

# Downloading Level 2 Aerosol Data

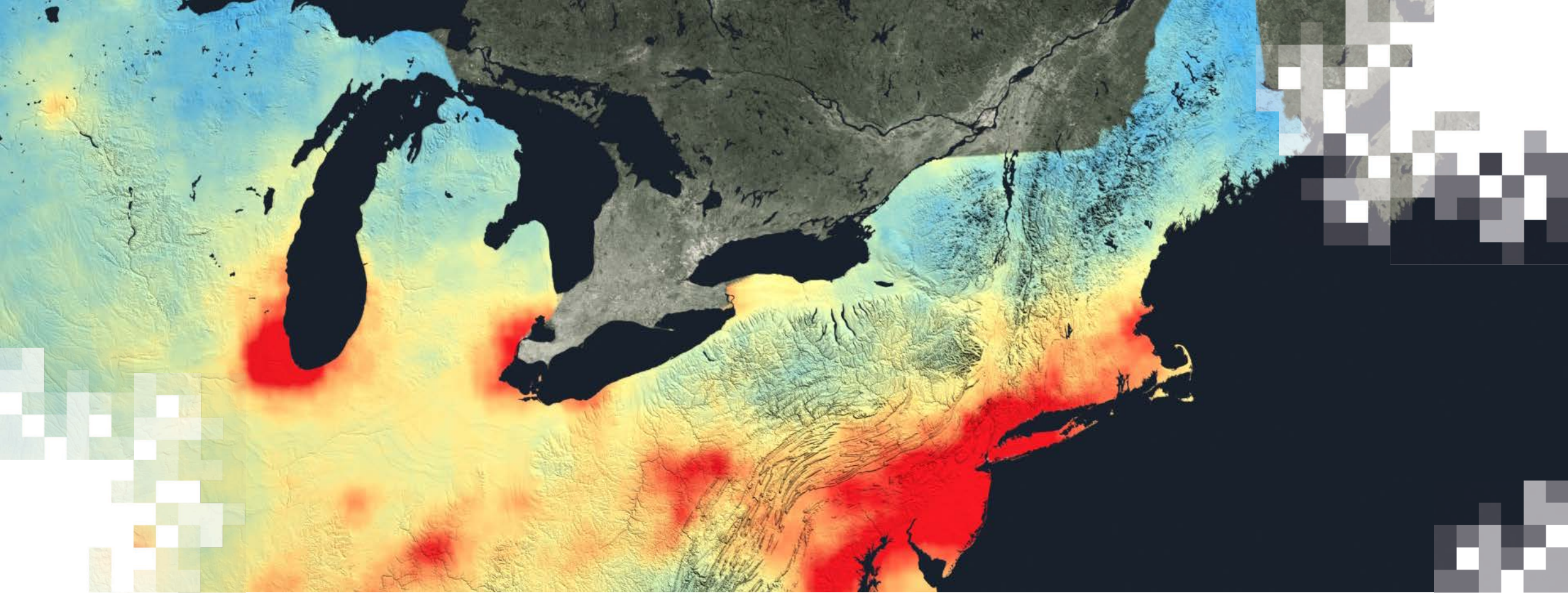
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NASA Air Quality Remote Sensing Training, US EPA, Raleigh, NC, March 21-23, 2023

# Objectives

1. Gain ability to access aerosol products available from NASA sensors (MODIS, VIIRS) via LAADS DAAC
2. Gain ability to access aerosol products available from NOAA sensors (VIIRS) via NOAA CLASS






Download MODIS & VIIRS Aerosol Data from LAADS DAAC

# Datasets to Download

- Wildfire Example: <https://go.nasa.gov/2oFiADP>
- July 29, 2019
- Geographical Boundary:
  - W:  $-129.4^{\circ}$ , N:  $45.7^{\circ}$ , E:  $-108.2^{\circ}$ , S:  $27.5^{\circ}$
- Products (max 6 at a time)
  - MYD04\_L2, MYD04\_3K
  - MOD04\_L2, MOD04\_3K
  - MCD19A2
  - AERDB\_L2\_VIIRS\_SNPP
  - AERDB\_D3\_VIIRS\_SNPP
  - AERDB\_M3\_VIIRS\_SNPP
  - AERDT\_L2\_VIIRS\_SNPP



# Step 1: Visit <https://urs.earthdata.nasa.gov/users/new>

 **EARTHDATA LOGIN**

## Register for an Earthdata Login Profile

Profile Information

**Username:** •

**Password:** •

**Password Confirmation:** •

• Required field

**Username must:**

- Be a Minimum of 4 characters
- Be a Maximum of 30 characters
- Use letters, numbers, periods and underscores
- Not contain any blank spaces
- Not begin, end or contain two consecutive special characters( . \_ )

**Password must contain:**

- Minimum of 8 characters
- One Uppercase letter
- One Lowercase letter
- One Number

You can skip this step if you already have your account from Day 1.



# Step 2: Add LAADS Web to Your Applications

- Login to Earthdata
- Click on **Applications > Authorized Apps**
- Click on **Approve More Applications**
- Look for LAADS Web in the list or search
- Add LAADS Web to your applications

You should see LAADS Web in your list of approved applications

## Approved Applications

Applications that use your Earthdata Login profile for authentication.

Earthdata Feedback Module	?
Earthdata Website	?
Earthdata Code Collaborative	?
Metadata Management Tool	?
Earthdata Search	✎ ✕
MISR Order and Customization Tool Production test site	✎ ✕
NASA GESDISC DATA ARCHIVE	✎ ✕
<b>LAADS Web</b>	✎ ✎ ✕
SEDAC Website	✎ ✕
LP DAAC Data Pool	✎ ✕



# Step 3: Login at <https://ladsweb.modaps.eosdis.nasa.gov/>

NASA EARTHDATA Other DAACs - Feedback ?

