


# Download MODIS Aerosol Data

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Satellite Remote Sensing of Dust, Fires, Smoke, and Air Quality, July 10-12, 2018



# 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

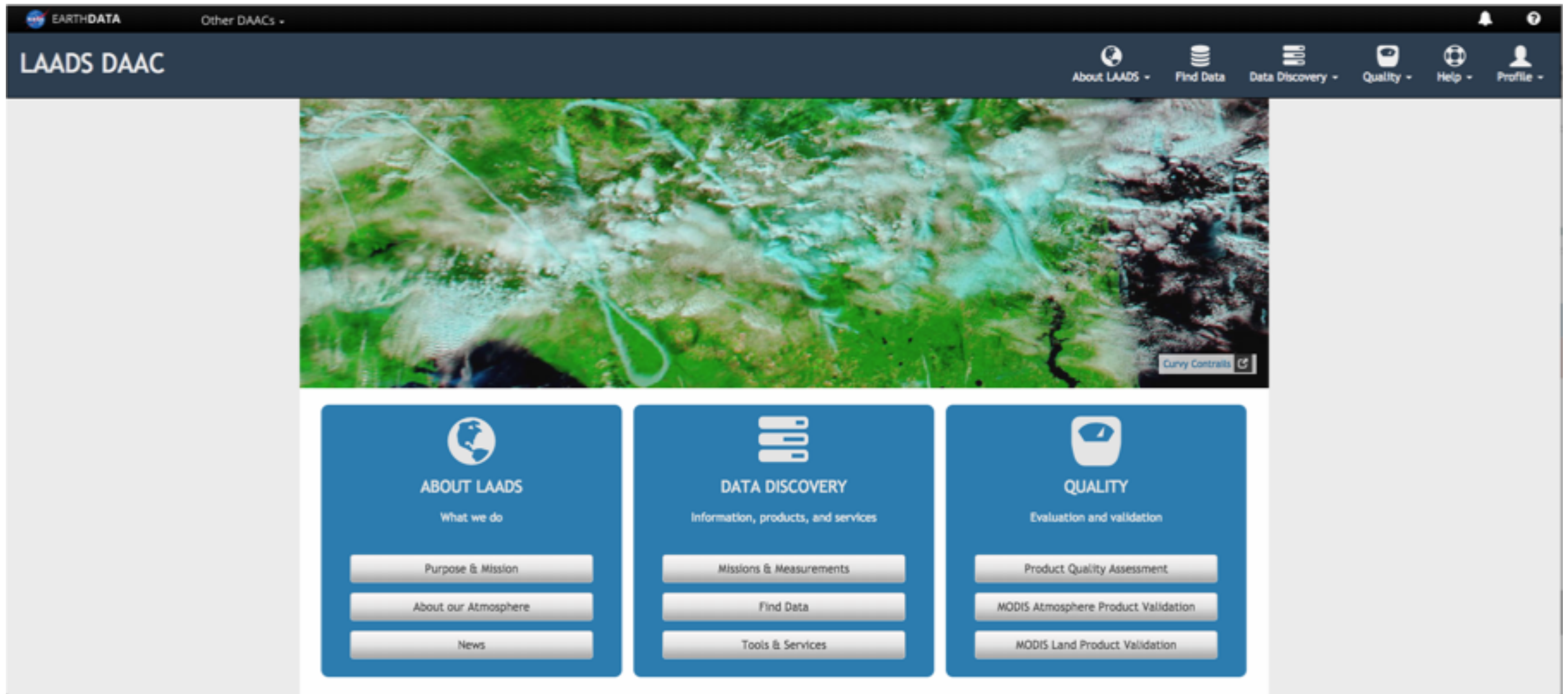
## Approved Applications

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, there is the NASA EarthData logo and a link to "Other DAACs". The main header is "LAADS DAAC". On the right side of the header, there are navigation links: "About LAADS", "Find Data", "Data Discovery", "Quality", "Help", and "Profile". Below the header is a large satellite image of a forested area with a river, labeled "Curvy Contrails". Below the image are three main content blocks:

- ABOUT LAADS** (What we do)
  - Purpose & Mission
  - About our Atmosphere
  - News
- DATA DISCOVERY** (Information, products, and services)
  - Missions & Measurements
  - Find Data
  - Tools & Services
- QUALITY** (Evaluation and validation)
  - Product Quality Assessment
  - MODIS Atmosphere Product Validation
  - 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 blue header with the NASA EarthData logo on the left, the text "Other DAACs" with a dropdown arrow, and navigation icons for "About LAADS", "Find Data", "Data Discovery", "Quality", "Help", and "Profile" on the right. Below the header is a large satellite image of a forested area with a river, credited to "Curvy Contrails". The main content area features three blue panels. The middle panel, titled "DATA DISCOVERY", contains a red rectangular box around the "Find Data" button, with a white mouse cursor arrow pointing at it. The other panels are "ABOUT LAADS" and "QUALITY", each with their respective sub-sections and buttons.

