	2.59E-04	5.90E-04	0.00E+00	5.24E-05	9.43E-05	0.00E+00	2.08E-04	4.40E-04	0.00E+00	4.47E-05	7.18E-05	0.00E+00	3.42E-05	4.22E-05	0.00E+00
1975	479225.2	3743128	2.65E-04	0.000518	0.00E+00	2.52E-04	5.73E-04	0.00E+00	5.09E-05	9.15E-05	0.00E+00	2.02E-04	4.27E-04	0.00E+00	4.34E-05	6.97E-05	0.00E+00	3.32E-05	4.09E-05	0.00E+00
1976	479216.9	3743112	2.57E-04	0.000502	0.00E+00	2.44E-04	5.56E-04	0.00E+00	4.93E-05	8.88E-05	0.00E+00	1.96E-04	4.14E-04	0.00E+00	4.21E-05	6.76E-05	0.00E+00	3.22E-05	3.97E-05	0.00E+00
1977	479208.5	3743096	2.49E-04	0.000487	0.00E+00	2.37E-04	5.39E-04	0.00E+00	4.78E-05	8.61E-05	0.00E+00	1.90E-04	4.02E-04	0.00E+00	4.08E-05	6.55E-05	0.00E+00	3.12E-05	3.85E-05	0.00E+00
1978	479200.1	3743080	2.42E-04	0.000472	0.00E+00	2.29E-04	5.22E-04	0.00E+00	4.64E-05	8.35E-05	0.00E+00	1.84E-04	3.90E-04	0.00E+00	3.96E-05	6.35E-05	0.00E+00	3.03E-05	3.73E-05	0.00E+00
1979	479191.8	3743063	2.35E-04	0.000458	0.00E+00	2.23E-04	5.07E-04	0.00E+00	4.50E-05	8.09E-05	0.00E+00	1.79E-04	3.78E-04	0.00E+00	3.84E-05	6.16E-05	0.00E+00	2.93E-05	3.62E-05	0.00E+00
1980	479183.4	3743047	2.28E-04	0.000444	0.00E+00	2.16E-04	4.91E-04	0.00E+00	4.36E-05	7.85E-05	0.00E+00	1.73E-04	3.66E-04	0.00E+00	3.72E-05	5.98E-05	0.00E+00	2.85E-05	3.51E-05	0.00E+00
1981	479175	3743031	2.21E-04	0.000431	0.00E+00	2.09E-04	4.77E-04	0.00E+00	4.23E-05	7.62E-05	0.00E+00	1.68E-04	3.55E-04	0.00E+00	3.61E-05	5.80E-05	0.00E+00	2.76E-05	3.41E-05	0.00E+00
1982	479166.7	3743015	2.14E-04	0.000418	0.00E+00	2.03E-04	4.63E-04	0.00E+00	4.11E-05	7.39E-05	0.00E+00	1.63E-04	3.45E-04	0.00E+00	3.51E-05	5.63E-05	0.00E+00	2.68E-05	3.31E-05	0.00E+00
1983	479158.3	3742999	2.08E-04	0.000406	0.00E+00	1.97E-04	4.49E-04	0.00E+00	3.99E-05	7.18E-05	0.00E+00	1.58E-04	3.35E-04	0.00E+00	3.40E-05	5.46E-05	0.00E+00	2.60E-05	3.21E-05	0.00E+00
1984	479150	3742983	2.02E-04	0.000394	0.00E+00	1.92E-04	4.36E-04	0.00E+00	3.87E-05	6.97E-05	0.00E+00	1.54E-04	3.25E-04	0.00E+00	3.31E-05	5.31E-05	0.00E+00	2.53E-05	3.12E-05	0.00E+00
1985	479141.6	3742966	1.96E-04	0.000383	0.00E+00	1.86E-04	4.24E-04	0.00E+00	3.76E-05	6.77E-05	0.00E+00	1.49E-04	3.16E-04	0.00E+00	3.21E-05	5.16E-05	0.00E+00	2.46E-05	3.03E-05	0.00E+00
1986	479133.2	3742950	1.91E-04	0.000373	0.00E+00	1.81E-04	4.12E-04	0.00E+00	3.66E-05	6.58E-05	0.00E+00	1.45E-04	3.07E-04	0.00E+00	3.12E-05	5.01E-05	0.00E+00	2.39E-05	2.94E-05	0.00E+00
1987	479124.9	3742934	1.86E-04	0.000362	0.00E+00	1.76E-04	4.01E-04	0.00E+00	3.56E-05	6.40E-05	0.00E+00	1.41E-04	2.99E-04	0.00E+00	3.04E-05	4.87E-05	0.00E+00	2.32E-05	2.86E-05	0.00E+00
1988	479116.5	3742918	1.81E-04	0.000353	0.00E+00	1.71E-04	3.90E-04	0.00E+00	3.46E-05	6.23E-05	0.00E+00	1.37E-04	2.91E-04	0.00E+00	2.95E-05	4.74E-05	0.00E+00	2.26E-05	2.79E-05	0.00E+00
1989	479108.1	3742902	1.76E-04	0.000343	0.00E+00	1.67E-04	3.80E-04	0.00E+00	3.37E-05	6.06E-05	0.00E+00	1.34E-04	2.83E-04	0.00E+00	2.88E-05	4.62E-05	0.00E+00	2.20E-05	2.71E-05	0.00E+00
1990	479099.8	3742885	1.71E-04	0.000334	0.00E+00	1.62E-04	3.70E-04	0.00E+00	3.28E-05	5.91E-05	0.00E+00	1.30E-04	2.76E-04	0.00E+00	2.80E-05	4.50E-05	0.00E+00	2.14E-05	2.64E-05	0.00E+00
1991	479091.4	3742869	1.67E-04	0.000326	0.00E+00	1.58E-04	3.60E-04	0.00E+00	3.20E-05	5.75E-05	0.00E+00	1.27E-04	2.69E-04	0.00E+00	2.73E-05	4.38E-05	0.00E+00	2.09E-05	2.57E-05	0.00E+00
1992	479280.5	3743332	3.26E-04	0.000637	0.00E+00	3.09E-04	7.04E-04	0.00E+00	6.25E-05	1.12E-04	0.00E+00	2.48E-04	5.25E-04	0.00E+00	5.34E-05	8.56E-05	0.00E+00	4.08E-05	5.03E-05	0.00E+00
1993	479272.2	3743315	3.19E-04	0.000623	0.00E+00	3.03E-04	6.89E-04	0.00E+00	6.12E-05	1.10E-04	0.00E+00	2.43E-04	5.14E-04	0.00E+00	5.22E-05	8.38E-05	0.00E+00	3.99E-05	4.92E-05	0.00E+00
1994	479263.8	3743299	3.12E-04	0.000609	0.00E+00	2.96E-04	6.73E-04	0.00E+00	5.98E-05	1.08E-04	0.00E+00	2.37E-04	5.02E-04	0.00E+00	5.10E-05	8.19E-05	0.00E+00	3.90E-05	4.81E-05	0.00E+00
1995	479255.4	3743283	3.04E-04	0.000594	0.00E+00	2.89E-04	6.57E-04	0.00E+00	5.84E-05	1.05E-04	0.00E+00	2.32E-04	4.90E-04	0.00E+00	4.98E-05	7.99E-05	0.00E+00	3.81E-05	4.70E-05	0.00E+00
1996	479247.1	3743267	2.97E-04	0.00058	0.00E+00	2.82E-04	6.41E-04	0.00E+00	5.69E-05	1.02E-04	0.00E+00	2.26E-04	4.78E-04	0.00E+00	4.86E-05	7.80E-05	0.00E+00	3.71E-05	4.58E-05	0.00E+00
1997	479238.7	3743251	2.89E-04	0.000565	0.00E+00	2.74E-04	6.25E-04	0.00E+00	5.55E-05	9.98E-05	0.00E+00	2.20E-04	4.66E-04	0.00E+00	4.74E-05	7.60E-05	0.00E+00	3.62E-05	4.46E-05	0.00E+00
1998	479230.3	3743235	2.82E-04	0.00055	0.00E+00	2.67E-04	6.09E-04	0.00E+00	5.40E-05	9.72E-05	0.00E+00	2.15E-04	4.54E-04	0.00E+00	4.61E-05	7.40E-05	0.00E+00	3.53E-05	4.35E-05	0.00E+00
1999	479222	3743218	2.74E-04	0.000535	0.00E+00	2.60E-04	5.92E-04	0.00E+00	5.26E-05	9.46E-05	0.00E+00	2.09E-04	4.42E-04	0.00E+00	4.49E-05	7.20E-05	0.00E+00	3.43E-05	4.23E-05	0.00E+00
2000	479213.6	3743202	2.67E-04	0.000521	0.00E+00	2.53E-04	5.76E-04	0.00E+00	5.12E-05	9.20E-05	0.00E+00	2.03E-04	4.30E-04	0.00E+00	4.37E-05	7.01E-05	0.00E+00	3.34E-05	4.12E-05	0.00E+00
2001	479205.2	3743186	2.59E-04	0.000506	0.00E+00	2.46E-04	5.60E-04	0.00E+00	4.97E-05	8.95E-05	0.00E+00	1.97E-04	4.18E-04	0.00E+00	4.24E-05	6.81E-05	0.00E+00	3.24E-05	4.00E-05	0.00E+00
2002	479196.9	3743170	2.52E-04	0.000492	0.00E+00	2.39E-04	5.44E-04	0.00E+00	4.83E-05	8.70E-05	0.00E+00	1.92E-04	4.06E-04	0.00E+00	4.12E-05	6.62E-05	0.00E+00	3.15E-05	3.89E-05	0.00E+00
2003	479188.5	3743154	2.45E-04	0.000478	0.00E+00	2.32E-04	5.29E-04	0.00E+00	4.70E-05	8.45E-05	0.00E+00	1.86E-04	3.94E-04	0.00E+00	4.01E-05	6.43E-05	0.00E+00	3.06E-05	3.78E-05	0.00E+00
2004	479180.1	3743137	2.38E-04	0.000464	0.00E+00	2.26E-04	5.14E-04	0.00E+00	4.56E-05	8.21E-05	0.00E+00	1.81E-04	3.83E-04	0.00E+00	3.89E-05	6.25E-05	0.00E+00	2.97E-05	3.67E-05	0.00E+00
2005	479171.8	3743121	2.31E-04	0.000451	0.00E+00	2.19E-04	4.99E-04	0.00E+00	4.43E-05	7.97E-05	0.00E+00	1.76E-04	3.72E-04	0.00E+00	3.78E-05	6.07E-05	0.00E+00	2.89E-05	3.56E-05	0.00E+00
2006	479163.4	3743105	2.24E-04	0.000438	0.00E+00	2.13E-04	4.84E-04	0.00E+00	4.30E-05	7.74E-05	0.00E+00	1.71E-04	3.61

			UnMitigated				T2				T2L3				T3				T3L3				T4			
						8.88E-07				9.35E-07				1.62E-07				7.14E-07				1.28E-07				8.41E-08
			Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total	Yr 1	Yr 2	Yr 3	Total
1	480337.7	3743042	9.37E-09	1.83E-08	0.00E+00	2.77E-08	8.89E-09	2.02E-08	0.00E+00	2.91E-08	1.80E-09	3.23E-09	0.00E+00	5.03E-09	7.14E-09	1.51E-08	0.00E+00	2.22E-08	1.53E-09	2.46E-09	0.00E+00	4.00E-09	1.17E-09	1.45E-09	0.00E+00	2.62E-09
2	480320.9	3743049	9.98E-09	1.95E-08	0.00E+00	2.95E-08	9.47E-09	2.16E-08	0.00E+00	3.10E-08	1.91E-09	3.44E-09	0.00E+00	5.36E-09	7.60E-09	1.61E-08	0.00E+00	2.37E-08	1.63E-09	2.62E-09	0.00E+00	4.26E-09	1.25E-09	1.54E-09	0.00E+00	2.79E-09
3	480304.2	3743056	1.06E-08	2.07E-08	0.00E+00	3.13E-08	1.01E-08	2.29E-08	0.00E+00	3.30E-08	2.03E-09	3.66E-09	0.00E+00	5.70E-09	8.08E-09	1.71E-08	0.00E+00	2.52E-08	1.74E-09	2.79E-09	0.00E+00	4.52E-09	1.33E-09	1.64E-09	0.00E+00	2.96E-09
4	480406.3	3743064	7.01E-09	1.37E-08	0.00E+00	2.07E-08	6.65E-09	1.51E-08	0.00E+00	2.18E-08	1.34E-09	2.42E-09	0.00E+00	3.76E-09	5.34E-09	1.13E-08	0.00E+00	1.66E-08	1.15E-09	1.84E-09	0.00E+00	2.99E-09	8.77E-10	1.08E-09	0.00E+00	1.96E-09
5	480389.5	3743071	7.46E-09	1.46E-08	0.00E+00	2.20E-08	7.07E-09	1.61E-08	0.00E+00	2.32E-08	1.43E-09	2.57E-09	0.00E+00	4.00E-09	5.68E-09	1.20E-08	0.00E+00	1.77E-08	1.22E-09	1.96E-09	0.00E+00	3.18E-09	9.33E-10	1.15E-09	0.00E+00	2.08E-09
6	480372.6	3743078	7.92E-09	1.55E-08	0.00E+00	2.34E-08	7.52E-09	1.71E-08	0.00E+00	2.46E-08	1.52E-09	2.73E-09	0.00E+00	4.25E-09	6.03E-09	1.28E-08	0.00E+00	1.88E-08	1.30E-09	2.08E-09	0.00E+00	3.38E-09	9.91E-10	1.22E-09	0.00E+00	2.21E-09
7	480355.8	3743085	8.40E-09	1.64E-08	0.00E+00	2.48E-08	7.97E-09	1.82E-08	0.00E+00	2.61E-08	1.61E-09	2.90E-09	0.00E+00	4.51E-09	6.40E-09	1.35E-08	0.00E+00	1.99E-08	1.38E-09	2.21E-09	0.00E+00	3.58E-09	1.05E-09	1.30E-09	0.00E+00	2.35E-09
8	480339	3743092	8.90E-09	1.74E-08	0.00E+00	2.63E-08	8.44E-09	1.92E-08	0.00E+00	2.77E-08	1.71E-09	3.07E-09	0.00E+00	4.78E-09	6.78E-09	1.43E-08	0.00E+00	2.11E-08	1.46E-09	2.34E-09	0.00E+00	3.80E-09	1.11E-09	1.37E-09	0.00E+00	2.49E-09
9	480322.2	3743099	9.41E-09	1.84E-08	0.00E+00	2.78E-08	8.93E-09	2.03E-08	0.00E+00	2.92E-08	1.80E-09	3.25E-09	0.00E+00	5.05E-09	7.16E-09	1.52E-08	0.00E+00	2.23E-08	1.54E-09	2.47E-09	0.00E+00	4.01E-09	1.18E-09	1.45E-09	0.00E+00	2.63E-09
10	480305.3	3743106	9.92E-09	1.94E-08	0.00E+00	2.93E-08	9.41E-09	2.14E-08	0.00E+00	3.08E-08	1.90E-09	3.42E-09	0.00E+00	5.33E-09	7.56E-09	1.60E-08	0.00E+00	2.35E-08	1.62E-09	2.61E-09	0.00E+00	4.23E-09	1.24E-09	1.53E-09	0.00E+00	2.77E-09
11	480407.7	3743113	6.80E-09	1.33E-08	0.00E+00	2.01E-08	6.45E-09	1.47E-08	0.00E+00	2.11E-08	1.30E-09	2.35E-09	0.00E+00	3.65E-09	5.17E-09	1.09E-08	0.00E+00	1.61E-08	1.11E-09	1.79E-09	0.00E+00	2.90E-09	8.50E-10	1.05E-09	0.00E+00	1.90E-09
12	480374.9	3743177	7.23E-09	1.41E-08	0.00E+00	2.13E-08	6.86E-09	1.56E-08	0.00E+00	2.25E-08	1.39E-09	2.49E-09	0.00E+00	3.88E-09	5.50E-09	1.16E-08	0.00E+00	1.71E-08	1.18E-09	1.90E-09	0.00E+00	3.08E-09	9.04E-10	1.12E-09	0.00E+00	2.02E-09
13	480357.9	3743184	7.58E-09	1.48E-08	0.00E+00	2.24E-08	7.19E-09	1.64E-08	0.00E+00	2.35E-08	1.45E-09	2.61E-09	0.00E+00	4.07E-09	5.77E-09	1.22E-08	0.00E+00	1.80E-08	1.24E-09	1.99E-09	0.00E+00	3.23E-09	9.48E-10	1.17E-09	0.00E+00	2.12E-09
14	480341	3743191	7.92E-09	1.55E-08	0.00E+00	2.34E-08	7.52E-09	1.71E-08	0.00E+00	2.46E-08	1.52E-09	2.73E-09	0.00E+00	4.25E-09	6.03E-09	1.28E-08	0.00E+00	1.88E-08	1.30E-09	2.08E-09	0.00E+00	3.38E-09	9.91E-10	1.22E-09	0.00E+00	2.21E-09
15	480324	3743198	8.27E-09	1.62E-08	0.00E+00	2.44E-08	7.85E-09	1.79E-08	0.00E+00	2.57E-08	1.59E-09	2.85E-09	0.00E+00	4.44E-09	6.30E-09	1.33E-08	0.00E+00	1.96E-08	1.35E-09	2.17E-09	0.00E+00	3.53E-09	1.04E-09	1.28E-09	0.00E+00	2.31E-09
16	480307	3743205	8.62E-09	1.68E-08	0.00E+00	2.55E-08	8.18E-09	1.86E-08	0.00E+00	2.68E-08	1.65E-09	2.97E-09	0.00E+00	4.63E-09	6.56E-09	1.39E-08	0.00E+00	2.04E-08	1.41E-09	2.26E-09	0.00E+00	3.68E-09	1.08E-09	1.33E-09	0.00E+00	2.41E-09
17	480392.8	3743220	6.57E-09	1.28E-08	0.00E+00	1.94E-08	6.24E-09	1.42E-08	0.00E+00	2.04E-08	1.26E-09	2.27E-09	0.00E+00	3.53E-09	5.00E-09	1.06E-08	0.00E+00	1.56E-08	1.08E-09	1.73E-09	0.00E+00	2.80E-09	8.22E-10	1.01E-09	0.00E+00	1.84E-09
18	480375.8	3743227	6.86E-09	1.34E-08	0.00E+00	2.03E-08	6.51E-09	1.48E-08	0.00E+00	2.13E-08	1.32E-09	2.37E-09	0.00E+00	3.69E-09	5.23E-09	1.11E-08	0.00E+00	1.63E-08	1.12E-09	1.80E-09	0.00E+00	2.93E-09	8.59E-10	1.06E-09	0.00E+00	1.92E-09
19	480358.8	3743234	7.16E-09	1.40E-08	0.00E+00	2.11E-08	6.79E-09	1.55E-08	0.00E+00	2.22E-08	1.37E-09	2.47E-09	0.00E+00	3.84E-09	5.45E-09	1.15E-08	0.00E+00	1.70E-08	1.17E-09	1.88E-09	0.00E+00	3.05E-09	8.95E-10	1.10E-09	0.00E+00	2.00E-09
20	480341.7	3743241	7.45E-09	1.45E-08	0.00E+00	2.20E-08	7.07E-09	1.61E-08	0.00E+00	2.32E-08	1.43E-09	2.57E-09	0.00E+00	4.00E-09	5.67E-09	1.20E-08	0.00E+00	1.77E-08	1.22E-09	1.96E-09	0.00E+00	3.18E-09	9.32E-10	1.15E-09	0.00E+00	2.08E-09
21	480324.7	3743248	7.74E-09	1.51E-08	0.00E+00	2.28E-08	7.34E-09	1.67E-08	0.00E+00	2.41E-08	1.48E-09	2.67E-09	0.00E+00	4.15E-09	5.89E-09	1.25E-08	0.00E+00	1.84E-08	1.27E-09	2.03E-09	0.00E+00	3.30E-09	9.68E-10	1.19E-09	0.00E+00	2.16E-09
22	480307.7	3743255	8.02E-09	1.57E-08	0.00E+00	2.37E-08	7.61E-09	1.73E-08	0.00E+00	2.49E-08	1.54E-09	2.77E-09	0.00E+00	4.31E-09	6.11E-09	1.29E-08	0.00E+00	1.90E-08	1.31E-09	2.11E-09	0.00E+00	3.42E-09	1.00E-09	1.24E-09	0.00E+00	2.24E-09
23	480393.6	3743269	6.25E-09	1.22E-08	0.00E+00	1.85E-08	5.93E-09	1.35E-08	0.00E+00	1.94E-08	1.20E-09	2.16E-09	0.00E+00	3.36E-09	4.76E-09	1.01E-08	0.00E+00	1.48E-08	1.02E-09	1.64E-09	0.00E+00	2.67E-09	7.82E-10	9.65E-10	0.00E+00	1.75E-09
24	480376.5	3743276	6.50E-09	1.27E-08	0.00E+00	1.92E-08	6.17E-09	1.40E-08	0.00E+00	2.02E-08	1.25E-09	2.24E-09	0.00E+00	3.49E-09	4.95E-09	1.05E-08	0.00E+00	1.54E-08	1.06E-09	1.71E-09	0.00E+00	2.77E-09	8.13E-10	1.00E-09	0.00E+00	1.82E-09
25	480359.5	3743283	6.75E-09	1.32E-08	0.00E+00	1.99E-08	6.40E-09	1.46E-08	0.00E+00	2.10E-08	1.29E-09	2.33E-09	0.00E+00	3.62E-09	5.14E-09	1.09E-08	0.00E+00	1.60E-08	1.10E-09	1.77E-09	0.00E+00	2.88E-09	8.44E-10	1.04E-09	0.00E+00	1.89E-09
26	480342.4	3743290	6.99E-09	1.37E-08	0.00E+00	2.06E-08	6.63E-09	1.51E-08	0.00E+00	2.17E-08	1.34E-09	2.41E-09	0.00E+00	3.75E-09	5.33E-09	1.13E-08	0.00E+00	1.66E-08	1.14E-09	1.84E-09	0.00E+00	2.98E-09	8.75E-10	1.08E-09	0.00E+00	1.95E-09
27	479050.1	3742581	1.69E-09	3.30E-09	0.00E+00	4.99E-09	1.60E-09	3.65E-09	0.00E+00	5.26E-09	3.24E-10	5.84E-10	0.00E+00	9.08E-10	1.29E-09	2.72E-09	0.00E+00	4.01E-09	2.77E-10	4.44E-10	0.00E+00	7.21E-10	2.12E-10	2.61E-10	0.00E+00	4.73E-10
28	479050	3742600	1.71E-09	3.34E-09	0.00E+00	5.05E-09	1.62E-09	3.69E-09	0.00E+00	5.32E-09	3.28E-10	5.90E-10	0.00E+00	9.18E-10	1.30E-09	2.75E-09	0.00E+00	4.06E-09	2.80E-10	4.49E-10	0.00E+00	7.29E-10	2.14E-10	2.64E-10	0.00E+00	4.78E-10
29	479049.9	3742618	1.73E-09	3.38E-09	0.00E+00	5.11E-09	1.64E-09	3.74E-09	0.00E+00	5.38E-09	3.32E-10	5.97E-10	0.00E+00	9.28E-10	1.32E-09	2.78E-09	0.00E+00	4.10E-09	2.83E-10	4.54E-10	0.00E+00	7.37E-10	2.16E-10	2.67E-10	0.00E+00	4.83E-10
30	479049.9	3742637	1.75E-09	3.41E-09	0.00E+00	5.16E-09	1.66E-09	3.78E-09	0.00E+00	5.43E-09	3.35E-10	6.03E-10	0.00E+00	9.39E-10	1.33E-09	2.82E-09	0.00E+00	4.15E-09	2.86E-10	4.59E-10	0.00E+00	7.45E-10	2.19E-10	2.70E-10	0.00E+00	4.88E-10
31	479049.8	3742655	1.77E-09	3.45E-09	0.00E+00	5.22E-09	1.68E-09	3.82E-09	0.00E+00	5.49E-09	3.39E-10	6.10E-10	0.00E+00	9.49E-10	1.35E-09	2.85E-09	0.00E+00	4.19E-09	2.89E-10	4.64E-10	0.00E+00	7.53E-10	2.21E-10	2.73E-10	0.00E+00	4.94E-10
32	479049.7	3742673	1.79E-09	3.49E-09	0.00E+00	5.27E-09	1.69E-09	3.86E-09	0.00E+00	5.55E-09	3.43E-10	6.16E-10	0.00E+00	9.59E-10	1.36E-09	2.88E-09	0.00E+00	4.24E-09	2.92E-10	4.69E-10	0.00E+00	7.61E-10	2.23E-10	2.76E-10	0.00E+00	4.99E-10
33	479049.6	3742692	1.80E-09	3.52E-09	0.00E+00	5.33E-09	1.71E-09	3.90E-09	0.00E+00	5.61E-09	3.46E-10	6.22E-10	0.00E+00	9.68E-10	1.37E-09	2.90E-09	0.00E+00	4.28E-09	2.95E-10	4.74E-10	0.00E+00	7.69E-10	2.26E-10	2.78E-10	0.00E+00	5.04E-10
34	479014.4	3742529	1.54E-09	3.01E-09	0.00E+00	4.56E-09	1.46E-09	3.33E-09	0.00E+00	4.80E-09	2.96E-10	5.33E-10	0.00E+00	8.29E-10	1.18E-09	2.48E-09	0.00E+00	3.66E-09	2.53E-10	4.05E-10	0.00E+00	6.58E-10	1.93E-10	2.38E-10	0.00E+00	4.31E-10
35	479021.6	3742512	1.55E-09	3.02E-09	0.00E+00	4.56E-09	1.47E-09	3.34E-09	0.00E+00	4.80E-09	2.96E-10	5.33E-10	0.00E+00	8.30E-10	1.18E-09	2.49E-09	0.00E+00	3.67E-09	2.53E-10	4.06E-10	0.00E+00	6.59E-10	1.93E-10	2.38E-10	0.00E+00	4.32E-10
36	479028.7	3742495	1.55E-09	3.02E-09	0.00E+00	4.57E-09	1.47E-09	3.34E-09	0.00E+00	4.81E-09	2.97E-10	5.34E-10	0.00E+00	8.31E-10	1.18E-09	2.49E-09	0.00E+00	3.67E-09	2.53E-10	4.07E-10	0.00E+00	6.60E-10	1.94E-10	2.39E-10	0.00E+00	4.32E-10
37	479035.8	3742478	1.55E-09	3.03E-09	0.00E+00	4.57E-09	1.47E-09	3.35E-09	0.00E+00	4.82E-09	2.97E-10	5.35E-10	0.00E+00	8.32E-10	1.18E-09	2.49E-09	0.00E+00	3.67E-09	2.54E-10	4.07E-10	0.00E+00	6.61E-10	1.94E-10	2.39E-10	0.00E+00	4.33E-10
38	479042.9	3742462	1.55E-09	3.03E-09	0.00E+00	4.58E-09	1.47E-09	3.35E-09	0.00E+00	4.82E-09	2.98E-10	5.35E-10	0.00E+00	8.33E-10	1.18E-09	2.50E-09	0.00E+00	3.68E-09	2.54E-10	4.08E-10	0.00E+00	6.62E-10	1.94E-10	2.39E-10	0.00E+00	4.34E-10
39	479050	3742445	1.55E-09	3.03E-09	0.00E+00	4.59E-09	1.47E-09	3.36E-09	0.00E+00	4.83E-09	2.98E-10	5.36E-10	0.00E+00	8.34E-10	1.18E-09	2.50E-09	0.00E+00	3.68E-09	2.54E-10	4.08E-10	0.00E+00	6.62E-10	1.94E-10	2.40E-10	0.00E+00	4.34E-10
40	479057.1	3742428	1.56E-09	3.04E-09	0.00E+00	4.59E-09	1.48E-09	3.36E-09	0.00E+00	4.83E-09	2.98E-10	5.37E-10	0.00E+00	8.35E-10	1.18E-09	2.50E-09	0.00E+00	3.69E-09	2.55E-10	4.09E-10	0.00E+00	6.63E-10	1.95E-10	2.40E-10	0.00E+00	4.35E-10
41	479000.1	3742581	1.55E-09	3.04E-09	0.00E+00	4.59E-09	1.48E-09	3.36E-09	0.00E+00	4.83E-09	2.98E-10	5.37E-10	0.00E+00	8.35E-10	1.18E-09	2.50E-09	0.00E+00	3.69E-09	2.54E-10	4.08E-10	0.00E+00	6.63E-10	1.95E-10	2.40E-10	0.00E+00	4.34E-10
42	479000	3742599	1.57E-09	3.07E-09	0.00E+00	4.64E-09	1.49E-09	3.39E-09	0.00E+00	4.88E-09	3.01E-10	5.42E-10	0.00E+00	8.44E-10	1.20E-09	2.53E-09	0.00E+00	3.73E-09	2.57E-10	4.13E-10	0.00E+00	6.70E-10	1.97E-10	2.42E-10	0.00E+00	4.39E-10
43	478999.9	3742618	1.59E-09	3.10E-09	0.00E+00	4.69E-09	1.51E-09	3.43E-09	0.00E+00	4.94E-09	3.05E-10	5.48E-10	0.00E+00	8.52E-10	1.21E-09	2.56E-09	0.00E+00	3.77E-09	2.60E-10	4.17E-10	0.00E+00	6.77E-10	1.99E-10	2.45E-10	0.00E+00	4.44E-10
44	478999.9	3742636	1.60E-09	3.13E-09	0.00E+00	4.74E-09	1.52E-09	3.46E-09	0.00E+00	4.99E-09	3.08E-10	5.54E-10	0.00E+00	8.61E-10	1.22E-09	2.58E-09	0.00E+00	3.80E-09	2.63E-10	4.21E-10	0.00E+00	6.84E-10	2.01E-10	2.48E-10	0.00E+00	4.48E-10
45	478999.8	3742655	1.62E-09	3.16E-09	0.00E+00	4.78E-09	1.54E-09	3.50E-09	0.00E+00	5.04E-09	3.11E-10	5.59E-10	0.00E+00	8.70E-10	1.23E-09	2.61E-09	0.00E+00	3.84E-09	2.65E-10	4.26E-10	0.00E+00	6.91E-10	2.03E-10	2.50E-10	0.00E+00	4.53E-10
46	478999.7	3742673	1.64E-09	3.19E-09	0.00E+00	4.83E-09	1.55E-09	3.53E-09	0.00E+00	5.09E-09	3.14E-10	5.65E-10	0.00E+00	8.78E-10	1.25E-09	2.63E-09	0.00E+00	3.88E-09	2.68E-10	4.30E-10	0.00E+00	6.98E-10	2.05E-10	2.52E-10	0.00E+00	4.57E-10
47	478999.6	3742692	1.65E-09	3.23E-09	0.00E+00	4.88E-09	1.57E-09	3.57E-09	0.00E+00	5.14E-09	3.17E-10	5.70E-10	0.00E+00	8.87E-10	1.26E-09	2.66E-09	0.00E+00	3.92E-09	2.70E-10	4.34E-10	0.00E+00	7.05E-10	2.07E-10	2.55E-10	0.00E+00	4.62E-10
48	478964.5	3742529	1.43E-09	2.78E-09	0.00E+00	4.21E-09	1.35E-09	3.08E-09	0.00E+00	4.43E-09	2.73E-10	4.92E-10	0.00E+00	7.65E-10	1.09E-09	2.30E-09	0.00E+00	3.38E-09	2.33E-10	3.74E-10	0.00E+00	6.08E-10	1.78E-10	2.20E-10	0.00E+00	3.98E-10
49	478971.6	3742512	1.43E-09	2.79E-09	0.00E+00	4.21E-09	1.35E-09	3.08E-09	0.00E+00	4.44E-09	2.74E-10	4.92E-10	0.00E+00	7.66E-10	1.09E-09	2.30E-09	0.00E+00	3.38E-09	2.34E-10	3.75E-10	0.00E+00	6.09E-10	1.79E-10	2.20E-10	0.00E+00	3.99E-10
50	478978.7	3742495	1.43E-09	2.79E-09	0.00E+00	4.22E-09	1.36E-09	3.09E-09	0.00E+00	4.44E-09	2.74E-10	4.93E-10	0.00E+00	7.67E-10	1.09E-09	2.30E-09	0.00E+00	3.39E-09	2.34E-10	3.75E-10	0.00E+00	6.09E-10	1.79E-10	2.21E-10	0.00E+00	3.99E-10
51	478985.9	3742478	1.43E-09	2.79E-09	0.00E+00	4.22E-09	1.36E-09	3.09E-09	0.00E+00	4.45E-09	2.74E-10	4.94E-10	0.00E+00	7.68E-10	1.09E-09	2.30E-09	0.00E+00	3.39E-09	2.34E-10	3.76E-10	0.00E+00	6.10E-10	1.79E-10	2.21E-10	0.00E+00	4.00E-10
52	478993	3742461	1.43E-09	2.80E-09	0.00E+00	4.23E-09	1.36E-09	3.09E-09	0.00E+00	4.45E-09	2.75E-10	4.94E-10	0.00E+00	7.69E-10	1.09E-09	2.31E-09	0.00E+00	3.40E-09	2.34E-10	3.76E-10	0.00E+00	6.11E-10	1.79E-10	2.21E-10	0.00E+00	4.00E-10
53	479000.1	3742444	1.43E-09	2.80E-09	0.00E+00	4.23E-09	1.36E-09	3.10E-09	0.00E+00	4.46E-09	2.75E-10	4.95E-10	0.00E+00	7.70E-10	1.09E-09	2.31E-09	0.00E+00	3.40E-09	2.35E-10	3.77E-10	0.00E+00	6.11E-10	1.79E-10	2.21E-10	0.00E+00	4.01E-10
54	479007.2	3742427	1.43E-09	2.80E-09	0.00E+00	4.24E-09	1.36E-09	3.10E-09	0.00E+00	4.46E-09	2.75E-10	4.95E-10	0.00E+00	7.70E-10	1.09E-09	2.31E-09	0.00E+00	3.40E-09	2.35E-10	3.77E-10	0.00E+00	6.12E-10	1.80E-10	2.21E-10	0.00E+00	4.01E-10
55	479014.4	3742411	1.44E-09	2.81E-09	0.00E+00	4.24E-09	1.36E-09	3.10E-09	0.00E+00	4.47E-09	2.76E-10	4.96E-10	0.00E+00	7.71E-10	1.09E-09	2.31E-09	0.00E+00	3.41E-09	2.35E-10	3.77E-10	0.00E+00	6.13E-10	1.80E-10	2.22E-10	0.00E+00	4.01E-10
56	479021.5	3742394	1.44E-09	2.81E-09	0.00E+00	4.25E-09	1.36E-09	3.11E-09	0.00E+00	4.47E-09	2.76E-10	4.96E-10	0.00E+00	7.72E-10	1.10E-09	2.32E-09	0.00E+00	3.41E-09	2.35E-10	3.78E-10	0.00E+00	6.13E-10	1.80E-10	2.22E-10	0.00E+00	4.02E-10
57	479028.6	3742377	1.44E-09	2.81E-09	0.00E+00	4.25E-09	1.37E-09	3.11E-09	0.00E+00	4.48E-09	2.76E-10	4.97E-10	0.00E+00	7.73E-10	1.10E-09	2.32E-09	0.00E+00	3.41E-09	2.36E-10	3.78E-10	0.00E+00	6.14E-10	1.80E-10	2.22E-10	0.00E+00	4.02E-10
58	479035.7	3742360	1.44E-09	2.81E-09	0.00E+00	4.26E-09	1.37E-09	3.11E-09	0.00E+00	4.48E-09	2.76E-10	4.97E-10	0.00E+00	7.74E-10	1.10E-09	2.32E-09	0.00E+00	3.42E-09	2.36E-10	3.79E-10	0.00E+00	6.14E-10	1.80E-10	2.22E-10	0.00E+00	4.03E-10
59	479042.9	3742343	1.44E-09	2.82E-09	0.00E+00	4.26E-09	1.37E-09	3.12E-09	0.00E+00	4.48E-09	2.77E-10	4.98E-10	0.00E+00	7.75E-10	1.10E-09	2.32E-09	0.00E+00	3.42E-09	2.36E-10	3.79E-10	0.00E+00	6.15E-10	1.80E-10	2.23E-10	0.00E+00	4.03E-10
60	479050	3742326	1.44E-09	2.82E-09	0.00E+00	4.26E-09	1.37E-09	3.12E-09	0.00E+00	4.49E-09	2.77E-10	4.98E-10	0.00E+00	7.75E-10	1.10E-09	2.33E-09	0.00E+00	3.42E-09	2.36E-10	3.79E-10	0.00E+00	6.16E-10	1.81E-10	2.23E-10	0.00E+00	4.04E-10
61	478950.1	3742581	1.44E-09	2.80E-09	0.00E+00	4.24E-09	1.36E-09	3.10E-09	0.00E+00	4.46E-09	2.75E-10	4.95E-10	0.00E+00	7.71E-10	1.09E-09	2.31E-09	0.00E+00	3.40E-09	2.35E-10	3.77E-10	0.00E+00	6.12E-10	1.80E-10	2.22E-10	0.00E+00	4.01E-10
62	478950	3742599	1.45E-09	2.83E-09	0.00E+00	4.28E-09	1.38E-09	3.13E-09	0.00E+00	4.51E-09	2.78E-10	5.00E-10	0.00E+00	7.78E-10	1.10E-09	2.33E-09	0.00E+00	3.44E-09	2.37E-10	3.81E-10	0.00E+00	6.18E-10	1.81E-10	2.24E-10	0.00E+00	4.05E-10
63	478950	3742618	1.46E-09	2.86E-09	0.00E+00	4.32E-09	1.39E-09	3.16E-09	0.00E+00	4.55E-09	2.81E-10	5.05E-10	0.00E+00	7.86E-10	1.11E-09	2.36E-09	0.00E+00	3.47E-09	2.40E-10	3.85E-10	0.00E+00	6.24E-10	1.83E-10	2.26E-10	0.00E+00	4.09E-10
64	478949.9	3742636	1.48E-09	2.89E-09	0.00E+00	4.36E-09	1.40E-09	3.19E-09	0.00E+00	4.59E-09	2.84E-10	5.10E-10	0.00E+00	7.94E-10	1.13E-09	2.38E-09	0.00E+00	3.51E-09	2.42E-10	3.88E-10	0.00E+00	6.30E-10	1.85E-10	2.28E-10	0.00E+00	4.13E-10
65	478949.8	3742654	1.49E-09	2.91E-09	0.00E+00	4.41E-09	1.42E-09	3.22E-09	0.00E+00	4.64E-09	2.86E-10	5.15E-10	0.00E+00	8.01E-10	1.14E-09	2.40E-09	0.00E+00	3.54E-09	2.44E-10	3.92E-10	0.00E+00	6.36E-10	1.87E-10	2.30E-10	0.00E+00	4.17E-10
66	478949.7	3742673	1.51E-09	2.94E-09	0.00E+00	4.45E-09	1.43E-09	3.25E-09	0.00E+00	4.68E-09	2.89E-10	5.20E-10	0.00E+00	8.09E-10	1.15E-09	2.43E-09	0.00E+00	3.57E-09	2.47E-10	3.96E-10	0.00E+00	6.42E-10	1.88E-10	2.33E-10	0.00E+00	4.21E-10
67	478949.6	3742691	1.52E-09	2.97E-09	0.00E+00	4.49E-09	1.44E-09	3.28E-09	0.00E+00	4.73E-09	2.92E-10	5.25E-10	0.00E+00	8.16E-10	1.16E-09	2.45E-09	0.00E+00	3.61E-09	2.49E-10	4.00E