LAADS DAAC  
Level-1 and Atmosphere Archive & Distribution System Distributed Active Archive Center

About LAADS- Data - Learn Login -

# VIEW DATA

Preview Images Before Downloading  
Now Available in Beta

**View Data Now**  
Interactively search and preview data sets as images before downloading with the View Data tool.

**Your Source for Level-1 and Atmospheric Data**  
Providing Access to Global Science Data Projects

View Data Find Data

Missions Level 0 & 1 Atmosphere Airborne Land Applications

LAADS DAAC primarily archives and distributes data on clouds, water vapor, and aerosols in Earth's atmosphere as well as key instrument data for NASA, NOAA and European Space Administration missions. LAADS DAAC also serves as a backup source for MODIS and VIIRS land products.



# Step 4: Click on “Find Data”

The screenshot shows the LAADS DAAC website interface. At the top, there is a navigation bar with the NASA EarthData logo, 'Other DAACs', and utility icons for notifications, feedback, and help. Below this is a sub-header for 'LAADS DAAC' with the tagline 'Level-1 and Atmosphere Archive & Distribution System Distributed Active Archive Center'. A main banner features a world map background with the text 'VIEW DATA' in large white letters, followed by 'Preview Images Before Downloading' and 'Now Available in Beta' in green. A callout box on the right says 'View Data Now' and describes the interactive search tool. At the bottom of the banner, there is a blue bar with the text 'Your Source for Level-1 and Atmospheric Data' and 'Providing Access to Global Science Data Projects'. Two buttons are present: 'View Data' and 'Find Data', with the latter highlighted by a red rectangular box and a mouse cursor. Below the banner are six category icons: Missions (satellite), Level 0 & 1 (globe), Atmosphere (cloud and sun), Airborne (airplane), Land (trees), and Applications (satellite and people).

LAADS DAAC primarily archives and distributes data on clouds, water vapor, and aerosols in Earth’s atmosphere as well as key instrument data for NASA, NOAA and European Space Administration missions. LAADS DAAC also serves as a backup source for MODIS and VIIRS land products.





# Step 5: Make a Product Selection - Select Sensor

The screenshot shows the NASA LAADS web interface. On the left, a sidebar contains navigation options: 'Search by Product', 'Online Archive', 'Filename Search', 'Image Viewer', 'Load/Save Search', and 'Past Orders'. A dropdown menu is open, listing various sensors, with 'VIIRS:Suomi-NPP' selected and highlighted by a mouse cursor. Below the dropdown, a filter panel shows 'All [145]' selected, with sub-categories for 'Level-0 / Level-1 [9]', 'Land [4]', 'Land Cover Characteristics [4]', and 'Other [132]'. The main content area is titled 'All' and shows 'VIIRS Collection 1 - Level 1, Land (Archive Set 5000)'. A search bar with the text 'keyword' and a 'Browse products' checkbox is present. A list of products is displayed, each with an information icon (i) on the right:

- NPP\_IMFTS\_L1**: VIIRS/NPP Imagery Resolution Terrain-Corrected Geolocation 6-Min L1 Swath IP 375m
- NPP\_MOFTS\_L1**: VIIRS/NPP Moderate Resolution Terrain-Corrected Geolocation 6-Min L1 Swath IP 750m
- NPP\_VDNES\_L1**: VIIRS/NPP Day/Night Band 6-Min L1 Swath SDR 750m
- NPP\_VIAES\_L1**: VIIRS/NPP Imagery Resolution 6-Min L1 Swath SDR 375m
- NPP\_VMAES\_L1**: VIIRS/NPP Moderate Resolution 6-Min L1 Swath SDR and GEO 750m
- NPP\_VOBCIPS\_L1**: VIIRS/NPP On Board Calibrator (OBC) IP
- VNP01**: VIIRS/NPP Raw Radiances in Counts 6-Min L1A Swath
- VNP03IMGLL**: VIIRS/NPP Imagery Resolution Terrain-Corrected Geolocation 6-Min L1 Swath 375m Light
- VNP03MODLL**: VIIRS/NPP Moderate Resolution Terrain-Corrected Geolocation 6-Min L1 Swath 750m Light
- VNP04ANC**: VIIRS/NPP Aerosol Daily L3 Global 0.05 Deg CMG

At the bottom of the interface, the NASA Goddard logo is on the left, 'Level-1 and Atmosphere Archive & Distribution System' is in the center, and 'Privacy Policy and Important Notices' is on the right.



# Step 5: Make a Product Selection - Data Collection

The screenshot displays the LAADS DAAC web interface. At the top, the NASA logo and 'LAADS DAAC' are on the left, and navigation links for 'About LAADS', 'Data', 'Learn', and 'Login' are on the right. A progress bar below the header shows five steps: 1. PRODUCTS (active), 2. TIME, 3. LOCATION, 4. FILES, and 5. REVIEW & ORDER. Below the progress bar, status indicators show 'No products selected.', 'No date selected.', 'W: -180°, N: 90°, E: 180°, S: -90°', and 'No files selected.', with a 'reset' button. On the left sidebar, there are icons for 'Search by Product', 'Online Archive', 'Filename Search', 'Image Viewer', 'Load/Save Search', and 'Past Orders'. The main content area features a search bar with 'keyword' and a 'Browse products' checkbox. A dropdown menu is open, listing product collections: 'VIIRS Collection 1 - Level 1, Land (Archive Set 5000)', 'VIIRS Collection 1 - Level 1, Atmosphere (Archive Set 5110)', 'VIIRS Collection 1.1 - Level 1, Atmosphere (Archive Set 5111)' (highlighted with a checkmark and a mouse cursor), and 'VIIRS Collection 2 - Level 1, Atmosphere, Land (Archive Set 5200)'. Below the dropdown, a list of products is shown under the heading 'All [7]'. The products listed are: 'AERDB\_D3\_VIIRS\_SNPP' (VIIRS/SNPP Deep Blue Level 3 daily aerosol data, 1x1 degree grid), 'AERDB\_L2\_VIIRS\_SNPP' (VIIRS/SNPP Deep Blue Aerosol L2 6-Min Swath 6 km), 'AERDB\_M3\_VIIRS\_SNPP' (VIIRS/SNPP Deep Blue Level 3 monthly aerosol data, 1x1 degree grid), 'AERDT\_L2\_VIIRS\_SNPP' (VIIRS/SNPP Dark Target Aerosol L2 6-Min Swath 6 km), 'CLDPROP\_D3\_VIIRS\_SNPP' (VIIRS/SNPP Cloud Properties Level 3 daily, 1x1 degree grid), 'CLDPROP\_L2\_VIIRS\_SNPP' (VIIRS/SNPP Cloud Properties L2 6-Min Swath 750 m), and 'CLDPROP\_M3\_VIIRS\_SNPP' (VIIRS/SNPP Cloud Properties Level 3 monthly, 1x1 degree grid). Each product entry has an information icon (i) on the right. At the bottom of the interface, the NASA Goddard logo is on the left, 'Level-1 and Atmosphere Archive & Distribution System' is in the center, and 'Privacy Policy and Important Notices' is on the right.