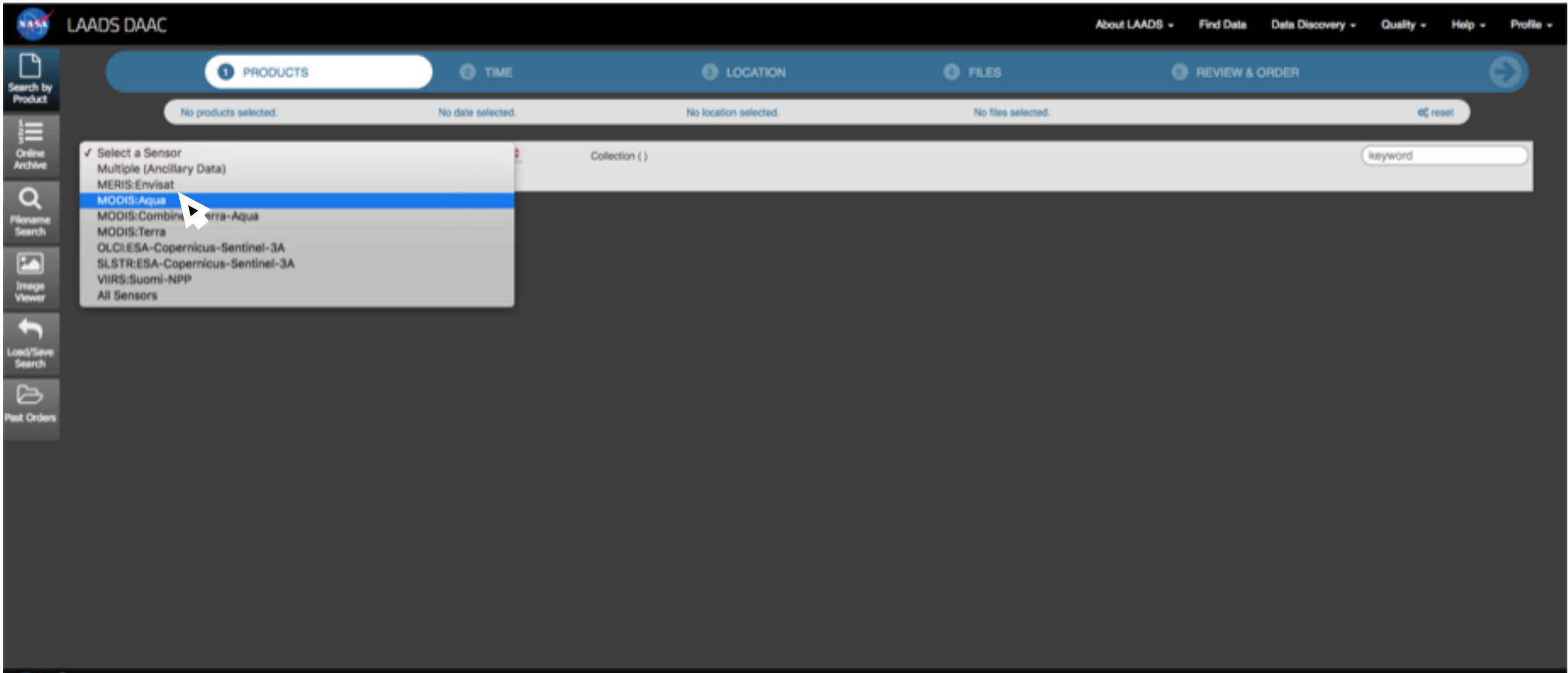
**ABOUT LAADS**  
What we do  
Purpose & Mission  
About our Atmosphere  
News

**DATA DISCOVERY**  
Information, products, and services  
Missions & Measurements  
**Find Data**  
Tools & Services

**QUALITY**  
Evaluation and validation  
Product Quality Assessment  
MODIS Atmosphere Product Validation  
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 blue navigation bar with five steps: '1 PRODUCTS', '2 TIME', '3 LOCATION', '4 FILES', and '5 REVIEW & ORDER'. Underneath this bar, there are four status indicators: 'No products selected.', 'No date selected.', 'No location selected.', and 'No files selected.', followed by a 'reset' button. On the left side, there is a vertical sidebar with icons for 'Search by Product', 'Online Archive', 'Filename Search', 'Image Viewer', 'Load/Save Search', and 'Past Orders'. The main content area shows a 'Collection ( )' header and a search input field with the placeholder text 'keyword'. A dropdown menu is open under 'Select a Sensor', listing the following options: 'Multiple (Ancillary Data)', 'MERIS:Envisat', 'MODIS:Aqua' (highlighted in blue), 'MODIS:Combined Terra-Aqua', 'MODIS:Terra', 'OLCI:ESA-Copernicus-Sentinel-3A', 'SLSTR:ESA-Copernicus-Sentinel-3A', 'VIIRS:Suomi-NPP', and 'All Sensors'. A mouse cursor is pointing at the 'MODIS:Aqua' option.



