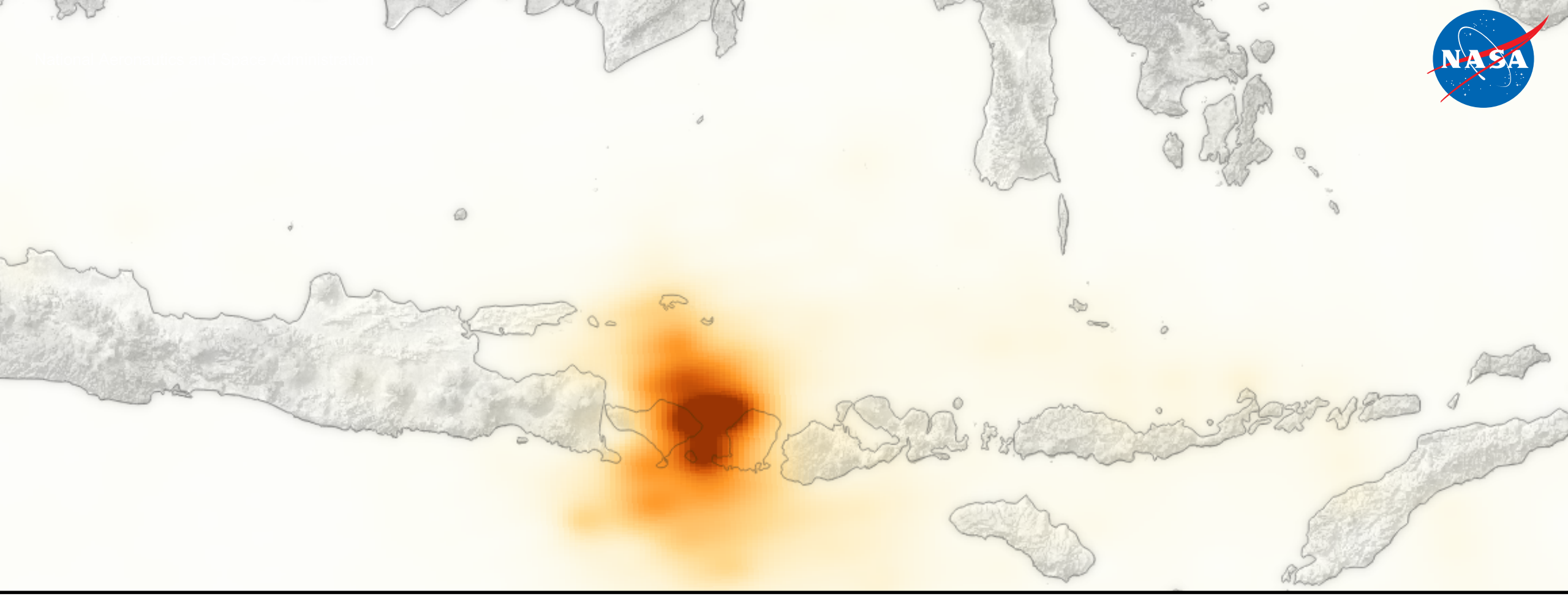


Download OMI NO_2 or SO_2 Data

Data Analysis Tools for High Resolution Air Quality Satellite Datasets

Pawan Gupta & Melanie Follette-Cook, January 17-22, 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(. _)