# Step 5: Make a Product Selection – Data Product

The screenshot displays the LAADS DAAC web interface. At the top, the NASA logo and 'LAADS DAAC' are on the left, and navigation links for 'About LAADS', 'Data', 'Learn', and 'Login' are on the right. A progress bar at the top indicates five steps: 1. PRODUCTS (active), 2. TIME, 3. LOCATION, 4. FILES, and 5. REVIEW & ORDER. Below the progress bar, search filters for 'No date selected.', 'W: -180°, N: 90°, E: 180°, S: -90°', and 'No files selected.' are visible, along with a 'reset' button. A dropdown menu for 'Products (Collection)' is open, listing 'AERDB\_D3\_VIIRS\_SNPP (5111)', 'AERDB\_L2\_VIIRS\_SNPP (5111)', 'AERDT\_L2\_VIIRS\_SNPP (5111)', and 'AERDB\_M3\_VIIRS\_SNPP (5111)'. The main content area shows a search for 'VIIRS Collection 1.1 - Level 1, Atmosphere (Archive Set 5111)'. A list of products is displayed, with the first four items highlighted in green: 'AERDB\_D3\_VIIRS\_SNPP', 'AERDB\_L2\_VIIRS\_SNPP', 'AERDB\_M3\_VIIRS\_SNPP', and 'AERDT\_L2\_VIIRS\_SNPP'. A mouse cursor is pointing at the 'AERDT\_L2\_VIIRS\_SNPP' row. The bottom of the interface features the NASA Goddard logo, 'Level-1 and Atmosphere Archive & Distribution System', and a 'Privacy Policy and Important Notices' link.



# Step 5: Make a Product Selection – Data Product

The screenshot shows the LAADS DAAC web interface. At the top, there is a navigation bar with the NASA logo and 'LAADS DAAC' text. On the right side of the navigation bar are links for 'About LAADS', 'Data', 'Learn', and 'Login'. Below the navigation bar is a progress indicator with five steps: 1. PRODUCTS (highlighted), 2. TIME, 3. LOCATION, 4. FILES, and 5. REVIEW & ORDER. A right-pointing arrow is next to the progress indicator. Below the progress indicator is a status bar showing '4 products selected', 'No date selected.', 'W: -180°, N: 90°, E: 180°, S: -90°', and 'No files selected.', along with a 'reset' button. The main content area is divided into several sections. On the left, there is a sidebar with icons for 'Search by Product', 'Online Archive', 'Filename Search', 'Image Viewer', 'Load/Save Search', and 'Past Orders'. The main content area has a dropdown menu for 'VIIRS:Suomi-NPP' and another for 'VIIRS Collection 1.1 - Level 1, Atmosphere (Archive Set 5111)'. Below these is a filter section for 'Atmosphere [7]' with sub-categories 'Aerosol [4]' and 'Cloud Properties [3]'. The main product list shows 'All' products, with 'AERDB\_L2\_VIIRS\_SNPP' highlighted in green. A red box highlights the 'AERDB\_L2\_VIIRS\_SNPP' product name, and a mouse cursor is pointing at it. Below the product name is a checkbox labeled 'Browse products' and a 'Clear Selected Products' link. At the bottom of the interface, there is a footer with the NASA Goddard logo, the text 'Level-1 and Atmosphere Archive & Distribution System', and a link for 'Privacy Policy and Important Notices'.



# Step 6: Select Time

The screenshot shows the LAADS DAAC web interface. At the top, there is a navigation bar with tabs for '1 PRODUCTS', '2 TIME', '3 LOCATION', '4 FILES', and '5 REVIEW & ORDER'. A red circle highlights a right-pointing arrow in the top right corner. Below the navigation bar, there is a search bar and a list of products. The products list includes:

- ✓ AERDB\_D3\_VIIRS\_SNPP: VIIRS/SNPP Deep Blue Level 3 daily aerosol data, 1x1 degree grid
- ✓ AERDB\_L2\_VIIRS\_SNPP: VIIRS/SNPP Deep Blue Aerosol L2 6-Min Swath 6 km
- ✓ AERDB\_M3\_VIIRS\_SNPP: VIIRS/SNPP Deep Blue Level 3 monthly aerosol data, 1x1 degree grid
- ✓ AERDT\_L2\_VIIRS\_SNPP: VIIRS/SNPP Dark Target Aerosol L2 6-Min Swath 6 km
- CLDPROP\_D3\_VIIRS\_SNPP: VIIRS/SNPP Cloud Properties Level 3 daily, 1x1 degree grid
- CLDPROP\_L2\_VIIRS\_SNPP: VIIRS/SNPP Cloud Properties L2 6-Min Swath 750 m
- CLDPROP\_M3\_VIIRS\_SNPP: VIIRS/SNPP Cloud Properties Level 3 monthly, 1x1 degree grid

A text box at the bottom of the screenshot contains the following text: "Click on the next arrow on the right, or click on the TIME tab."



