

Download MODIS Aerosol Data

Data Analysis Tools for High Resolution Air Quality Satellite Datasets

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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



Step 2: Add LAADS Web to your Applications

- Login to Earthdata
- Click on **My Applications**
- 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

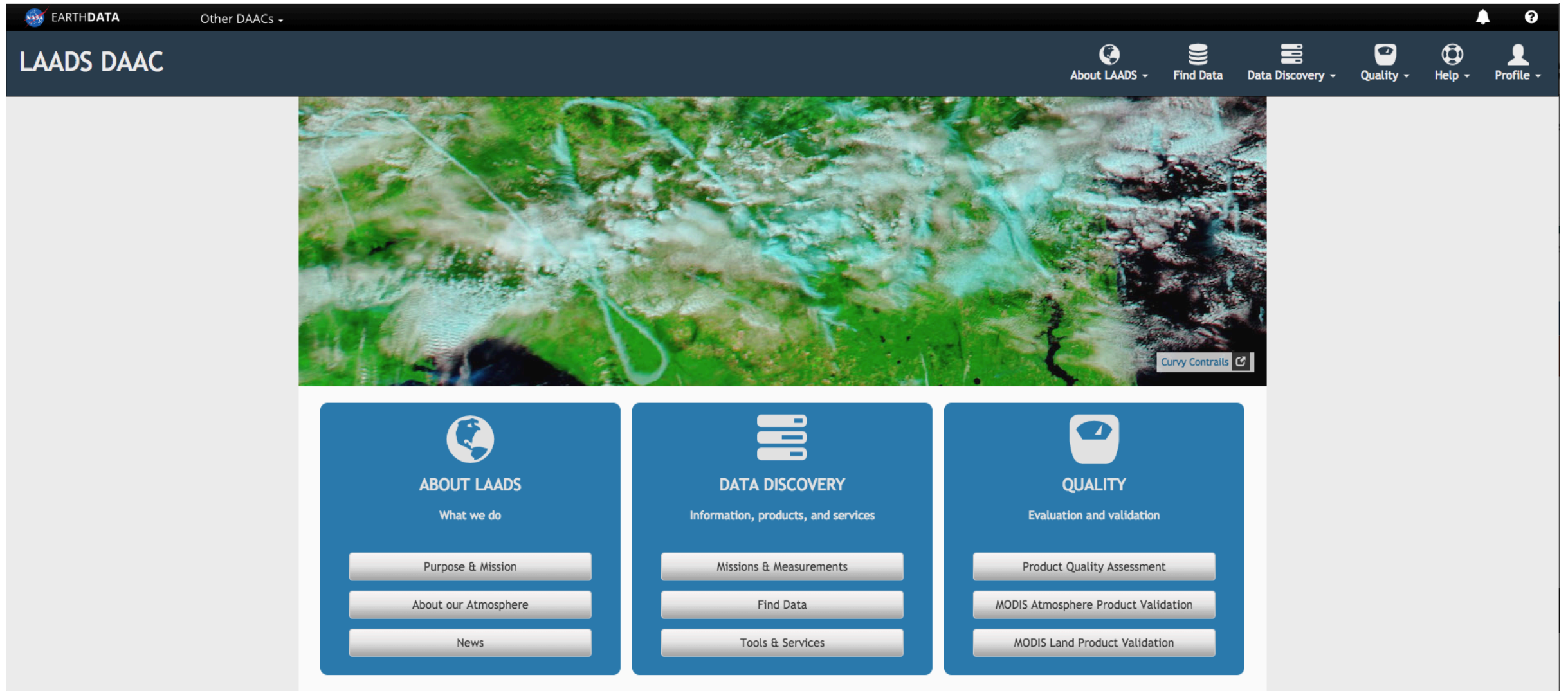
Approved Applications

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	✎ ✕
LAADS Web	✎ ✎ ✕
SEDAC Website	✎ ✕
LP DAAC Data Pool	✎ ✕