165	479543.3	3743320	8.113E-09	1.58E-08	0.00E+00	2.40E-08	7.70E-09	1.75E-08	0.00E+00	2.52E-08	1.56E-09	2.80E-09	0.00E+00	4.36E-09	6.18E-09	1.31E-08	0.00E+00	1.92E-08	1.33E-09	2.13E-09	0.00E+00	3.46E-09	1.02E-09	1.25E-09	0.00E+00	2.27E-09
166	479525.2	3743318	7.784E-09	1.52E-08	0.00E+00	2.30E-08	7.38E-09	1.68E-08	0.00E+00	2.42E-08	1.49E-09	2.69E-09	0.00E+00	4.18E-09	5.93E-09	1.25E-08	0.00E+00	1.85E-08	1.27E-09	2.04E-09	0.00E+00	3.32E-09	9.74E-10	1.20E-09	0.00E+00	2.18E-09
167	479507.1	3743315	7.459E-09	1.46E-08	0.00E+00	2.20E-08	7.08E-09	1.61E-08	0.00E+00	2.32E-08	1.43E-09	2.57E-09	0.00E+00	4.00E-09	5.68E-09	1.20E-08	0.00E+00	1.77E-08	1.22E-09	1.96E-09	0.00E+00	3.18E-09	9.33E-10	1.15E-09	0.00E+00	2.08E-09
168	479489.1	3743313	7.141E-09	1.39E-08	0.00E+00	2.11E-08	6.77E-09	1.54E-08	0.00E+00	2.22E-08	1.37E-09	2.46E-09	0.00E+00	3.83E-09	5.44E-09	1.15E-08	0.00E+00	1.69E-08	1.17E-09	1.88E-09	0.00E+00	3.05E-09	8.93E-10	1.10E-09	0.00E+00	2.00E-09
169	479471	3743311	6.831E-09	1.33E-08	0.00E+00	2.02E-08	6.48E-09	1.48E-08	0.00E+00	2.12E-08	1.31E-09	2.36E-09	0.00E+00	3.67E-09	5.20E-09	1.10E-08	0.00E+00	1.62E-08	1.12E-09	1.79E-09	0.00E+00	2.91E-09	8.55E-10	1.05E-09	0.00E+00	1.91E-09
170	479461.2	3743295	6.707E-09	1.31E-08	0.00E+00	1.98E-08	6.36E-09	1.45E-08	0.00E+00	2.09E-08	1.29E-09	2.31E-09	0.00E+00	3.60E-09	5.11E-09	1.08E-08	0.00E+00	1.59E-08	1.10E-09	1.76E-09	0.00E+00	2.86E-09	8.39E-10	1.04E-09	0.00E+00	1.87E-09
171	479452.8	3743279	6.601E-09	1.29E-08	0.00E+00	1.95E-08	6.26E-09	1.43E-08	0.00E+00	2.05E-08	1.27E-09	2.28E-09	0.00E+00	3.54E-09	5.03E-09	1.06E-08	0.00E+00	1.57E-08	1.08E-09	1.73E-09	0.00E+00	2.81E-09	8.26E-10	1.02E-09	0.00E+00	1.84E-09
172	479444.4	3743263	6.485E-09	1.27E-08	0.00E+00	1.91E-08	6.15E-09	1.40E-08	0.00E+00	2.02E-08	1.24E-09	2.24E-09	0.00E+00	3.48E-09	4.94E-09	1.04E-08	0.00E+00	1.54E-08	1.06E-09	1.70E-09	0.00E+00	2.77E-09	8.11E-10	1.00E-09	0.00E+00	1.81E-09
173	479869	3743407	1.093E-08	2.13E-08	0.00E+00	3.23E-08	1.04E-08	2.36E-08	0.00E+00	3.40E-08	2.10E-09	3.77E-09	0.00E+00	5.87E-09	8.32E-09	1.76E-08	0.00E+00	2.59E-08	1.79E-09	2.87E-09	0.00E+00	4.66E-09	1.37E-09	1.69E-09	0.00E+00	3.06E-09
174	479851	3743405	1.096E-08	2.14E-08	0.00E+00	3.24E-08	1.04E-08	2.37E-08	0.00E+00	3.41E-08	2.10E-09	3.78E-09	0.00E+00	5.88E-09	8.34E-09	1.76E-08	0.00E+00	2.60E-08	1.79E-09	2.88E-09	0.00E+00	4.67E-09	1.37E-09	1.69E-09	0.00E+00	3.06E-09
175	479832.9	3743402	1.096E-08	2.14E-08	0.00E+00	3.23E-08	1.04E-08	2.37E-08	0.00E+00	3.41E-08	2.10E-09	3.78E-09	0.00E+00	5.88E-09	8.34E-09	1.76E-08	0.00E+00	2.60E-08	1.79E-09	2.88E-09	0.00E+00	4.67E-09	1.37E-09	1.69E-09	0.00E+00	3.06E-09
176	479814.8	3743400	1.092E-08	2.13E-08	0.00E+00	3.23E-08	1.04E-08	2.36E-08	0.00E+00	3.40E-08	2.10E-09	3.77E-09	0.00E+00	5.86E-09	8.32E-09	1.76E-08	0.00E+00	2.59E-08	1.79E-09	2.87E-09	0.00E+00	4.66E-09	1.37E-09	1.69E-09	0.00E+00	3.05E-09
177	479428.8	3743329	6.092E-09	1.19E-08	0.00E+00	1.80E-08	5.78E-09	1.32E-08	0.00E+00	1.89E-08	1.17E-09	2.10E-09	0.00E+00	3.27E-09	4.64E-09	9.81E-09	0.00E+00	1.44E-08	9.97E-10	1.60E-09	0.00E+00	2.60E-09	7.62E-10	9.40E-10	0.00E+00	1.70E-09
178	479420.4	3743313	5.997E-09	1.17E-08	0.00E+00	1.77E-08	5.69E-09	1.30E-08	0.00E+00	1.86E-08	1.15E-09	2.07E-09	0.00E+00	3.22E-09	4.57E-09	9.66E-09	0.00E+00	1.42E-08	9.81E-10	1.58E-09	0.00E+00	2.56E-09	7.50E-10	9.25E-10	0.00E+00	1.68E-09
179	479871	3743452	9.984E-09	1.95E-08	0.00E+00	2.95E-08	9.47E-09	2.16E-08	0.00E+00	3.10E-08	1.92E-09	3.45E-09	0.00E+00	5.36E-09	7.60E-09	1.61E-08	0.00E+00	2.37E-08	1.63E-09	2.62E-09	0.00E+00	4.26E-09	1.25E-09	1.54E-09	0.00E+00	2.79E-09
180	479852.9	3743450	1.002E-08	1.96E-08	0.00E+00	2.96E-08	9.51E-09	2.16E-08	0.00E+00	3.12E-08	1.92E-09	3.46E-09	0.00E+00	5.38E-09	7.63E-09	1.61E-08	0.00E+00	2.38E-08	1.64E-09	2.63E-09	0.00E+00	4.27E-09	1.25E-09	1.55E-09	0.00E+00	2.80E-09
181	479834.8	3743447	1.003E-08	1.96E-08	0.00E+00	2.96E-08	9.52E-09	2.17E-08	0.00E+00	3.12E-08	1.92E-09	3.46E-09	0.00E+00	5.39E-09	7.64E-09	1.62E-08	0.00E+00	2.38E-08	1.64E-09	2.64E-09	0.00E+00	4.28E-09	1.26E-09	1.55E-09	0.00E+00	2.80E-09
182	479816.7	3743445	1.002E-08	1.96E-08	0.00E+00	2.96E-08	9.51E-09	2.16E-08	0.00E+00	3.12E-08	1.92E-09	3.46E-09	0.00E+00	5.38E-09	7.63E-09	1.61E-08	0.00E+00	2.38E-08	1.64E-09	2.63E-09	0.00E+00	4.27E-09	1.25E-09	1.55E-09	0.00E+00	2.80E-09
183	479798.7	3743443	9.986E-09	1.95E-08	0.00E+00	2.95E-08	9.47E-09	2.16E-08	0.00E+00	3.10E-08	1.92E-09	3.45E-09	0.00E+00	5.36E-09	7.60E-09	1.61E-08	0.00E+00	2.37E-08	1.63E-09	2.62E-09	0.00E+00	4.26E-09	1.25E-09	1.54E-09	0.00E+00	2.79E-09
184	479780.6	3743440	9.927E-09	1.94E-08	0.00E+00	2.93E-08	9.42E-09	2.14E-08	0.00E+00	3.09E-08	1.90E-09	3.43E-09	0.00E+00	5.33E-09	7.56E-09	1.60E-08	0.00E+00	2.35E-08	1.62E-09	2.61E-09	0.00E+00	4.23E-09	1.24E-09	1.53E-09	0.00E+00	2.77E-09
185	479762.5	3743438	9.844E-09	1.92E-08	0.00E+00	2.91E-08	9.34E-09	2.13E-08	0.00E+00	3.06E-08	1.89E-09	3.40E-09	0.00E+00	5.29E-09	7.50E-09	1.59E-08	0.00E+00	2.33E-08	1.61E-09	2.59E-09	0.00E+00	4.20E-09	1.23E-09	1.52E-09	0.00E+00	2.75E-09
186	479744.5	3743436	9.738E-09	1.90E-08	0.00E+00	2.88E-08	9.24E-09	2.10E-08	0.00E+00	3.03E-08	1.87E-09	3.36E-09	0.00E+00	5.23E-09	7.41E-09	1.57E-08	0.00E+00	2.31E-08	1.59E-09	2.56E-09	0.00E+00	4.15E-09	1.22E-09	1.50E-09	0.00E+00	2.72E-09
187	479726.4	3743433	9.611E-09	1.88E-08	0.00E+00	2.84E-08	9.12E-09	2.08E-08	0.00E+00	2.99E-08	1.84E-09	3.32E-09	0.00E+00	5.16E-09	7.32E-09	1.55E-08	0.00E+00	2.28E-08	1.57E-09	2.52E-09	0.00E+00	4.10E-09	1.20E-09	1.48E-09	0.00E+00	2.69E-09
188	479708.3	3743431	9.463E-09	1.85E-08	0.00E+00	2.79E-08	8.98E-09	2.04E-08	0.00E+00	2.94E-08	1.82E-09	3.27E-09	0.00E+00	5.08E-09	7.21E-09	1.52E-08	0.00E+00	2.24E-08	1.55E-09	2.49E-09	0.00E+00	4.04E-09	1.18E-09	1.46E-09	0.00E+00	2.64E-09
189	479690.3	3743428	9.297E-09	1.82E-08	0.00E+00	2.75E-08	8.82E-09	2.01E-08	0.00E+00	2.89E-08	1.78E-09	3.21E-09	0.00E+00	4.99E-09	7.08E-09	1.50E-08	0.00E+00	2.21E-08	1.52E-09	2.44E-09	0.00E+00	3.96E-09	1.16E-09	1.43E-09	0.00E+00	2.60E-09
190	479672.2	3743426	9.114E-09	1.78E-08	0.00E+00	2.69E-08	8.65E-09	1.97E-08	0.00E+00	2.83E-08	1.75E-09	3.15E-09	0.00E+00	4.89E-09	6.94E-09	1.47E-08	0.00E+00	2.16E-08	1.49E-09	2.39E-09	0.00E+00	3.89E-09	1.14E-09	1.41E-09	0.00E+00	2.55E-09
191	479654.1	3743424	8.916E-09	1.74E-08	0.00E+00	2.63E-08	8.46E-09	1.93E-08	0.00E+00	2.77E-08	1.71E-09	3.08E-09	0.00E+00	4.79E-09	6.79E-09	1.44E-08	0.00E+00	2.11E-08	1.46E-09	2.34E-09	0.00E+00	3.80E-09	1.12E-09	1.38E-09	0.00E+00	2.49E-09
192	479636	3743421	8.704E-09	1.70E-08	0.00E+00	2.57E-08	8.26E-09	1.88E-08	0.00E+00	2.71E-08	1.67E-09	3.00E-09	0.00E+00	4.67E-09	6.63E-09	1.40E-08	0.00E+00	2.06E-08	1.42E-09	2.29E-09	0.00E+00	3.71E-09	1.09E-09	1.34E-09	0.00E+00	2.43E-09
193	479618	3743419	8.482E-09	1.66E-08	0.00E+00	2.50E-08	8.05E-09	1.83E-08	0.00E+00	2.64E-08	1.63E-09	2.93E-09	0.00E+00	4.55E-09	6.46E-09	1.37E-08	0.00E+00	2.01E-08	1.39E-09	2.23E-09	0.00E+00	3.62E-09	1.06E-09	1.31E-09	0.00E+00	2.37E-09
194	479599.9	3743417	8.248E-09	1.61E-08	0.00E+00	2.44E-08	7.83E-09	1.78E-08	0.00E+00	2.56E-08	1.58E-09	2.85E-09	0.00E+00	4.43E-09	6.28E-09	1.33E-08	0.00E+00	1.96E-08	1.35E-09	2.17E-09	0.00E+00	3.52E-09	1.03E-09	1.27E-09	0.00E+00	2.30E-09
195	479581.8	3743414	8.008E-09	1.56E-08	0.00E+00	2.36E-08	7.60E-09	1.73E-08	0.00E+00	2.49E-08	1.54E-09	2.76E-09	0.00E+00	4.30E-09	6.10E-09	1.29E-08	0.00E+00	1.90E-08	1.31E-09	2.10E-09	0.00E+00	3.41E-09	1.00E-09	1.24E-09	0.00E+00	2.24E-09
196	479563.8	3743412	7.764E-09	1.52E-08	0.00E+00	2.29E-08	7.37E-09	1.68E-08	0.00E+00	2.41E-08	1.49E-09	2.68E-09	0.00E+00	4.17E-09	5.91E-09	1.25E-08	0.00E+00	1.84E-08	1.27E-09	2.04E-09	0.00E+00	3.31E-09	9.71E-10	1.20E-09	0.00E+00	2.17E-09
197	479545.7	3743410	7.515E-09	1.47E-08	0.00E+00	2.22E-08	7.13E-09	1.62E-08	0.00E+00	2.34E-08	1.44E-09	2.59E-09	0.00E+00	4.03E-09	5.72E-09	1.21E-08	0.00E+00	1.78E-08	1.23E-09	1.97E-09	0.00E+00	3.20E-09	9.40E-10	1.16E-09	0.00E+00	2.10E-09
198	479527.6	3743407	7.265E-09	1.42E-08	0.00E+00	2.15E-08	6.89E-09	1.57E-08	0.00E+00	2.26E-08	1.39E-09	2.51E-09	0.00E+00	3.90E-09	5.53E-09	1.17E-08	0.00E+00	1.72E-08	1.19E-09	1.91E-09	0.00E+00	3.10E-09	9.09E-10	1.12E-09	0.00E+00	2.03E-09
199	479509.6	3743405	7.014E-09	1.37E-08	0.00E+00	2.07E-08	6.65E-09	1.52E-08	0.00E+00	2.18E-08	1.35E-09	2.42E-09	0.00E+00	3.77E-09	5.34E-09	1.13E-08	0.00E+00	1.66E-08	1.15E-09	1.84E-09	0.00E+00	2.99E-09	8.78E-10	1.08E-09	0.00E+00	1.96E-09
200	479491.5	3743403	6.765E-09	1.32E-08	0.00E+00	2.00E-08	6.42E-09	1.46E-08	0.00E+00	2.10E-08	1.30E-09	2.33E-09	0.00E+00	3.63E-09	5.15E-09	1.09E-08	0.00E+00	1.60E-08	1.11E-09	1.78E-09	0.00E+00	2.88E-09	8.46E-10	1.04E-09	0.00E+00	1.89E-09
201	479062.8	3742717	1.875E-09	3.66E-09	0.00E+00	5.53E-09	1.78E-09	4.05E-09	0.00E+00	5.83E-09	3.60E-10	6.47E-10	0.00E+00	1.01E-09	1.43E-09	3.02E-09	0.00E+00	4.45E-09	3.07E-10	4.92E-10	0.00E+00	7.99E-10	2.35E-10	2.89E-10	0.00E+00	5.24E-10
202	479893.1	3743499	9.087E-09	1.77E-08	0.00E+00	2.68E-08	8.62E-09	1.96E-08	0.00E+00	2.82E-08	1.74E-09	3.14E-09	0.00E+00	4.88E-09	6.92E-09	1.46E-08	0.00E+00	2.16E-08	1.49E-09	2.39E-09	0.00E+00	3.87E-09	1.14E-09	1.40E-09	0.00E+00	2.54E-09
203	479875.1	3743497	9.15E-09	1.79E-08	0.00E+00	2.70E-08	8.68E-09	1.98E-08	0.00E+00	2.84E-08	1.76E-09	3.16E-09	0.00E+00	4.91E-09	6.97E-09	1.47E-08	0.00E+00	2.17E-08	1.50E-09	2.40E-09	0.00E+00	3.90E-09	1.14E-09	1.41E-09	0.00E+00	2.56E-09
204	479857	3743495	9.196E-09	1.80E-08	0.00E+00	2.72E-08	8.72E-09	1.99E-08	0.00E+00	2.86E-08	1.76E-09	3.17E-09	0.00E+00	4.94E-09	7.00E-09	1.48E-08	0.00E+00	2.18E-08	1.51E-09	2.42E-09	0.00E+00	3.92E-09	1.15E-09	1.42E-09	0.00E+00	2.57E-09
205	479838.9	3743492	9.222E-09	1.80E-08	0.00E+00	2.72E-08	8.75E-09	1.99E-08	0.00E+00	2.87E-08	1.77E-09	3.18E-09	0.00E+00	4.95E-09	7.02E-09	1.48E-08	0.00E+00	2.19E-08	1.51E-09	2.42E-09	0.00E+00	3.93E-09	1.15E-09	1.42E-09	0.00E+00	2.58E-09
206	479820.9	3743490	9.227E-09	1.80E-08	0.00E+00	2.72E-08	8.75E-09	1.99E-08	0.00E+00	2.87E-08	1.77E-09	3.18E-09	0.00E+00	4.95E-09	7.03E-09	1.49E-08	0.00E+00	2.19E-08	1.51E-09	2.42E-09	0.00E+00	3.93E-09	1.15E-09	1.42E-09	0.00E+00	2.58E-09
207	479802.8	3743488	9.213E-09	1.80E-08	0.00E+00	2.72E-08	8.74E-09	1.99E-08	0.00E+00	2.86E-08	1.77E-09	3.18E-09	0.00E+00	4.95E-09	7.02E-09	1.48E-08	0.00E+00	2.19E-08	1.51E-09	2.42E-09	0.00E+00	3.93E-09	1.15E-09	1.42E-09	0.00E+00	2.57E-09
208	479784.7	3743485	9.178E-09	1.79E-08	0.00E+00	2.71E-08	8.71E-09	1.98E-08	0.00E+00	2.85E-08	1.76E-09	3.17E-09	0.00E+00	4.93E-09	6.99E-09	1.48E-08	0.00E+00	2.18E-08	1.50E-09	2.41E-09	0.00E+00	3.91E-09	1.15E-09	1.42E-09	0.00E+00	2.56E-09
209	479766.7	3743483	9.123E-09	1.78E-08	0.00E+00	2.69E-08	8.66E-09	1.97E-08	0.00E+00	2.84E-08	1.75E-09	3.15E-09	0.00E+00	4.90E-09	6.95E-09	1.47E-08	0.00E+00	2.16E-08	1.49E-09	2.40E-09	0.00E+00	3.89E-09	1.14E-09	1.41E-09	0.00E+00	2.55E-09
210	479748.6	3743481	9.048E-09	1.77E-08	0.00E+00	2.67E-08	8.58E-09	1.95E-08	0.00E+00	2.81E-08	1.74E-09	3.12E-09	0.00E+00	4.86E-09	6.89E-09	1.46E-08	0.00E+00	2.15E-08	1.48E-09	2.38E-09	0.00E+00	3.86E-09	1.13E-09	1.40E-09	0.00E+00	2.53E-09
211	479730.5	3743478	8.955E-09	1.75E-08	0.00E+00	2.64E-08	8.50E-09	1.93E-08	0.00E+00	2.78E-08	1.72E-09	3.09E-09	0.00E+00	4.81E-09	6.82E-09	1.44E-08	0.00E+00	2.12E-08	1.47E-09	2.35E-09	0.00E+00	3.82E-09	1.12E-09	1.38E-09	0.00E+00	2.50E-09
212	479712.5	3743476	8.843E-09	1.73E-08	0.00E+00	2.61E-08	8.39E-09	1.91E-08	0.00E+00	2.75E-08	1.70E-09	3.05E-09	0.00E+00	4.75E-09	6.73E-09	1.42E-08	0.00E+00	2.10E-08	1.45E-09	2.32E-09	0.00E+00	3.77E-09	1.11E-09	1.36E-09	0.00E+00	2.47E-09
213	479694.4	3743474	8.715E-09	1.70E-08	0.00E+00	2.57E-08	8.27E-09	1.88E-08	0.00E+00	2.71E-08	1.67E-09	3.01E-09	0.00E+00	4.68E-09	6.64E-09	1.40E-08	0.00E+00	2.07E-08	1.43E-09	2.29E-09	0.00E+00	3.72E-09	1.09E-09	1.34E-09	0.00E+00	2.44E-09
214	479676.3	3743471	8.57E-09	1.67E-08	0.00E+00	2.53E-08	8.13E-09	1.85E-08	0.00E+00	2.66E-08	1.64E-09	2.96E-09	0.00E+00	4.60E-09	6.53E-09	1.38E-08	0.00E+00	2.03E-08	1.40E-09	2.25E-09	0.00E+00	3.65E-09	1.07E-09	1.32E-09	0.00E+00	2.39E-09
215	479658.3	3743469	8.412E-09	1.64E-08	0.00E+00	2.48E-08	7.98E-09	1.82E-08	0.00E+00	2.61E-08	1.61E-09	2.90E-09	0.00E+00	4.52E-09	6.41E-09	1.35E-08	0.00E+00	2.00E-08	1.38E-09	2.21E-09	0.00E+00	3.59E-09	1.05E-09	1.30E-09	0.00E+00	2.35E-09
216	479640.2	3743467	8.24E-09	1.61E-08	0.00E+00	2.43E-08	7.82E-09	1.78E-08	0.00E+00	2.56E-08	1.58E-09	2.84E-09	0.00E+00	4.42E-09	6.27E-09	1.33E-08	0.00E+00	1.95E-08	1.35E-09	2.16E-09	0.00E+00	3.51E-09	1.03E-09	1.27E-09	0.00E+00	2.30E-09
217	479622.1	3743464	8.057E-09	1.57E-08	0.00E+00	2.38E-08	7.64E-09	1.74E-08	0.00E+00	2.50E-08	1.55E-09	2.78E-09	0.00E+00	4.33E-09	6.14E-09	1.30E-08	0.00E+00	1.91E-08	1.32E-09	2.12E-09	0.00E+00	3.44E-09	1.01E-09	1.24E-09	0.00E+00	2.25E-09
218	479604.1	3743462	7.863E-09	1.54E-08	0.00E+00	2.32E-08	7.46E-09	1.70E-08	0.00E+00	2.44E-08	1.51E-09	2.71E-09	0.00E+00	4.22E-09	5.99E-09	1.27E-08	0.00E+00	1.87E-08	1.29E-09	2.07E-09	0.00E+00	3.35E-09	9.84E-10	1.21E-09	0.00E+00	2.20E-09
219	479586	3743460	7.661E-09	1.50E-08	0.00E+00	2.26E-08	7.27E-09	1.65E-08	0.00E+00	2.38E-08	1.47E-09	2.64E-09	0.00E+00	4.11E-09	5.83E-09	1.23E-08	0.00E+00	1.82E-08	1.25E-09	2.01E-09	0.00E+00	3.27E-09	9.58E-10	1.18E-09	0.00E+00	2.14E-09
220	479567.9	3743457	7.454E-09	1.46E-08	0.00E+00	2.20E-08	7.07E-09	1.61E-08	0.00E+00	2.32E-08	1.43E-09	2.57E-09	0.00E+00	4.00E-09	5.68E-09	1.20E-08	0.00E+00	1.77E-08	1.22E-09	1.96E-09	0.00E+00	3.18E-09	9.33E-10	1.15E-09	0.00E+00	2.08E-09
221	479549.9	3743455	7.241E-09	1.41E-08	0.00E+00	2.14E-08	6.87E-09	1.56E-08	0.00E+00	2.25E-08	1.39E-09	2.50E-09	0.00E+00	3.89E-09	5.51E-09	1.17E-08	0.00E+00	1.72E-08	1.19E-09	1.90E-09	0.00E+00	3.09E-09	9.06E-10	1.12E-09	0.00E+00	2.02E-09
222	479531.8	3743453	7.025E-09	1.37E-08	0.00E+00	2.07E-08	6.66E-09	1.52E-08	0.00E+00	2.18E-08	1.35E-09	2.42E-09	0.00E+00	3.77E-09	5.35E-09	1.13E-08	0.00E+00	1.67E-08	1.15E-09	1.85E-09	0.00E+00	3.00E-09	8.79E-10	1.08E-09	0.00E+00	1.96E-09
223	479513.7	3743450	6.806E-09	1.33E-08	0.00E+00	2.01E-08	6.46E-09	1.47E-08	0.00E+00	2.12E-08	1.31E-09	2.35E-09	0.00E+00	3.65E-09	5.18E-09	1.10E-08	0.00E+00	1.61E-08	1.11E-09	1.79E-09	0.00E+00	2.90E-09	8.52E-10	1.05E-09	0.00E+00	1.90E-09
224	479495.7	3743448	6.587E-09	1.29E-08	0.00E+00	1.94E-08	6.25E-09	1.42E-08	0.00E+00	2.05E-08	1.26E-09	2.27E-09	0.00E+00	3.54E-09	5.02E-09	1.06E-08	0.00E+00	1.56E-08	1.08E-09	1.73E-09	0.00E+00	2.81E-09	8.24E-10	1.02E-09	0.00E+00	1.84E-09
225	479057.9	3742805	1.948E-09	3.80E-09	0.00E+00	5.75E-09	1.85E-09	4.21E-09	0.00E+00	6.06E-09	3.74E-10	6.72E-10	0.00E+00	1.05E-09	1.48E-09	3.14E-09	0.00E+00	4.62E-09	3.19E-10	5.12E-10	0.00E+00	8.31E-10	2.44E-10	3.01E-10	0.00E+00	5.44E-10
226	479049.6	3742788	1.902E-09	3.71E-09	0.00E+00	5.61E-09	1.80E-09	4.11E-09	0.00E+00	5.91E-09	3.65E-10	6.56E-10	0.00E+00	1.02E-09	1.45E-09	3.06E-09	0.00E+00	4.51E-09	3.11E-10	5.00E-10	0.00E+00	8.11E-10	2.38E-10	2.93E-10	0.00E+00	5.31E-10
227	479041.2	3742772	1.856E-09	3.63E-09	0.00E+00	5.48E-09	1.76E-09	4.01E-09	0.00E+00	5.77E-09	3.56E-10	6.41E-10	0.00E+00	9.97E-10	1.41E-09	2.99E-09	0.00E+00	4.40E-09	3.04E-10	4.88E-10	0.00E+00	7.92E-10	2.32E-10	2.86E-10	0.00E+00	5.19E-10
228	479032.8	3742756	1.813E-09	3.54E-09	0.00E+00	5.35E-09	1.72E-09	3.92E-09	0.00E+00	5.64E-09	3.48E-10	6.26E-10	0.00E+00	9.73E-10	1.38E-09	2.92E-09	0.00E+00	4.30E-09	2.97E-10	4.76E-10	0.00E+00	7.73E-10	2.27E-10	2.80E-10	0.00E+00	5.07E-10
229	479024.5	3742740	1.771E-09	3.46E-09	0.00E+00	5.23E-09	1.68E-09	3.82E-09	0.00E+00	5.50E-09	3.40E-10	6.11E-10	0.00E+00	9.51E-10	1.35E-09	2.85E-09	0.00E+00	4.20E-09	2.90E-10	4.65E-10	0.00E+00	7.55E-10	2.22E-10	2.73E-10	0.00E+00	4.95E-10
230	479016.1	3742724	1.73E-09	3.38E-09	0.00E+00	5.11E-09	1.64E-09	3.74E-09	0.00E+00	5.38E-09	3.32E-10	5.97E-10	0.00E+00	9.29E-10	1.32E-09	2.79E-09	0.00E+00	4.10E-09	2.83E-10	4.54E-10	0.00E+00	7.37E-10	2.16E-10	2.67E-10	0.00E+00	4.83E-10
231	479901.5	3743545	8.334E-09	1.63E-08	0.00E+00	2.46E-08	7.91E-09	1.80E-08	0.00E+00	2.59E-08	1.60E-09	2.88E-09	0.00E+00	4.47E-09	6.35E-09	1.34E-08	0.00E+00	1.98E-08	1.36E-09	2.19E-09	0.00E+00	3.55E-09	1.04E-09	1.29E-09	0.00E+00	2.33E-09
232	479883.4	3743543	8.403E-09	1.64E-08	0.00E+00	2.48E-08	7.97E-09	1.81E-08	0.00E+00	2.61E-08	1.61E-09	2.90E-09	0.00E+00	4.51E-09	6.40E-09	1.35E-08	0.00E+00	1.99E-08	1.38E-09	2.21E-09	0.00E+00	3.58E-09	1.05E-09	1.30E-09	0.00E+00	2.35E-09
233	479865.4	3743541	8.457E-09	1.65E-08	0.00E+00	2.50E-08	8.02E-09	1.83E-08	0.00E+00	2.63E-08	1.62E-09	2.92E-09	0.00E+00	4.54E-09	6.44E-09	1.36E-08	0.00E+00	2.01E-08	1.38E-09	2.22E-09	0.00E+00	3.61E-09	1.06E-09	1.31E-09	0.00E+00	2.36E-09
234	479847.3	3743538	8.495E-09	1.66E-08	0.00E+00	2.51E-08	8.06E-09	1.83E-08	0.00E+00	2.64E-08	1.63E-09	2.93E-09	0.00E+00	4.56E-09	6.47E-09	1.37E-08	0.00E+00	2.01E-08	1.39E-09	2.23E-09	0.00E+00	3.62E-09	1.06E-09	1.31E-09	0.00E+00	2.37E-09
235	479829.2	3743536	8.517E-09	1.66E-08	0.00E+00	2.51E-08	8.08E-09	1.84E-08	0.00E+00	2.65E-08	1.63E-09	2.94E-09	0.00E+00	4.57E-09	6.49E-09	1.37E-08	0.00E+00	2.02E-08	1.39E-09	2.24E-09	0.00E+00	3.63E-09	1.07E-09	1.31E-09	0.00E+00	2.38E-09
236	479811.1	3743534	8.522E-09	1.66E-08	0.00E+00	2.52E-08	8.09E-09	1.84E-08	0.00E+00	2.65E-08	1.63E-09	2.94E-09	0.00E+00	4.58E-09	6.49E-09	1.37E-08	0.00E+00	2.02E-08	1.39E-09	2.24E-09	0.00E+00	3.63E-09	1.07E-09	1.32E-09	0.00E+00	2.38E-09
237	479793.1	3743531	8.51E-09	1.66E-08	0.00E+00	2.51E-08	8.07E-09	1.84E-08	0.00E+00	2.65E-08	1.63E-09	2.94E-09	0.00E+00	4.57E-09	6.48E-09	1.37E-08	0.00E+00	2.02E-08	1.39E-09	2.24E-09	0.00E+00	3.63E-09	1.06E-09	1.31E-09	0.00E+00	2.38E-09
238	479775	3743529	8.48E-09	1.66E-08	0.00E+00	2.50E-08	8.05E-09	1.83E-08	0.00E+00	2.64E-08	1.63E-09	2.93E-09	0.00E+00	4.55E-09	6.46E-09	1.37E-08	0.00E+00	2.01E-08	1.39E-09	2.23E-09	0.00E+00	3.62E-09	1.06E-09	1.31E-09	0.00E+00	2.37E-09
239	479756.9	3743526	8.433E-09	1.65E-08	0.00E+00	2.49E-08	8.00E-09	1.82E-08	0.00E+00	2.62E-08	1.62E-09	2.91E-09	0.00E+00	4.53E-09	6.42E-09	1.36E-08	0.00E+00	2.00E-08	1.38E-09	2.22E-09	0.00E+00	3.60E-09	1.06E-09	1.30E-09	0.00E+00	2.36E-09
240	479738.9	3743524	8.37E-09	1.63E-08	0.00E+00	2.47E-08	7.94E-09	1.81E-08	0.00E+00	2.60E-08	1.61E-09	2.89E-09	0.00E+00	4.49E-09	6.37E-09	1.35E-08	0.00E+00	1.99E-08	1.37E-09	2.20E-09	0.00E+00	3.57E-09	1.05E-09	1.29E-09	0.00E+00	2.34E-09
241	479720.8	3743522	8.29E-09	1.62E-08	0.00E+00	2.45E-08	7.87E-09	1.79E-08	0.00E+00	2.58E-08	1.59E-09	2.86E-09	0.00E+00	4.45E-09	6.31E-09	1.33E-08	0.00E+00	1.97E-08	1.36E-09	2.18E-09	0.00E+00	3.53E-09	1.04E-09	1.28E-09	0.00E+00	2.32E-09
242	479702.7	3743519	8.195E-09	1.60E-08	0.00E+00	2.42E-08	7.77E-09	1.77E-08	0.00E+00	2.55E-08	1.57E-09	2.83E-09	0.00E+00	4.40E-09	6.24E-09	1.32E-08	0.00E+00	1.94E-08	1.34E-09	2.15E-09	0.00E+00	3.49E-09	1.03E-09	1.26E-09	0.00E+00	2.29E-09
243	479684.7	3743517	8.085E-09	1.58E-08	0.00E+00	2.39E-08	7.67E-09	1.75E-08	0.00E+00	2.51E-08	1.55E-09	2.79E-09	0.00E+00	4.34E-09	6.16E-09	1.30E-08	0.00E+00	1.92E-08	1.32E-09	2.12E-09	0.00E+00	3.45E-09	1.01E-09	1.25E-09	0.00E+00	2.26E-09
244	479666.6	3743515	7.962E-09	1.55E-08	0.00E+00	2.35E-08	7.55E-09	1.72E-08	0.00E+00	2.48E-08	1.53E-09	2.75E-09	0.00E+00	4.27E-09	6.06E-09	1.28E-08	0.00E+00	1.89E-08	1.30E-09	2.09E-09	0.00E+00	3.40E-09	9.96E-10	1.23E-09	0.00E+00	2.22E-09
245	479648.5	3743512	7.826E-09	1.53E-08	0.00E+00	2.31E-08	7.42E-09	1.69E-08	0.00E+00	2.43E-08	1.50E-09	2.70E-09	0.00E+00	4.20E-09	5.96E-09	1.26E-08	0.00E+00	1.86E-08	1.28E-09	2.06E-09	0.00E+00	3.34E-09	9.79E-10	1.21E-09	0.00E+00	2.19E-09
246	479630.4	3743510	7.679E-09	1.50E-08	0.00E+00	2.27E-08	7.29E-09	1.66E-08	0.00E+00	2.39E-08	1.47E-09	2.65E-09	0.00E+00	4.12E-09	5.85E-09	1.24E-08	0.00E+00	1.82E-08	1.26E-09	2.02E-09	0.00E+00	3.27E-09	9.61E-10	1.19E-09	0.00E+00	2.15E-09
247	479612.4	3743508	7.521E-09	1.47E-08	0.00E+00	2.22E-08	7.14E-09	1.62E-08	0.00E+00	2.34E-08	1.44E-09	2.60E-09	0.00E+00	4.04E-09	5.73E-09	1.21E-08	0.00E+00	1.78E-08	1.23E-09	1.98E-09	0.00E+00	3.21E-09	9.41E-10	1.16E-09	0.00E+00	2.10E-09