# Step 6: Select Time

LAADS DAAC

About LAADS Data Learn Login

1 PRODUCTS 2 TIME 3 LOCATION 4 FILES 5 REVIEW & ORDER

4 products selected 2019-07-29 W: -180°, N: 90°, E: 180°, S: -90° No files selected. reset

Date Range Single Date

Display as: YYYY-MM-DD

2019-07-29

Add Date

+ Advanced

Date Selection: Clear All

2019-07-29

Coverage Selection:

Day (granules contain day data only)

Day-Night Boundary (granules contain data over the seasonal, latitude boundary between day and night)

- Select **Date Range** or **Single Date**
- Click **Add Date**
- Click **Location** (or 'next' arrow)

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# Step 7: Select a Location or Region

LAADS DAAC

About LAADS Data Learn Login

1 PRODUCTS 2 TIME 3 LOCATION 4 FILES 5 REVIEW & ORDER

4 products selected 2019-07-29 W: -129.4°, N: 45.7°, E: -108.2°, S: 27.5° No files selected. reset

- Select **Draw Custom Box (Classic)** or **Enter Coordinates**.
- Draw a box over the Southwest US.
- Click the **next** arrow.
- The program will start searching data.

SELECT AREA OF INTEREST

- World
- Countries
- Tiles
- Validation Sites
- Draw Custom Box (Classic)
- Enter Coordinates

Lon, Lat, Lon, Lat Lat, Lon, Lat, Lon

-129.4, 45.7, -108.2, 27.5 +

Current selection:

W: -129.4°, N: 45.7°, E: -108.2°, S: 27.5° x

Level-1 and Atmosphere Archive & Distribution System Privacy Policy and Important Notices



# Step 8: Select Files

LAADS DAAC

About LAADS Data Learn Login

1 PRODUCTS 2 TIME 3 LOCATION 4 FILES 5 REVIEW & ORDER

4 products selected 2019-07-29 W: -129.4°, N: 45.7°, E: -108.2°, S: 27.5° 16 files selected

\* Download selected files as json or csv

Search: Showing 1 to 16 of 16 entries

Select All Clear All

Filename	Product (collection)	Date / Time	Download
AERDT_L2_VIIRS_SNPP.A2019210.1912.011.2020199213612.nc	AERDT_L2_VIIRS_SNPP (5111)	2019-07-29 19:12:00	11 MB
AERDT_L2_VIIRS_SNPP.A2019210.2100.011.2020199213619.nc	AERDT_L2_VIIRS_SNPP (5111)	2019-07-29 21:00:00	10 MB
AERDT_L2_VIIRS_SNPP.A2019210.2236.011.2020199213554.nc	AERDT_L2_VIIRS_SNPP (5111)	2019-07-29 22:36:00	12 MB
AERDT_L2_VIIRS_SNPP.A2019210.1918.011.2020199213559.nc	AERDT_L2_VIIRS_SNPP (5111)	2019-07-29 19:18:00	10 MB
AERDT_L2_VIIRS_SNPP.A2019210.2242.011.2020199213716.nc	AERDT_L2_VIIRS_SNPP (5111)	2019-07-29 22:42:00	8 MB
AERDT_L2_VIIRS_SNPP.A2019210.2054.011.2020199213610.nc	AERDT_L2_VIIRS_SNPP (5111)	2019-07-29 20:54:00	10 MB
AERDB_D3_VIIRS_SNPP.A2019210.011.2021099143124.nc	AERDB_D3_VIIRS_SNPP (5111)	2019-07-29 00:00:00	4 MB
AERDB_M3_VIIRS_SNPP.A2019182.011.2021099143342.nc	AERDB_M3_VIIRS_SNPP (5111)	2019-07-01 00:00:00	6 MB
AERDB_L2_VIIRS_SNPP.A2019210.0748.011.2020152062841.nc	AERDB_L2_VIIRS_SNPP (5111)	2019-07-29 07:48:00	6 MB
AERDB_L2_VIIRS_SNPP.A2019210.0930.011.2020152062848.nc	AERDB_L2_VIIRS_SNPP (5111)	2019-07-29 09:30:00	6 MB
AERDB_L2_VIIRS_SNPP.A2019210.2054.011.2020152062911.nc	AERDB_L2_VIIRS_SNPP (5111)	2019-07-29 20:54:00	10 MB
AERDB_L2_VIIRS_SNPP.A2019210.2100.011.2020199213619.nc	AERDB_L2_VIIRS_SNPP (5111)	2019-07-29 21:00:00	10 MB
AERDB_L2_VIIRS_SNPP.A2019210.1912.011.2020199213612.nc	AERDB_L2_VIIRS_SNPP (5111)	2019-07-29 19:12:00	11 MB
AERDB_L2_VIIRS_SNPP.A2019210.1918.011.2020199213559.nc	AERDB_L2_VIIRS_SNPP (5111)	2019-07-29 19:18:00	10 MB
AERDB_L2_VIIRS_SNPP.A2019210.2242.011.2020199213716.nc	AERDB_L2_VIIRS_SNPP (5111)	2019-07-29 22:42:00	12 MB
AERDB_L2_VIIRS_SNPP.A2019210.2236.011.2020199213554.nc	AERDB_L2_VIIRS_SNPP (5111)	2019-07-29 22:36:00	7 MB
AERDB_L2_VIIRS_SNPP.A2019210.2236.011.2020152062915.nc	AERDB_L2_VIIRS_SNPP (5111)	2019-07-29 22:36:00	10 MB

Previous 1 Next

Level-1 and Atmosphere Archive & Distribution System Privacy Policy and Important Notices

- Click **Select All**
- Click the Next Arrow





# Step 9: Submit Order

**LAADS DAAC** About LAADS Data Learn Login

1 PRODUCTS 2 TIME 3 LOCATION 4 FILES 5 REVIEW & ORDER

4 products selected 2019-07-29 W: -129.4°, N: 45.7°, E: -108.2°, S: 27.5° 16 files selected reset