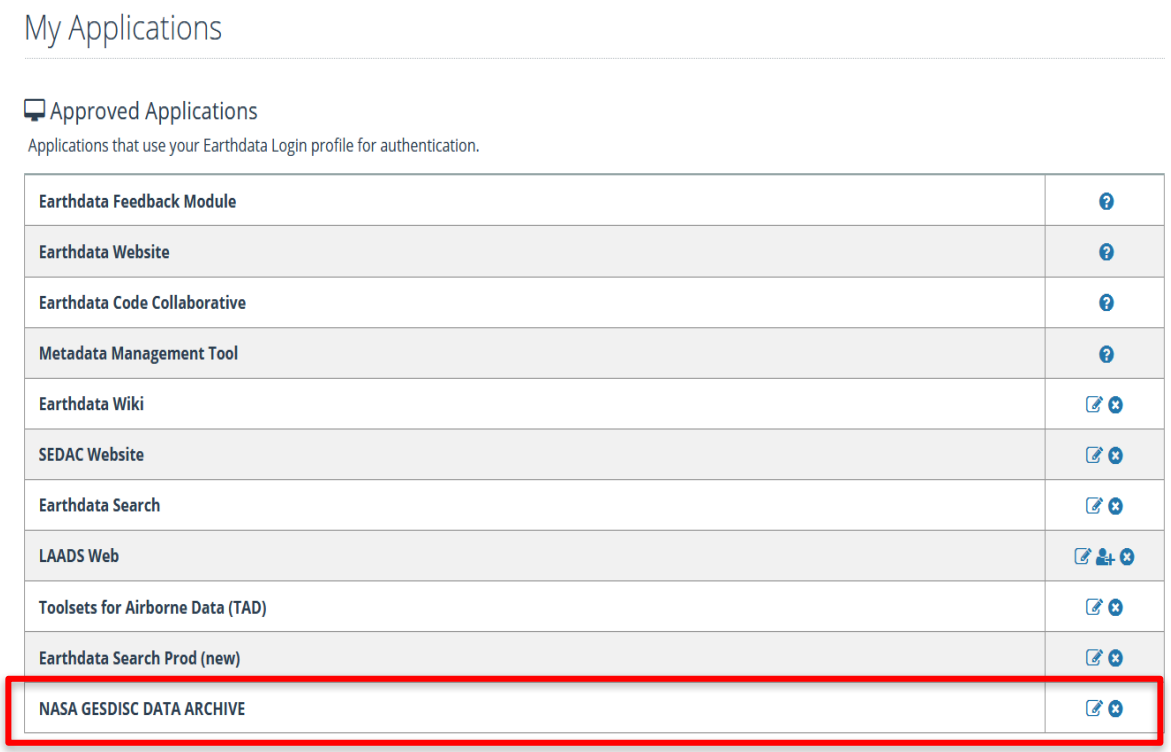
Password must contain:

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

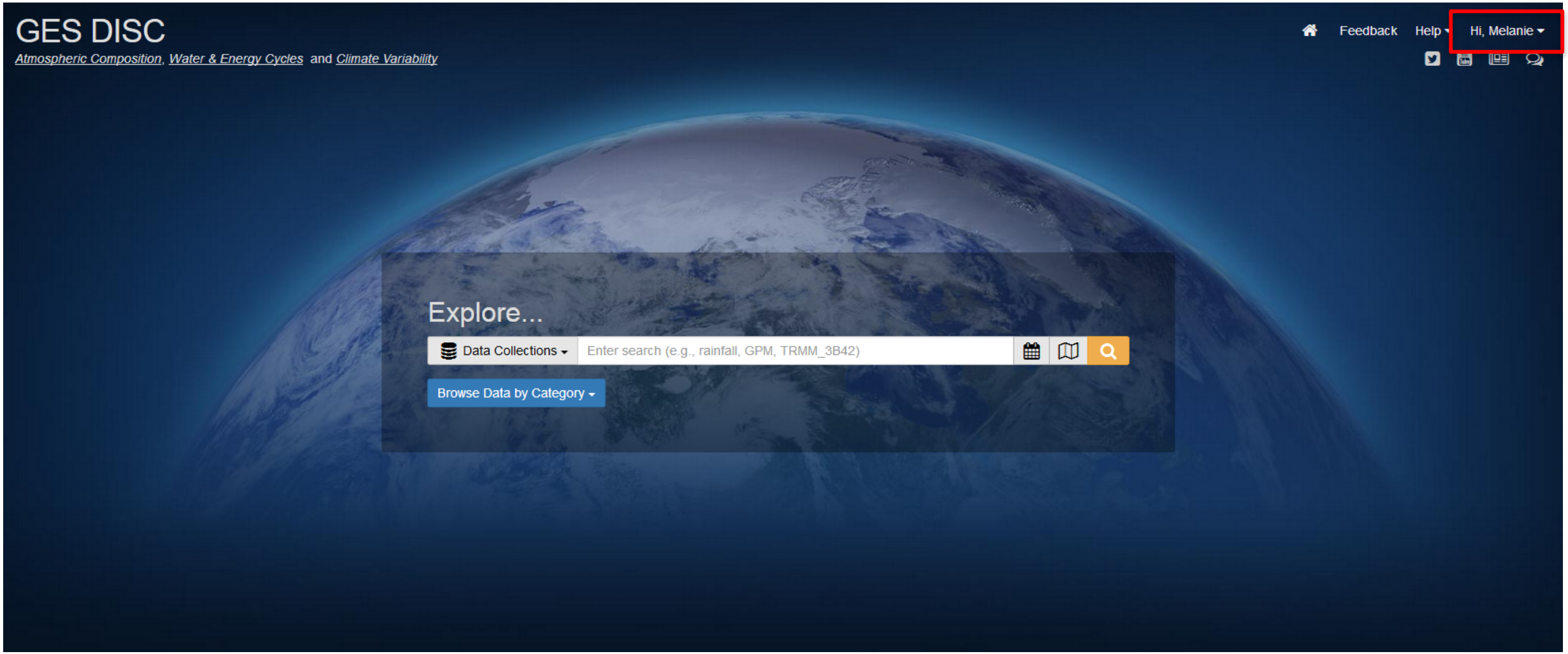
Step 2: Add NASA GESDISC to your Applications