248	479594.3	3743505	7.354E-09	1.44E-08	0.00E+00	2.17E-08	6.98E-09	1.59E-08	0.00E+00	2.29E-08	1.41E-09	2.54E-09	0.00E+00	3.95E-09	5.60E-09	1.18E-08	0.00E+00	1.74E-08	1.20E-09	1.93E-09	0.00E+00	3.14E-09	9.20E-10	1.13E-09	0.00E+00	2.05E-09
249	479576.2	3743503	7.18E-09	1.40E-08	0.00E+00	2.12E-08	6.81E-09	1.55E-08	0.00E+00	2.23E-08	1.38E-09	2.48E-09	0.00E+00	3.85E-09	5.47E-09	1.16E-08	0.00E+00	1.70E-08	1.18E-09	1.89E-09	0.00E+00	3.06E-09	8.98E-10	1.11E-09	0.00E+00	2.01E-09
250	479558.2	3743501	6.999E-09	1.37E-08	0.00E+00	2.07E-08	6.64E-09	1.51E-08	0.00E+00	2.18E-08	1.34E-09	2.42E-09	0.00E+00	3.76E-09	5.33E-09	1.13E-08	0.00E+00	1.66E-08	1.15E-09	1.84E-09	0.00E+00	2.98E-09	8.76E-10	1.08E-09	0.00E+00	1.96E-09
251	479540.1	3743498	6.814E-09	1.33E-08	0.00E+00	2.01E-08	6.47E-09	1.47E-08	0.00E+00	2.12E-08	1.31E-09	2.35E-09	0.00E+00	3.66E-09	5.19E-09	1.10E-08	0.00E+00	1.62E-08	1.12E-09	1.79E-09	0.00E+00	2.91E-09	8.53E-10	1.05E-09	0.00E+00	1.90E-09
252	479522	3743496	6.626E-09	1.29E-08	0.00E+00	1.96E-08	6.29E-09	1.43E-08	0.00E+00	2.06E-08	1.27E-09	2.29E-09	0.00E+00	3.56E-09	5.05E-09	1.07E-08	0.00E+00	1.57E-08	1.08E-09	1.74E-09	0.00E+00	2.83E-09	8.29E-10	1.02E-09	0.00E+00	1.85E-09
253	479504	3743494	6.434E-09	1.26E-08	0.00E+00	1.90E-08	6.10E-09	1.39E-08	0.00E+00	2.00E-08	1.23E-09	2.22E-09	0.00E+00	3.45E-09	4.90E-09	1.04E-08	0.00E+00	1.53E-08	1.05E-09	1.69E-09	0.00E+00	2.74E-09	8.05E-10	9.93E-10	0.00E+00	1.80E-09
254	479330.7	3743429	4.693E-09	9.16E-09	0.00E+00	1.39E-08	4.45E-09	1.01E-08	0.00E+00	1.46E-08	9.00E-10	1.62E-09	0.00E+00	2.52E-09	3.57E-09	7.56E-09	0.00E+00	1.11E-08	7.68E-10	1.23E-09	0.00E+00	2.00E-09	5.87E-10	7.24E-10	0.00E+00	1.31E-09
255	479322.4	3743413	4.623E-09	9.03E-09	0.00E+00	1.37E-08	4.39E-09	9.99E-09	0.00E+00	1.44E-08	8.87E-10	1.60E-09	0.00E+00	2.48E-09	3.52E-09	7.44E-09	0.00E+00	1.10E-08	7.57E-10	1.21E-09	0.00E+00	1.97E-09	5.78E-10	7.13E-10	0.00E+00	1.29E-09
256	479314	3743396	4.548E-09	8.88E-09	0.00E+00	1.34E-08	4.31E-09	9.82E-09	0.00E+00	1.41E-08	8.72E-10	1.57E-09	0.00E+00	2.44E-09	3.46E-09	7.32E-09	0.00E+00	1.08E-08	7.44E-10	1.19E-09	0.00E+00	1.94E-09	5.69E-10	7.02E-10	0.00E+00	1.27E-09
257	479305.6	3743380	4.469E-09	8.73E-09	0.00E+00	1.32E-08	4.24E-09	9.65E-09	0.00E+00	1.39E-08	8.57E-10	1.54E-09	0.00E+00	2.40E-09	3.40E-09	7.20E-09	0.00E+00	1.06E-08	7.31E-10	1.17E-09	0.00E+00	1.91E-09	5.59E-10	6.90E-10	0.00E+00	1.25E-09
258	479297.3	3743364	4.386E-09	8.56E-09	0.00E+00	1.29E-08	4.16E-09	9.47E-09	0.00E+00	1.36E-08	8.41E-10	1.51E-09	0.00E+00	2.35E-09	3.34E-09	7.06E-09	0.00E+00	1.04E-08	7.18E-10	1.15E-09	0.00E+00	1.87E-09	5.49E-10	6.77E-10	0.00E+00	1.23E-09
259	479063	3742911	2.081E-09	4.06E-09	0.00E+00	6.14E-09	1.97E-09	4.49E-09	0.00E+00	6.47E-09	3.99E-10	7.18E-10	0.00E+00	1.12E-09	1.58E-09	3.35E-09	0.00E+00	4.94E-09	3.41E-10	5.47E-10	0.00E+00	8.87E-10	2.60E-10	3.21E-10	0.00E+00	5.81E-10
260	479054.6	3742895	2.03E-09	3.96E-09	0.00E+00	5.99E-09	1.93E-09	4.38E-09	0.00E+00	6.31E-09	3.89E-10	7.00E-10	0.00E+00	1.09E-09	1.55E-09	3.27E-09	0.00E+00	4.81E-09	3.32E-10	5.33E-10	0.00E+00	8.65E-10	2.54E-10	3.13E-10	0.00E+00	5.67E-10
261	479046.3	3742878	1.98E-09	3.87E-09	0.00E+00	5.85E-09	1.88E-09	4.28E-09	0.00E+00	6.16E-09	3.80E-10	6.83E-10	0.00E+00	1.06E-09	1.51E-09	3.19E-09	0.00E+00	4.70E-09	3.24E-10	5.20E-10	0.00E+00	8.44E-10	2.48E-10	3.06E-10	0.00E+00	5.53E-10
262	479037.9	3742862	1.933E-09	3.77E-09	0.00E+00	5.71E-09	1.83E-09	4.18E-09	0.00E+00	6.01E-09	3.71E-10	6.67E-10	0.00E+00	1.04E-09	1.47E-09	3.11E-09	0.00E+00	4.58E-09	3.16E-10	5.08E-10	0.00E+00	8.24E-10	2.42E-10	2.98E-10	0.00E+00	5.40E-10
263	479029.5	3742846	1.887E-09	3.69E-09	0.00E+00	5.57E-09	1.79E-09	4.08E-09	0.00E+00	5.87E-09	3.62E-10	6.51E-10	0.00E+00	1.01E-09	1.44E-09	3.04E-09	0.00E+00	4.48E-09	3.09E-10	4.96E-10	0.00E+00	8.05E-10	2.36E-10	2.91E-10	0.00E+00	5.27E-10
264	479021.2	3742830	1.844E-09	3.60E-09	0.00E+00	5.44E-09	1.75E-09	3.98E-09	0.00E+00	5.73E-09	3.54E-10	6.36E-10	0.00E+00	9.90E-10	1.40E-09	2.97E-09	0.00E+00	4.37E-09	3.02E-10	4.84E-10	0.00E+00	7.86E-10	2.31E-10	2.84E-10	0.00E+00	5.15E-10
265	479012.8	3742814	1.801E-09	3.52E-09	0.00E+00	5.32E-09	1.71E-09	3.89E-09	0.00E+00	5.60E-09	3.45E-10	6.22E-10	0.00E+00	9.67E-10	1.37E-09	2.90E-09	0.00E+00	4.27E-09	2.95E-10	4.73E-10	0.00E+00	7.68E-10	2.25E-10	2.78E-10	0.00E+00	5.03E-10
266	479004.4	3742797	1.76E-09	3.44E-09	0.00E+00	5.20E-09	1.67E-09	3.80E-09	0.00E+00	5.47E-09	3.38E-10	6.07E-10	0.00E+00	9.45E-10	1.34E-09	2.83E-09	0.00E+00	4.17E-09	2.88E-10	4.62E-10	0.00E+00	7.50E-10	2.20E-10	2.72E-10	0.00E+00	4.92E-10
267	478996.1	3742781	1.72E-09	3.36E-09	0.00E+00	5.08E-09	1.63E-09	3.72E-09	0.00E+00	5.35E-09	3.30E-10	5.94E-10	0.00E+00	9.24E-10	1.31E-09	2.77E-09	0.00E+00	4.08E-09	2.82E-10	4.52E-10	0.00E+00	7.34E-10	2.15E-10	2.65E-10	0.00E+00	4.81E-10
268	478987.7	3742765	1.682E-09	3.28E-09	0.00E+00	4.97E-09	1.60E-09	3.63E-09	0.00E+00	5.23E-09	3.23E-10	5.80E-10	0.00E+00	9.03E-10	1.28E-09	2.71E-09	0.00E+00	3.99E-09	2.75E-10	4.42E-10	0.00E+00	7.17E-10	2.10E-10	2.60E-10	0.00E+00	4.70E-10
269	478979.3	3742749	1.645E-09	3.21E-09	0.00E+00	4.86E-09	1.56E-09	3.55E-09	0.00E+00	5.11E-09	3.15E-10	5.68E-10	0.00E+00	8.83E-10	1.25E-09	2.65E-09	0.00E+00	3.90E-09	2.69E-10	4.32E-10	0.00E+00	7.01E-10	2.06E-10	2.54E-10	0.00E+00	4.60E-10
270	478971	3742733	1.609E-09	3.14E-09	0.00E+00	4.75E-09	1.53E-09	3.47E-09	0.00E+00	5.00E-09	3.09E-10	5.55E-10	0.00E+00	8.64E-10	1.22E-09	2.59E-09	0.00E+00	3.82E-09	2.63E-10	4.23E-10	0.00E+00	6.86E-10	2.01E-10	2.48E-10	0.00E+00	4.49E-10
271	478962.6	3742717	1.573E-09	3.07E-09	0.00E+00	4.65E-09	1.49E-09	3.40E-09	0.00E+00	4.89E-09	3.02E-10	5.43E-10	0.00E+00	8.45E-10	1.20E-09	2.53E-09	0.00E+00	3.73E-09	2.58E-10	4.13E-10	0.00E+00	6.71E-10	1.97E-10	2.43E-10	0.00E+00	4.40E-10
272	479894	3743589	7.732E-09	1.51E-08	0.00E+00	2.28E-08	7.34E-09	1.67E-08	0.00E+00	2.40E-08	1.48E-09	2.67E-09	0.00E+00	4.15E-09	5.89E-09	1.25E-08	0.00E+00	1.83E-08	1.27E-09	2.03E-09	0.00E+00	3.30E-09	9.67E-10	1.19E-09	0.00E+00	2.16E-09
273	479875.9	3743587	7.793E-09	1.52E-08	0.00E+00	2.30E-08	7.39E-09	1.68E-08	0.00E+00	2.42E-08	1.49E-09	2.69E-09	0.00E+00	4.18E-09	5.93E-09	1.25E-08	0.00E+00	1.85E-08	1.28E-09	2.05E-09	0.00E+00	3.32E-09	9.75E-10	1.20E-09	0.00E+00	2.18E-09
274	479857.8	3743584	7.84E-09	1.53E-08	0.00E+00	2.32E-08	7.44E-09	1.69E-08	0.00E+00	2.44E-08	1.50E-09	2.71E-09	0.00E+00	4.21E-09	5.97E-09	1.26E-08	0.00E+00	1.86E-08	1.28E-09	2.06E-09	0.00E+00	3.34E-09	9.81E-10	1.21E-09	0.00E+00	2.19E-09
275	479839.8	3743582	7.875E-09	1.54E-08	0.00E+00	2.33E-08	7.47E-09	1.70E-08	0.00E+00	2.45E-08	1.51E-09	2.72E-09	0.00E+00	4.23E-09	6.00E-09	1.27E-08	0.00E+00	1.87E-08	1.29E-09	2.07E-09	0.00E+00	3.36E-09	9.85E-10	1.22E-09	0.00E+00	2.20E-09
276	479821.7	3743580	7.895E-09	1.54E-08	0.00E+00	2.33E-08	7.49E-09	1.71E-08	0.00E+00	2.45E-08	1.51E-09	2.72E-09	0.00E+00	4.24E-09	6.01E-09	1.27E-08	0.00E+00	1.87E-08	1.29E-09	2.07E-09	0.00E+00	3.37E-09	9.88E-10	1.22E-09	0.00E+00	2.21E-09
277	479803.6	3743577	7.901E-09	1.54E-08	0.00E+00	2.33E-08	7.50E-09	1.71E-08	0.00E+00	2.46E-08	1.52E-09	2.73E-09	0.00E+00	4.24E-09	6.02E-09	1.27E-08	0.00E+00	1.87E-08	1.29E-09	2.08E-09	0.00E+00	3.37E-09	9.88E-10	1.22E-09	0.00E+00	2.21E-09
278	479785.6	3743575	7.892E-09	1.54E-08	0.00E+00	2.33E-08	7.49E-09	1.70E-08	0.00E+00	2.45E-08	1.51E-09	2.72E-09	0.00E+00	4.24E-09	6.01E-09	1.27E-08	0.00E+00	1.87E-08	1.29E-09	2.07E-09	0.00E+00	3.37E-09	9.87E-10	1.22E-09	0.00E+00	2.21E-09
279	479767.5	3743573	7.868E-09	1.54E-08	0.00E+00	2.32E-08	7.46E-09	1.70E-08	0.00E+00	2.45E-08	1.51E-09	2.72E-09	0.00E+00	4.22E-09	5.99E-09	1.27E-08	0.00E+00	1.87E-08	1.29E-09	2.07E-09	0.00E+00	3.36E-09	9.84E-10	1.21E-09	0.00E+00	2.20E-09
280	479749.4	3743570	7.83E-09	1.53E-08	0.00E+00	2.31E-08	7.43E-09	1.69E-08	0.00E+00	2.43E-08	1.50E-09	2.70E-09	0.00E+00	4.20E-09	5.96E-09	1.26E-08	0.00E+00	1.86E-08	1.28E-09	2.06E-09	0.00E+00	3.34E-09	9.80E-10	1.21E-09	0.00E+00	2.19E-09
281	479731.4	3743568	7.777E-09	1.52E-08	0.00E+00	2.30E-08	7.38E-09	1.68E-08	0.00E+00	2.42E-08	1.49E-09	2.68E-09	0.00E+00	4.18E-09	5.92E-09	1.25E-08	0.00E+00	1.84E-08	1.27E-09	2.04E-09	0.00E+00	3.32E-09	9.73E-10	1.20E-09	0.00E+00	2.17E-09
282	479713.3	3743565	7.711E-09	1.51E-08	0.00E+00	2.28E-08	7.32E-09	1.67E-08	0.00E+00	2.40E-08	1.48E-09	2.66E-09	0.00E+00	4.14E-09	5.87E-09	1.24E-08	0.00E+00	1.83E-08	1.26E-09	2.03E-09	0.00E+00	3.29E-09	9.65E-10	1.19E-09	0.00E+00	2.15E-09
283	479695.2	3743563	7.631E-09	1.49E-08	0.00E+00	2.25E-08	7.24E-09	1.65E-08	0.00E+00	2.37E-08	1.46E-09	2.63E-09	0.00E+00	4.10E-09	5.81E-09	1.23E-08	0.00E+00	1.81E-08	1.25E-09	2.00E-09	0.00E+00	3.25E-09	9.55E-10	1.18E-09	0.00E+00	2.13E-09
284	479677.2	3743561	7.538E-09	1.47E-08	0.00E+00	2.23E-08	7.15E-09	1.63E-08	0.00E+00	2.34E-08	1.45E-09	2.60E-09	0.00E+00	4.05E-09	5.74E-09	1.21E-08	0.00E+00	1.79E-08	1.23E-09	1.98E-09	0.00E+00	3.21E-09	9.43E-10	1.16E-09	0.00E+00	2.11E-09
285	479659.1	3743558	7.434E-09	1.45E-08	0.00E+00	2.19E-08	7.05E-09	1.61E-08	0.00E+00	2.31E-08	1.43E-09	2.57E-09	0.00E+00	3.99E-09	5.66E-09	1.20E-08	0.00E+00	1.76E-08	1.22E-09	1.95E-09	0.00E+00	3.17E-09	9.30E-10	1.15E-09	0.00E+00	2.08E-09
286	479641	3743556	7.317E-09	1.43E-08	0.00E+00	2.16E-08	6.94E-09	1.58E-08	0.00E+00	2.27E-08	1.40E-09	2.53E-09	0.00E+00	3.93E-09	5.57E-09	1.18E-08	0.00E+00	1.74E-08	1.20E-09	1.92E-09	0.00E+00	3.12E-09	9.15E-10	1.13E-09	0.00E+00	2.04E-09
287	479623	3743554	7.19E-09	1.40E-08	0.00E+00	2.12E-08	6.82E-09	1.55E-08	0.00E+00	2.24E-08	1.38E-09	2.48E-09	0.00E+00	3.86E-09	5.48E-09	1.16E-08	0.00E+00	1.71E-08	1.18E-09	1.89E-09	0.00E+00	3.07E-09	9.00E-10	1.11E-09	0.00E+00	2.01E-09
288	479604.9	3743551	7.055E-09	1.38E-08	0.00E+00	2.08E-08	6.69E-09	1.52E-08	0.00E+00	2.19E-08	1.35E-09	2.43E-09	0.00E+00	3.79E-09	5.37E-09	1.14E-08	0.00E+00	1.67E-08	1.15E-09	1.85E-09	0.00E+00	3.01E-09	8.83E-10	1.09E-09	0.00E+00	1.97E-09
289	479586.8	3743549	6.912E-09	1.35E-08	0.00E+00	2.04E-08	6.56E-09	1.49E-08	0.00E+00	2.15E-08	1.33E-09	2.39E-09	0.00E+00	3.71E-09	5.26E-09	1.11E-08	0.00E+00	1.64E-08	1.13E-09	1.82E-09	0.00E+00	2.95E-09	8.65E-10	1.07E-09	0.00E+00	1.93E-09
290	479568.8	3743547	6.762E-09	1.32E-08	0.00E+00	2.00E-08	6.42E-09	1.46E-08	0.00E+00	2.10E-08	1.30E-09	2.33E-09	0.00E+00	3.63E-09	5.15E-09	1.09E-08	0.00E+00	1.60E-08	1.11E-09	1.78E-09	0.00E+00	2.88E-09	8.46E-10	1.04E-09	0.00E+00	1.89E-09
291	479550.7	3743544	6.606E-09	1.29E-08	0.00E+00	1.95E-08	6.27E-09	1.43E-08	0.00E+00	2.05E-08	1.27E-09	2.28E-09	0.00E+00	3.55E-09	5.03E-09	1.06E-08	0.00E+00	1.57E-08	1.08E-09	1.74E-09	0.00E+00	2.82E-09	8.26E-10	1.02E-09	0.00E+00	1.85E-09
292	479532.6	3743542	6.444E-09	1.26E-08	0.00E+00	1.90E-08	6.11E-09	1.39E-08	0.00E+00	2.00E-08	1.24E-09	2.22E-09	0.00E+00	3.46E-09	4.91E-09	1.04E-08	0.00E+00	1.53E-08	1.05E-09	1.69E-09	0.00E+00	2.75E-09	8.06E-10	9.95E-10	0.00E+00	1.80E-09
293	479514.6	3743540	6.279E-09	1.23E-08	0.00E+00	1.85E-08	5.96E-09	1.36E-08	0.00E+00	1.95E-08	1.20E-09	2.17E-09	0.00E+00	3.37E-09	4.78E-09	1.01E-08	0.00E+00	1.49E-08	1.03E-09	1.65E-09	0.00E+00	2.68E-09	7.86E-10	9.69E-10	0.00E+00	1.75E-09
294	479496.5	3743537	6.111E-09	1.19E-08	0.00E+00	1.80E-08	5.80E-09	1.32E-08	0.00E+00	1.90E-08	1.17E-09	2.11E-09	0.00E+00	3.28E-09	4.65E-09	9.84E-09	0.00E+00	1.45E-08	1.00E-09	1.61E-09	0.00E+00	2.61E-09	7.65E-10	9.43E-10	0.00E+00	1.71E-09
295	479295	3743456	4.314E-09	8.42E-09	0.00E+00	1.27E-08	4.09E-09	9.32E-09	0.00E+00	1.34E-08	8.27E-10	1.49E-09	0.00E+00	2.32E-09	3.28E-09	6.95E-09	0.00E+00	1.02E-08	7.06E-10	1.13E-09	0.00E+00	1.84E-09	5.40E-10	6.66E-10	0.00E+00	1.21E-09
296	479286.6	3743440	4.248E-09	8.30E-09	0.00E+00	1.25E-08	4.03E-09	9.18E-09	0.00E+00	1.32E-08	8.15E-10	1.47E-09	0.00E+00	2.28E-09	3.23E-09	6.84E-09	0.00E+00	1.01E-08	6.95E-10	1.12E-09	0.00E+00	1.81E-09	5.32E-10	6.56E-10	0.00E+00	1.19E-09
297	479278.2	3743424	4.18E-09	8.16E-09	0.00E+00	1.23E-08	3.97E-09	9.03E-09	0.00E+00	1.30E-08	8.02E-10	1.44E-09	0.00E+00	2.24E-09	3.18E-09	6.73E-09	0.00E+00	9.91E-09	6.84E-10	1.10E-09	0.00E+00	1.78E-09	5.23E-10	6.45E-10	0.00E+00	1.17E-09
298	479269.9	3743408	4.108E-09	8.02E-09	0.00E+00	1.21E-08	3.90E-09	8.87E-09	0.00E+00	1.28E-08	7.88E-10	1.42E-09	0.00E+00	2.21E-09	3.13E-09	6.61E-09	0.00E+00	9.74E-09	6.72E-10	1.08E-09	0.00E+00	1.75E-09	5.14E-10	6.34E-10	0.00E+00	1.15E-09
299	479261.5	3743391	4.033E-09	7.87E-09	0.00E+00	1.19E-08	3.83E-09	8.71E-09	0.00E+00	1.25E-08	7.74E-10	1.39E-09	0.00E+00	2.17E-09	3.07E-09	6.49E-09	0.00E+00	9.56E-09	6.60E-10	1.06E-09	0.00E+00	1.72E-09	5.05E-10	6.22E-10	0.00E+00	1.13E-09
300	479253.1	3743375	3.955E-09	7.72E-09	0.00E+00	1.17E-08	3.75E-09	8.54E-09	0.00E+00	1.23E-08	7.59E-10	1.36E-09	0.00E+00	2.12E-09	3.01E-09	6.37E-09	0.00E+00	9.38E-09	6.47E-10	1.04E-09	0.00E+00	1.69E-09	4.95E-10	6.10E-10	0.00E+00	1.11E-09
301	479060.7	3743003	2.176E-09	4.25E-09	0.00E+00	6.42E-09	2.06E-09	4.70E-09	0.00E+00	6.76E-09	4.17E-10	7.51E-10	0.00E+00	1.17E-09	1.66E-09	3.50E-09	0.00E+00	5.16E-09	3.56E-10	5.72E-10	0.00E+00	9.28E-10	2.72E-10	3.36E-10	0.00E+00	6.08E-10
302	479052.4	3742987	2.121E-09	4.14E-09	0.00E+00	6.26E-09	2.01E-09	4.58E-09	0.00E+00	6.59E-09	4.07E-10	7.32E-10	0.00E+00	1.14E-09	1.61E-09	3.42E-09	0.00E+00	5.03E-09	3.47E-10	5.57E-10	0.00E+00	9.04E-10	2.65E-10	3.27E-10	0.00E+00	5.93E-10
303	479044	3742971	2.068E-09	4.04E-09	0.00E+00	6.11E-09	1.96E-09	4.47E-09	0.00E+00	6.43E-09	3.97E-10	7.14E-10	0.00E+00	1.11E-09	1.57E-09	3.33E-09	0.00E+00	4.90E-09	3.38E-10	5.43E-10	0.00E+00	8.82E-10	2.59E-10	3.19E-10	0.00E+00	5.78E-10
304	479035.6	3742954	2.017E-09	3.94E-09	0.00E+00	5.96E-09	1.91E-09	4.36E-09	0.00E+00	6.27E-09	3.87E-10	6.96E-10	0.00E+00	1.08E-09	1.54E-09	3.25E-09	0.00E+00	4.78E-09	3.30E-10	5.30E-10	0.00E+00	8.60E-10	2.52E-10	3.11E-10	0.00E+00	5.64E-10
305	479027.3	3742938	1.969E-09	3.84E-09	0.00E+00	5.81E-09	1.87E-09	4.25E-09	0.00E+00	6.12E-09	3.78E-10	6.79E-10	0.00E+00	1.06E-09	1.50E-09	3.17E-09	0.00E+00	4.67E-09	3.22E-10	5.17E-10	0.00E+00	8.39E-10	2.46E-10	3.04E-10	0.00E+00	5.50E-10
306	479018.9	3742922	1.922E-09	3.75E-09	0.00E+00	5.68E-09	1.82E-09	4.15E-09	0.00E+00	5.98E-09	3.69E-10	6.63E-10	0.00E+00	1.03E-09	1.46E-09	3.10E-09	0.00E+00	4.56E-09	3.15E-10	5.05E-10	0.00E+00	8.20E-10	2.40E-10	2.97E-10	0.00E+00	5.37E-10
307	479010.5	3742906	1.877E-09	3.67E-09	0.00E+00	5.54E-09	1.78E-09	4.05E-09	0.00E+00	5.84E-09	3.60E-10	6.48E-10	0.00E+00	1.01E-09	1.43E-09	3.02E-09	0.00E+00	4.45E-09	3.07E-10	4.93E-10	0.00E+00	8.00E-10	2.35E-10	2.90E-10	0.00E+00	5.25E-10
308	479002.2	3742890	1.834E-09	3.58E-09	0.00E+00	5.42E-09	1.74E-09	3.96E-09	0.00E+00	5.70E-09	3.52E-10	6.33E-10	0.00E+00	9.85E-10	1.40E-09	2.95E-09	0.00E+00	4.35E-09	3.00E-10	4.82E-10	0.00E+00	7.82E-10	2.29E-10	2.83E-10	0.00E+00	5.13E-10
309	478993.8	3742873	1.793E-09	3.50E-09	0.00E+00	5.29E-09	1.70E-09	3.87E-09	0.00E+00	5.57E-09	3.44E-10	6.19E-10	0.00E+00	9.62E-10	1.36E-09	2.89E-09	0.00E+00	4.25E-09	2.93E-10	4.71E-10	0.00E+00	7.64E-10	2.24E-10	2.77E-10	0.00E+00	5.01E-10
310	478985.5	3742857	1.752E-09	3.42E-09	0.00E+00	5.17E-09	1.66E-09	3.79E-09	0.00E+00	5.45E-09	3.36E-10	6.05E-10	0.00E+00	9.41E-10	1.33E-09	2.82E-09	0.00E+00	4.16E-09	2.87E-10	4.60E-10	0.00E+00	7.47E-10	2.19E-10	2.70E-10	0.00E+00	4.90E-10
311	478977.1	3742841	1.714E-09	3.35E-09	0.00E+00	5.06E-09	1.63E-09	3.70E-09	0.00E+00	5.33E-09	3.29E-10	5.91E-10	0.00E+00	9.20E-10	1.30E-09	2.76E-09	0.00E+00	4.06E-09	2.80E-10	4.50E-10	0.00E+00	7.31E-10	2.14E-10	2.64E-10	0.00E+00	4.79E-10
312	478968.7	3742825	1.676E-09	3.27E-09	0.00E+00	4.95E-09	1.59E-09	3.62E-09	0.00E+00	5.21E-09	3.21E-10	5.78E-10	0.00E+00	9.00E-10	1.28E-09	2.70E-09	0.00E+00	3.98E-09	2.74E-10	4.40E-10	0.00E+00	7.15E-10	2.10E-10	2.59E-10	0.00E+00	4.68E-10
313	478960.4	3742809	1.64E-09	3.20E-09	0.00E+00	4.84E-09	1.56E-09	3.54E-09	0.00E+00	5.10E-09	3.15E-10	5.66E-10	0.00E+00	8.80E-10	1.25E-09	2.64E-09	0.00E+00	3.89E-09	2.68E-10	4.31E-10	0.00E+00	6.99E-10	2.05E-10	2.53E-10	0.00E+00	4.58E-10
314	478952	3742793	1.605E-09	3.13E-09	0.00E+00	4.74E-09	1.52E-09	3.47E-09	0.00E+00	4.99E-09	3.08E-10	5.54E-10	0.00E+00	8.61E-10	1.22E-09	2.58E-09	0.00E+00	3.81E-09	2.63E-10	4.22E-10	0.00E+00	6.84E-10	2.01E-10	2.48E-10	0.00E+00	4.48E-10
315	478943.6	3742776	1.57E-09	3.07E-09	0.00E+00	4.64E-09	1.49E-09	3.39E-09	0.00E+00	4.88E-09	3.01E-10	5.42E-10	0.00E+00	8.43E-10	1.20E-09	2.53E-09	0.00E+00	3.72E-09	2.57E-10	4.13E-10	0.00E+00	6.70E-10	1.96E-10	2.42E-10	0.00E+00	4.39E-10
316	478935.3	3742760	1.537E-09	3.00E-09	0.00E+00	4.54E-09	1.46E-09	3.32E-09	0.00E+00	4.78E-09	2.95E-10	5.30E-10	0.00E+00	8.25E-10	1.17E-09	2.48E-09	0.00E+00	3.65E-09	2.52E-10	4.04E-10	0.00E+00	6.55E-10	1.92E-10	2.37E-10	0.00E+00	4.30E-10
317	478926.9	3742744	1.505E-09	2.94E-09	0.00E+00	4.44E-09	1.43E-09	3.25E-09	0.00E+00	4.68E-09	2.89E-10	5.19E-10	0.00E+00	8.08E-10	1.15E-09	2.42E-09	0.00E+00	3.57E-09	2.46E-10	3.95E-10	0.00E+00	6.42E-10	1.88E-10	2.32E-10	0.00E+00	4.21E-10
318	478918.5	3742728	1.474E-09	2.88E-09	0.00E+00	4.35E-09	1.40E-09	3.18E-09	0.00E+00	4.58E-09	2.83E-10	5.09E-10	0.00E+00	7.91E-10	1.12E-09	2.37E-09	0.00E+00	3.50E-09	2.41E-10	3.87E-10	0.00E+00	6.28E-10	1.84E-10	2.27E-10	0.00E+00	4.12E-10
319	478910.2	3742712	1.443E-09	2.82E-09	0.00E+00	4.26E-09	1.37E-09	3.12E-09	0.00E+00	4.49E-09	2.77E-10	4.98E-10	0.00E+00	7.75E-10	1.10E-09	2.32E-09	0.00E+00	3.42E-09	2.36E-10	3.79E-10	0.00E+00	6.15E-10	1.81E-10	2.23E-10	0.00E+00	4.03E-10
320	479899.7	3743646	7.014E-09	1.37E-08	0.00E+00	2.07E-08	6.65E-09	1.52E-08	0.00E+00	2.18E-08	1.35E-09	2.42E-09	0.00E+00	3.77E-09	5.34E-09	1.13E-08	0.00E+00	1.66E-08	1.15E-09	1.84E-09	0.00E+00	2.99E-09	8.78E-10	1.08E-09	0.00E+00	1.96E-09
321	479899.7	3743696	6.478E-09	1.27E-08	0.00E+00	1.91E-08	6.15E-09	1.40E-08	0.00E+00	2.01E-08	1.24E-09	2.24E-09	0.00E+00	3.48E-09	4.93E-09	1.04E-08	0.00E+00	1.54E-08	1.06E-09	1.70E-09	0.00E+00	2.76E-09	8.10E-10	1.00E-09	0.00E+00	1.81E-09
322	479984.9	3742728	3.007E-07	5.87E-07	0.00E+00	8.88E-07	2.85E-07	6.49E-07	0.00E+00	9.35E-07	5.77E-08	1.04E-07	0.00E+00	1.61E-07	2.29E-07	4.84E-07	0.00E+00	7.13E-07	4.92E-08	7.90E-08	0.00E+00	1.28E-07	3.76E-08	4.64E-08	0.00E+00	8.40E-08
323	480004.6	3742727	3.009E-07	5.88E-07	0.00E+00	8.88E-07	2.85E-07	6.50E-07	0.00E+00	9.35E-07	5.77E-08	1.04E-07	0.00E+00	1.62E-07	2.29E-07	4.85E-07	0.00E+00	7.14E-07	4.92E-08	7.91E-08	0.00E+00	1.28E-07	3.76E-08	4.64E-08	0.00E+00	8.41E-08
324	480028	3742727	2.813E-07	5.49E-07	0.00E+00	8.31E-07	2.67E-07	6.08E-07	0.00E+00	8.75E-07	5.40E-08	9.71E-08	0.00E+00	1.51E-07	2.14E-07	4.53E-07	0.00E+00	6.67E-07	4.60E-08	7.39E-08	0.00E+00	1.20E-07	3.52E-08	4.34E-08	0.00E+00	7.86E-08
325	480048.1	3742727	2.528E-07	4.94E-07	0.00E+00	7.46E-07	2.40E-07	5.46E-07	0.00E+00	7.86E-07	4.85E-08	8.72E-08	0.00E+00	1.36E-07	1.92E-07	4.07E-07	0.00E+00	6.00E-07	4.14E-08	6.64E-08	0.00E+00	1.08E-07	3.16E-08	3.90E-08	0.00E+00	7.06E-08
326	480074	3742727	1.956E-07	3.82E-07	0.00E+00	5.77E-07	1.86E-07	4.22E-07	0.00E+00	6.08E-07	3.75E-08	6.75E-08	0.00E+00	1.05E-07	1.49E-07	3.15E-07	0.00E+00	4.64E-07	3.20E-08	5.14E-08	0.00E+00	8.34E-08	2.45E-08	3.02E-08	0.00E+00	5.46E-08
327	479899.9	3742696	2.823E-07	5.51E-07	0.00E+00	8.34E-07	2.68E-07	6.10E-07	0.00E+00	8.78E-07	5.42E-08	9.74E-08	0.00E+00	1.52E-07	2.15E-07	4.55E-07	0.00E+00	6.70E-07	4.62E-08	7.42E-08	0.00E+00	1.20E-07	3.53E-08	4.36E-08	0.00E+00	7.89E-08
328	480086.7	3742696	2.67E-07	5.21E-07	0.00E+00	7.88E-07	2.53E-07	5.77E-07	0.00E+00	8.30E-07	5.12E-08	9.21E-08	0.00E+00	1.43E-07	2.03E-07	4.30E-07	0.00E+00	6.33E-07	4.37E-08	7.01E-08	0.00E+00	1.14E-07	3.34E-08	4.12E-08	0.00E+00	7.46E-08
329	480086.9	3742563	2.932E-07	5.73E-07	0.00E+00	8.66E-07	2.78E-07	6.33E-07	0.00E+00	9.11E-07	5.62E-08	1.01E-07	0.00E+00	1.57E-07	2.23E-07	4.72E-07	0.00E+00	6.95E-07	4.80E-08	7.70E-08	0.00E+00	1.25E-07	3.67E-08	4.52E-08	0.00E+00	8.19E-08
330	479904.8	3742563	1.595E-07	3.12E-07	0.00E+00	4.71E-07	1.51E-07	3.45E-07	0.00E+00	4.96E-07	3.06E-08	5.51E-08	0.00E+00	8.57E-08	1.21E-07	2.57E-07	0.00E+00	3.78E-07	2.61E-08	4.19E-08	0.00E+00	6.80E-08	2.00E-08	2.46E-08	0.00E+00	4.46E-08
331	479900.2	3742567	1.503E-07	2.94E-07	0.00E+00	4.44E-07	1.43E-07	3.25E-07	0.00E+00	4.67E-07	2.88E-08	5.19E-08	0.00E+00	8.07E-08	1.14E-07	2.42E-07	0.00E+00	3.57E-07	2.46E-08	3.95E-08	0.00E+00	6.41E-08	1.88E-08	2.32E-08	0.00E+00	4.20E-08