Files Summary:

- AERDB\_D3\_VIIRS\_SNPP** ( Collection 5111 ) Total: 1 file ✕  
2019-07-29 00:00:00 .. 2019-07-29 00:00:00 ]  
The order will generate 1 files.
- AERDB\_L2\_VIIRS\_SNPP** ( Collection 5111 ) Total: 8 files ✕  
2019-07-29 07:48:00 .. 2019-07-29 22:42:00 ]  
The order will generate 8 files.
- AERDT\_L2\_VIIRS\_SNPP** ( Collection 5111 ) Total: 6 files ✕  
2019-07-29 19:12:00 .. 2019-07-29 22:42:00 ]  
The order will generate 6 files.
- AERDB\_M3\_VIIRS\_SNPP** ( Collection 5111 ) Total: 1 file ✕  
2019-07-01 00:00:00 .. 2019-07-01 00:00:00 ]  
The order will generate 1 files.

Apply Post-Processing ✓  
View Delivery Method ✓  
The order may generate as many as 16 files.  
Add another search Submit Order

Search by Product Online Archive Filename Search Image Viewer Load/Save Search Past Orders

Level-1 and Atmosphere Archive & Distribution System Privacy Policy and Important Notices



# Step 10: Download the Data

- After placing your order, check your email for order confirmation.
- Follow the instructions in the email to download the data.
- Save the data in your directory where you will run your python scripts (or upload them into Google Colab).



# Cloud Data Access Options

The screenshot shows the Earthdata Search interface with the following elements:

- Search Results:** 25 Matching Collections. The first result is "MODIS/Terra+Aqua Land Aerosol Optical Depth Daily L2G Global 1km SIN Grid V061" with 1,634,222 Granules from 2000-02-24 onwards. It is marked as "Available from AWS Cloud" and "Earthdata Cloud".
- Filter Collections:** On the left, the "Available from AWS Cloud" filter is checked and circled in red.
- Information Icon:** A red circle highlights the "i" icon next to the first result, with an arrow pointing to it.
- Map:** A satellite-style map of the Middle East and surrounding regions is shown on the right.

**Annotations:** Three red circles highlight key features: the "Available from AWS Cloud" filter, the "Earthdata Cloud" icon, and the "i" information icon.

- Earthdata Search Filter: **Available from AWS Cloud**
- Check dataset for “**Earthdata Cloud**” icon
- Click “**i**” for more details



# Cloud Data Access Options

**EARTHDATA SEARCH** Find a DAAC - Feedback Earthdata Login

Search for collections or topics

**Search Results (25 Collections)**

**MODIS/Terra+Aqua Land Aerosol Optical Depth Daily L2G Global 1km SIN Grid V061**

the MCD19A3D.  
\* There are four additional Climate Modeling Grid (CMG) products: MCD19A1CMGL, MCD19A1GO, MCD19A2CMG, and MCD19A3CMG.

**LP DAAC ARCHIVER**  
lpdaac@usgs.gov  
Telephone: 605-594-6116  
U.S. toll free: 866-573-3222

**NASA/GSFC/SED/ESD/TISL/MODAPS PROCESSOR**  
Edward.J.Masuoka@nasa.gov  
Telephone: 301-614-5515

**Cloud Access**  
Available for access in-region with AWS Cloud

Region  
**us-west-2**

Bucket/Object Prefix  
**s3://lp-prod-protected/MCD19A2.061**  
**s3://lp-prod-public/MCD19A2.061**

AWS S3 Credentials  
[Get AWS S3 Credentials](#) | [Documentation](#)

For Developers

Showing 5 of 1,634,222 matching granules

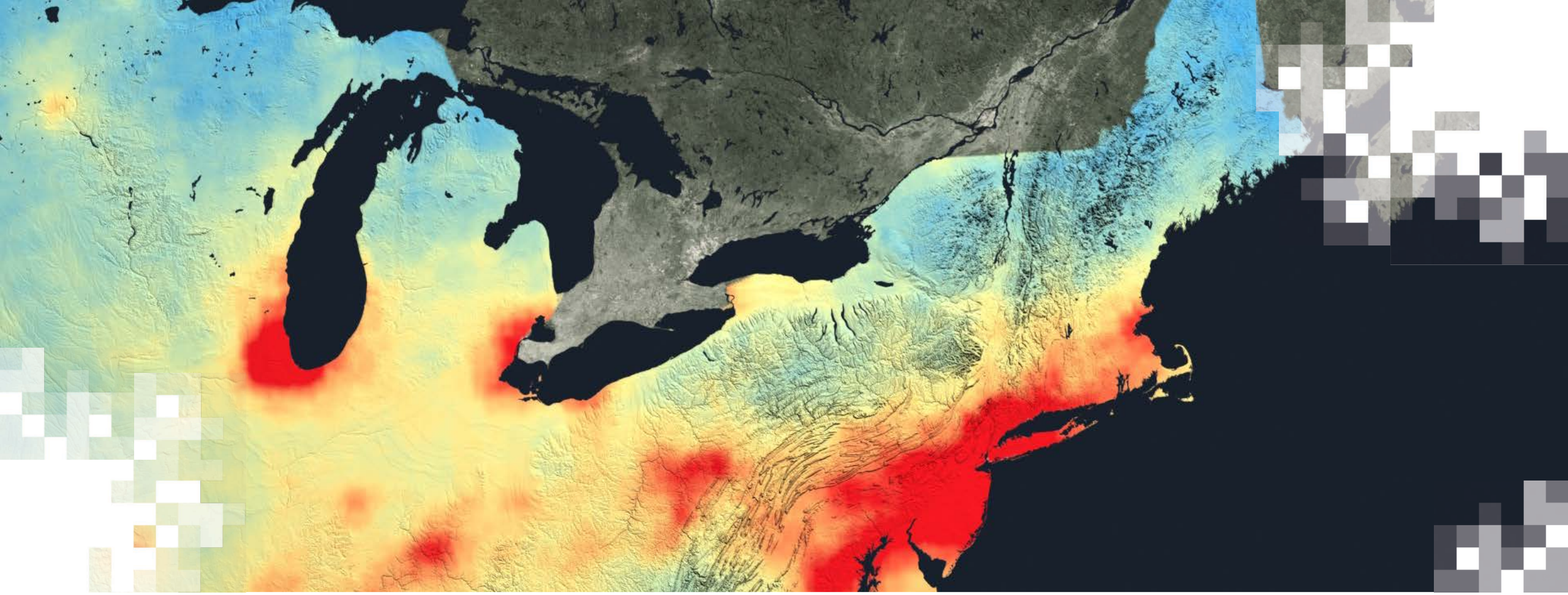
Granule ID	START	END
MCD19A2.A2023038.h32v10.061.2023039173204	2023-02-07 23:00:00	2023-02-07 23:05:00
MCD19A2.A2023038.h34v09.061.2023039173532	2023-02-07 22:55:00	2023-02-07 23:00:00
MCD19A2.A2023038.h33v09.061.2023039173556	2023-02-07 22:55:00	2023-02-07 23:00:00
MCD19A2.A2023038.h33v10.061.2023039173743	2023-02-07 22:55:00	2023-02-07 23:05:00
MCD19A2.A2023038.h35v09.061.2023039173608	2023-02-07 22:55:00	2023-02-07 23:00:00