- Login to Earthdata
- Click on **My Applications**
- Click on **Approve More Applications**
- Look for NASA GESDISC DATA ARCHIVE in the list or search
- Add NASA GESDISC DATA ARCHIVE to your applications

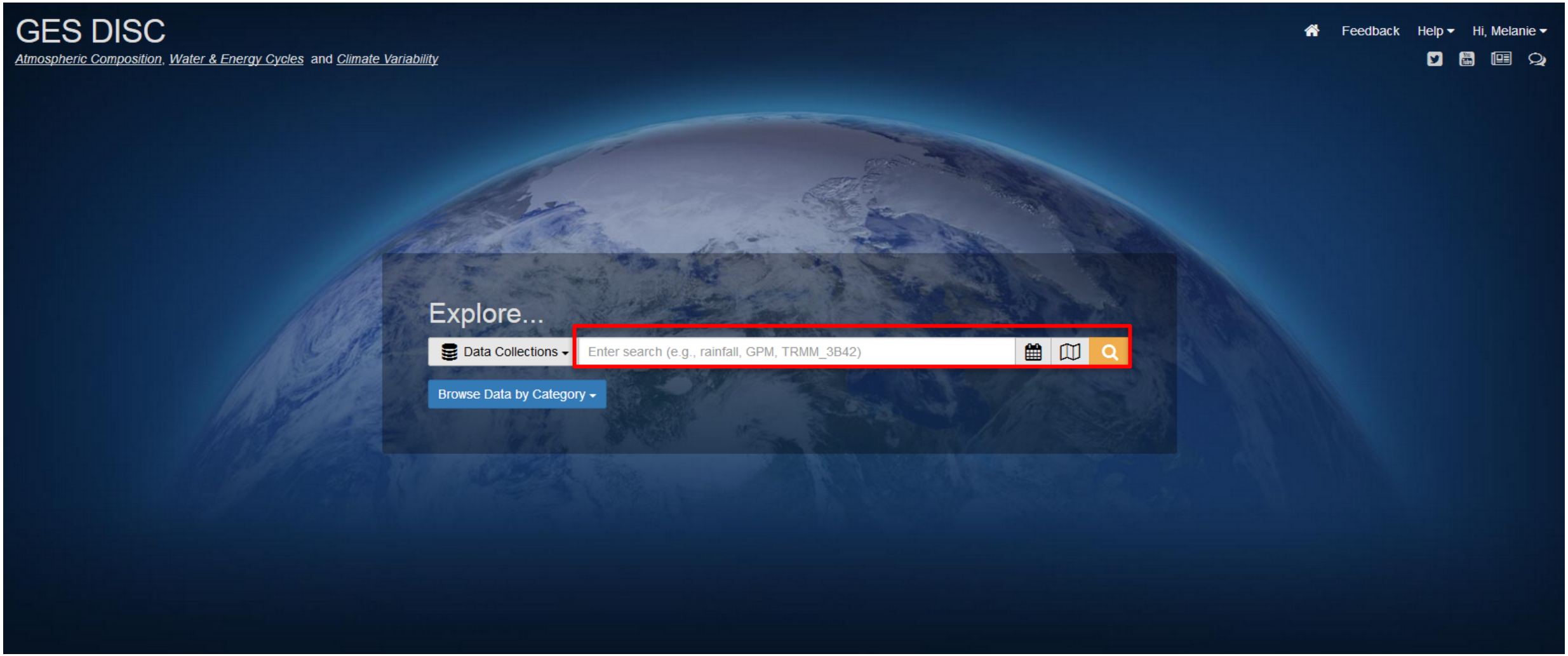
You should see NASA GESDISC DATA ARCHIVE in list of approved applications