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



The screenshot shows the LAADS DAAC website homepage. At the top left is the NASA EarthData logo and a link to 'Other DAACs'. The main header is 'LAADS DAAC'. On the right side of the header are navigation icons for 'About LAADS', 'Find Data', 'Data Discovery', 'Quality', 'Help', and 'Profile'. Below the header is a large satellite image of a forested area with a 'Curvy Contrails' watermark. The main content area features three blue panels: 'ABOUT LAADS' (What we do) with buttons for 'Purpose & Mission', 'About our Atmosphere', and 'News'; 'DATA DISCOVERY' (Information, products, and services) with buttons for 'Missions & Measurements', 'Find Data', and 'Tools & Services'; and 'QUALITY' (Evaluation and validation) with buttons for 'Product Quality Assessment', 'MODIS Atmosphere Product Validation', and 'MODIS Land Product Validation'.



Step 4: Click on “Find Data”

The screenshot shows the LAADS DAAC website interface. At the top, there is a dark header with the NASA EarthData logo on the left, a dropdown menu for 'Other DAACs', and navigation icons for 'About LAADS', 'Find Data', 'Data Discovery', 'Quality', 'Help', and 'Profile'. Below the header is a large satellite image of a landscape with a 'Curvy Contrails' watermark. The main content area features three blue panels. The middle panel, 'DATA DISCOVERY', contains a red-bordered button labeled 'Find Data' with a mouse cursor pointing to it. Other buttons in the panels include 'Purpose & Mission', 'About our Atmosphere', 'News', 'Missions & Measurements', 'Tools & Services', 'Product Quality Assessment', 'MODIS Atmosphere Product Validation', and 'MODIS Land Product Validation'.



Step 5: Make a Product Selection - Select Sensor

The screenshot displays the LAADS DAAC web interface. At the top left is the NASA logo and the text 'LAADS DAAC'. The top right contains navigation links: 'About LAADS', 'Find Data', 'Data Discovery', 'Quality', 'Help', and 'Profile'. Below the header is a progress bar with five steps: '1 PRODUCTS', '2 TIME', '3 LOCATION', '4 FILES', and '5 REVIEW & ORDER'. The 'PRODUCTS' step is active. Below the progress bar, there are status indicators: 'No products selected.', 'No date selected.', 'No location selected.', and 'No files selected.', along with a 'reset' button. A search bar on the right contains the text 'keyword'. A dropdown menu is open under the 'PRODUCTS' step, listing sensor options: 'Select a Sensor', 'Multiple (Ancillary Data)', 'MERIS:Envisat', 'MODIS:Aqua' (highlighted), 'MODIS:Combine Terra-Aqua', 'MODIS:Terra', 'OLCI:ESA-Copernicus-Sentinel-3A', 'SLSTR:ESA-Copernicus-Sentinel-3A', 'VIIRS:Suomi-NPP', and 'All Sensors'. The left sidebar contains icons for 'Search by Product', 'Online Archive', 'Filename Search', 'Image Viewer', 'Load/Save Search', and 'Past Orders'.

Step 5: Make a Product Selection - Data Collection

The screenshot shows the NASA LAADS DAAC web interface. The top navigation bar includes links for 'About LAADS', 'Find Data', 'Data Discovery', 'Quality', 'Help', and 'Profile'. The main interface is divided into five steps: 1. PRODUCTS, 2. TIME, 3. LOCATION, 4. FILES, and 5. REVIEW & ORDER. The 'PRODUCTS' step is currently active, and a status bar indicates 'No products selected.', 'No date selected.', 'No location selected.', and 'No files selected.' with a 'reset' button.

A dropdown menu for 'MODIS:Aqua' is open, showing a list of collections. The option '6 - MODIS Collection 6 - Level 1, Atmosphere, Land' is highlighted. Below this, there are sub-categories: 'Atmosphere [12]' (including Aerosol [2], Water Vapor [1], Cloud Properties [1], Atmosphere Profiles [2], Cloud Mask [2], Joint L2 Atmosphere Product [1], L3 Atmosphere Product [3]), 'Land [29]' (including Radiation Budget Variables [16], Ecosystem Variables [9]), and 'MODIS Terra, Aqua [7]'.