[View Granules](#)

v1.186.1 · NASA Official: Stephen Berrick · FOIA · NASA Privacy Policy · USA.gov

Earthdata Access: A Section 508 accessible alternative





## NOAA Aerosol Data Access with CLASS

# NOAA Data Search with CLASS

<https://www.avl.class.noaa.gov/saa/products/welcome>

The screenshot displays the NOAA Comprehensive Large Array-Data Stewardship System (CLASS) website. At the top, there is a navigation bar with links for NOAA HOME, WEATHER, OCEANS, FISHERIES, CHARTING, SATELLITES, CLIMATE, RESEARCH, COASTS, and CAREERS. The main header features the NOAA logo and the text "NOAA COMPREHENSIVE LARGE ARRAY-DATA STEWARDSHIP SYSTEM (CLASS) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION". Below the header, there is a search bar with a dropdown menu showing "Please select a product to search" and a "GO" button. A sidebar on the left contains navigation links under "Around CLASS" (Home, Search for Data, Upload Search, Search Results, Shopping Cart, Order Status, Help) and "User Account" (User Profile, User Preferences, Advanced Options, Download Keys, FTPS Instructions, Release Info, Other Links). The main content area includes a "SEARCH FOR DATA" section with a list of satellite data types: Environmental Data from Polar-orbiting Satellites, Environmental Data from Geostationary Satellites, Defense Meteorological Satellite Program (DMSP), Joint Polar Satellite System (JPSS), Sea Surface Temperature data (SST), RADARSAT, Altimetry / Sea Surface Height Data (JASON), Global Navigation Satellite Systems (GNSS), and Other - Miscellaneous products in CLASS. Below this is a "NEWS" section with several updates: "Attention GOES Users! (1/4/2023):" regarding GOES-18 operations, "Attention JPSS Users. Start dates of NOAA-21 products now available to the public. (12/20/2022):" listing ATMS SDR/TDR and RDRs, "Attention CLASS Users! (12/14/2022):" regarding HTTPS implementation, and "Attention GOES Users! (11/23/2022):" regarding GOES-18 Level 2 products. A "SEARCH COLLECTION METADATA" section is also visible at the bottom right.



# NOAA Data Search with CLASS

<https://www.avl.class.noaa.gov/saa/products/welcome>

The screenshot displays the NOAA Comprehensive Large Array-Data Stewardship System (CLASS) website. The top navigation bar includes links for NOAA HOME, WEATHER, OCEANS, FISHERIES, CHARTING, SATELLITES, CLIMATE, RESEARCH, COASTS, and CAREERS. The main header features the NOAA logo and the text "NOAA COMPREHENSIVE LARGE ARRAY-DATA STEWARDSHIP SYSTEM (CLASS) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION".

The left sidebar contains a navigation menu with the following items:

- Around CLASS
  - Home
  - Search for Data
  - Upload Search
  - Search Results
  - Shopping Cart
  - Order Status
  - Help
- User Account
  - User Profile
  - User Preferences
- Advanced Options
  - Download Keys
  - FTPS Instructions
- Release Info
  - Version 8.3.2
  - December 7, 2022
- Other Links
  - CLASS Home
  - NCEI
  - NESDIS
  - NOAA
  - DOC

The main content area shows search results for "JPSS VIIRS Products (Granule)(JPSS\_GRAN)". The search bar contains the text "JPSS VIIRS Products (Granule)(JPSS\_GRAN)" and a "GO" button. Below the search bar, the title "Search - JPSS\_GRAN" is displayed.

The "Data Description" section provides information about the JPSS VIIRS Products (Granule) (JPSS\_GRAN), stating that they are Visible Infrared Imaging Radiometer Suite (VIIRS) sensor data records and intermediate products from the Joint Polar Satellite System (JPSS). It mentions that the products were developed by the NOAA/NESDIS Center for Satellite Application and Research (STAR) and were produced within a near real-time environment at the NOAA/NESDIS Office of Satellite and Product Operations (OSPO). The archived products are distributed in the netCDF-4 file format with metadata attributes included. It also notes that individual product (Datatype) description, documentation, and possible bulk access options are available under the "Product Details" link.

The "Details - Metadata, Documentation" section is expanded, showing a "Notes" section. The notes include a post from 3/13/2018 stating that beginning on April 11, 2018, many of the datatypes below will begin flowing into CLASS as roughly 10 minute TAR files to allow for easier access to the data since the order limits are restricted by file counts. Each TAR file will contain several granules. Please plan accordingly. Another note from 12/06/2017 states that daily tar files of the products for the most recent 90 days are available via anonymous FTP download at <ftp://ftp-jpss.avl.class.noaa.gov/>.