332	479899.6	3742696	2.782E-07	5.43E-07	0.00E+00	8.22E-07		2.64E-07	6.01E-07	0.00E+00	8.65E-07		5.34E-08	9.60E-08	0.00E+00	1.49E-07		2.12E-07	4.48E-07	0.00E+00	6.60E-07		4.55E-08	7.31E-08	0.00E+00	1.19E-07		3.48E-08	4.29E-08	0.00E+00	7.78E-08

			UnMitigated			T2			T2L3			T3			T3L3			T4		
			2.33E-02	4.55E-02	0.00E+00	2.21E-02	5.03E-02	0.00E+00	4.47E-03	8.04E-03	0.00E+00	1.77E-02	3.75E-02	0.00E+00	3.81E-03	6.12E-03	0.00E+00	2.91E-03	3.60E-03	0.00E+00
			Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3
1	480337.7	3743042	7.26E-04	1.42E-03	0.00E+00	6.88E-04	1.57E-03	0.00E+00	1.39E-04	2.50E-04	0.00E+00	5.53E-04	1.17E-03	0.00E+00	1.19E-04	1.91E-04	0.00E+00	9.08E-05	1.12E-04	0.00E+00
2	480320.9	3743049	7.73E-04	1.51E-03	0.00E+00	7.33E-04	1.67E-03	0.00E+00	1.48E-04	2.67E-04	0.00E+00	5.88E-04	1.24E-03	0.00E+00	1.26E-04	2.03E-04	0.00E+00	9.67E-05	1.19E-04	0.00E+00
3	480304.2	3743056	8.21E-04	1.60E-03	0.00E+00	7.79E-04	1.77E-03	0.00E+00	1.58E-04	2.83E-04	0.00E+00	6.25E-04	1.32E-03	0.00E+00	1.34E-04	2.16E-04	0.00E+00	1.03E-04	1.27E-04	0.00E+00
4	480406.3	3743064	5.43E-04	1.06E-03	0.00E+00	5.15E-04	1.17E-03	0.00E+00	1.04E-04	1.87E-04	0.00E+00	4.13E-04	8.74E-04	0.00E+00	8.88E-05	1.43E-04	0.00E+00	6.79E-05	8.38E-05	0.00E+00
5	480389.5	3743071	5.77E-04	1.13E-03	0.00E+00	5.48E-04	1.25E-03	0.00E+00	1.11E-04	1.99E-04	0.00E+00	4.40E-04	9.30E-04	0.00E+00	9.45E-05	1.52E-04	0.00E+00	7.22E-05	8.91E-05	0.00E+00
6	480372.6	3743078	6.13E-04	1.20E-03	0.00E+00	5.82E-04	1.32E-03	0.00E+00	1.18E-04	2.12E-04	0.00E+00	4.67E-04	9.88E-04	0.00E+00	1.00E-04	1.61E-04	0.00E+00	7.67E-05	9.47E-05	0.00E+00
7	480355.8	3743085	6.51E-04	1.27E-03	0.00E+00	6.17E-04	1.41E-03	0.00E+00	1.25E-04	2.25E-04	0.00E+00	4.95E-04	1.05E-03	0.00E+00	1.06E-04	1.71E-04	0.00E+00	8.14E-05	1.00E-04	0.00E+00
8	480339	3743092	6.89E-04	1.35E-03	0.00E+00	6.54E-04	1.49E-03	0.00E+00	1.32E-04	2.38E-04	0.00E+00	5.25E-04	1.11E-03	0.00E+00	1.13E-04	1.81E-04	0.00E+00	8.62E-05	1.06E-04	0.00E+00
9	480322.2	3743099	7.28E-04	1.42E-03	0.00E+00	6.91E-04	1.57E-03	0.00E+00	1.40E-04	2.51E-04	0.00E+00	5.55E-04	1.17E-03	0.00E+00	1.19E-04	1.91E-04	0.00E+00	9.11E-05	1.12E-04	0.00E+00
10	480305.3	3743106	7.68E-04	1.50E-03	0.00E+00	7.29E-04	1.66E-03	0.00E+00	1.47E-04	2.65E-04	0.00E+00	5.85E-04	1.24E-03	0.00E+00	1.26E-04	2.02E-04	0.00E+00	9.61E-05	1.19E-04	0.00E+00
11	480407.7	3743113	5.26E-04	1.03E-03	0.00E+00	4.99E-04	1.14E-03	0.00E+00	1.01E-04	1.82E-04	0.00E+00	4.01E-04	8.47E-04	0.00E+00	8.61E-05	1.38E-04	0.00E+00	6.58E-05	8.12E-05	0.00E+00
12	480374.9	3743177	5.60E-04	1.09E-03	0.00E+00	5.31E-04	1.21E-03	0.00E+00	1.07E-04	1.93E-04	0.00E+00	4.26E-04	9.01E-04	0.00E+00	9.16E-05	1.47E-04	0.00E+00	7.00E-05	8.64E-05	0.00E+00
13	480357.9	3743184	5.86E-04	1.15E-03	0.00E+00	5.56E-04	1.27E-03	0.00E+00	1.12E-04	2.02E-04	0.00E+00	4.47E-04	9.44E-04	0.00E+00	9.60E-05	1.54E-04	0.00E+00	7.34E-05	9.05E-05	0.00E+00
14	480341	3743191	6.14E-04	1.20E-03	0.00E+00	5.82E-04	1.33E-03	0.00E+00	1.18E-04	2.12E-04	0.00E+00	4.67E-04	9.88E-04	0.00E+00	1.00E-04	1.61E-04	0.00E+00	7.68E-05	9.47E-05	0.00E+00
15	480324	3743198	6.41E-04	1.25E-03	0.00E+00	6.08E-04	1.38E-03	0.00E+00	1.23E-04	2.21E-04	0.00E+00	4.88E-04	1.03E-03	0.00E+00	1.05E-04	1.68E-04	0.00E+00	8.01E-05	9.89E-05	0.00E+00
16	480307	3743205	6.67E-04	1.30E-03	0.00E+00	6.33E-04	1.44E-03	0.00E+00	1.28E-04	2.30E-04	0.00E+00	5.08E-04	1.07E-03	0.00E+00	1.09E-04	1.75E-04	0.00E+00	8.35E-05	1.03E-04	0.00E+00
17	480392.8	3743220	5.09E-04	9.94E-04	0.00E+00	4.83E-04	1.10E-03	0.00E+00	9.76E-05	1.76E-04	0.00E+00	3.87E-04	8.19E-04	0.00E+00	8.33E-05	1.34E-04	0.00E+00	6.37E-05	7.85E-05	0.00E+00
18	480375.8	3743227	5.31E-04	1.04E-03	0.00E+00	5.04E-04	1.15E-03	0.00E+00	1.02E-04	1.83E-04	0.00E+00	4.05E-04	8.56E-04	0.00E+00	8.70E-05	1.40E-04	0.00E+00	6.65E-05	8.20E-05	0.00E+00
19	480358.8	3743234	5.54E-04	1.08E-03	0.00E+00	5.26E-04	1.20E-03	0.00E+00	1.06E-04	1.91E-04	0.00E+00	4.22E-04	8.92E-04	0.00E+00	9.07E-05	1.46E-04	0.00E+00	6.93E-05	8.55E-05	0.00E+00
20	480341.7	3743241	5.77E-04	1.13E-03	0.00E+00	5.47E-04	1.25E-03	0.00E+00	1.11E-04	1.99E-04	0.00E+00	4.39E-04	9.29E-04	0.00E+00	9.44E-05	1.52E-04	0.00E+00	7.22E-05	8.90E-05	0.00E+00
21	480324.7	3743248	5.99E-04	1.17E-03	0.00E+00	5.68E-04	1.29E-03	0.00E+00	1.15E-04	2.07E-04	0.00E+00	4.56E-04	9.65E-04	0.00E+00	9.81E-05	1.57E-04	0.00E+00	7.50E-05	9.25E-05	0.00E+00
22	480307.7	3743255	6.21E-04	1.21E-03	0.00E+00	5.89E-04	1.34E-03	0.00E+00	1.19E-04	2.14E-04	0.00E+00	4.73E-04	1.00E-03	0.00E+00	1.02E-04	1.63E-04	0.00E+00	7.77E-05	9.59E-05	0.00E+00
23	480393.6	3743269	4.84E-04	9.46E-04	0.00E+00	4.59E-04	1.05E-03	0.00E+00	9.29E-05	1.67E-04	0.00E+00	3.69E-04	7.80E-04	0.00E+00	7.93E-05	1.27E-04	0.00E+00	6.06E-05	7.47E-05	0.00E+00
24	480376.5	3743276	5.03E-04	9.83E-04	0.00E+00	4.78E-04	1.09E-03	0.00E+00	9.66E-05	1.74E-04	0.00E+00	3.83E-04	8.11E-04	0.00E+00	8.24E-05	1.32E-04	0.00E+00	6.30E-05	7.77E-05	0.00E+00
25	480359.5	3743283	5.23E-04	1.02E-03	0.00E+00	4.96E-04	1.13E-03	0.00E+00	1.00E-04	1.80E-04	0.00E+00	3.98E-04	8.41E-04	0.00E+00	8.55E-05	1.37E-04	0.00E+00	6.54E-05	8.06E-05	0.00E+00
26	480342.4	3743290	5.41E-04	1.06E-03	0.00E+00	5.14E-04	1.17E-03	0.00E+00	1.04E-04	1.87E-04	0.00E+00	4.12E-04	8.72E-04	0.00E+00	8.86E-05	1.42E-04	0.00E+00	6.77E-05	8.36E-05	0.00E+00
27	479050.1	3742581	1.31E-04	2.56E-04	0.00E+00	1.24E-04	2.83E-04	0.00E+00	2.51E-05	4.52E-05	0.00E+00	9.97E-05	2.11E-04	0.00E+00	2.14E-05	3.44E-05	0.00E+00	1.64E-05	2.02E-05	0.00E+00
28	479050	3742600	1.32E-04	2.59E-04	0.00E+00	1.26E-04	2.86E-04	0.00E+00	2.54E-05	4.57E-05	0.00E+00	1.01E-04	2.13E-04	0.00E+00	2.17E-05	3.48E-05	0.00E+00	1.66E-05	2.04E-05	0.00E+00
29	479049.9	3742618	1.34E-04	2.61E-04	0.00E+00	1.27E-04	2.89E-04	0.00E+00	2.57E-05	4.62E-05	0.00E+00	1.02E-04	2.16E-04	0.00E+00	2.19E-05	3.52E-05	0.00E+00	1.67E-05	2.07E-05	0.00E+00
30	479049.9	3742637	1.35E-04	2.64E-04	0.00E+00	1.28E-04	2.92E-04	0.00E+00	2.60E-05	4.67E-05	0.00E+00	1.03E-04	2.18E-04	0.00E+00	2.22E-05	3.56E-05	0.00E+00	1.69E-05	2.09E-05	0.00E+00
31	479049.8	3742655	1.37E-04	2.67E-04	0.00E+00	1.30E-04	2.96E-04	0.00E+00	2.62E-05	4.72E-05	0.00E+00	1.04E-04	2.20E-04	0.00E+00	2.24E-05	3.59E-05	0.00E+00	1.71E-05	2.11E-05	0.00E+00
32	479049.7	3742673	1.38E-04	2.70E-04	0.00E+00	1.31E-04	2.99E-04	0.00E+00	2.65E-05	4.77E-05	0.00E+00	1.05E-04	2.23E-04	0.00E+00	2.26E-05	3.63E-05	0.00E+00	1.73E-05	2.13E-05	0.00E+00
33	479049.6	3742692	1.40E-04	2.73E-04	0.00E+00	1.32E-04	3.02E-04	0.00E+00	2.68E-05	4.82E-05	0.00E+00	1.06E-04	2.25E-04	0.00E+00	2.29E-05	3.67E-05	0.00E+00	1.75E-05	2.16E-05	0.00E+00
34	479014.4	3742529	1.19E-04	2.33E-04	0.00E+00	1.13E-04	2.58E-04	0.00E+00	2.29E-05	4.12E-05	0.00E+00	9.10E-05	1.92E-04	0.00E+00	1.96E-05	3.14E-05	0.00E+00	1.49E-05	1.84E-05	0.00E+00
35	479021.6	3742512	1.20E-04	2.34E-04	0.00E+00	1.14E-04	2.58E-04	0.00E+00	2.29E-05	4.13E-05	0.00E+00	9.11E-05	1.93E-04	0.00E+00	1.96E-05	3.14E-05	0.00E+00	1.50E-05	1.85E-05	0.00E+00
36	479028.7	3742495	1.20E-04	2.34E-04	0.00E+00	1.14E-04	2.59E-04	0.00E+00	2.30E-05	4.13E-05	0.00E+00	9.12E-05	1.93E-04	0.00E+00	1.96E-05	3.15E-05	0.00E+00	1.50E-05	1.85E-05	0.00E+00
37	479035.8	3742478	1.20E-04	2.34E-04	0.00E+00	1.14E-04	2.59E-04	0.00E+00	2.30E-05	4.14E-05	0.00E+00	9.13E-05	1.93E-04	0.00E+00	1.96E-05	3.15E-05	0.00E+00	1.50E-05	1.85E-05	0.00E+00
38	479042.9	3742462	1.20E-04	2.35E-04	0.00E+00	1.14E-04	2.59E-04	0.00E+00	2.30E-05	4.15E-05	0.00E+00	9.15E-05	1.93E-04	0.00E+00	1.97E-05	3.16E-05	0.00E+00	1.50E-05	1.85E-05	0.00E+00
39	479050	3742445	1.20E-04	2.35E-04	0.00E+00	1.14E-04	2.60E-04	0.00E+00	2.31E-05	4.15E-05	0.00E+00	9.16E-05	1.94E-04	0.00E+00	1.97E-05	3.16E-05	0.00E+00	1.50E-05	1.86E-05	0.00E+00
40	479057.1	3742428	1.20E-04	2.35E-04	0.00E+00	1.14E-04	2.60E-04	0.00E+00	2.31E-05	4.16E-05	0.00E+00	9.17E-05	1.94E-04	0.00E+00	1.97E-05	3.16E-05	0.00E+00	1.51E-05	1.86E-05	0.00E+00
41	479000.1	3742581	1.20E-04	2.35E-04	0.00E+00	1.14E-04	2.60E-04	0.00E+00	2.31E-05	4.15E-05	0.00E+00	9.17E-05	1.94E-04	0.00E+00	1.97E-05	3.16E-05	0.00E+00	1.51E-05	1.86E-05	0.00E+00
42	479000	3742599	1.22E-04	2.38E-04	0.00E+00	1.15E-04	2.63E-04	0.00E+00	2.33E-05	4.20E-05	0.00E+00	9.26E-05	1.96E-04	0.00E+00	1.99E-05	3.20E-05	0.00E+00	1.52E-05	1.88E-05	0.00E+00
43	478999.9	3742618	1.23E-04	2.40E-04	0.00E+00	1.17E-04	2.66E-04	0.00E+00	2.36E-05	4.24E-05	0.00E+00	9.36E-05	1.98E-04	0.00E+00	2.01E-05	3.23E-05	0.00E+00	1.54E-05	1.90E-05	0.00E+00
44	478999.9	3742636	1.24E-04	2.43E-04	0.00E+00	1.18E-04	2.68E-04	0.00E+00	2.38E-05	4.29E-05	0.00E+00	9.46E-05	2.00E-04	0.00E+00	2.03E-05	3.26E-05	0.00E+00	1.55E-05	1.92E-05	0.00E+00
45	478999.8	3742655	1.25E-04	2.45E-04	0.00E+00	1.19E-04	2.71E-04	0.00E+00	2.41E-05	4.33E-05	0.00E+00	9.55E-05	2.02E-04	0.00E+00	2.05E-05	3.30E-05	0.00E+00	1.57E-05	1.94E-05	0.00E+00
46	478999.7	3742673	1.27E-04	2.47E-04	0.00E+00	1.20E-04	2.74E-04	0.00E+00	2.43E-05	4.37E-05	0.00E+00	9.65E-05	2.04E-04	0.00E+00	2.07E-05	3.33E-05	0.00E+00	1.58E-05	1.95E-05	0.00E+00
47	478999.6	3742692	1.28E-04	2.50E-04	0.00E+00	1.21E-04	2.76E-04	0.00E+00	2.45E-05	4.41E-05	0.00E+00	9.74E-05	2.06E-04	0.00E+00	2.09E-05	3.36E-05	0.00E+00	1.60E-05	1.97E-05	0.00E+00
48	478964.5	3742529	1.10E-04	2.15E-04	0.00E+00	1.05E-04	2.38E-04	0.00E+00	2.12E-05	3.81E-05	0.00E+00	8.40E-05	1.78E-04	0.00E+00	1.81E-05	2.90E-05	0.00E+00	1.38E-05	1.70E-05	0.00E+00
49	478971.6	3742512	1.11E-04	2.16E-04	0.00E+00	1.05E-04	2.39E-04	0.00E+00	2.12E-05	3.81E-05	0.00E+00	8.41E-05	1.78E-04	0.00E+00	1.81E-05	2.90E-05	0.00E+00	1.38E-05	1.71E-05	0.00E+00
50	478978.7	3742495	1.11E-04	2.16E-04	0.00E+00	1.05E-04	2.39E-04	0.00E+00	2.12E-05	3.82E-05	0.00E+00	8.42E-05	1.78E-04	0.00E+00	1.81E-05	2.91E-05	0.00E+00	1.38E-05	1.71E-05	0.00E+00
51	478985.9	3742478	1.11E-04	2.16E-04	0.00E+00	1.05E-04	2.39E-04	0.00E+00	2.12E-05	3.82E-05	0.00E+00	8.43E-05	1.78E-04	0.00E+00	1.81E-05	2.91E-05	0.00E+00	1.39E-05	1.71E-05	0.00E+00
52	478993	3742461	1.11E-04	2.17E-04	0.00E+00	1.05E-04	2.39E-04	0.00E+00	2.13E-05	3.83E-05	0.00E+00	8.44E-05	1.79E-04	0.00E+00	1.81E-05	2.91E-05	0.00E+00	1.39E-05	1.71E-05	0.00E+00
53	479000.1	3742444	1.11E-04	2.17E-04	0.00E+00	1.05E-04	2.40E-04	0.00E+00	2.13E-05	3.83E-05	0.00E+00	8.45E-05	1.79E-04	0.00E+00	1.82E-05	2.92E-05	0.00E+00	1.39E-05	1.71E-05	0.00E+00
54	479007.2	3742427	1.11E-04	2.17E-04	0.00E+00	1.05E-04	2.40E-04	0.00E+00	2.13E-05	3.83E-05	0.00E+00	8.46E-05	1.79E-04	0.00E+00	1.82E-05	2.92E-05	0.00E+00	1.39E-05	1.71E-05	0.00E+00
55	479014.4	3742411	1.11E-04	2.17E-04	0.00E+00	1.06E-04	2.40E-04	0.00E+00	2.13E-05	3.84E-05	0.00E+00	8.47E-05	1.79E-04	0.00E+00	1.82E-05	2.92E-05	0.00E+00	1.39E-05	1.72E-05	0.00E+00
56	479021.5	3742394	1.11E-04	2.17E-04	0.00E+00	1.06E-04	2.41E-04	0.00E+00	2.14E-05	3.84E-05	0.00E+00	8.48E-05	1.79E-04	0.00E+00	1.82E-05	2.93E-05	0.00E+00	1.39E-05	1.72E-05	0.00E+00
57	479028.6	3742377	1.11E-04	2.18E-04	0.00E+00	1.06E-04	2.41E-04	0.00E+00	2.14E-05	3.85E-05	0.00E+00	8.49E-05	1.80E-04	0.00E+00	1.82E-05	2.93E-05	0.00E+00	1.39E-05	1.72E-05	0.00E+00
58	479035.7	3742360	1.12E-04	2.18E-04	0.00E+00	1.06E-04	2.41E-04	0.00E+00	2.14E-05	3.85E-05	0.00E+00	8.50E-05	1.80E-04	0.00E+00	1.83E-05	2.93E-05	0.00E+00	1.40E-05	1.72E-05	0.00E+00
59	479042.9	3742343	1.12E-04	2.18E-04	0.00E+00	1.06E-04	2.41E-04	0.00E+00	2.14E-05	3.85E-05	0.00E+00	8.50E-05	1.80E-04	0.00E+00	1.83E-05	2.93E-05	0.00E+00	1.40E-05	1.72E-05	0.00E+00
60	479050	3742326	1.12E-04	2.18E-04	0.00E+00	1.06E-04	2.41E-04	0.00E+00	2.14E-05	3.86E-05	0.00E+00	8.51E-05	1.80E-04	0.00E+00	1.83E-05	2.94E-05	0.00E+00	1.40E-05	1.73E-05	0.00E+00
61	478950.1	3742581	1.11E-04	2.17E-04	0.00E+00	1.05E-04	2.40E-04	0.00E+00	2.13E-05	3.84E-05	0.00E+00	8.46E-05	1.79E-04	0.00E+00	1.82E-05	2.92E-05	0.00E+00	1.39E-05	1.72E-05	0.00E+00
62	478950	3742599	1.12E-04	2.19E-04	0.00E+00	1.07E-04	2.42E-04	0.00E+00	2.15E-05	3.87E-05	0.00E+00	8.55E-05	1.81E-04	0.00E+00	1.84E-05	2.95E-05	0.00E+00	1.40E-05	1.73E-05	0.00E+00
63	478950	3742618	1.13E-04	2.21E-04	0.00E+00	1.08E-04	2.45E-04	0.00E+00	2.17E-05	3.91E-05	0.00E+00	8.63E-05	1.83E-04	0.00E+00	1.86E-05	2.98E-05	0.00E+00	1.42E-05	1.75E-05	0.00E+00
64	478949.9	3742636	1.14E-04	2.23E-04	0.00E+00	1.09E-04	2.47E-04	0.00E+00	2.20E-05	3.95E-05	0.00E+00	8.71E-05	1.84E-04	0.00E+00	1.87E-05	3.01E-05	0.00E+00	1.43E-05	1.77E-05	0.00E+00
65	478949.8	3742654	1.16E-04	2.26E-04	0.00E+00	1.10E-04	2.50E-04	0.00E+00	2.22E-05	3.99E-05	0.00E+00	8.80E-05	1.86E-04	0.00E+00	1.89E-05	3.04E-05	0.00E+00	1.45E-05	1.78E-05	0.00E+00
66	478949.7	3742673	1.17E-04	2.28E-04	0.00E+00	1.11E-04	2.52E-04	0.00E+00	2.24E-05	4.03E-05	0.00E+00	8.88E-05	1.88E-04	0.00E+00	1.91E-05	3.06E-05	0.00E+00	1.46E-05	1.80E-05	0.00E+00
67	478949.6	3742691	1.18E-04	2.30E-04	0.00E+00	1.12E-04	2.54E-04	0.00E+00	2.26E-05	4.06E-05	0.00E+00	8.97E-05	1.90E-04	0.00E+00	1.93E-05	3.09E-05	0.00E+00	1.47E-05	1.82E-05	0.00E+00
68	478914.5	3742528	1.02E-04	2.00E-04	0.00E+00	9.71E-05	2.21E-04	0.00E+00	1.96E-05	3.53E-05	0.00E+00	7.79E-05	1.65E-04	0.00E+00	1.67E-05	2.69E-05	0.00E+00	1.28E-05	1.58E-05	0.00E+00
69	478921.7	3742511	1.02E-04	2.00E-04	0.00E+00	9.72E-05	2.21E-04	0.00E+00	1.97E-05	3.54E-05	0.00E+00	7.80E-05	1.65E-04	0.00E+00	1.68E-05	2.69E-05	0.00E+00	1.28E-05	1.58E-05	0.00E+00
70	478928.8	3742494	1.03E-04	2.00E-04	0.00E+00	9.73E-05	2.22E-04	0.00E+00	1.97E-05	3.54E-05	0.00E+00	7.81E-05	1.65E-04	0.00E+00	1.68E-05	2.69E-05	0.00E+00	1.28E-05	1.58E-05	0.00E+00
71	478936	3742478	1.03E-04	2.01E-04	0.00E+00	9.74E-05	2.22E-04	0.00E+00	1.97E-05	3.54E-05	0.00E+00	7.82E-05	1.65E-04	0.00E+00	1.68E-05	2.70E-05	0.00E+00	1.28E-05	1.58E-05	0.00E+00
72	478943.1	3742461	1.03E-04	2.01E-04	0.00E+00	9.75E-05	2.22E-04	0.00E+00	1.97E-05	3.55E-05	0.00E+00	7.83E-05	1.66E-04	0.00E+00	1.68E-05	2.70E-05	0.00E+00	1.29E-05	1.59E-05	0.00E+00
73	478950.2	3742444	1.03E-04	2.01E-04	0.00E+00	9.76E-05	2.22E-04	0.00E+00	1.97E-05	3.55E-05	0.00E+00	7.83E-05	1.66E-04	0.00E+00	1.68E-05	2.70E-05	0.00E+00	1.29E-05	1.59E-05	0.00E+00
74	478957.4	3742427	1.03E-04	2.01E-04	0.00E+00	9.77E-05	2.22E-04	0.00E+00	1.98E-05	3.55E-05	0.00E+00	7.84E-05	1.66E-04	0.00E+00	1.69E-05	2.71E-05	0.00E+00	1.29E-05	1.59E-05	0.00E+00
75	478964.5	3742410	1.03E-04	2.01E-04	0.00E+00	9.78E-05	2.23E-04	0.00E+00	1.98E-05	3.56E-05	0.00E+00	7.85E-05	1.66E-04	0.00E+00	1.69E-05	2.71E-05	0.00E+00	1.29E-05	1.59E-05	0.00E+00
76	478971.7	3742393	1.03E-04	2.01E-04	0.00E+00	9.79E-05	2.23E-04	0.00E+00	1.98E-05	3.56E-05	0.00E+00	7.85E-05	1.66E-04	0.00E+00	1.69E-05	2.71E-05	0.00E+00	1.29E-05	1.59E-05	0.00E+00
77	478978.8	3742376	1.03E-04	2.02E-04	0.00E+00	9.80E-05	2.23E-04	0.00E+00	1.98E-05	3.56E-05	0.00E+00	7.86E-05	1.66E-04	0.00E+00	1.69E-05	2.71E-05	0.00E+00	1.29E-05	1.59E-05	0.00E+00
78	478985.9	3742359	1.03E-04	2.02E-04	0.00E+00	9.81E-05	2.23E-04	0.00E+00	1.98E-05	3.57E-05	0.00E+00	7.87E-05	1.66E-04	0.00E+00	1.69E-05	2.72E-05	0.00E+00	1.29E-05	1.60E-05	0.00E+00
79	478993.1	3742342	1.03E-04	2.02E-04	0.00E+00	9.82E-05	2.23E-04	0.00E+00	1.98E-05	3.57E-05	0.00E+00	7.88E-05	1.67E-04	0.00E+00	1.69E-05	2.72E-05	0.00E+00	1.29E-05	1.60E-05	0.00E+00
80	479000.2	3742326	1.04E-04	2.02E-04	0.00E+00	9.82E-05	2.24E-04	0.00E+00	1.99E-05	3.57E-05	0.00E+00	7.88E-05	1.67E-04	0.00E+00	1.69E-05	2.72E-05	0.00E+00	1.30E-05	1.60E-05	0.00E+00
81	479007.4	3742309	1.04E-04	2.02E-04	0.00E+00	9.83E-05	2.24E-04	0.00E+00	1.99E-05	3.58E-05	0.00E+00	7.89E-05	1.67E-04	0.00E+00	1.70E-05	2.72E-05	0.00E+00	1.30E-05	1.60E-05	0.00E+00
82	479014.5	3742292	1.04E-04	2.03E-04	0.00E+00	9.84E-05	2.24E-04	0.00E+00	1.99E-05	3.58E-05	0.00E+00	7.90E-05	1.67E-04	0.00E+00	1.70E-05	2.73E-05	0.00E+00	1.30E-05	1.60E-05	0.00E+00
83	479021.7	3742275	1.04E-04	2.03E-04	0.00E+00	9.85E-05	2.24E-04	0.00E+00	1.99E-05	3.58E-05	0.00E+00	7.91E-05	1.67E-04	0.00E+00	1.70E-05	2.73E-05	0.00E+00	1.30E-05	1.60E-05	0.00E+00
84	479028.8	3742258	1.04E-04	2.03E-04	0.00E+00	9.86E-05	2.25E-04	0.00E+00	1.99E-05	3.59E-05	0.00E+00	7.92E-05	1.67E-04	0.00E+00	1.70E-05	2.73E-05	0.00E+00	1.30E-05	1.60E-05	0.00E+00
85	479035.9	3742241	1.04E-04	2.03E-04	0.00E+00	9.87E-05	2.25E-04	0.00E+00	2.00E-05	3.59E-05	0.00E+00	7.93E-05	1.68E-04	0.00E+00	1.70E-05	2.73E-05	0.00E+00	1.30E-05	1.61E-05	0.00E+00
86	479043.1	3742224	1.04E-04	2.03E-04	0.00E+00	9.89E-05	2.25E-04	0.00E+00	2.00E-05	3.60E-05	0.00E+00	7.94E-05	1.68E-04	0.00E+00	1.71E-05	2.74E-05	0.00E+00	1.30E-05	1.61E-05	0.00E+00
87	479050.2	3742207	1.04E-04	2.04E-04	0.00E+00	9.90E-05	2.25E-04	0.00E