The main content area displays a list of products under the 'All' collection. The products listed are:

- MYD00F**: MODIS/Aqua Level 0 Raw Instrument Packets (5 minutes)
- MYD01**: Level 1A Scans of raw radiances in counts
- MYD021KM**: Level 1B Calibrated Radiances - 1km
- MYD02HKM**: Level 1B Calibrated Radiances - 500m
- MYD02OBC**: Level 1B Onboard Calibrator/Engineering Data
- MYD02QKM**: Level 1B Calibrated Radiances - 250m
- MYD02SSH**: MODIS/Aqua Level 1B Subsampled Calibrated Radiances 5km
- MYD03**: Geolocation - 1km
- MYD04_3K**: MODIS/Aqua Aerosol 5-Min L2 Swath 3km
- MYD04_L2**: MODIS/Aqua Aerosol 5-Min L2 Swath 10km

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', 'Find Data', 'Data Discovery', 'Quality', 'Help', and 'Profile' 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, there are three status indicators: 'No date selected.', 'No location selected.', and 'No files selected.', along with a 'reset' button. The main content area is divided into a left sidebar and a main panel. The sidebar contains a 'Search by Product' section with a dropdown menu showing 'MODIS:Aqua' and 'Select a Collection'. Below this is a 'Filename Search' section with a search input field. The main panel shows a list of products under the 'Aerosol' category. Two products are highlighted in green: 'MYD04_3K' (MODIS/Aqua Aerosol 5-Min L2 Swath 3km) and 'MYD04_L2' (MODIS/Aqua Aerosol 5-Min L2 Swath 10km). A mouse cursor is pointing at the 'MYD04_L2' product. The sidebar also shows a list of categories: 'All [57]', 'Level-0 / Level-1 [7]', 'Atmosphere [12]', 'Aerosol [2]', 'Water Vapor [1]', 'Cloud Properties [1]', 'Atmosphere Profiles [2]', 'Cloud Mask [2]', 'Joint L2 Atmosphere Product [1]', 'L3 Atmosphere Product [3]', 'Land [29]', 'Radiation Budget Variables [16]', 'Ecosystem Variables [9]', and 'Vegetation Indices [6]'. The 'Aerosol [2]' category is currently selected.

Step 6: Select Time

The screenshot displays the NASA 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 icon in the top right corner. Below the navigation bar, there is a search bar and a 'reset' button. The main content area shows a list of products under the 'Aerosol' category, with 'MYD04_3K' and 'MYD04_L2' selected. A text box in the lower right of the interface reads: 'Click on the next arrow on the right, or click on the TIME tab'.



Step 6: Select Time

The screenshot shows the LAADS DAAC search interface. The top navigation bar includes the NASA logo, 'LAADS DAAC', and links for 'About LAADS', 'Find Data', 'Data Discovery', 'Quality', 'Help', and 'Profile'. The main search bar has five steps: 1. PRODUCTS, 2. TIME, 3. LOCATION, 4. FILES, and 5. REVIEW & ORDER. Below the search bar, there are three status boxes: '2 products selected' (with a date range of 2017-10-08 .. 2017-12-09), 'No location selected.', and 'No files selected.' (with a 'reset' button). The 'Date Range' section has a 'Date Range' tab selected, a 'Single Date' tab, a 'Display as:' dropdown set to 'YYYY-MM-DD', and two date pickers showing '2017-10-08' and '2017-12-09'. The 'Add Date' button is highlighted with a red circle and a mouse cursor. The 'Date Selection' section shows the same date range and a 'Clear All' button. The 'Coverage Selection' section has 'Day' selected (checked) and 'Day-Night Boundary' unselected (unchecked). Explanatory text for 'Day' says '(granules contain day data only)' and for 'Day-Night Boundary' says '(granules contain data over the seasonal, latitude boundary between day and night)'. A sidebar on the left contains icons for 'Search by Product', 'Online Archive', 'Filename Search', 'Image Viewer', 'Load/Save Search', and 'Past Orders'.