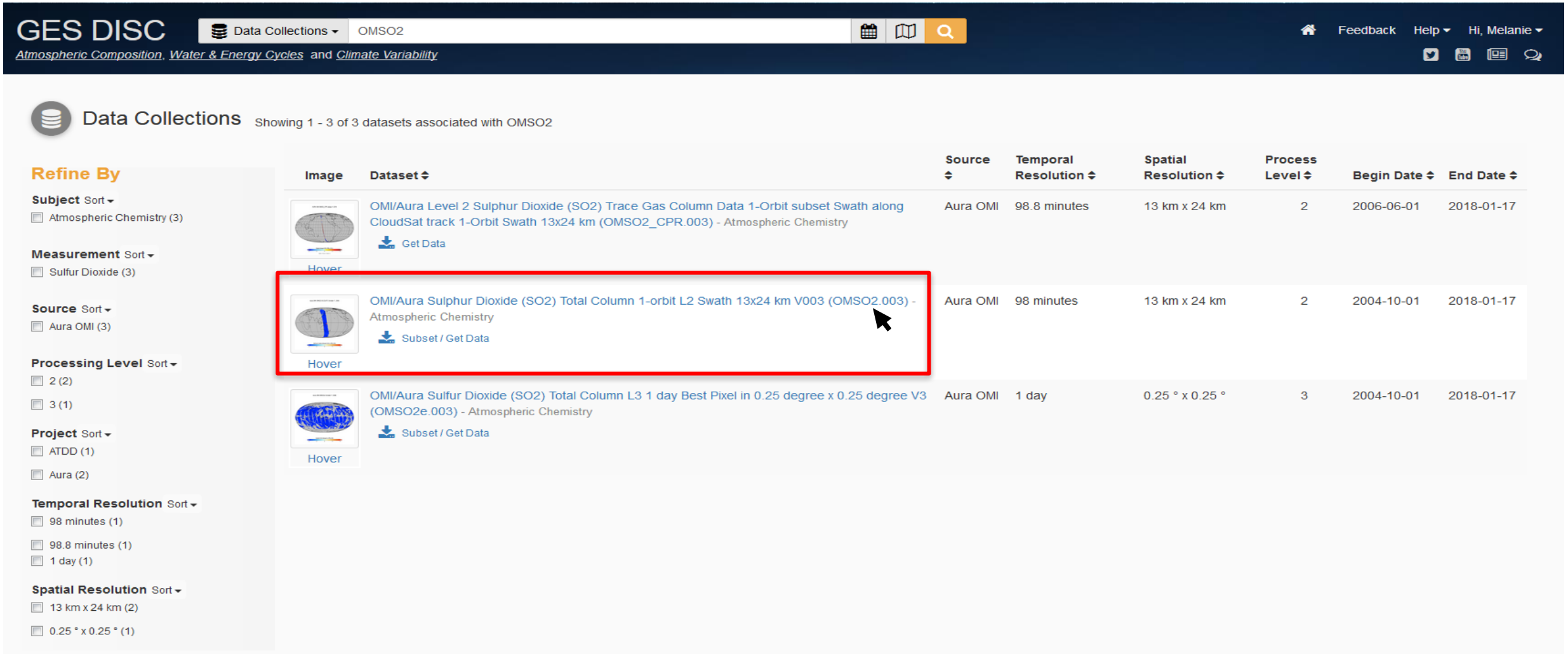
Step 3: Login at https://disc.gsfc.nasa.gov/



Step 4: Enter Search Keywords (e.g. OMNO2 or OMSO2)



Step 5: Make a Product Selection



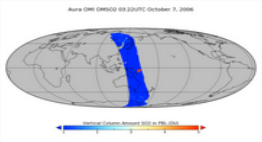
Step 6: Choose Data Access (we will use EARTHDATA)

GES DISC | Data Collections | OMSO2 | Feedback | Help | Hi, Melanie

Atmospheric Composition, *Water & Energy Cycles* and *Climate Variability*

Go to Search Results

OMSO2: OMI/Aura Sulphur Dioxide (SO2) Total Column 1-orbit L2 Swath 13x24 km V003



The Aura Ozone Monitoring Instrument (OMI) Sulfur Dioxide Product 'OMSO2' Version 3 is now available to the public from the NASA Goddard Earth Sciences Data and Information Services Center (GES DISC). The OMSO2 product contains three values of SO2 Vertical column corresponding to three a-priori vertical profiles used in the retrieval algorithm. It also contains quality flags, geolocation and other ancillary information. The lead scientist for the OMSO2 product is Nickolay Kroktov. The shortname for this Level-2 OMI total column SO2 product is OMSO2.

The OMSO2 files are stored in the version 5 EOS Hierarchical Data Format (HDF-EOS5). Each file contains data from the day lit portion of an orbit (~53 minutes). There are approximately 14 orbits per day. The maximum file size for the OMSO2 data product is approximately 21 MB.