126	479729.2	3743255	0.001021	1.99E-03	0.00E+00	9.69E-04	2.21E-03	0.00E+00	1.96E-04	3.52E-04	0.00E+00	7.78E-04	1.64E-03	0.00E+00	1.67E-04	2.68E-04	0.00E+00	1.28E-04	1.58E-04	0.00E+00
127	479711.1	3743252	0.000992	1.94E-03	0.00E+00	9.41E-04	2.14E-03	0.00E+00	1.90E-04	3.42E-04	0.00E+00	7.55E-04	1.60E-03	0.00E+00	1.62E-04	2.61E-04	0.00E+00	1.24E-04	1.53E-04	0.00E+00
128	479693	3743250	0.00096	1.87E-03	0.00E+00	9.11E-04	2.07E-03	0.00E+00	1.84E-04	3.31E-04	0.00E+00	7.31E-04	1.55E-03	0.00E+00	1.57E-04	2.52E-04	0.00E+00	1.20E-04	1.48E-04	0.00E+00
129	479675	3743248	0.000927	1.81E-03	0.00E+00	8.79E-04	2.00E-03	0.00E+00	1.78E-04	3.20E-04	0.00E+00	7.06E-04	1.49E-03	0.00E+00	1.52E-04	2.44E-04	0.00E+00	1.16E-04	1.43E-04	0.00E+00
130	479656.9	3743245	0.000893	1.74E-03	0.00E+00	8.47E-04	1.93E-03	0.00E+00	1.71E-04	3.08E-04	0.00E+00	6.80E-04	1.44E-03	0.00E+00	1.46E-04	2.35E-04	0.00E+00	1.12E-04	1.38E-04	0.00E+00
131	479638.8	3743243	0.000857	1.67E-03	0.00E+00	8.14E-04	1.85E-03	0.00E+00	1.64E-04	2.96E-04	0.00E+00	6.53E-04	1.38E-03	0.00E+00	1.40E-04	2.25E-04	0.00E+00	1.07E-04	1.32E-04	0.00E+00
132	479620.8	3743241	0.000822	1.61E-03	0.00E+00	7.80E-04	1.78E-03	0.00E+00	1.58E-04	2.84E-04	0.00E+00	6.26E-04	1.32E-03	0.00E+00	1.35E-04	2.16E-04	0.00E+00	1.03E-04	1.27E-04	0.00E+00
133	479602.7	3743238	0.000786	1.54E-03	0.00E+00	7.46E-04	1.70E-03	0.00E+00	1.51E-04	2.71E-04	0.00E+00	5.99E-04	1.27E-03	0.00E+00	1.29E-04	2.07E-04	0.00E+00	9.84E-05	1.21E-04	0.00E+00
134	479584.6	3743236	0.000751	1.47E-03	0.00E+00	7.13E-04	1.62E-03	0.00E+00	1.44E-04	2.59E-04	0.00E+00	5.72E-04	1.21E-03	0.00E+00	1.23E-04	1.97E-04	0.00E+00	9.40E-05	1.16E-04	0.00E+00
135	479566.5	3743234	0.000716	1.40E-03	0.00E+00	6.80E-04	1.55E-03	0.00E+00	1.37E-04	2.47E-04	0.00E+00	5.45E-04	1.15E-03	0.00E+00	1.17E-04	1.88E-04	0.00E+00	8.96E-05	1.11E-04	0.00E+00
136	479548.5	3743231	0.000682	1.33E-03	0.00E+00	6.47E-04	1.47E-03	0.00E+00	1.31E-04	2.35E-04	0.00E+00	5.19E-04	1.10E-03	0.00E+00	1.12E-04	1.79E-04	0.00E+00	8.53E-05	1.05E-04	0.00E+00
137	479530.4	3743229	0.000649	1.27E-03	0.00E+00	6.15E-04	1.40E-03	0.00E+00	1.24E-04	2.24E-04	0.00E+00	4.94E-04	1.04E-03	0.00E+00	1.06E-04	1.70E-04	0.00E+00	8.12E-05	1.00E-04	0.00E+00
138	479519.3	3743215	0.000633	1.24E-03	0.00E+00	6.01E-04	1.37E-03	0.00E+00	1.21E-04	2.18E-04	0.00E+00	4.82E-04	1.02E-03	0.00E+00	1.04E-04	1.66E-04	0.00E+00	7.92E-05	9.77E-05	0.00E+00
139	479511	3743199	0.000622	1.21E-03	0.00E+00	5.90E-04	1.34E-03	0.00E+00	1.19E-04	2.15E-04	0.00E+00	4.73E-04	1.00E-03	0.00E+00	1.02E-04	1.63E-04	0.00E+00	7.78E-05	9.59E-05	0.00E+00
140	479502.6	3743182	0.000609	1.19E-03	0.00E+00	5.78E-04	1.32E-03	0.00E+00	1.17E-04	2.10E-04	0.00E+00	4.64E-04	9.81E-04	0.00E+00	9.97E-05	1.60E-04	0.00E+00	7.62E-05	9.40E-05	0.00E+00
141	479494.2	3743166	0.000596	1.16E-03	0.00E+00	5.65E-04	1.29E-03	0.00E+00	1.14E-04	2.06E-04	0.00E+00	4.53E-04	9.59E-04	0.00E+00	9.75E-05	1.56E-04	0.00E+00	7.45E-05	9.19E-05	0.00E+00
142	479743.4	3743301	0.000958	1.87E-03	0.00E+00	9.09E-04	2.07E-03	0.00E+00	1.84E-04	3.31E-04	0.00E+00	7.30E-04	1.54E-03	0.00E+00	1.57E-04	2.52E-04	0.00E+00	1.20E-04	1.48E-04	0.00E+00
143	479725.3	3743299	0.000937	1.83E-03	0.00E+00	8.89E-04	2.02E-03	0.00E+00	1.80E-04	3.23E-04	0.00E+00	7.13E-04	1.51E-03	0.00E+00	1.53E-04	2.46E-04	0.00E+00	1.17E-04	1.45E-04	0.00E+00
144	479707.2	3743297	0.000913	1.78E-03	0.00E+00	8.66E-04	1.97E-03	0.00E+00	1.75E-04	3.15E-04	0.00E+00	6.95E-04	1.47E-03	0.00E+00	1.49E-04	2.40E-04	0.00E+00	1.14E-04	1.41E-04	0.00E+00
145	479689.2	3743294	0.000888	1.73E-03	0.00E+00	8.42E-04	1.92E-03	0.00E+00	1.70E-04	3.06E-04	0.00E+00	6.76E-04	1.43E-03	0.00E+00	1.45E-04	2.33E-04	0.00E+00	1.11E-04	1.37E-04	0.00E+00
146	479671.1	3743292	0.000861	1.68E-03	0.00E+00	8.17E-04	1.86E-03	0.00E+00	1.65E-04	2.97E-04	0.00E+00	6.55E-04	1.39E-03	0.00E+00	1.41E-04	2.26E-04	0.00E+00	1.08E-04	1.33E-04	0.00E+00
147	479653	3743290	0.000832	1.63E-03	0.00E+00	7.90E-04	1.80E-03	0.00E+00	1.60E-04	2.87E-04	0.00E+00	6.34E-04	1.34E-03	0.00E+00	1.36E-04	2.19E-04	0.00E+00	1.04E-04	1.28E-04	0.00E+00
148	479635	3743287	0.000803	1.57E-03	0.00E+00	7.62E-04	1.74E-03	0.00E+00	1.54E-04	2.77E-04	0.00E+00	6.12E-04	1.29E-03	0.00E+00	1.31E-04	2.11E-04	0.00E+00	1.00E-04	1.24E-04	0.00E+00
149	479616.9	3743285	0.000774	1.51E-03	0.00E+00	7.34E-04	1.67E-03	0.00E+00	1.48E-04	2.67E-04	0.00E+00	5.89E-04	1.25E-03	0.00E+00	1.27E-04	2.03E-04	0.00E+00	9.68E-05	1.19E-04	0.00E+00
150	479598.8	3743283	0.000743	1.45E-03	0.00E+00	7.05E-04	1.61E-03	0.00E+00	1.43E-04	2.57E-04	0.00E+00	5.66E-04	1.20E-03	0.00E+00	1.22E-04	1.95E-04	0.00E+00	9.30E-05	1.15E-04	0.00E+00
151	479580.8	3743280	0.000713	1.39E-03	0.00E+00	6.77E-04	1.54E-03	0.00E+00	1.37E-04	2.46E-04	0.00E+00	5.43E-04	1.15E-03	0.00E+00	1.17E-04	1.87E-04	0.00E+00	8.92E-05	1.10E-04	0.00E+00
152	479562.7	3743278	0.000683	1.33E-03	0.00E+00	6.48E-04	1.48E-03	0.00E+00	1.31E-04	2.36E-04	0.00E+00	5.20E-04	1.10E-03	0.00E+00	1.12E-04	1.80E-04	0.00E+00	8.55E-05	1.05E-04	0.00E+00
153	479544.7	3743276	0.000654	1.28E-03	0.00E+00	6.20E-04	1.41E-03	0.00E+00	1.25E-04	2.26E-04	0.00E+00	4.98E-04	1.05E-03	0.00E+00	1.07E-04	1.72E-04	0.00E+00	8.18E-05	1.01E-04	0.00E+00
154	479526.6	3743273	0.000624	1.22E-03	0.00E+00	5.92E-04	1.35E-03	0.00E+00	1.20E-04	2.15E-04	0.00E+00	4.75E-04	1.01E-03	0.00E+00	1.02E-04	1.64E-04	0.00E+00	7.81E-05	9.63E-05	0.00E+00
155	479508.5	3743271	0.000596	1.16E-03	0.00E+00	5.65E-04	1.29E-03	0.00E+00	1.14E-04	2.06E-04	0.00E+00	4.54E-04	9.60E-04	0.00E+00	9.75E-05	1.57E-04	0.00E+00	7.46E-05	9.20E-05	0.00E+00
156	479493.2	3743261	0.000575	1.12E-03	0.00E+00	5.45E-04	1.24E-03	0.00E+00	1.10E-04	1.98E-04	0.00E+00	4.38E-04	9.25E-04	0.00E+00	9.41E-05	1.51E-04	0.00E+00	7.19E-05	8.87E-05	0.00E+00
157	479484.9	3743245	0.000565	1.10E-03	0.00E+00	5.36E-04	1.22E-03	0.00E+00	1.08E-04	1.95E-04	0.00E+00	4.31E-04	9.11E-04	0.00E+00	9.26E-05	1.49E-04	0.00E+00	7.07E-05	8.73E-05	0.00E+00
158	479476.5	3743228	0.000555	1.08E-03	0.00E+00	5.27E-04	1.20E-03	0.00E+00	1.07E-04	1.92E-04	0.00E+00	4.23E-04	8.94E-04	0.00E+00	9.09E-05	1.46E-04	0.00E+00	6.95E-05	8.57E-05	0.00E+00
159	479468.1	3743212	0.000544	1.06E-03	0.00E+00	5.16E-04	1.18E-03	0.00E+00	1.04E-04	1.88E-04	0.00E+00	4.14E-04	8.76E-04	0.00E+00	8.91E-05	1.43E-04	0.00E+00	6.81E-05	8.40E-05	0.00E+00
160	479633.6	3743332	0.000756	1.48E-03	0.00E+00	7.17E-04	1.63E-03	0.00E+00	1.45E-04	2.61E-04	0.00E+00	5.76E-04	1.22E-03	0.00E+00	1.24E-04	1.99E-04	0.00E+00	9.46E-05	1.17E-04	0.00E+00
161	479615.5	3743329	0.000731	1.43E-03	0.00E+00	6.94E-04	1.58E-03	0.00E+00	1.40E-04	2.52E-04	0.00E+00	5.57E-04	1.18E-03	0.00E+00	1.20E-04	1.92E-04	0.00E+00	9.15E-05	1.13E-04	0.00E+00
162	479597.5	3743327	0.000706	1.38E-03	0.00E+00	6.69E-04	1.52E-03	0.00E+00	1.35E-04	2.44E-04	0.00E+00	5.37E-04	1.14E-03	0.00E+00	1.16E-04	1.85E-04	0.00E+00	8.83E-05	1.09E-04	0.00E+00
163	479579.4	3743325	0.00068	1.33E-03	0.00E+00	6.45E-04	1.47E-03	0.00E+00	1.30E-04	2.35E-04	0.00E+00	5.18E-04	1.09E-03	0.00E+00	1.11E-04	1.79E-04	0.00E+00	8.51E-05	1.05E-04	0.00E+00
164	479561.3	3743322	0.000654	1.28E-03	0.00E+00	6.20E-04	1.41E-03	0.00E+00	1.25E-04	2.26E-04	0.00E+00	4.98E-04	1.05E-03	0.00E+00	1.07E-04	1.72E-04	0.00E+00	8.18E-05	1.01E-04	0.00E+00
165	479543.3	3743320	0.000628	1.23E-03	0.00E+00	5.96E-04	1.36E-03	0.00E+00	1.20E-04	2.17E-04	0.00E+00	4.78E-04	1.01E-03	0.00E+00	1.03E-04	1.65E-04	0.00E+00	7.86E-05	9.69E-05	0.00E+00
166	479525.2	3743318	0.000603	1.18E-03	0.00E+00	5.72E-04	1.30E-03	0.00E+00	1.16E-04	2.08E-04	0.00E+00	4.59E-04	9.70E-04	0.00E+00	9.86E-05	1.58E-04	0.00E+00	7.54E-05	9.30E-05	0.00E+00
167	479507.1	3743315	0.000578	1.13E-03	0.00E+00	5.48E-04	1.25E-03	0.00E+00	1.11E-04	1.99E-04	0.00E+00	4.40E-04	9.30E-04	0.00E+00	9.45E-05	1.52E-04	0.00E+00	7.23E-05	8.91E-05	0.00E+00
168	479489.1	3743313	0.000553	1.08E-03	0.00E+00	5.25E-04	1.19E-03	0.00E+00	1.06E-04	1.91E-04	0.00E+00	4.21E-04	8.90E-04	0.00E+00	9.05E-05	1.45E-04	0.00E+00	6.92E-05	8.53E-05	0.00E+00
169	479471	3743311	0.000529	1.03E-03	0.00E+00	5.02E-04	1.14E-03	0.00E+00	1.01E-04	1.83E-04	0.00E+00	4.03E-04	8.52E-04	0.00E+00	8.66E-05	1.39E-04	0.00E+00	6.62E-05	8.16E-05	0.00E+00
170	479461.2	3743295	0.000519	1.01E-03	0.00E+00	4.93E-04	1.12E-03	0.00E+00	9.96E-05	1.79E-04	0.00E+00	3.95E-04	8.36E-04	0.00E+00	8.50E-05	1.36E-04	0.00E+00	6.50E-05	8.01E-05	0.00E+00
171	479452.8	3743279	0.000511	9.98E-04	0.00E+00	4.85E-04	1.10E-03	0.00E+00	9.80E-05	1.76E-04	0.00E+00	3.89E-04	8.23E-04	0.00E+00	8.36E-05	1.34E-04	0.00E+00	6.39E-05	7.89E-05	0.00E+00
172	479444.4	3743263	0.000502	9.80E-04	0.00E+00	4.76E-04	1.08E-03	0.00E+00	9.63E-05	1.73E-04	0.00E+00	3.82E-04	8.09E-04	0.00E+00	8.22E-05	1.32E-04	0.00E+00	6.28E-05	7.75E-05	0.00E+00
173	479869	3743407	0.000846	1.65E-03	0.00E+00	8.03E-04	1.83E-03	0.00E+00	1.62E-04	2.92E-04	0.00E+00	6.45E-04	1.36E-03	0.00E+00	1.39E-04	2.22E-04	0.00E+00	1.06E-04	1.31E-04	0.00E+00
174	479851	3743405	0.000848	1.66E-03	0.00E+00	8.05E-04	1.83E-03	0.00E+00	1.63E-04	2.93E-04	0.00E+00	6.46E-04	1.37E-03	0.00E+00	1.39E-04	2.23E-04	0.00E+00	1.06E-04	1.31E-04	0.00E+00
175	479832.9	3743402	0.000848	1.66E-03	0.00E+00	8.05E-04	1.83E-03	0.00E+00	1.63E-04	2.93E-04	0.00E+00	6.46E-04	1.37E-03	0.00E+00	1.39E-04	2.23E-04	0.00E+00	1.06E-04	1.31E-04	0.00E+00
176	479814.8	3743400	0.000846	1.65E-03	0.00E+00	8.02E-04	1.83E-03	0.00E+00	1.62E-04	2.92E-04	0.00E+00	6.44E-04	1.36E-03	0.00E+00	1.38E-04	2.22E-04	0.00E+00	1.06E-04	1.31E-04	0.00E+00
177	479428.8	3743329	0.000472	9.21E-04	0.00E+00	4.47E-04	1.02E-03	0.00E+00	9.05E-05	1.63E-04	0.00E+00	3.59E-04	7.60E-04	0.00E+00	7.72E-05	1.24E-04	0.00E+00	5.90E-05	7.28E-05	0.00E+00
178	479420.4	3743313	0.000464	9.07E-04	0.00E+00	4.40E-04	1.00E-03	0.00E+00	8.91E-05	1.60E-04	0.00E+00	3.54E-04	7.48E-04	0.00E+00	7.60E-05	1.22E-04	0.00E+00	5.81E-05	7.17E-05	0.00E+00
179	479871	3743452	0.000773	1.51E-03	0.00E+00	7.33E-04	1.67E-03	0.00E+00	1.48E-04	2.67E-04	0.00E+00	5.89E-04	1.24E-03	0.00E+00	1.27E-04	2.03E-04	0.00E+00	9.67E-05	1.19E-04	0.00E+00
180	479852.9	3743450	0.000776	1.52E-03	0.00E+00	7.36E-04	1.68E-03	0.00E+00	1.49E-04	2.68E-04	0.00E+00	5.91E-04	1.25E-03	0.00E+00	1.27E-04	2.04E-04	0.00E+00	9.71E-05	1.20E-04	0.00E+00
181	479834.8	3743447	0.000777	1.52E-03	0.00E+00	7.37E-04	1.68E-03	0.00E+00	1.49E-04	2.68E-04	0.00E+00	5.92E-04	1.25E-03	0.00E+00	1.27E-04	2.04E-04	0.00E+00	9.72E-05	1.20E-04	0.00E+00
182	479816.7	3743445	0.000776	1.52E-03	0.00E+00	7.36E-04	1.68E-03	0.00E+00	1.49E-04	2.68E-04	0.00E+00	5.91E-04	1.25E-03	0.00E+00	1.27E-04	2.04E-04	0.00E+00	9.71E-05	1.20E-04	0.00E+00
183	479798.7	3743443	0.000773	1.51E-03	0.00E+00	7.34E-04	1.67E-03	0.00E+00	1.48E-04	2.67E-04	0.00E+00	5.89E-04	1.25E-03	0.00E+00	1.27E-04	2.03E-04	0.00E+00	9.67E-05	1.19E-04	0.00E+00
184	479780.6	3743440	0.000769	1.50E-03	0.00E+00	7.29E-04	1.66E-03	0.00E+00	1.47E-04	2.65E-04	0.00E+00	5.85E-04	1.24E-03	0.00E+00	1.26E-04	2.02E-04	0.00E+00	9.62E-05	1.19E-04	0.00E+00
185	479762.5	3743438	0.000762	1.49E-03	0.00E+00	7.23E-04	1.65E-03	0.00E+00	1.46E-04	2.63E-04	0.00E+00	5.80E-04	1.23E-03	0.00E+00	1.25E-04	2.00E-04	0.00E+00	9.53E-05	1.18E-04	0.00E+00
186	479744.5	3743436	0.000754	1.47E-03	0.00E+00	7.15E-04	1.63E-03	0.00E+00	1.45E-04	2.60E-04	0.00E+00	5.74E-04	1.21E-03	0.00E+00	1.23E-04	1.98E-04	0.00E+00	9.43E-05	1.16E-04	0.00E+00
187	479726.4	3743433	0.000744	1.45E-03	0.00E+00	7.06E-04	1.61E-03	0.00E+00	1.43E-04	2.57E-04	0.00E+00	5.67E-04	1.20E-03	0.00E+00	1.22E-04	1.95E-04	0.00E+00	9.31E-05	1.15E-04	0.00E+00
188	479708.3	3743431	0.000733	1.43E-03	0.00E+00	6.95E-04	1.58E-03	0.00E+00	1.41E-04	2.53E-04	0.00E+00	5.58E-04	1.18E-03	0.00E+00	1.20E-04	1.92E-04	0.00E+00	9.17E-05	1.13E-04	0.00E+00
189	479690.3	3743428	0.00072	1.41E-03	0.00E+00	6.83E-04	1.55E-03	0.00E+00	1.38E-04	2.48E-04	0.00E+00	5.48E-04	1.16E-03	0.00E+00	1.18E-04	1.89E-04	0.00E+00	9.01E-05	1.11E-04	0.00E+00
190	479672.2	3743426	0.000706	1.38E-03	0.00E+00	6.69E-04	1.52E-03	0.00E+00	1.35E-04	2.44E-04	0.00E+00	5.37E-04	1.14E-03	0.00E+00	1.15E-04	1.85E-04	0.00E+00	8.83E-05	1.09E-04	0.00E+00
191	479654.1	3743424	0.00069	1.35E-03	0.00E+00	6.55E-04	1.49E-03	0.00E+00	1.32E-04	2.38E-04	0.00E+00	5.26E-04	1.11E-03	0.00E+00	1.13E-04	1.81E-04	0.00E+00	8.64E-05	1.07E-04	0.00E+00
192	479636	3743421	0.000674	1.32E-03	0.00E+00	6.39E-04	1.46E-03	0.00E+00	1.29E-04	2.33E-04	0.00E+00	5.13E-04	1.09E-03	0.00E+00	1.10E-04	1.77E-04	0.00E+00	8.43E-05	1.04E-04	0.00E+00
193	479618	3743419	0.000657	1.28E-03	0.00E+00	6.23E-04	1.42E-03	0.00E+00	1.26E-04	2.27E-04	0.00E+00	5.00E-04	1.06E-03	0.00E+00	1.07E-04	1.73E-04	0.00E+00	8.22E-05	1.01E-04	0.00E+00
194	479599.9	3743417	0.000639	1.25E-03	0.00E+00	6.06E-04	1.38E-03	0.00E+00	1.22E-04	2.20E-04	0.00E+00	4.86E-04	1.03E-03	0.00E+00	1.05E-04	1.68E-04	0.00E+00	7.99E-05	9.86E-05	0.00E+00
195	479581.8	3743414	0.00062	1.21E-03	0.00E+00	5.88E-04	1.34E-03	0.00E+00	1.19E-04	2.14E-04	0.00E+00	4.72E-04	9.98E-04	0.00E+00	1.01E-04	1.63E-04	0.00E+00	7.76E-05	9.57E-05	0.00E+00
196	479563.8	3743412	0.000601	1.17E-03	0.00E+00	5.70E-04	1.30E-03	0.00E+00	1.15E-04	2.07E-04	0.00E+00	4.58E-04	9.68E-04	0.00E+00	9.84E-05	1.58E-04	0.00E+00	7.52E-05	9.28E-05	0.00E+00
197	479545.7	3743410	0.000582	1.14E-03	0.00E+00	5.52E-04	1.26E-03	0.00E+00	1.12E-04	2.01E-04	0.00E+00	4.43E-04	9.37E-04	0.00E+00	9.52E-05	1.53E-04	0.00E+00	7.28E-05	8.98E-05	0.00E+00
198	479527.6	3743407	0.000562	1.10E-03	0.00E+00	5.34E-04	1.21E-03	0.00E+00	1.08E-04	1.94E-04	0.00E+00	4.28E-04	9.06E-04	0.00E+00	9.21E-05	1.48E-04	0.00E+00	7.04E-05	8.68E-05	0.00E+00
199	479509.6	3743405	0.000543	1.06E-03	0.00E+00	5.15E-04	1.17E-03	0.00E+00	1.04E-04	1.87E-04	0.00E+00	4.14E-04	8.75E-04	0.00E+00	8.89E-05	1.43E-04	0.00E+00	6.79E-05	8.38E-05	0.00E+00
200	479491.5	3743403	0.000524	1.02E-03	0.00E+00	4.97E-04	1.13E-03	0.00E+00	1.00E-04	1.81E-04	0.00E+00	3.99E-04	8.43E-04	0.00E+00	8.57E-05	1.38E-04	0.00E+00	6.55E-05	8.08E-05	0.00E+00
201	479062.8	3742717	0.000145	2.83E-04	0.00E+00	1.38E-04	3.13E-04	0.00E+00	2.78E-05	5.01E-05	0.00E+00	1.11E-04	2.34E-04	0.00E+00	2.38E-05	3.81E-05	0.00E+00	1.82E-05	2.24E-05	0.00E+00
202	479893.1	3743499	0.000704	1.37E-03	0.00E+00	6.67E-04	1.52E-03	0.00E+00	1.35E-04	2.43E-04	0.00E+00	5.36E-04	1.13E-03	0.00E+00	1.15E-04	1.85E-04	0.00E+00	8.80E-05	1.09E-04	0.00E+00
203	479875.1	3743497	0.000708	1.38E-03	0.00E+00	6.72E-04	1.53E-03	0.00E+00	1.36E-04	2.44E-04	0.00E+00	5.39E-04	1.14E-03	0.00E+00	1.16E-04	1.86E-04	0.00E+00	8.86E-05	1.09E-04	0.00E+00
204	479857	3743495	0.000712	1.39E-03	0.00E+00	6.75E-04	1.54E-03	0.00E+00	1.37E-04	2.46E-04	0.00E+00	5.42E-04	1.15E-03	0.00E+00	1.17E-04	1.87E-04	0.00E+00	8.91E-05	1.10E-04	0.00E+00
205	479838.9	3743492	0.000714	1.39E-03	0.00E+00	6.77E-04	1.54E-03	0.00E+00	1.37E-04	2.46E-04	0.00E+00	5.44E-04	1.15E-03	0.00E+00	1.17E-04	1.88E-04	0.00E+00	8.93E-05	1.10E-04	0.00E+00
206	479820.9	3743490	0.000714	1.40E-03	0.00E+00	6.78E-04	1.54E-03	0.00E+00	1.37E-04	2.47E-04	0.00E+00	5.44E-04	1.15E-03	0.00E+00	1.17E-04	1.88E-04	0.00E+00	8.94E-05	1.10E-04	0.00E+00
207	479802.8	3743488	0.000713	1.39E-03	0.00E+00	6.77E-04	1.54E-03	0.00E+00	1.37E-04	2.46E-04	0.00E+00	5.43E-04	1.15E-03	0.00E+00	1.17E-04	1.87E-04	0.00E+00	8.92E-05	1.10E-04	0.00E+00
208	479784.7	3743485	0.000711	1.39E-03	0.00E+00	6.74E-04	1.53E-03	0.00E+00	1.36E-04	2.45E-04	0.00E+00	5.41E-04	1.14E-03	0.00E+00	1.16E-04	1.87E-04	0.00E+00	8.89E-05	1.10E-04	0.00E+00
209	479766.7	3743483	0.000706	1.38E-03	0.00E+00	6.70E-04	1.53E-03	0.00E+00	1.35E-04	2.44E-04	0.00E+00	5.38E-04	1.14E-03	0.00E+00	1.16E-04	1.86E-04	0.00E+00	8.84E-05	1.09E-04	0.00E+00
210	479748.6	3743481	0.000701	1.37E-03	0.00E+00	6.65E-04	1.51E-03	0.00E+00	1.34E-04	2.42E-04	0.00E+00	5.33E-04	1.13E-03	0.00E+00	1.15E-04	1.84E-04	0.00E+00	8.76E-05	1.08E-04	0.00E+00
211	479730.5	3743478	0.000693	1.35E-03	0.00E+00	6.58E-04	1.50E-03	0.00E+00	1.33E-04	2.39E-04	0.00E+00	5.28E-04	1.12E-03	0.00E+00	1.13E-04	1.82E-04	0.00E+00	8.67E-05	1.07E-04	0.00E+00
212	479712.5	3743476	0.000685	1.34E-03	0.00E+00	6.50E-04	1.48E-03	0.00E+00	1.31E-04	2.36E-04	0.00E+00	5.21E-04	1.10E-03	0.00E+00	1.12E-04	1.80E-04	0.00E+00	8.57E-05	1.06E-04	0.00E+00
213	479694.4	3743474	0.000675	1.32E-03	0.00E+00	6.40E-04	1.46E-03	0.00E+00	1.29E-04	2.33E-04	0.00E+00	5.14E-04	1.09E-03	0.00E+00	1.10E-04	1.77E-04	0.00E+00	8.44E-05	1.04E-04	0.00E+00
214	479676.3	3743471	0.000664	1.30E-03	0.00E+00	6.30E-04	1.43E-03	0.00E+00	1.27E-04	2.29E-04	0.00E+00	5.05E-04	1.07E-03	0.00E+00	1.09E-04	1.74E-04	0.00E+00	8.30E-05	1.02E-04	0.00E+00
215	479658.3	3743469	0.000651