The "Spatial" section features a map of the world with a search area highlighted. The map includes a search area with a bounding box and a "Max Area" button. The search area is defined by the coordinates 90, -180, 180, and -90. The map also includes a scale bar and a "0.00, 0.00" label.



# NOAA Data Search with CLASS

<https://www.avl.class.noaa.gov/saa/products/welcome>

The screenshot displays the NOAA CLASS web interface. On the left, a sidebar titled "Other Links" contains buttons for "CLASS Home", "NCEI", "NESDIS", "NOAA", and "DOC". The main content area is titled "Spatial" and features a satellite map of North America with a yellow rectangular selection box. To the right of the map are input fields for coordinates: a vertical field with "50", a horizontal field with "-125" and "-65", a vertical field with "25", and a "Max Area" button. Below the map, the "Temporal" section includes a note "(maximum range is 366 days)" and four input fields: "Start Date" (2022-03-20), "End Date" (2022-03-24), "Start Time (UTC)" (00:00:00), and "End Time (UTC)" (23:59:59). A radio button selection is set to "The Entire Range Of Days". The "Advanced Search" section is expanded, showing a "Datatype" list with "VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs" selected, and a "Satellite" dropdown menu with "NOAA-20 S-NPP" selected.





# NOAA Data Search with CLASS

<https://www.avl.class.noaa.gov/saa/products/welcome>

**Around CLASS**

- » Home
- » Search for Data
- » Upload Search
- » Search Results
- » Shopping Cart
- » Order Status
- » Help

**User Account**

- » User Profile
- » User Preferences

**Advanced Options**

- » Download Keys
- » FTPS Instructions

**Release Info**

- » Version 8.3.2  
December 7, 2022

**Other Links**

- » CLASS Home
- » NCEI
- » NESDIS
- » NOAA
- » DOC

JPSS VIIRS Products (Granule)(JPSS\_GRAN) >>GO

### Data Product Search Results - JPSS\_GRAN

(click here for a printable listing)

Recently Searched Data Sets: JPSS\_GRAN >>GO

Displaying page 1 of approximately 13 page(s).  
There are an estimated 126 hit(s).

There are 0 (JPSS\_GRAN) items in your shopping cart. The shopping cart limit is 500.

Shopping Cart: Generate Map

Goto Cart Update Select Page Unselect All Prev Page Next Page

Select datasets... Jump to...

View Details	Shopping Cart	Inventory ID	Datatype	Start Orbit	End Orbit	Start Time	End Time	Satellite	Dataset Name
1	<input type="checkbox"/>	1034306380	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	53860	53860	2022-03-20 16:01:36.000	2022-03-20 16:11:31.000	NPP	JRR-AOD_v2r3_npp_s20 2203201601365_e20220 3201611314_c20220320 1810150.tar
2	<input type="checkbox"/>	1034305364	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	22464	22464	2022-03-20 16:44:16.000	2022-03-20 16:54:12.000	J01	JRR-AOD_v2r3_j01_s20 2203201644166_e20220 3201654121_c20220320 1722240.tar
3	<input type="checkbox"/>	1034305362	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	22464	22464	2022-03-20 16:54:13.000	2022-03-20 17:04:10.000	J01	JRR-AOD_v2r3_j01_s20 2203201654134_e20220 3201704106_c20220320 1722030.tar
4	<input type="checkbox"/>	1034306796	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	53861	53861	2022-03-20 17:31:13.000	2022-03-20 17:41:08.000	NPP	JRR-AOD_v2r3_npp_s20 2203201731135_e20220 3201741083_c20220320 1816350.tar
5	<input type="checkbox"/>	1034351878	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	53861	53861	2022-03-20 17:41:09.000	2022-03-20 17:51:06.000	NPP	JRR-AOD_v2r3_npp_s20 2203201741095_e20220 3201751062_c20220321 1814260.tar
6	<input type="checkbox"/>	1034308155	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	22465	22465	2022-03-20 18:23:51.000	2022-03-20 18:33:46.000	J01	JRR-AOD_v2r3_j01_s20 2203201823510_e20220 3201833465_c20220320 1904430.tar
7	<input type="checkbox"/>	1034308160	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	22465	22465	2022-03-20 18:33:47.000	2022-03-20 18:43:45.000	J01	JRR-AOD_v2r3_j01_s20 2203201833477_e20220 3201843450_c20220320 1904420.tar
8	<input type="checkbox"/>	1034309752	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	53862	53862	2022-03-20 19:13:37.000	2022-03-20 19:20:43.000	NPP	JRR-AOD_v2r3_npp_s20 2203201913373_e20220 3201920431_c20220320 2000290.tar
9	<input type="checkbox"/>	1034309638	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	53862	53862	2022-03-20 19:20:44.000	2022-03-20 19:30:40.000	NPP	JRR-AOD_v2r3_npp_s20 2203201920443_e20220 3201930409_c20220320 2000290.tar
10	<input type="checkbox"/>	1034310858	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	22466	22466	2022-03-20 20:04:51.000	2022-03-20 20:13:20.000	J01	JRR-AOD_v2r3_j01_s20 2203202004511_e20220 3202013208_c20220320 2047060.tar



# NOAA Data Search with CLASS

<https://www.avl.class.noaa.gov/saa/products/welcome>

Search Results - JPSS\_GRAN

JPSS\_VIIRS Products (Granule)(JPSS\_GRAN) >>GO

### Data Product Search Results - JPSS\_GRAN

(click here for a printable listing)