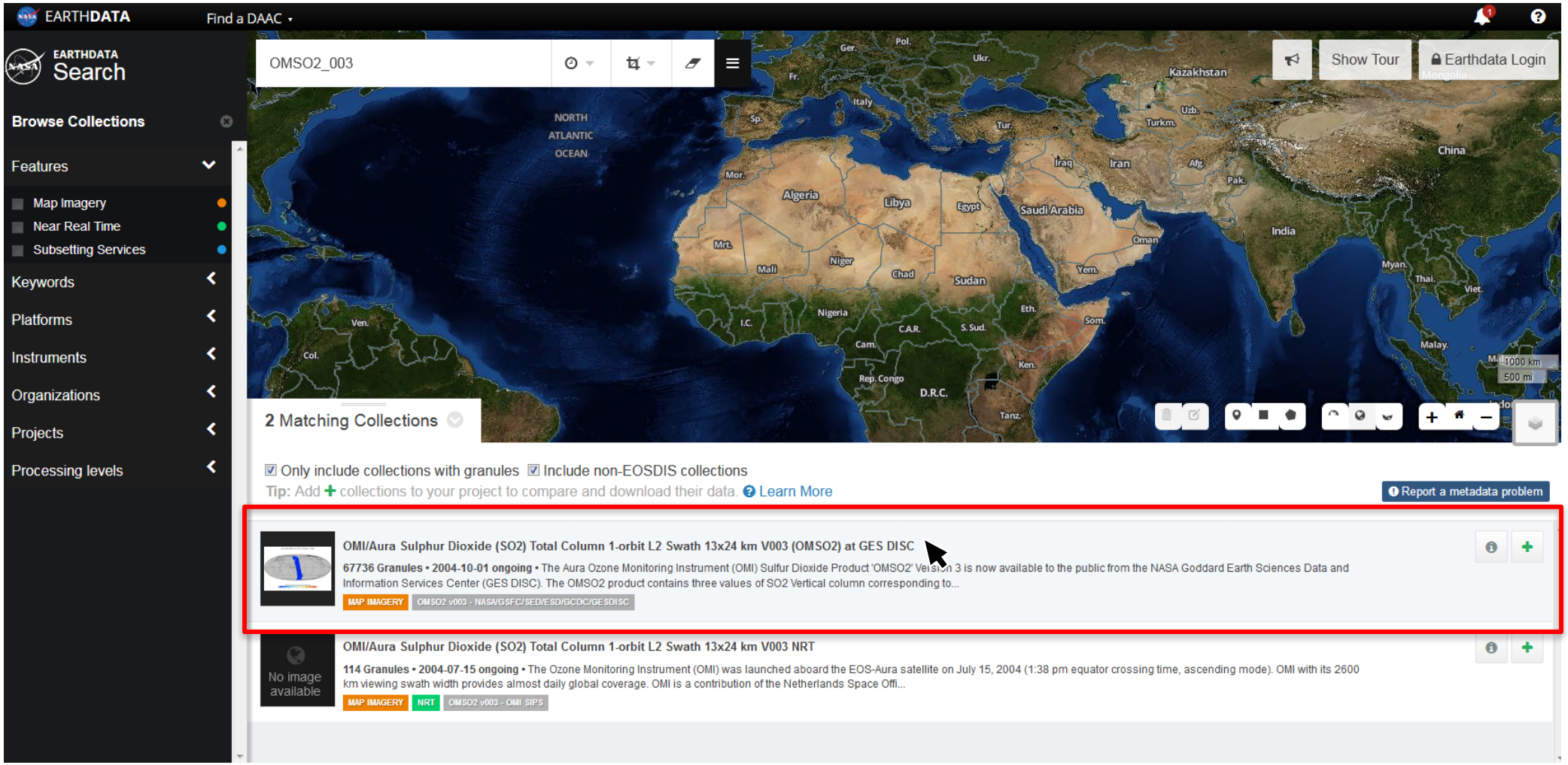
Data Access

- Online Archive
- EARTHDATA Search
- Simple Subset Wizard
- OPENDAP DATA

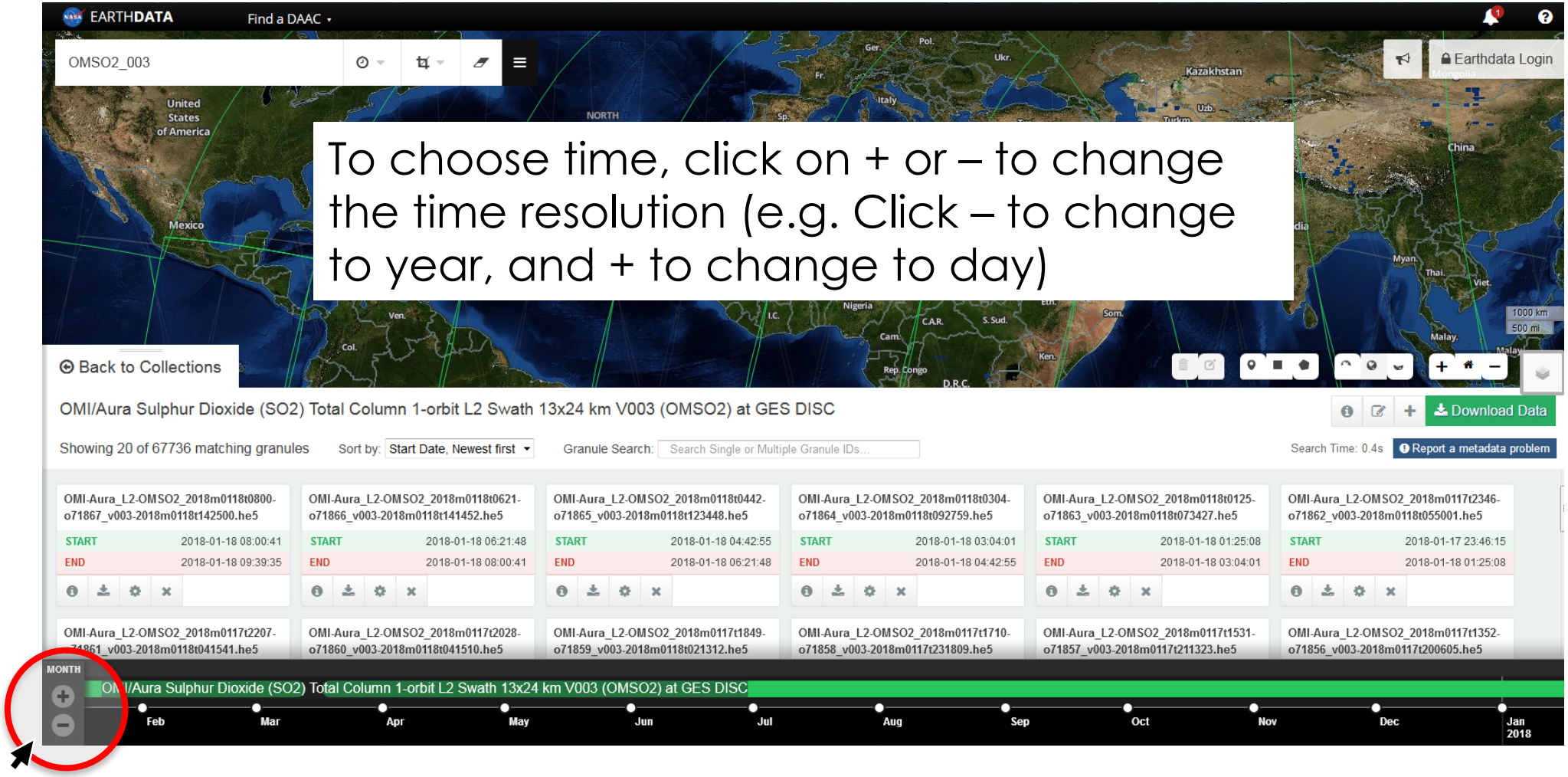
Product Summary | Data Citation | Documentation

Shortname:	OMSO2
Longname:	OMI/Aura Sulphur Dioxide (SO2) Total Column 1-orbit L2 Swath 13x24 km V003
DOI:	10.5067/Aura/OMI/DATA2022
Version:	003
Format:	HDF5
Spatial Coverage:	-180.0,-90.0,180.0,90.0
Temporal Coverage:	2004-10-01 to present
File Size:	26 MB per file
Data Resolution	
Spatial:	13 km x 24 km
Vertical:	80 km
Temporal:	98 minutes