254	479330.7	3743429	0.000363	7.10E-04	0.00E+00	3.45E-04	7.85E-04	0.00E+00	6.97E-05	1.25E-04	0.00E+00	2.77E-04	5.85E-04	0.00E+00	5.95E-05	9.55E-05	0.00E+00	4.55E-05	5.61E-05	0.00E+00
255	479322.4	3743413	0.000358	6.99E-04	0.00E+00	3.40E-04	7.73E-04	0.00E+00	6.87E-05	1.24E-04	0.00E+00	2.73E-04	5.76E-04	0.00E+00	5.86E-05	9.40E-05	0.00E+00	4.48E-05	5.52E-05	0.00E+00
256	479314	3743396	0.000352	6.88E-04	0.00E+00	3.34E-04	7.61E-04	0.00E+00	6.75E-05	1.22E-04	0.00E+00	2.68E-04	5.67E-04	0.00E+00	5.76E-05	9.25E-05	0.00E+00	4.41E-05	5.43E-05	0.00E+00
257	479305.6	3743380	0.000346	6.76E-04	0.00E+00	3.28E-04	7.47E-04	0.00E+00	6.64E-05	1.19E-04	0.00E+00	2.63E-04	5.57E-04	0.00E+00	5.66E-05	9.09E-05	0.00E+00	4.33E-05	5.34E-05	0.00E+00
258	479297.3	3743364	0.00034	6.63E-04	0.00E+00	3.22E-04	7.33E-04	0.00E+00	6.51E-05	1.17E-04	0.00E+00	2.59E-04	5.47E-04	0.00E+00	5.56E-05	8.92E-05	0.00E+00	4.25E-05	5.24E-05	0.00E+00
259	479063	3742911	0.000161	3.15E-04	0.00E+00	1.53E-04	3.48E-04	0.00E+00	3.09E-05	5.56E-05	0.00E+00	1.23E-04	2.59E-04	0.00E+00	2.64E-05	4.23E-05	0.00E+00	2.02E-05	2.49E-05	0.00E+00
260	479054.6	3742895	0.000157	3.07E-04	0.00E+00	1.49E-04	3.39E-04	0.00E+00	3.01E-05	5.42E-05	0.00E+00	1.20E-04	2.53E-04	0.00E+00	2.57E-05	4.13E-05	0.00E+00	1.97E-05	2.43E-05	0.00E+00
261	479046.3	3742878	0.000153	2.99E-04	0.00E+00	1.45E-04	3.31E-04	0.00E+00	2.94E-05	5.29E-05	0.00E+00	1.17E-04	2.47E-04	0.00E+00	2.51E-05	4.03E-05	0.00E+00	1.92E-05	2.37E-05	0.00E+00
262	479037.9	3742862	0.00015	2.92E-04	0.00E+00	1.42E-04	3.23E-04	0.00E+00	2.87E-05	5.16E-05	0.00E+00	1.14E-04	2.41E-04	0.00E+00	2.45E-05	3.93E-05	0.00E+00	1.87E-05	2.31E-05	0.00E+00
263	479029.5	3742846	0.000146	2.85E-04	0.00E+00	1.39E-04	3.16E-04	0.00E+00	2.80E-05	5.04E-05	0.00E+00	1.11E-04	2.35E-04	0.00E+00	2.39E-05	3.84E-05	0.00E+00	1.83E-05	2.26E-05	0.00E+00
264	479021.2	3742830	0.000143	2.79E-04	0.00E+00	1.35E-04	3.08E-04	0.00E+00	2.74E-05	4.93E-05	0.00E+00	1.09E-04	2.30E-04	0.00E+00	2.34E-05	3.75E-05	0.00E+00	1.79E-05	2.20E-05	0.00E+00
265	479012.8	3742814	0.000139	2.72E-04	0.00E+00	1.32E-04	3.01E-04	0.00E+00	2.67E-05	4.81E-05	0.00E+00	1.06E-04	2.25E-04	0.00E+00	2.28E-05	3.66E-05	0.00E+00	1.74E-05	2.15E-05	0.00E+00
266	479004.4	3742797	0.000136	2.66E-04	0.00E+00	1.29E-04	2.94E-04	0.00E+00	2.61E-05	4.70E-05	0.00E+00	1.04E-04	2.19E-04	0.00E+00	2.23E-05	3.58E-05	0.00E+00	1.70E-05	2.10E-05	0.00E+00
267	478996.1	3742781	0.000133	2.60E-04	0.00E+00	1.26E-04	2.88E-04	0.00E+00	2.56E-05	4.60E-05	0.00E+00	1.01E-04	2.14E-04	0.00E+00	2.18E-05	3.50E-05	0.00E+00	1.67E-05	2.06E-05	0.00E+00
268	478987.7	3742765	0.00013	2.54E-04	0.00E+00	1.24E-04	2.81E-04	0.00E+00	2.50E-05	4.49E-05	0.00E+00	9.92E-05	2.10E-04	0.00E+00	2.13E-05	3.42E-05	0.00E+00	1.63E-05	2.01E-05	0.00E+00
269	478979.3	3742749	0.000127	2.49E-04	0.00E+00	1.21E-04	2.75E-04	0.00E+00	2.44E-05	4.39E-05	0.00E+00	9.70E-05	2.05E-04	0.00E+00	2.08E-05	3.35E-05	0.00E+00	1.59E-05	1.97E-05	0.00E+00
270	478971	3742733	0.000125	2.43E-04	0.00E+00	1.18E-04	2.69E-04	0.00E+00	2.39E-05	4.30E-05	0.00E+00	9.48E-05	2.01E-04	0.00E+00	2.04E-05	3.27E-05	0.00E+00	1.56E-05	1.92E-05	0.00E+00
271	478962.6	3742717	0.000122	2.38E-04	0.00E+00	1.16E-04	2.63E-04	0.00E+00	2.34E-05	4.20E-05	0.00E+00	9.28E-05	1.96E-04	0.00E+00	1.99E-05	3.20E-05	0.00E+00	1.52E-05	1.88E-05	0.00E+00
272	479894	3743589	0.000599	1.17E-03	0.00E+00	5.68E-04	1.29E-03	0.00E+00	1.15E-04	2.07E-04	0.00E+00	4.56E-04	9.64E-04	0.00E+00	9.80E-05	1.57E-04	0.00E+00	7.49E-05	9.24E-05	0.00E+00
273	479875.9	3743587	0.000603	1.18E-03	0.00E+00	5.72E-04	1.30E-03	0.00E+00	1.16E-04	2.08E-04	0.00E+00	4.59E-04	9.72E-04	0.00E+00	9.87E-05	1.59E-04	0.00E+00	7.55E-05	9.31E-05	0.00E+00
274	479857.8	3743584	0.000607	1.19E-03	0.00E+00	5.76E-04	1.31E-03	0.00E+00	1.16E-04	2.09E-04	0.00E+00	4.62E-04	9.78E-04	0.00E+00	9.94E-05	1.59E-04	0.00E+00	7.59E-05	9.37E-05	0.00E+00
275	479839.8	3743582	0.00061	1.19E-03	0.00E+00	5.78E-04	1.32E-03	0.00E+00	1.17E-04	2.10E-04	0.00E+00	4.64E-04	9.82E-04	0.00E+00	9.98E-05	1.60E-04	0.00E+00	7.63E-05	9.41E-05	0.00E+00
276	479821.7	3743580	0.000611	1.19E-03	0.00E+00	5.80E-04	1.32E-03	0.00E+00	1.17E-04	2.11E-04	0.00E+00	4.65E-04	9.84E-04	0.00E+00	1.00E-04	1.61E-04	0.00E+00	7.65E-05	9.43E-05	0.00E+00
277	479803.6	3743577	0.000612	1.19E-03	0.00E+00	5.80E-04	1.32E-03	0.00E+00	1.17E-04	2.11E-04	0.00E+00	4.66E-04	9.85E-04	0.00E+00	1.00E-04	1.61E-04	0.00E+00	7.65E-05	9.44E-05	0.00E+00
278	479785.6	3743575	0.000611	1.19E-03	0.00E+00	5.80E-04	1.32E-03	0.00E+00	1.17E-04	2.11E-04	0.00E+00	4.65E-04	9.84E-04	0.00E+00	1.00E-04	1.61E-04	0.00E+00	7.64E-05	9.43E-05	0.00E+00
279	479767.5	3743573	0.000609	1.19E-03	0.00E+00	5.78E-04	1.32E-03	0.00E+00	1.17E-04	2.10E-04	0.00E+00	4.64E-04	9.81E-04	0.00E+00	9.97E-05	1.60E-04	0.00E+00	7.62E-05	9.40E-05	0.00E+00
280	479749.4	3743570	0.000606	1.18E-03	0.00E+00	5.75E-04	1.31E-03	0.00E+00	1.16E-04	2.09E-04	0.00E+00	4.62E-04	9.76E-04	0.00E+00	9.92E-05	1.59E-04	0.00E+00	7.58E-05	9.36E-05	0.00E+00
281	479731.4	3743568	0.000602	1.18E-03	0.00E+00	5.71E-04	1.30E-03	0.00E+00	1.16E-04	2.08E-04	0.00E+00	4.59E-04	9.70E-04	0.00E+00	9.86E-05	1.58E-04	0.00E+00	7.53E-05	9.29E-05	0.00E+00
282	479713.3	3743565	0.000597	1.17E-03	0.00E+00	5.66E-04	1.29E-03	0.00E+00	1.15E-04	2.06E-04	0.00E+00	4.55E-04	9.61E-04	0.00E+00	9.77E-05	1.57E-04	0.00E+00	7.47E-05	9.21E-05	0.00E+00
283	479695.2	3743563	0.000591	1.15E-03	0.00E+00	5.61E-04	1.28E-03	0.00E+00	1.13E-04	2.04E-04	0.00E+00	4.50E-04	9.51E-04	0.00E+00	9.67E-05	1.55E-04	0.00E+00	7.39E-05	9.12E-05	0.00E+00
284	479677.2	3743561	0.000584	1.14E-03	0.00E+00	5.54E-04	1.26E-03	0.00E+00	1.12E-04	2.01E-04	0.00E+00	4.44E-04	9.40E-04	0.00E+00	9.55E-05	1.53E-04	0.00E+00	7.30E-05	9.01E-05	0.00E+00
285	479659.1	3743558	0.000576	1.12E-03	0.00E+00	5.46E-04	1.24E-03	0.00E+00	1.10E-04	1.99E-04	0.00E+00	4.38E-04	9.27E-04	0.00E+00	9.42E-05	1.51E-04	0.00E+00	7.20E-05	8.88E-05	0.00E+00
286	479641	3743556	0.000567	1.11E-03	0.00E+00	5.37E-04	1.22E-03	0.00E+00	1.09E-04	1.96E-04	0.00E+00	4.31E-04	9.12E-04	0.00E+00	9.27E-05	1.49E-04	0.00E+00	7.09E-05	8.74E-05	0.00E+00
287	479623	3743554	0.000557	1.09E-03	0.00E+00	5.28E-04	1.20E-03	0.00E+00	1.07E-04	1.92E-04	0.00E+00	4.24E-04	8.97E-04	0.00E+00	9.11E-05	1.46E-04	0.00E+00	6.96E-05	8.59E-05	0.00E+00
288	479604.9	3743551	0.000546	1.07E-03	0.00E+00	5.18E-04	1.18E-03	0.00E+00	1.05E-04	1.88E-04	0.00E+00	4.16E-04	8.80E-04	0.00E+00	8.94E-05	1.44E-04	0.00E+00	6.83E-05	8.43E-05	0.00E+00
289	479586.8	3743549	0.000535	1.05E-03	0.00E+00	5.08E-04	1.16E-03	0.00E+00	1.03E-04	1.85E-04	0.00E+00	4.07E-04	8.62E-04	0.00E+00	8.76E-05	1.41E-04	0.00E+00	6.70E-05	8.26E-05	0.00E+00
290	479568.8	3743547	0.000524	1.02E-03	0.00E+00	4.97E-04	1.13E-03	0.00E+00	1.00E-04	1.81E-04	0.00E+00	3.99E-04	8.43E-04	0.00E+00	8.57E-05	1.38E-04	0.00E+00	6.55E-05	8.08E-05	0.00E+00
291	479550.7	3743544	0.000511	9.99E-04	0.00E+00	4.85E-04	1.10E-03	0.00E+00	9.81E-05	1.76E-04	0.00E+00	3.89E-04	8.24E-04	0.00E+00	8.37E-05	1.34E-04	0.00E+00	6.40E-05	7.89E-05	0.00E+00
292	479532.6	3743542	0.000499	9.74E-04	0.00E+00	4.73E-04	1.08E-03	0.00E+00	9.57E-05	1.72E-04	0.00E+00	3.80E-04	8.03E-04	0.00E+00	8.17E-05	1.31E-04	0.00E+00	6.24E-05	7.70E-05	0.00E+00
293	479514.6	3743540	0.000486	9.49E-04	0.00E+00	4.61E-04	1.05E-03	0.00E+00	9.33E-05	1.68E-04	0.00E+00	3.70E-04	7.83E-04	0.00E+00	7.96E-05	1.28E-04	0.00E+00	6.08E-05	7.50E-05	0.00E+00
294	479496.5	3743537	0.000473	9.24E-04	0.00E+00	4.49E-04	1.02E-03	0.00E+00	9.08E-05	1.63E-04	0.00E+00	3.60E-04	7.62E-04	0.00E+00	7.74E-05	1.24E-04	0.00E+00	5.92E-05	7.30E-05	0.00E+00
295	479295	3743456	0.000334	6.52E-04	0.00E+00	3.17E-04	7.21E-04	0.00E+00	6.41E-05	1.15E-04	0.00E+00	2.54E-04	5.38E-04	0.00E+00	5.47E-05	8.77E-05	0.00E+00	4.18E-05	5.15E-05	0.00E+00
296	479286.6	3743440	0.000329	6.42E-04	0.00E+00	3.12E-04	7.10E-04	0.00E+00	6.31E-05	1.14E-04	0.00E+00	2.50E-04	5.30E-04	0.00E+00	5.38E-05	8.64E-05	0.00E+00	4.12E-05	5.08E-05	0.00E+00
297	479278.2	3743424	0.000324	6.32E-04	0.00E+00	3.07E-04	6.99E-04	0.00E+00	6.21E-05	1.12E-04	0.00E+00	2.46E-04	5.21E-04	0.00E+00	5.30E-05	8.50E-05	0.00E+00	4.05E-05	4.99E-05	0.00E+00
298	479269.9	3743408	0.000318	6.21E-04	0.00E+00	3.02E-04	6.87E-04	0.00E+00	6.10E-05	1.10E-04	0.00E+00	2.42E-04	5.12E-04	0.00E+00	5.21E-05	8.36E-05	0.00E+00	3.98E-05	4.91E-05	0.00E+00
299	479261.5	3743391	0.000312	6.10E-04	0.00E+00	2.96E-04	6.74E-04	0.00E+00	5.99E-05	1.08E-04	0.00E+00	2.38E-04	5.03E-04	0.00E+00	5.11E-05	8.20E-05	0.00E+00	3.91E-05	4.82E-05	0.00E+00
300	479253.1	3743375	0.000306	5.98E-04	0.00E+00	2.90E-04	6.61E-04	0.00E+00	5.87E-05	1.06E-04	0.00E+00	2.33E-04	4.93E-04	0.00E+00	5.01E-05	8.04E-05	0.00E+00	3.83E-05	4.73E-05	0.00E+00
301	479060.7	3743003	0.000168	3.29E-04	0.00E+00	1.60E-04	3.64E-04	0.00E+00	3.23E-05	5.81E-05	0.00E+00	1.28E-04	2.71E-04	0.00E+00	2.76E-05	4.43E-05	0.00E+00	2.11E-05	2.60E-05	0.00E+00
302	479052.4	3742987	0.000164	3.21E-04	0.00E+00	1.56E-04	3.55E-04	0.00E+00	3.15E-05	5.67E-05	0.00E+00	1.25E-04	2.64E-04	0.00E+00	2.69E-05	4.31E-05	0.00E+00	2.05E-05	2.53E-05	0.00E+00
303	479044	3742971	0.00016	3.13E-04	0.00E+00	1.52E-04	3.46E-04	0.00E+00	3.07E-05	5.52E-05	0.00E+00	1.22E-04	2.58E-04	0.00E+00	2.62E-05	4.21E-05	0.00E+00	2.00E-05	2.47E-05	0.00E+00
304	479035.6	3742954	0.000156	3.05E-04	0.00E+00	1.48E-04	3.37E-04	0.00E+00	3.00E-05	5.39E-05	0.00E+00	1.19E-04	2.51E-04	0.00E+00	2.56E-05	4.10E-05	0.00E+00	1.95E-05	2.41E-05	0.00E+00
305	479027.3	3742938	0.000152	2.98E-04	0.00E+00	1.45E-04	3.29E-04	0.00E+00	2.92E-05	5.26E-05	0.00E+00	1.16E-04	2.45E-04	0.00E+00	2.49E-05	4.00E-05	0.00E+00	1.91E-05	2.35E-05	0.00E+00
306	479018.9	3742922	0.000149	2.91E-04	0.00E+00	1.41E-04	3.21E-04	0.00E+00	2.85E-05	5.14E-05	0.00E+00	1.13E-04	2.40E-04	0.00E+00	2.44E-05	3.91E-05	0.00E+00	1.86E-05	2.30E-05	0.00E+00
307	479010.5	3742906	0.000145	2.84E-04	0.00E+00	1.38E-04	3.14E-04	0.00E+00	2.79E-05	5.02E-05	0.00E+00	1.11E-04	2.34E-04	0.00E+00	2.38E-05	3.82E-05	0.00E+00	1.82E-05	2.24E-05	0.00E+00
308	479002.2	3742890	0.000142	2.77E-04	0.00E+00	1.35E-04	3.07E-04	0.00E+00	2.72E-05	4.90E-05	0.00E+00	1.08E-04	2.29E-04	0.00E+00	2.32E-05	3.73E-05	0.00E+00	1.78E-05	2.19E-05	0.00E+00
309	478993.8	3742873	0.000139	2.71E-04	0.00E+00	1.32E-04	3.00E-04	0.00E+00	2.66E-05	4.79E-05	0.00E+00	1.06E-04	2.23E-04	0.00E+00	2.27E-05	3.65E-05	0.00E+00	1.74E-05	2.14E-05	0.00E+00
310	478985.5	3742857	0.000136	2.65E-04	0.00E+00	1.29E-04	2.93E-04	0.00E+00	2.60E-05	4.68E-05	0.00E+00	1.03E-04	2.18E-04	0.00E+00	2.22E-05	3.56E-05	0.00E+00	1.70E-05	2.09E-05	0.00E+00
311	478977.1	3742841	0.000133	2.59E-04	0.00E+00	1.26E-04	2.87E-04	0.00E+00	2.54E-05	4.58E-05	0.00E+00	1.01E-04	2.14E-04	0.00E+00	2.17E-05	3.49E-05	0.00E+00	1.66E-05	2.05E-05	0.00E+00
312	478968.7	3742825	0.00013	2.53E-04	0.00E+00	1.23E-04	2.80E-04	0.00E+00	2.49E-05	4.48E-05	0.00E+00	9.88E-05	2.09E-04	0.00E+00	2.12E-05	3.41E-05	0.00E+00	1.62E-05	2.00E-05	0.00E+00
313	478960.4	3742809	0.000127	2.48E-04	0.00E+00	1.20E-04	2.74E-04	0.00E+00	2.44E-05	4.38E-05	0.00E+00	9.67E-05	2.04E-04	0.00E+00	2.08E-05	3.34E-05	0.00E+00	1.59E-05	1.96E-05	0.00E+00
314	478952	3742793	0.000124	2.43E-04	0.00E+00	1.18E-04	2.68E-04	0.00E+00	2.38E-05	4.29E-05	0.00E+00	9.46E-05	2.00E-04	0.00E+00	2.03E-05	3.26E-05	0.00E+00	1.55E-05	1.92E-05	0.00E+00
315	478943.6	3742776	0.000122	2.37E-04	0.00E+00	1.15E-04	2.63E-04	0.00E+00	2.33E-05	4.20E-05	0.00E+00	9.26E-05	1.96E-04	0.00E+00	1.99E-05	3.19E-05	0.00E+00	1.52E-05	1.88E-05	0.00E+00
316	478935.3	3742760	0.000119	2.32E-04	0.00E+00	1.13E-04	2.57E-04	0.00E+00	2.28E-05	4.11E-05	0.00E+00	9.06E-05	1.92E-04	0.00E+00	1.95E-05	3.13E-05	0.00E+00	1.49E-05	1.84E-05	0.00E+00
317	478926.9	3742744	0.000117	2.28E-04	0.00E+00	1.11E-04	2.52E-04	0.00E+00	2.24E-05	4.02E-05	0.00E+00	8.87E-05	1.88E-04	0.00E+00	1.91E-05	3.06E-05	0.00E+00	1.46E-05	1.80E-05	0.00E+00
318	478918.5	3742728	0.000114	2.23E-04	0.00E+00	1.08E-04	2.46E-04	0.00E+00	2.19E-05	3.94E-05	0.00E+00	8.69E-05	1.84E-04	0.00E+00	1.87E-05	3.00E-05	0.00E+00	1.43E-05	1.76E-05	0.00E+00
319	478910.2	3742712	0.000112	2.18E-04	0.00E+00	1.06E-04	2.41E-04	0.00E+00	2.14E-05	3.86E-05	0.00E+00	8.51E-05	1.80E-04	0.00E+00	1.83E-05	2.94E-05	0.00E+00	1.40E-05	1.72E-05	0.00E+00
320	479899.7	3743646	0.000543	1.06E-03	0.00E+00	5.15E-04	1.17E-03	0.00E+00	1.04E-04	1.87E-04	0.00E+00	4.14E-04	8.75E-04	0.00E+00	8.89E-05	1.43E-04	0.00E+00	6.79E-05	8.38E-05	0.00E+00
321	479899.7	3743696	0.000502	9.79E-04	0.00E+00	4.76E-04	1.08E-03	0.00E+00	9.62E-05	1.73E-04	0.00E+00	3.82E-04	8.08E-04	0.00E+00	8.21E-05	1.32E-04	0.00E+00	6.27E-05	7.74E-05	0.00E+00
322	479984.9	3742728	0.023281	4.55E-02	0.00E+00	2.21E-02	5.03E-02	0.00E+00	4.47E-03	8.03E-03	0.00E+00	1.77E-02	3.75E-02	0.00E+00	3.81E-03	6.12E-03	0.00E+00	2.91E-03	3.59E-03	0.00E+00
323	480004.6	3742727	0.023297	4.55E-02	0.00E+00	2.21E-02	5.03E-02	0.00E+00	4.47E-03	8.04E-03	0.00E+00	1.77E-02	3.75E-02	0.00E+00	3.81E-03	6.12E-03	0.00E+00	2.91E-03	3.60E-03	0.00E+00
324	480028	3742727	0.021782	4.25E-02	0.00E+00	2.07E-02	4.70E-02	0.00E+00	4.18E-03	7.52E-03	0.00E+00	1.66E-02	3.51E-02	0.00E+00	3.57E-03	5.72E-03	0.00E+00	2.73E-03	3.36E-03	0.00E+00
325	480048.1	3742727	0.019571	3.82E-02	0.00E+00	1.86E-02	4.23E-02	0.00E+00	3.75E-03	6.75E-03	0.00E+00	1.49E-02	3.15E-02	0.00E+00	3.20E-03	5.14E-03	0.00E+00	2.45E-03	3.02E-03	0.00E+00
326	480074	3742727	0.015141	2.96E-02	0.00E+00	1.44E-02	3.27E-02	0.00E+00	2.90E-03	5.22E-03	0.00E+00	1.15E-02	2.44E-02	0.00E+00	2.48E-03	3.98E-03	0.00E+00	1.89E-03	2.34E-03	0.00E+00
327	479899.9	3742696	0.021858	4.27E-02	0.00E+00	2.07E-02	4.72E-02	0.00E+00	4.19E-03	7.54E-03	0.00E+00	1.66E-02	3.52E-02	0.00E+00	3.58E-03	5.74E-03	0.00E+00	2.73E-03	3.37E-03	0.00E+00
328	480086.7	3742696	0.020669	4.04E-02	0.00E+00	1.96E-02	4.46E-02	0.00E+00	3.96E-03	7.13E-03	0.00E+00	1.57E-02	3.33E-02	0.00E+00	3.38E-03	5.43E-03	0.00E+00	2.59E-03	3.19E-03	0.00E+00
329	480086.9	3742563	0.022699	4.43E-02	0.00E+00	2.15E-02	4.90E-02	0.00E+00	4.35E-03	7.83E-03	0.00E+00	1.73E-02	3.66E-02	0.00E+00	3.72E-03	5.96E-03	0.00E+00	2.84E-03	3.50E-03	0.00E+00
330	479904.8	3742563	0.012352	2.41E-02	0.00E+00	1.17E-02	2.67E-02	0.00E+00	2.37E-03	4.26E-03	0.00E+00	9.41E-03	1.99E-02	0.00E+00	2.02E-03	3.25E-03	0.00E+00	1.55E-03	1.91E-03	0.00E+00
331	479900.2	3742567	0.01164	2.27E-02	0.00E+00	1.10E-02	2.51E-02	0.00E+00	2.23E-03	4.02E-03	0.00E+00	8.86E-03	1.87E-02	0.00E+00	1.91E-03	3.06E-03	0.00E+00	1.46E-03	1.80E-03	0.00E+00
332	479899.6	3742696	0.021543	4.21E-02	0.00E+00	2.04E-02	4.65E-02	0.00E+00	4.13E-03	7.43E-03	0.00E+00	1.64E-02	3.47E-02	0.00E+00	3.53E-03	5.66E-03	0.00E+00	2.70E-03	3.32E-03	0.00E+00