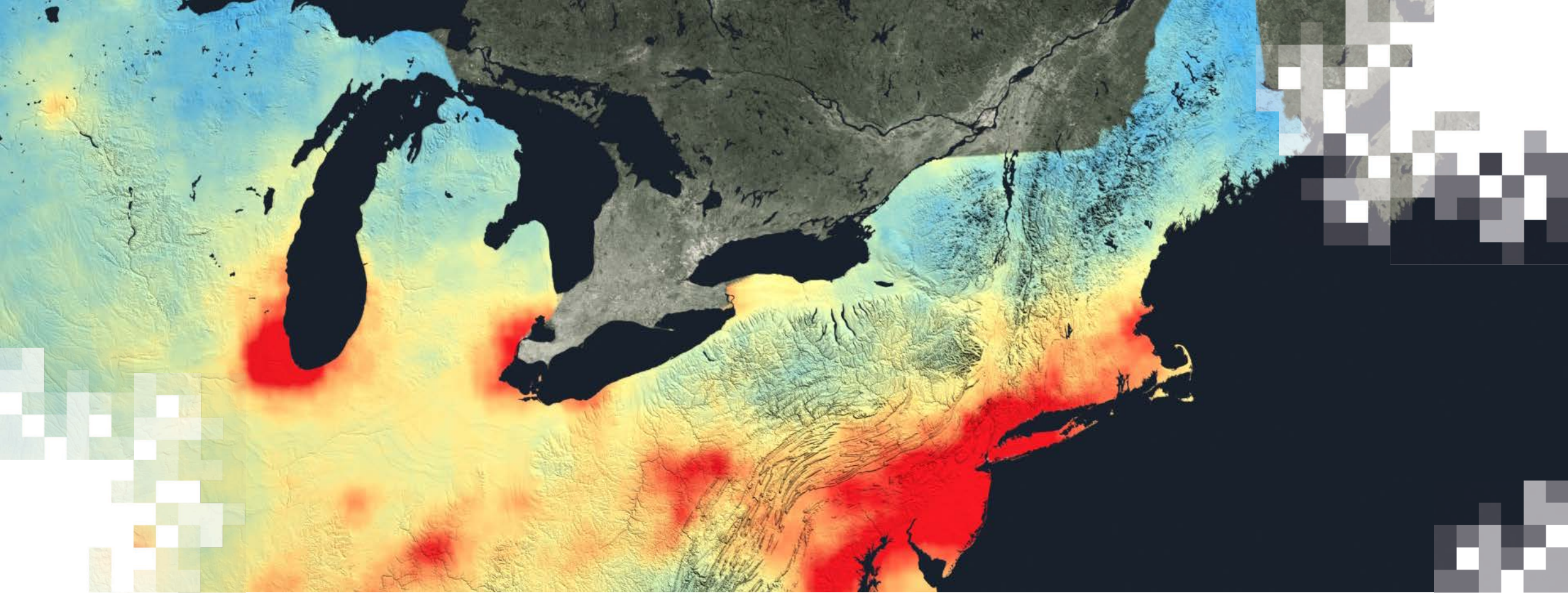
Recently Searched Data Sets: JPSS\_GRAN >>GO

Displaying page 1 of approximately 13 page(s).  
There are an estimated 126 hit(s).  
There are 0 (JPSS\_GRAN) items in your shopping cart. The shopping cart limit is 500.

Buttons: Goto Cart, Update, Select Page, Unselect All, Prev Page, Next Page, Jump to...

Shopping Cart	Inventory ID	Datatype	Start Orbit	End Orbit	Start Time	End Time	Satellite	Dataset Name
<input type="checkbox"/>	1034306380	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	53860	53860	2022-03-20 16:01:36.000	2022-03-20 16:11:31.000	NPP	JRR-AOD_v2r3_npp_s20 2203201601365_e20220 3201611314_c20220320 1810150.tar
<input type="checkbox"/>	1034305364	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	22464	22464	2022-03-20 16:44:16.000	2022-03-20 16:54:12.000	J01	JRR-AOD_v2r3_j01_s20 2203201644166_e20220 3201654121_c20220320 1722240.tar
<input type="checkbox"/>	1034305362	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	22464	22464	2022-03-20 16:54:13.000	2022-03-20 17:04:10.000	J01	JRR-AOD_v2r3_j01_s20 2203201654134_e20220 3201704106_c20220320 1722030.tar
<input type="checkbox"/>	1034306796	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	53861	53861	2022-03-20 17:31:13.000	2022-03-20 17:41:08.000	NPP	JRR-AOD_v2r3_npp_s20 2203201731135_e20220 3201741083_c20220320 1816350.tar
<input type="checkbox"/>	1034351878	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	53861	53861	2022-03-20 17:41:09.000	2022-03-20 17:51:06.000	NPP	JRR-AOD_v2r3_npp_s20 2203201741095_e20220 3201751062_c20220321 1814260.tar
<input type="checkbox"/>	1034308155	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	22465	22465	2022-03-20 18:23:51.000	2022-03-20 18:33:46.000	J01	JRR-AOD_v2r3_j01_s20 2203201823510_e20220 3201833465_c20220320 1904430.tar
<input type="checkbox"/>	1034308160	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	22465	22465	2022-03-20 18:33:47.000	2022-03-20 18:43:45.000	J01	JRR-AOD_v2r3_j01_s20 2203201833477_e20220 3201843450_c20220320 1904420.tar
<input type="checkbox"/>	1034309752	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	53862	53862	2022-03-20 19:13:37.000	2022-03-20 19:20:43.000	NPP	JRR-AOD_v2r3_npp_s20 2203201913373_e20220 3201920431_c20220320 2000290.tar
<input type="checkbox"/>	1034309638	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	53862	53862	2022-03-20 19:20:44.000	2022-03-20 19:30:40.000	NPP	JRR-AOD_v2r3_npp_s20 2203201920443_e20220 3201930409_c20220320 2000290.tar
<input type="checkbox"/>	1034310858	VIIRS Aerosol Optical Depth and Aerosol Particle Size EDRs (VIIRS_AD)	22466	22466	2022-03-20 20:04:51.000	2022-03-20 20:13:20.000	J01	JRR-AOD_v2r3_j01_s20 2203202004511_e20220 3202013208_c20220320 2047060.tar





Questions?