Step 7: Select Product

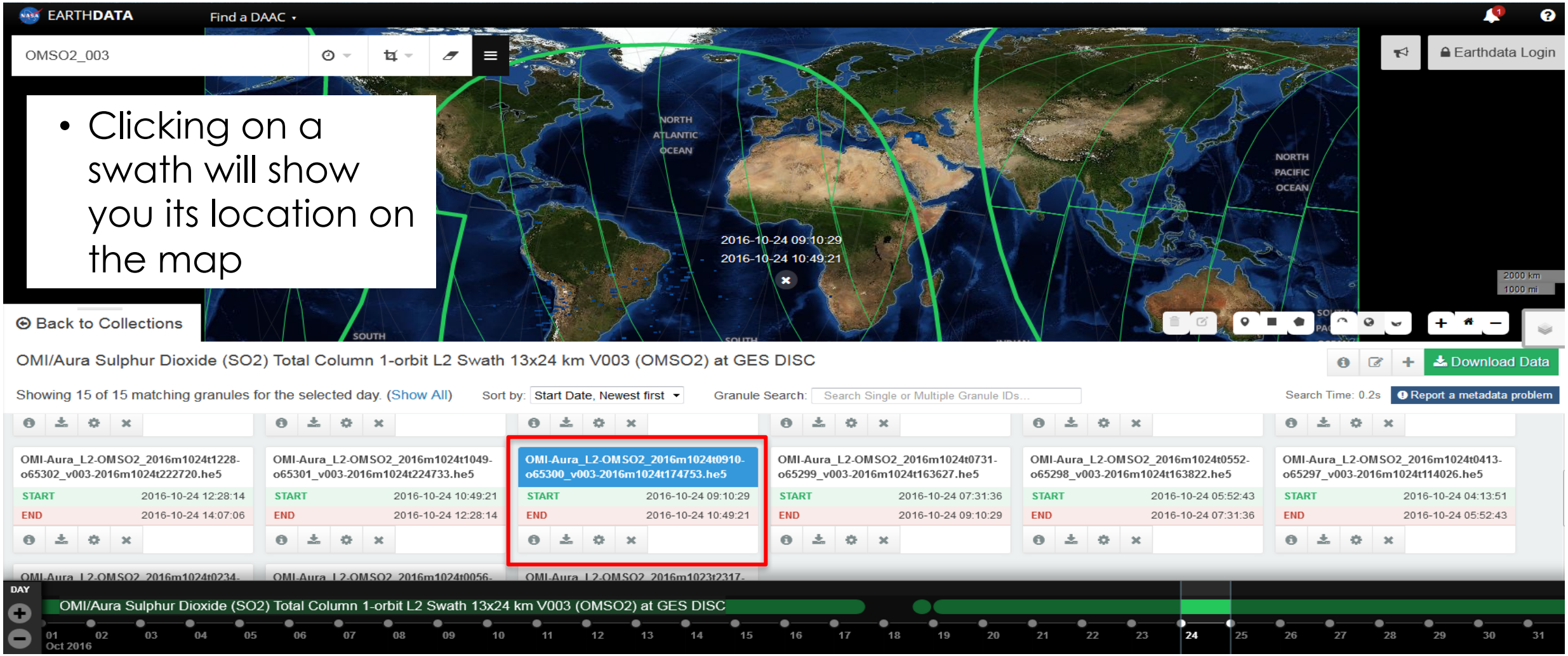


Step 8: Select Time

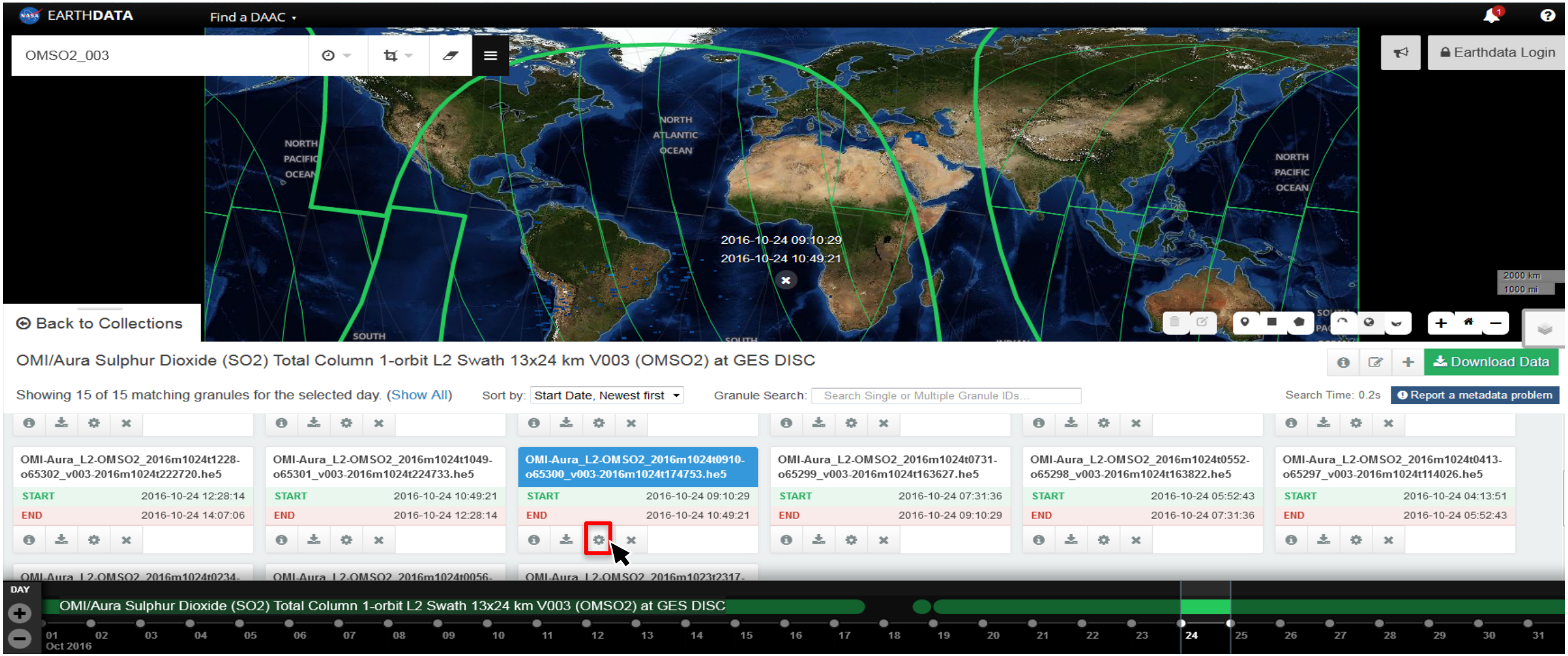