	Daily Trips
	590

	Passenger Vehicles	2-Axle Trks	3-Axle Trks	4-Axle Trks	Total
Percentage	69.0%	6.8%	5.5%	18.7%	100%
# Daily Vehicles	407.10	40.12	32.45	110.33	590
# Annual Vehicles	148,592	14,644	11,844	40,270	215,350

Truck Travel

Onsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	14,644	21.9%	3.76E-05
3-Axle Trks	11,844	17.7%	1.55E-04
4-Axle Trks	40,270	60.3%	1.04E-04
Total	66,759	100%	---

DPM Lbs/ Yr	Plac_In	Plac_Out					Total
Distance (m)	1109.6	1107.1	0	0	0	0	2216.7
2-Axle Trks	2.59E-05	2.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-05
3-Axle Trks	1.07E-04	1.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-04
4-Axle Trks	7.20E-05	7.19E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-04
Total	2.05E-04	2.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-04

Offsite Truck Travel Emissions			
Category	# of Trucks / Yr	% of Total	DPM EF (lb/Mile)
2-Axle Trks	14,644	21.9%	6.49E-05
3-Axle Trks	11,844	17.7%	3.52E-05
4-Axle Trks	40,270	60.3%	7.35E-05
Total	66,759	100%	---

DPM Lbs/ Yr	IN	OUT					Total
Gas Only	N	N	N	N	N	N	
Distance (m)	158.6	135.5	0	0	0	0	294.1
2-Axle Trks	6.40E-06	5.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-05
3-Axle Trks	3.47E-06	2.97E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-06
4-Axle Trks	7.24E-06	6.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-05
Total	1.71E-05	1.46E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-05

Truck Idle

# of Idling Pts	6

Truck Idling						Idle						Total
Category	# of Trucks / Yr	Idle EF (lbs / Event)	Time (Hr)	Lbs/ Yr	Lbs / Yr /Unit	6	0	0	0	0	0	6
2-Axle Trks	14,644	6.04E-05	0.25	2.21E-01	3.69E-02	2.21E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-01
3-Axle Trks	11,844	8.34E-05	0.25	2.47E-01	4.12E-02	2.47E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-01
4-Axle Trks	40,270	8.58E-05	0.25	8.64E-01	1.44E-01	8.64E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-01
Total	66,759	--	--	1.33E+00	2.22E-01	2.22E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E+00

TRUs

Percent of Trucks	0		# of Units	0

Onsite TRU Emissions					
Category	Percentage	# of TRUs / Yr	Time (Hr)	*DPM EF (lbs/Event)	Emissions (lb/Yr)
2-Axle Trks	0	0	0.25	2.09E-03	0.00
3-Axle Trks	0	0			0.00
4-Axle Trks	0	0			0.00
Total	0	0	Emission/Unit		#DIV/0!

* TRU EF * BHP * Load factor * Time in hours

Vehicle Emissions

Vehicle Travel Percentage / Count			
Category	# of Vehicles / Yr	% LDA	% LDT
Passenger Vehicles	148,592	66%	33.73%
# Vehicles		98,470	50,122

Category	TOG Exhaust EF (lb/Mile)	TOG Runloss EF (lb/Mile)
LDA	3.40E-05	4.95E-04
LDT	8.36E-05	8.89E-04

CARB TOG Speciation Profile Run Exhaust			Lbs/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
75070	Acetaldehyde	2.80E-03	9.36E-03	1.17E-02
107028	Acrolein	1.30E-03	4.35E-03	5.45E-03
71432	Benzene	2.47E-02	8.26E-02	1.04E-01
106990	1,3-Butadiene	5.50E-03	1.84E-02	2.30E-02
100414	Ethylbenzene	1.05E-02	3.51E-02	4.40E-02
50000	Formaldehyde	1.58E-02	5.28E-02	6.62E-02
110543	Hexane	1.60E-02	5.35E-02	6.71E-02
67561	Methanol	1.20E-03	4.01E-03	5.03E-03
78933	Methyl Ethyl Ketone	2.00E-04	6.69E-04	8.38E-04
91203	Naphthalene	5.00E-04	1.67E-03	2.10E-03
115071	Propylene	3.06E-02	1.02E-01	1.28E-01
100425	Styrene	1.20E-03	4.01E-03	5.03E-03
108883	Toluene	5.76E-02	1.93E-01	2.41E-01
1330207	Xylenes	4.80E-02	1.60E-01	2.01E-01
9901	Diesel	1.60E-02	3.48E+00	1.77E+00

CARB TOG Speciation Profile Evaporative Losses			Lbs/yr	
CAS#	Chemical Name	Fraction	LDA	LDT
71432	Benzene	3.600E-03	1.20E-02	1.51E-02
100414	Ethylbenzene	1.180E-03	3.95E-03	4.95E-03
110543	Hexane	1.540E-02	5.15E-02	6.45E-02
108883	Toluene	1.700E-02	5.68E-02	7.12E-02
1330207	Xylenes	5.780E-03	1.93E-02	2.42E-02

Vehicle Emissions Travel Summary

Emissions Summary				Source Col	1		2		3		4		5		6		7		8		9		10		11		12		Total Percentage	Total Distance
				Vehicles	Plac_In		Plac_Out		0		0		0		0		IN		OUT		0		0		0		0			
				Cars	0%		0%		0%		0%																			
					44.19%		44.09%		0.00%		0.00%		0.00%		0.00%		6.32%		5.40%		0.00%		0.00%		0.00%		0.00%		100.00%	2510.8
				Trucks	0%		0%		0%		0%		0%																	
					0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%			
CAS#	Chemical Name	Lbs/ Hr	Lbs/ Yr		Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr	Lbs/ Hr	Lbs/ Yr
75070	Acetaldehyde	7.03E-06	2.11E-02		3.11E-06	9.32E-03	3.10E-06	9.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.44E-07	1.33E-03	3.79E-07	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.03E-06	2.11E-02
107028	Acrolein	3.26E-06	9.79E-03		1.44E-06	4.33E-03	1.44E-06	4.32E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-07	6.19E-04	1.76E-07	5.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-06	9.79E-03
71432	Benzene	7.11E-05	2.13E-01		3.14E-05	9.42E-02	3.13E-05	9.40E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-06	1.35E-02	3.84E-06	1.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-05	2.13E-01
106990	1,3-Butadiene	1.38E-05	4.14E-02		6.10E-06	1.83E-02	6.09E-06	1.83E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.73E-07	2.62E-03	7.45E-07	2.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-05	4.14E-02
100414	Ethylbenzene	2.93E-05	8.80E-02		1.30E-05	3.89E-02	1.29E-05	3.88E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-06	5.56E-03	1.58E-06	4.75E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-05	8.80E-02
50000	Formaldehyde	3.97E-05	1.19E-01		1.75E-05	5.26E-02	1.75E-05	5.25E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-06	7.52E-03	2.14E-06	6.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-05	1.19E-01
110543	Hexane	7.89E-05	2.37E-01		3.48E-05	1.05E-01	3.48E-05	1.04E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-06	1.49E-02	4.26E-06	1.28E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.89E-05	2.37E-01
67561	Methanol	3.01E-06	9.04E-03		1.33E-06	4.00E-03	1.33E-06	3.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-07	5.71E-04	1.63E-07	4.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-06	9.04E-03
78933	Methyl Ethyl Ketone	5.02E-07	1.51E-03		2.22E-07	6.66E-04	2.21E-07	6.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.17E-08	9.52E-05	2.71E-08	8.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-07	1.51E-03
91203	Naphthalene	1.26E-06	3.77E-03		5.55E-07	1.66E-03	5.54E-07	1.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.93E-08	2.38E-04	6.78E-08	2.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-06	3.77E-03
115071	Propylene	7.68E-05	2.31E-01		3.40E-05	1.02E-01	3.39E-05	1.02E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-06	1.46E-02	4.15E-06	1.24E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.68E-05	2.31E-01
100425	Styrene	3.01E-06	9.04E-03		1.33E-06	4.00E-03	1.33E-06	3.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-07	5.71E-04	1.63E-07	4.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-06	9.04E-03
108883	Toluene	1.87E-04	5.62E-01		8.28E-05	2.48E-01	8.26E-05	2.48E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-05	3.55E-02	1.01E-05	3.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-04	5.62E-01
1330207	Xylenes	1.35E-04	4.05E-01		5.97E-05	1.79E-01	5.96E-05	1.79E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.53E-06	2.56E-02	7.29E-06	2.19E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-04	4.05E-01
9901	Diesel	1.75E-03	5.25E+00		7.73E-04	2.32E+00	7.72E-04	2.31E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	3.32E-01	9.44E-05	2.83E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-03	5.25E+00

