How to search and order higher level ASTER data products with NASA Earthdata Search

Earthdata Search is a web application developed by the NASA Earth Observing System Data and Information System (EOSDIS) to enable data discovery, search, comparison, visualization, and access across all DAAC data holdings. This is the only interface available to users to order on-demand (higher-level) ASTER data products.

These instructions describe how to search and order the ASTER Level 2 and Level 3 products available for on-demand processing:

- ASTER L2 Surface Emissivity (AST_05)
- ASTER L2 Surface Reflectance VNIR and SWIR (AST_07)
- ASTER L2 Surface Reflectance SWIR Crosstalk-Corrected (AST_07XT)
- ASTER L2 Surface Kinetic Temperature (AST_08)
- ASTER L2 Surface Radiance VNIR and SWIR (AST_09)
- ASTER L2 Surface Radiance SWIR Crosstalk-Corrected (AST_09XT)
- ASTER L2 Surface Radiance TIR (AST_09T)
- ASTER Digital Elevation Model (AST14DEM)
- ASTER Digital Elevation Model and Orthorectified Registered Radiance at the Sensor (AST14DMO)
- ASTER Orthorectified Registered Radiance at the Sensor (AST14OTH)
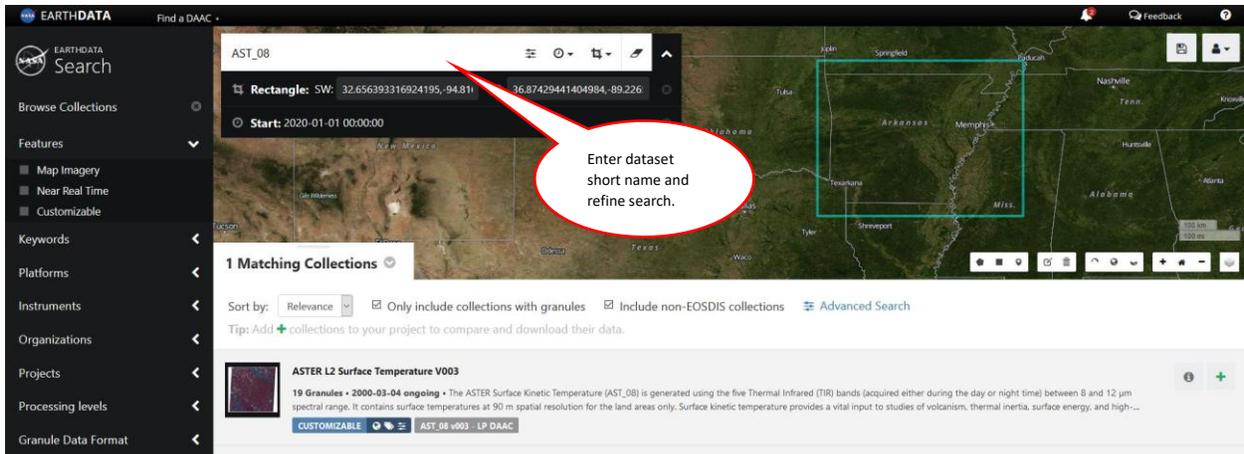
Please note that due to the current demand for ASTER data, the turnaround time for producing these products has increased. As a result, orders are limited to 2,000 granules per order. To improve the efficiency of the additional processing, all orders up to 2,000 granules will be divided into separate requests of 100 granules each with a unique download link for each set of 100 (or less) granules.

Step 1: Access NASA Earthdata Search

Access NASA Earthdata Search. Sign in with Earthdata Login credentials (🔒 Earthdata Login) or register for a new account.