# Step 5: Make a Product Selection - Data Collection

The screenshot shows the 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 steps: '1 PRODUCTS', '2 TIME', '3 LOCATION', '4 FILES', and '5 REVIEW & ORDER'. Below the steps, 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'. 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 under 'MODIS:Aqua', listing various collections. The selected item is '6 - MODIS Collection 6 - Level 1, Atmosphere, Land'. Below the dropdown, categories are listed: 'Atmosphere [12]', 'Land [29]', and 'Radiation Budget Variables [16]'. The main content area shows a list of products under the 'All' collection (6 - MODIS Collection 6 - Level 1, Atmosphere, Land). The products listed are:

Product ID	Description	Info Icon
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 visible. The 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. A search bar on the left allows for product selection. The 'Aerosol' collection is selected, and a dropdown menu shows 'MYD04\_3K (6)' and 'MYD04\_L2 (6)'. The 'Aerosol' collection is expanded, showing two products: '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 left sidebar contains navigation options: 'Search by Product', 'Online Archive', 'Filename Search', 'Image Viewer', 'Load/Save Search', and 'Past Orders'. The bottom left corner shows the text 'NASA's Applied Remote Sensing Training Program'.





# Step 6: Select Time

The screenshot shows the LAADS DAAC interface. The top navigation bar has five tabs: PRODUCTS (1), TIME (2), LOCATION (3), FILES (4), and REVIEW & ORDER (5). The 'TIME' tab is highlighted. On the right side of the navigation bar, a right-pointing arrow icon is circled in red. Below the navigation bar, there are sections for 'Products (Collection)', 'Aerosol', and a list of products. The 'Aerosol' section is highlighted in green. A white text box in the lower right of the interface contains the instruction: '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 'PRODUCTS', 'TIME', 'LOCATION', 'FILES', and 'REVIEW & ORDER'. The 'TIME' step is active, and the 'LOCATION' step is highlighted with a red circle and an arrow. The 'Date Range' section has 'Date Range' selected, and the 'Add Date' button is also highlighted with a red circle and an arrow. The 'Date Selection' section shows the date range '2017-10-08 .. 2017-12-09'. The 'Coverage Selection' section has 'Day' selected.

- 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

The screenshot shows the LAADS DAAC interface. The navigation bar at the top has five steps: 1 PRODUCTS, 2 TIME, 3 LOCATION, 4 FILES (highlighted), and 5 REVIEW & ORDER. A red circle highlights the 'Next' arrow button in the 'FILES' step. Below the navigation bar, there are search filters for products, time, and location. A search bar shows '2 products selected' and '236 files selected'. A red circle highlights the 'Select All' button in the search results area. The main table displays search results with columns for Filename, Product (collection), Image, Date / Time, and Download. A white text box with a black border is overlaid on the table, containing the following instructions:

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



# Step 9: Submit Order

The screenshot shows the LAADS DAAC interface at the 'REVIEW & ORDER' step. The top navigation bar includes 'About LAADS', 'Find Data', 'Data Discovery', 'Quality', 'Help', and 'Profile'. The main navigation bar has five steps: 1. PRODUCTS, 2. TIME, 3. LOCATION, 4. FILES, and 5. REVIEW & ORDER (highlighted). Below this, a summary bar shows '2 products selected', the time range '2017-10-08..2017-12-09', the location '-123.7, 38.4, -120.6, 35.9', and '236 files selected'. A 'reset' button is on the right.

The 'Files Summary' section contains two entries:

- MYD04\_3K ( Collection 6 )**: [ 2017-10-08 21:05:00 .. 2017-12-09 21:15:00 ]  
Total: 118 files ✖  
The order will generate 118 files.
- MYD04\_L2 ( Collection 6 )**: [ 2017-10-08 21:05:00 .. 2017-12-09 21:15:00 ]  
Total: 118 files ✖  
The order will generate 118 files.

On the right side, there are three blue buttons: 'Apply Post-Processing', 'Select Delivery Method', and 'Add another search'. Below these is a grey bar stating 'The order may generate as many as 236 files.' At the bottom right, a green 'Submit Order' button is highlighted with a red circle and a white mouse cursor arrow pointing to it.



# 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