	Model Source	Source Col	Dat Col		Col	Row	CAS#	Chemical Name	Pol Count	Source Count
1	Plac_In	1	8	1	8	96	75070	Acetaldehyde	15	10
2	Plac_Out	2	10	2	10	97	107028	Acrolein		
3	IN	7	20	3	12	98	71432	Benzene		
4	OUT	8	22	4	14	99	106990	1-3,Butadiene		
5			Col	5	16	100	100414	Ethylbenzene		
6			Col	6	18	101	50000	Formaldehyde		
7			Col	7	20	102	110543	Hexane		
8	IDLE_1	Idle1	8	8	22	103	67561	Methanol		
9	IDLE_2	Idle1	8	10	24	104	78933	Methyl Ethyl Ketone		
10	IDLE_3	Idle1	8		8	105	91203	Naphthalene		
11	IDLE_4	Idle1	8		8	106	115071	Propylene		
12	IDLE_5	Idle1	8		8	107	100425	Styrene		
13	IDLE_6	Idle1	8		8	108	108883	Toluene		
14			Col		8	109	1330207	Xylenes		
15			Col		8	110	9901	Diesel		
16			Col		8					
17			Col		8	35		Idle		
18			Col		8					
19			Col		8					
20			Col		8					
21			Col		8					
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1	8	96	1	1	Plac_In	0	0	75070	Acetaldehyde	1	9.32E-03	3.11E-06	1
1	8	97	1	2	Plac_In	0	0	107028	Acrolein	1	4.33E-03	1.44E-06	1
1	8	98	1	3	Plac_In	0	0	71432	Benzene	1	9.42E-02	3.14E-05	1
1	8	99	1	4	Plac_In	0	0	106990	1-3,Butadiene	1	1.83E-02	6.10E-06	1
1	8	100	1	5	Plac_In	0	0	100414	Ethylbenzene	1	3.89E-02	1.30E-05	1
1	8	101	1	6	Plac_In	0	0	50000	Formaldehyde	1	5.26E-02	1.75E-05	1
1	8	102	1	7	Plac_In	0	0	110543	Hexane	1	1.05E-01	3.48E-05	1
1	8	103	1	8	Plac_In	0	0	67561	Methanol	1	4.00E-03	1.33E-06	1
1	8	104	1	9	Plac_In	0	0	78933	Methyl Ethyl Ketone	1	6.66E-04	2.22E-07	1
1	8	105	1	10	Plac_In	0	0	91203	Naphthalene	1	1.66E-03	5.55E-07	1
1	8	106	1	11	Plac_In	0	0	115071	Propylene	1	1.02E-01	3.40E-05	1
1	8	107	1	12	Plac_In	0	0	100425	Styrene	1	4.00E-03	1.33E-06	1
1	8	108	1	13	Plac_In	0	0	108883	Toluene	1	2.48E-01	8.28E-05	1
1	8	109	1	14	Plac_In	0	0	1330207	Xylenes	1	1.79E-01	5.97E-05	1
1	8	110	1	15	Plac_In	0	0	9901	Diesel	1	2.32E+00	7.73E-04	1
2	10	96	2	1	Plac_Out	0	0	75070	Acetaldehyde	1	9.30E-03	3.10E-06	1
2	10	97	2	2	Plac_Out	0	0	107028	Acrolein	1	4.32E-03	1.44E-06	1
2	10	98	2	3	Plac_Out	0	0	71432	Benzene	1	9.40E-02	3.13E-05	1
2	10	99	2	4	Plac_Out	0	0	106990	1-3,Butadiene	1	1.83E-02	6.09E-06	1
2	10	100	2	5	Plac_Out	0	0	100414	Ethylbenzene	1	3.88E-02	1.29E-05	1
2	10	101	2	6	Plac_Out	0	0	50000	Formaldehyde	1	5.25E-02	1.75E-05	1
2	10	102	2	7	Plac_Out	0	0	110543	Hexane	1	1.04E-01	3.48E-05	1
2	10	103	2	8	Plac_Out	0	0	67561	Methanol	1	3.99E-03	1.33E-06	1
2	10	104	2	9	Plac_Out	0	0	78933	Methyl Ethyl Ketone	1	6.64E-04	2.21E-07	1
2	10	105	2	10	Plac_Out	0	0	91203	Naphthalene	1	1.66E-03	5.54E-07	1
2	10	106	2	11	Plac_Out	0	0	115071	Propylene	1	1.02E-01	3.39E-05	1
2	10	107	2	12	Plac_Out	0	0	100425	Styrene	1	3.99E-03	1.33E-06	1
2	10	108	2	13	Plac_Out	0	0	108883	Toluene	1	2.48E-01	8.26E-05	1
2	10	109	2	14	Plac_Out	0	0	1330207	Xylenes	1	1.79E-01	5.96E-05	1
2	10	110	2	15	Plac_Out	0	0	9901	Diesel	1	2.31E+00	7.72E-04	1
7	20	96	3	1	IN	0	0	75070	Acetaldehyde	1	1.33E-03	4.44E-07	1
7	20	97	3	2	IN	0	0	107028	Acrolein	1	6.19E-04	2.06E-07	1
7	20	98	3	3	IN	0	0	71432	Benzene	1	1.35E-02	4.49E-06	1
7	20	99	3	4	IN	0	0	106990	1-3,Butadiene	1	2.62E-03	8.73E-07	1
7	20	100	3	5	IN	0	0	100414	Ethylbenzene	1	5.56E-03	1.85E-06	1
7	20	101	3	6	IN	0	0	50000	Formaldehyde	1	7.52E-03	2.51E-06	1
7	20	102	3	7	IN	0	0	110543	Hexane	1	1.49E-02	4.98E-06	1
7	20	103	3	8	IN	0	0	67561	Methanol	1	5.71E-04	1.90E-07	1
7	20	104	3	9	IN	0	0	78933	Methyl Ethyl Ketone	1	9.52E-05	3.17E-08	1
7	20	105	3	10	IN	0	0	91203	Naphthalene	1	2.38E-04	7.93E-08	1
7	20	106	3	11	IN	0	0	115071	Propylene	1	1.46E-02	4.85E-06	1
7	20	107	3	12	IN	0	0	100425	Styrene	1	5.71E-04	1.90E-07	1
7	20	108	3	13	IN	0	0	108883	Toluene	1	3.55E-02	1.18E-05	1
7	20	109	3	14	IN	0	0	1330207	Xylenes	1	2.56E-02	8.53E-06	1
7	20	110	3	15	IN	0	0	9901	Diesel	1	3.32E-01	1.11E-04	1
8	22	96	4	1	OUT	0	0	75070	Acetaldehyde	1	1.14E-03	3.79E-07	1
8	22	97	4	2	OUT	0	0	107028	Acrolein	1	5.29E-04	1.76E-07	1
8	22	98	4	3	OUT	0	0	71432	Benzene	1	1.15E-02	3.84E-06	1
8	22	99	4	4	OUT	0	0	106990	1-3,Butadiene	1	2.24E-03	7.45E-07	1
8	22	100	4	5	OUT	0	0	100414	Ethylbenzene	1	4.75E-03	1.58E-06	1
8	22	101	4	6	OUT	0	0	50000	Formaldehyde	1	6.42E-03	2.14E-06	1
8	22	102	4	7	OUT	0	0	110543	Hexane	1	1.28E-02	4.26E-06	1
8	22	103	4	8	OUT	0	0	67561	Methanol	1	4.88E-04	1.63E-07	1
8	22	104	4	9	OUT	0	0	78933	Methyl Ethyl Ketone	1	8.13E-05	2.71E-08	1
8	22	105	4	10	OUT	0	0	91203	Naphthalene	1	2.03E-04	6.78E-08	1
8	22	106	4	11	OUT	0	0	115071	Propylene	1	1.24E-02	4.15E-06	1
8	22	107	4	12	OUT	0	0	100425	Styrene	1	4.88E-04	1.63E-07	1
8	22	108	4	13	OUT	0	0	108883	Toluene	1	3.03E-02	1.01E-05	1
8	22	109	4	14	OUT	0	0	1330207	Xylenes	1	2.19E-02	7.29E-06	1
8	22	110	4	15	OUT	0	0	9901	Diesel	1	2.83E-01	9.44E-05	1
#N/A		96	5	1		0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A		97	5	2		0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A		98	5	3		0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A		99	5	4		0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A		100	5	5		0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A		101	5	6		0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A		102	5	7		0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A		103	5	8		0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A		104	5	9		0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A		105	5	10		0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A		106	5	11		0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A		107	5	12		0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A		108	5	13		0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A		109	5	14		0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A		110	5	15		0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A		96	6	1		0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A		97	6	2		0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A		98	6	3		0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A		99	6	4		0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A		100	6	5		0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A		101	6	6		0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A		102	6	7		0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A		103	6	8		0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A		104	6	9		0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A		105	6	10		0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A		106	6	11		0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A		107	6	12		0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A		108	6	13		0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A		109	6	14		0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A		110	6	15		0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A		96	7	1		0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A		97	7	2		0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A		98	7	3		0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A		99	7	4		0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A		100	7	5		0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A		101	7	6		0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A		102	7	7		0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A		103	7	8		0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A		104	7	9		0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A		105	7	10		0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A		106	7	11		0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A		107	7	12		0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A		108	7	13		0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A		109	7	14		0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A		110	7	15		0	0	9901	Diesel	1	#N/A	#N/A	1
Idle	8	96	8	1	IDLE_1	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	97	8	2	IDLE_1	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	8	98	8	3	IDLE_1	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	8	99	8	4	IDLE_1	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	8	100	8	5	IDLE_1	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	8	101	8	6	IDLE_1	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	102	8	7	IDLE_1	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	8	103	8	8	IDLE_1	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	8	104	8	9	IDLE_1	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	8	105	8	10	IDLE_1	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	8	106	8	11	IDLE_1	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	8	107	8	12	IDLE_1	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	8	108	8	13	IDLE_1	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	8	109	8	14	IDLE_1	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	8	35	8	15	IDLE_1	0	0	9901	Diesel	1	2.22E-01	0.00E+00	1
Idle	8	96	9	1	IDLE_2	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	97	9	2	IDLE_2	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	8	98	9	3	IDLE_2	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	8	99	9	4	IDLE_2	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	8	100	9	5	IDLE_2	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	8	101	9	6	IDLE_2	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	102	9	7	IDLE_2	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	8	103	9	8	IDLE_2	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	8	104	9	9	IDLE_2	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	8	105	9	10	IDLE_2	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	8	106	9	11	IDLE_2	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	8	107	9	12	IDLE_2	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	8	108	9	13	IDLE_2	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	8	109	9	14	IDLE_2	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	8	35	9	15	IDLE_2	0	0	9901	Diesel	1	2.22E-01	0.00E+00	1
Idle	8	96	10	1	IDLE_3	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	97	10	2	IDLE_3	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	8	98	10	3	IDLE_3	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	8	99	10	4	IDLE_3	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	8	100	10	5	IDLE_3	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	8	101	10	6	IDLE_3	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	102	10	7	IDLE_3	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	8	103	10	8	IDLE_3	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	8	104	10	9	IDLE_3	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	8	105	10	10	IDLE_3	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	8	106	10	11	IDLE_3	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1

Idle	8	107	10	12	IDLE_3	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	8	108	10	13	IDLE_3	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	8	109	10	14	IDLE_3	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	8	35	10	15	IDLE_3	0	0	9901	Diesel	1	2.22E-01	0.00E+00	1
Idle	8	96	11	1	IDLE_4	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	97	11	2	IDLE_4	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	8	98	11	3	IDLE_4	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	8	99	11	4	IDLE_4	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	8	100	11	5	IDLE_4	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	8	101	11	6	IDLE_4	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	102	11	7	IDLE_4	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	8	103	11	8	IDLE_4	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	8	104	11	9	IDLE_4	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	8	105	11	10	IDLE_4	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	8	106	11	11	IDLE_4	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	8	107	11	12	IDLE_4	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	8	108	11	13	IDLE_4	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	8	109	11	14	IDLE_4	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	8	35	11	15	IDLE_4	0	0	9901	Diesel	1	2.22E-01	0.00E+00	1
Idle	8	96	12	1	IDLE_5	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	97	12	2	IDLE_5	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	8	98	12	3	IDLE_5	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	8	99	12	4	IDLE_5	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	8	100	12	5	IDLE_5	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	8	101	12	6	IDLE_5	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	102	12	7	IDLE_5	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	8	103	12	8	IDLE_5	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	8	104	12	9	IDLE_5	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	8	105	12	10	IDLE_5	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	8	106	12	11	IDLE_5	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	8	107	12	12	IDLE_5	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	8	108	12	13	IDLE_5	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	8	109	12	14	IDLE_5	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	8	35	12	15	IDLE_5	0	0	9901	Diesel	1	2.22E-01	0.00E+00	1
Idle	8	96	13	1	IDLE_6	0	0	75070	Acetaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	97	13	2	IDLE_6	0	0	107028	Acrolein	1	0.00E+00	0.00E+00	1
Idle	8	98	13	3	IDLE_6	0	0	71432	Benzene	1	0.00E+00	0.00E+00	1
Idle	8	99	13	4	IDLE_6	0	0	106990	1-3,Butadiene	1	0.00E+00	0.00E+00	1
Idle	8	100	13	5	IDLE_6	0	0	100414	Ethylbenzene	1	0.00E+00	0.00E+00	1
Idle	8	101	13	6	IDLE_6	0	0	50000	Formaldehyde	1	0.00E+00	0.00E+00	1
Idle	8	102	13	7	IDLE_6	0	0	110543	Hexane	1	0.00E+00	0.00E+00	1
Idle	8	103	13	8	IDLE_6	0	0	67561	Methanol	1	0.00E+00	0.00E+00	1
Idle	8	104	13	9	IDLE_6	0	0	78933	Methyl Ethyl Ketone	1	0.00E+00	0.00E+00	1
Idle	8	105	13	10	IDLE_6	0	0	91203	Naphthalene	1	0.00E+00	0.00E+00	1
Idle	8	106	13	11	IDLE_6	0	0	115071	Propylene	1	0.00E+00	0.00E+00	1
Idle	8	107	13	12	IDLE_6	0	0	100425	Styrene	1	0.00E+00	0.00E+00	1
Idle	8	108	13	13	IDLE_6	0	0	108883	Toluene	1	0.00E+00	0.00E+00	1
Idle	8	109	13	14	IDLE_6	0	0	1330207	Xylenes	1	0.00E+00	0.00E+00	1
Idle	8	35	13	15	IDLE_6	0	0	9901	Diesel	1	2.22E-01	0.00E+00	1
#N/A	96	14	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1	
#N/A	97	14	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1	
#N/A	98	14	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1	
#N/A	99	14	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1	
#N/A	100	14	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1	
#N/A	101	14	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1	
#N/A	102	14	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1	
#N/A	103	14	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1	
#N/A	104	14	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1	
#N/A	105	14	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1	
#N/A	106	14	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1	
#N/A	107	14	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1	
#N/A	108	14	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1	
#N/A	109	14	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1	
#N/A	110	14	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1	
#N/A	96	15	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1	
#N/A	97	15	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1	
#N/A	98	15	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1	
#N/A	99	15	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1	
#N/A	100	15	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1	
#N/A	101	15	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1	
#N/A	102	15	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1	
#N/A	103	15	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1	
#N/A	104	15	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1	
#N/A	105	15	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1	
#N/A	106	15	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1	
#N/A	107	15	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1	
#N/A	108	15	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1	
#N/A	109	15	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1	
#N/A	110	15	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1	
#N/A	96	16	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1	
#N/A	97	16	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1	
#N/A	98	16	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1	
#N/A	99	16	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1	
#N/A	100	16	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1	
#N/A	101	16	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1	
#N/A	102	16	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1	
#N/A	103	16	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1	
#N/A	104	16	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1	
#N/A	105	16	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1	
#N/A	106	16	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1	
#N/A	107	16	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1	
#N/A	108	16	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1	
#N/A	109	16	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1	
#N/A	110	16	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1	
#N/A	96	17	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1	
#N/A	97	17	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1	
#N/A	98	17	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1	
#N/A	99	17	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1	
#N/A	100	17	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1	
#N/A	101	17	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1	
#N/A	102	17	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1	
#N/A	103	17	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1	
#N/A	104	17	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1	
#N/A	105	17	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1	
#N/A	106	17	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1	
#N/A	107	17	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1	
#N/A	108	17	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1	
#N/A	109	17	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1	
#N/A	110	17	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1	
#N/A	96	18	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1	
#N/A	97	18	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1	
#N/A	98	18	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1	
#N/A	99	18	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1	
#N/A	100	18	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1	
#N/A	101	18	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1	
#N/A	102	18	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1	
#N/A	103	18	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1	
#N/A	104	18	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1	
#N/A	105	18	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1	
#N/A	106	18	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1	
#N/A	107	18	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1	
#N/A	108	18	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1	
#N/A	109	18	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1	
#N/A	110	18	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1	
#N/A	96	19	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1	
#N/A	97	19	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1	
#N/A	98	19	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1	
#N/A	99	19	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1	
#N/A	100	19	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1	
#N/A	101	19	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1	
#N/A	102	19	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1	
#N/A	103	19	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1	
#N/A	104	19	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1	
#N/A	105	19	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1	
#N/A	106	19	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1	
#N/A	107	19	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1	
#N/A	108	19	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1	
#N/A	109	19	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1	
#N/A	110	19	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1	
#N/A	96	20	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1	
#N/A	97	20	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1	
#N/A	98	20	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1	
#N/A	99	20	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1	
#N/A	100	20	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1	
#N/A	101	20	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1	
#N/A	102	20	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1	
#N/A	103	20	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1	

	#N/A	104	20	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
	#N/A	105	20	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
	#N/A	106	20	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
	#N/A	107	20	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
	#N/A	108	20	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
	#N/A	109	20	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
	#N/A	110	20	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
	#N/A	96	21	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
	#N/A	97	21	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
	#N/A	98	21	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
	#N/A	99	21	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
	#N/A	100	21	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
	#N/A	101	21	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
	#N/A	102	21	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
	#N/A	103	21	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
	#N/A	104	21	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
	#N/A	105	21	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
	#N/A	106	21	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
	#N/A	107	21	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
	#N/A	108	21	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
	#N/A	109	21	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
	#N/A	110	21	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
	#N/A	96	22	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
	#N/A	97	22	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
	#N/A	98	22	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
	#N/A	99	22	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
	#N/A	100	22	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
	#N/A	101	22	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
	#N/A	102	22	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
	#N/A	103	22	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
	#N/A	104	22	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
	#N/A	105	22	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
	#N/A	106	22	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
	#N/A	107	22	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
	#N/A	108	22	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
	#N/A	109	22	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
	#N/A	110	22	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	23	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	24	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	25	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	26	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	27	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	28	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	29	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1

#N/A	#N/A	#N/A	30	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	30	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	31	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	32	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	33	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	34	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	1	0	0	0	75070	Acetaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	2	0	0	0	107028	Acrolein	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	3	0	0	0	71432	Benzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	4	0	0	0	106990	1-3,Butadiene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	5	0	0	0	100414	Ethylbenzene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	6	0	0	0	50000	Formaldehyde	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	7	0	0	0	110543	Hexane	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	8	0	0	0	67561	Methanol	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	9	0	0	0	78933	Methyl Ethyl Ketone	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	10	0	0	0	91203	Naphthalene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	11	0	0	0	115071	Propylene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	12	0	0	0	100425	Styrene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	13	0	0	0	108883	Toluene	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	14	0	0	0	1330207	Xylenes	1	#N/A	#N/A	1
#N/A	#N/A	#N/A	35	15	0	0	0	9901	Diesel	1	#N/A	#N/A	1

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	PM2.5_RUNEX	PM10_RUNEX
Riverside	2022	HHDT	Aggregate	5	Diesel	0.018864654	0.01971763
Riverside	2022	HHDT	Aggregate	10	Diesel	0.016610182	0.017361221
Riverside	2022	HHDT	Aggregate	15	Diesel	0.013431405	0.014038713
					Average	0.01630208	0.017039188
Riverside	2022	LHDT1	Aggregate	5	Diesel	0.112152054	0.117223072
Riverside	2022	LHDT1	Aggregate	10	Diesel	0.091004171	0.095118975
Riverside	2022	LHDT1	Aggregate	15	Diesel	0.074506087	0.077874922
Riverside	2022	LHDT2	Aggregate	5	Diesel	0.09787942	0.102305093
Riverside	2022	LHDT2	Aggregate	10	Diesel	0.080946559	0.084606603
Riverside	2022	LHDT2	Aggregate	15	Diesel	0.067112545	0.070147076
					Average	0.087266806	0.091212624
Riverside	2022	MHDT	Aggregate	5	Diesel	0.058711224	0.061365885
Riverside	2022	MHDT	Aggregate	10	Diesel	0.046686675	0.048797639
Riverside	2022	MHDT	Aggregate	15	Diesel	0.030604357	0.03198815
					Average	0.045334085	0.047383892

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	Diesel %	Trips	PM2.5_RUNEX	PM10_RUNEX	TOG_RUNEX	TOG_RUNLOSS
Riverside	2022	LDA	Aggregate	Aggregate	Gasoline	631263.9969	25847634.02	25847634.02	0%	2949604.94	0.001255808	0.001365784	0.015401713	0.224518913
Riverside	2022	LDA	Aggregate	Aggregate	Diesel	2196.653698	78564.3487	78564.3487	68%	9694.75503	0.017169117	0.017945428	0.03175384	0
							25926198.37	66.3%						
Riverside	2022	LDT1	Aggregate	Aggregate	Gasoline	59198.30437	2131713.274	2131713.274	0%	256842.7273	0.002378039	0.002586078	0.077072856	0.751304588
Riverside	2022	LDT1	Aggregate	Aggregate	Diesel	34.7886086	679.0259591	679.0259591	0.6%	103.8388682	0.231867505	0.242351525	0.366801737	0
Riverside	2022	LDT2	Aggregate	Aggregate	Gasoline	261723.7424	11028402.51	11028402.51	0%	1228226.977	0.001299708	0.001413524	0.021301562	0.234133955
Riverside	2022	LDT2	Aggregate	Aggregate	Diesel	794.7199281	35894.03111	35894.03111	31%	3845.080543	0.007216005	0.007542281	0.017858542	0
							13196688.84	33.7%	115137			Gasoline Avg EF	0.037925377	0.403319152
								Diesel Wt EF	0.016025693					

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	Trips	PM2.5_RUNEX	PM2.5_IDLEX	PM10_RUNEX	PM10_IDLEX
Riverside	2022	HHDT	Aggregate	Aggregate	Diesel	24368.80176	3973089.107	3973089.107	431345.0979	0.031889784	0.037252753	0.033331698	0.038937157
Riverside	2022	MHDT	Aggregate	Aggregate	Diesel	15002.33439	674054.8952	674054.8952	178405.4403	0.015294853	0.036214585	0.015986418	0.037852048
Riverside	2022	LHDT1	Aggregate	Aggregate	Diesel	19562.12381	724726.8784	724726.8784	246066.9084	0.029659552	0.026294627	0.031000625	0.027483553
Riverside	2022	LHDT2	Aggregate	Aggregate	Diesel	8604.492864	323393.4583	323393.4583	108233.6958	0.026704457	0.026125134	0.027911914	0.027306397
									Average	0.028182004	0.02620988	0.02945627	0.027394975

APPENDIX C

ENERGY CALCULATIONS

Construction Off-Road Equipment										
Phase	**Off-Road Equipment Type**	**Amount**	**Usage Hour/Day**	**Total Usage Days**	**Total Usage Hours/Equipment**	**Horsepower**	**Load Factor**	**Total Usage Hours/ Equipment**	**Horsepower-Hour**	**Fuel Usage (gallons)**
Site Preparation	Rubber Tired Dozers	3	8	15	360	367	0.4	360	52848	2705.8176
	Tractors/Loaders/Backhoes	4	8	15	480	84	0.37	480	14918.4	763.82208
Grading	Excavators	1	8	20	160	36	0.38	160	2188.8	112.06656
	Graders	1	8	20	160	148	0.41	160	9708.8	497.09056
	Rubber Tired Dozers	1	8	20	160	367	0.4	160	23488	1202.5856
	Tractors/Loaders/Backhoes	3	8	20	480	84	0.37	480	14918.4	763.82208
Building Construction	Cranes	1	7	180	1260	367	0.29	1260	134101.8	6866.01216
	Forklifts	3	8	180	4320	82	0.2	4320	70848	3627.4176
	Generator Sets	1	8	180	1440	14	0.74	1440	14918.4	763.82208
	Tractors/Loaders/Backhoes	3	7	180	3780	84	0.37	3780	117482.4	6015.09888
	Welders	1	8	180	1440	46	0.45	1440	29808	1526.1696
Paving	Pavers	2	8	10	160	81	0.42	160	5443.2	278.69184
	Paving Equipment	2	8	10	160	89	0.36	160	5126.4	262.47168
	Rollers	2	8	10	160	36	0.38	160	2188.8	112.06656
Architectural Coating	Air Compressors	1	6	90	540	37	0.48	540	9590.4	491.02848
									Total	**25987.98336** Diesel

Construction Truck and Construction Worker Vehicle Fuel Efficiency				
		EMFAC 2021 Outputs		
Vehicle Type	Vehicle Class	Fuel Consumption (1,000 gallons/day)	VMT (miles/ day)	Fuel Efficency (miles/gallon)
Construction Truck	MHDT	76.7	686024.2	8.9
	HHDT	662.2	4023776	6.1
	HHDT/MHDT	-	-	7.5
Construction Worker Vehicle	LDA	902.6	25990133.5	28.8
	LDT1	88.9	2111319.3	23.7
	LDT2	492.5	11500757.8	23.4
	Worker Mix	-	-	26.2

Notes:

[1] For construction trucks assumes 50 percent HHDT and 50 percent MHDT vehicles, consistent with assumptions in CalEEMod for hauling trucks. For construction worker vehicles assumes 50 percent LDA, 25 percent LDT1, and 25 percent LDT2 vehicles, consistent with assumptions in CalEEMod for worker vehicles.

[2] EMFAC2021 was run for Riverside County for the construction year 2023. Data was aggregated over all vehicle model years and speed bins.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

Construction Vehicle Fuel Use - Diesel Vehicles						
Phase	Trip Type	Total Trips	Trip Length (miles)	Total VMT	Diesel Fuel Effiency (miles/gallon)	Fuel Usage (gallons/year)
Grading	Hauling	113	20	2260	6.1	370.5
Building Construction	Vendor	7128	10.2	72705.6	7.5	9694.1
					Total	**10064.6**

Diesel

[1] Assumes 100 percent HHDT vehicles for haul trucks and 50 percent HHDT/50 percent MHDT vehicles for MHDT, consistent with assumptions in CalEEMod.

[2] EMFAC2021 was run for Riverside County for the construction year 2023. Data was aggregated over all vehicle model years and speed bins.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

Construction Worker Vehicle Fuel Use - Gasoline Vehicles							
Phase	Total One-Way Trips/Day	Total Days	Total Trips	Trip Length (miles)	Total VMT	Gasoline Fuel Effiency (miles/gallon)	Fuel Usage (gallons/year)
Site Preparation	17.5	15	525	18.5	9712.5	25.8	376.5
Grading	15	20	600	18.5	11100	25.8	430.2
Building Construction	50.8	180	18288	18.5	338328	25.8	13113.5
Paving	15	10	300	18.5	5550	25.8	215.1
Architectural Coating	10.2	90	1836	18.5	33966	25.8	1316.5
						Total	**15451.8**

Gas

Total Construction Gasoline Usage	15451.8
Total Construction Diesel Usage	36052.6

Proposed Project Operational Trips			
Vehicle Class	CalEEMod	Total Project Trips	Total Trips per Vehicle Class
LDA	0.4689	480	225.1
LDT1	0.040227368	480	19.3
LDT2	0.197514653	480	94.8
MDV	0.1612	480	77.4
LHD1	0.032685094	480	15.7
LHD2	0.009227889	480	4.4
MHD	0.0667	480	32.0
HHD	0	480	0.0
OBUS	0	480	0.0
UBUS	0	480	0.0
MCY	0.023753837	480	11.4
SBUS	0	480	0.0
MH	0	480	0.0

Proposed Project Operational Trips – Fuel Efficiency						
Fuel	Vehicle Class	EMFAC2021 Outputs1				
		Fleet Mix (%)2	Consumption (1,000 gallons/day)	VMT (miles/day)	Fuel Efficiency3 (miles/gallon)	
Gas	LDA	52%	885.4	26,012,016.0	29.4	15.3
	LDT1	4%	86.1	2,083,796.0	24.2	1.0
	LDT2	24%	496.2	11,902,838.0	24.0	5.7
	MDV	17%	450.0	8,698,898.0	19.3	3.4
	LHD1	2%	65.8	894,591.4	13.6	0.2
	MCY	0%	4.4	183,169.9	41.8	0.2
	MH	0%	10.6	51,810.8	4.9	0.0
	Fleet Mix	–	–	–	25.9	25.9
Diesel	LHD2	6%	18.9	325,030.2	17.2	1.1
	MHDT	14%	77.6	696,366.1	9.0	1.2
	HHDT	80%	668.1	4,114,264.2	6.2	4.9
	Fleet Mix	–	–	–	7.2	7.2

Notes:

[1] EMFAC2021 was run for Riverside County for the operational year 2024. Data was aggregated over all vehicle model years and speed bins.

[2] Fleet mix is based on assumptions made in CalEEMod for the proposed project.

[3] The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

Proposed Project Operational Trips – Fuel Usage						
Land Use	Total Annual VMT2 (miles/year)	Fuel Type	Portion of Fleet3 (%)	VMT by Fuel Type (miles/year)	Fleet Mix Efficiency4 (miles/gallon)	Fuel Usage (gallons/ year)
Warehouse	2,282,952.00	Gas	92%	2110089	25.9	81600.5
		Diesel	8%	173340	7.2	23947.3
Warehouse HHDT	1,607,606.00	Diesel	100%	1607606	6.2	259291.3
					Total Gasoline/year	**81600.5**
					Total Diesel/year	**283238.6**

Notes:

[1] Calculated for operational year 2024 only. Future years will likely use less fuel due to more efficient cars.

[2] Total VMT is based on project's trip generation and trip lengths.

[3] Fleet distribution is based on EMFAC2021 output and CalEEMod assumptions.

[4] Fuel efficiency is based on fuel consumption and VMT data from EMFAC2021 for Riverside County and total VMT.

Electricity Usage	
Electricity by Land Use	**kWh/year**
Unrefrigerated Warehouse	556885
City Park	0
Parking Lot	71357
Total	**628,242**

Natural Gas Usage			
Natural Gas by Land Use	**kBTU/year**	**BTU/year**	**therms/year**
unrefrigerated warehouse	2,310,154	2,310,154,000	23,106
City Park	0	0	0
Parking Lot	0	0	0
Total	**2,310,154**	**2,310,154,000**	**23,106**