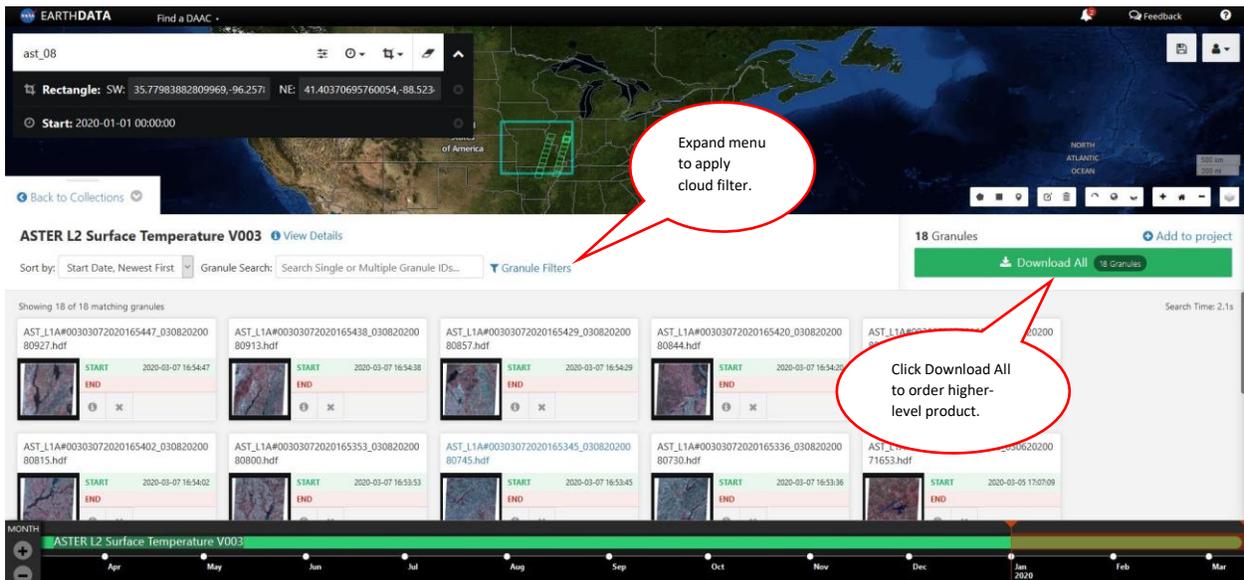## Step 2: Search for a dataset

Search for a dataset using the search box by entering the dataset short name (e.g. AST_08). Refine the search results by applying spatial and temporal filters.
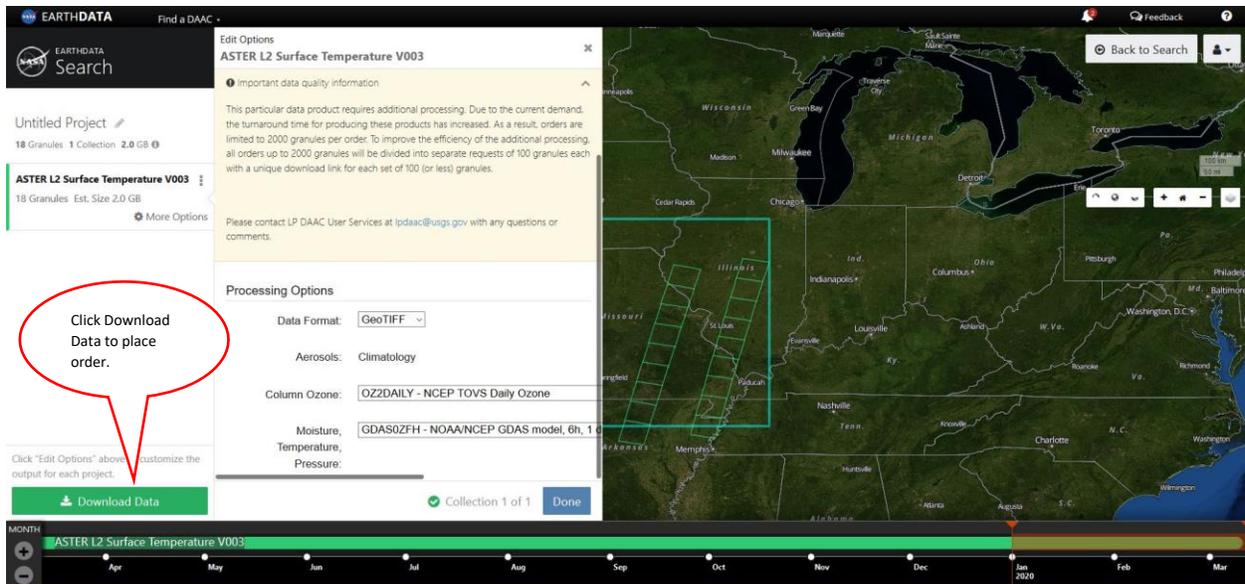
Step 3: View results of data search

Click on the collection name (e.g. ASTER L2 Surface Temperature V003) to view the matching Level 1A (L1A) science granules that are available for creating the on-demand ASTER product. Results will include only the granules that meet the criteria for processing the requested higher-level product. Additional Granule Filters can be applied if needed (e.g. cloud cover). Individual granules can be removed by clicking on the × icon. When available, browse imagery can be viewed by clicking an image.

Note: Since the higher-level products are processed using L1A granules as input, the results list will return L1A granules that can be used to generate the on-demand products. The L1A data are not available for download from this list.

Step 4: Customize and order data

Click on the *Download All* button to initiate an order for the higher-level ASTER data product. If the number of returned results is over 2,000, the *Download All* button will be grayed out. The search results will need to be narrowed down to 2,000 or fewer granules to adhere to the order limit before continuing to the next step. Once on the order processing page, choose *More Options* and select all desirable customization options, and then click *Done.* To place the order, click *Download Data.*

Step 5: Retrieve data

When the data request is submitted, an order status notice is displayed. To track the progress of the order, click the Login/Profile icon ( ) and select *Download Status & History* from the menu. Once the order has completed, download the data with the links provided in the email.

For orders with a large number of granules, LP DAAC recommends DAAC2Disk, a simple download executable, or command-line resources that take advantage of Python and R capabilities.

For questions about ordering ASTER Level 2 and Level 3 data products, please contact LP DAAC User Services at lpdaac@usgs.gov.