- Select **Date Range** or **Single Date**
- Click **Add Date**
- Click **Location**



Step 7: Select a Location or Region

LAADS DAAC

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

2017-10-08 .. 2017-12-09 W: -123.7°, N: 38.4°, E: -120.6°, S: 35.9° No files selected. reset

Lat: 36.71°, Lon: -119.86°

SELECT AREA OF INTEREST

- World
- Countries
- Tiles
- Validation Sites
- Draw Custom Box (Classic)**
Draw box on the map. Panning is disabled.
- Enter Coordinates

Current selection:
W: -123.7°, N: 38.4°, E: -120.6°, S: 35.9°

- Select **Draw Custom Box (Classic)**
- Draw a box over the Bay Area, California
- Click the **next** arrow
- The program will start searching data



Step 8: Files

LAADS DAAC

About LAADS Find Data Data Discovery Quality Help Profile

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

2 products selected 2017-10-08 .. 2017-12-09 W: -123.7°, N: 38.4°, E: -120.6°, S: 35.9° 236 files selected reset

* Download selected files as json or csv

Search: Showing 1 to 75 of 236 entries Select All Clear All

Filename	Product (collection)	Image	Date / Time	Download
MYD04_3K.A2017281.2105.006.2017282153727.hdf	MYD04_3K (6)		2017-10-08 21:05:00	11 MB
MYD04_L2.A2017281.2105.006.2017282154132.hdf	MYD04_L2 (6)		2017-10-08 21:05:00	5 MB
MYD04_3K.A2017282.2150.006.2017283153744.hdf	MYD04_3K (6)		2017-10-09 21:50:00	10 MB
MYD04_L2.A2017282.2150.006.2017283153836.hdf	MYD04_L2 (6)		2017-10-09 21:50:00	3 MB
MYD04_3K.A2017282.2145.006.2017283153759.hdf	MYD04_3K (6)		2017-10-09 21:45:00	9 MB
MYD04_L2.A2017282.2145.006.2017283153915.hdf	MYD04_L2 (6)		2017-10-09 21:45:00	3 MB
MYD04_3K.A2017282.2010.006.2017283154914.hdf	MYD04_3K (6)		2017-10-09 20:10:00	7 MB
MYD04_L2.A2017282.2010.006.2017283155401.hdf	MYD04_L2 (6)		2017-10-09 20:10:00	4 MB
MYD04_3K.A2017283.2050.006.2017284154548.hdf	MYD04_3K (6)		2017-10-10 20:50:00	10 MB
MYD04_L2.A2017283.2050.006.2017284155153.hdf	MYD04_L2 (6)		2017-10-10 20:50:00	5 MB
MYD04_3K.A2017284.2135.006.2017285155249.hdf			-10-11 21:35:00	16 MB
MYD04_L2.A2017284.2135.006.2017285155410.hdf			-10-11 21:35:00	4 MB
MYD04_3K.A2017285.2215.006.2017286165521.hdf			-10-12 22:15:00	9 MB
MYD04_L2.A2017285.2215.006.2017286165605.hdf			-10-12 22:15:00	3 MB
MYD04_3K.A2017285.2040.006.2017286165607.hdf	MYD04_3K (6)		2017-10-12 20:40:00	9 MB
MYD04_L2.A2017285.2040.006.2017286170047.hdf	MYD04_L2 (6)		2017-10-12 20:40:00	5 MB
MYD04_3K.A2017286.2125.006.2017287160915.hdf	MYD04_3K (6)		2017-10-13 21:25:00	11 MB

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



Step 9: Submit Order

NASA LAADS DAAC

About LAADS Find Data Data Discovery Quality Help Profile

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

2 products selected 2017-10-08..2017-12-09 -123.7, 38.4, -120.6, 35.9 236 files selected reset

Files Summary:

MYD04_3K (Collection 6) Total: 118 files x
[2017-10-08 21:05:00 .. 2017-12-09 21:15:00]
The order will generate 118 files.

MYD04_L2 (Collection 6) Total: 118 files x
[2017-10-08 21:05:00 .. 2017-12-09 21:15:00]
The order will generate 118 files.

Apply Post-Processing

Select Delivery Method

The order may generate as many as 236 files.

Add another search Submit Order



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