Step 9: Select Swath

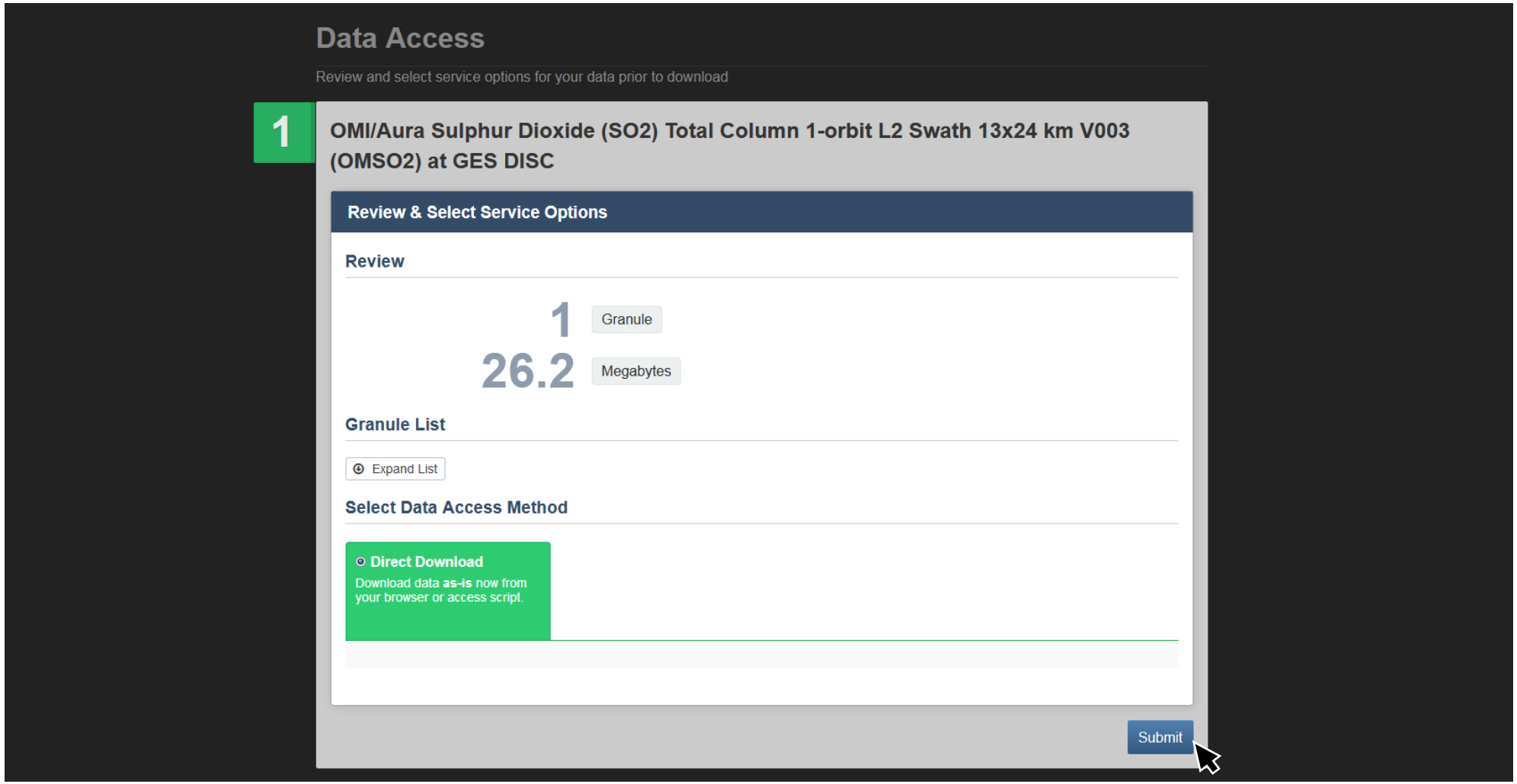
- Clicking on a swath will show you its location on the map



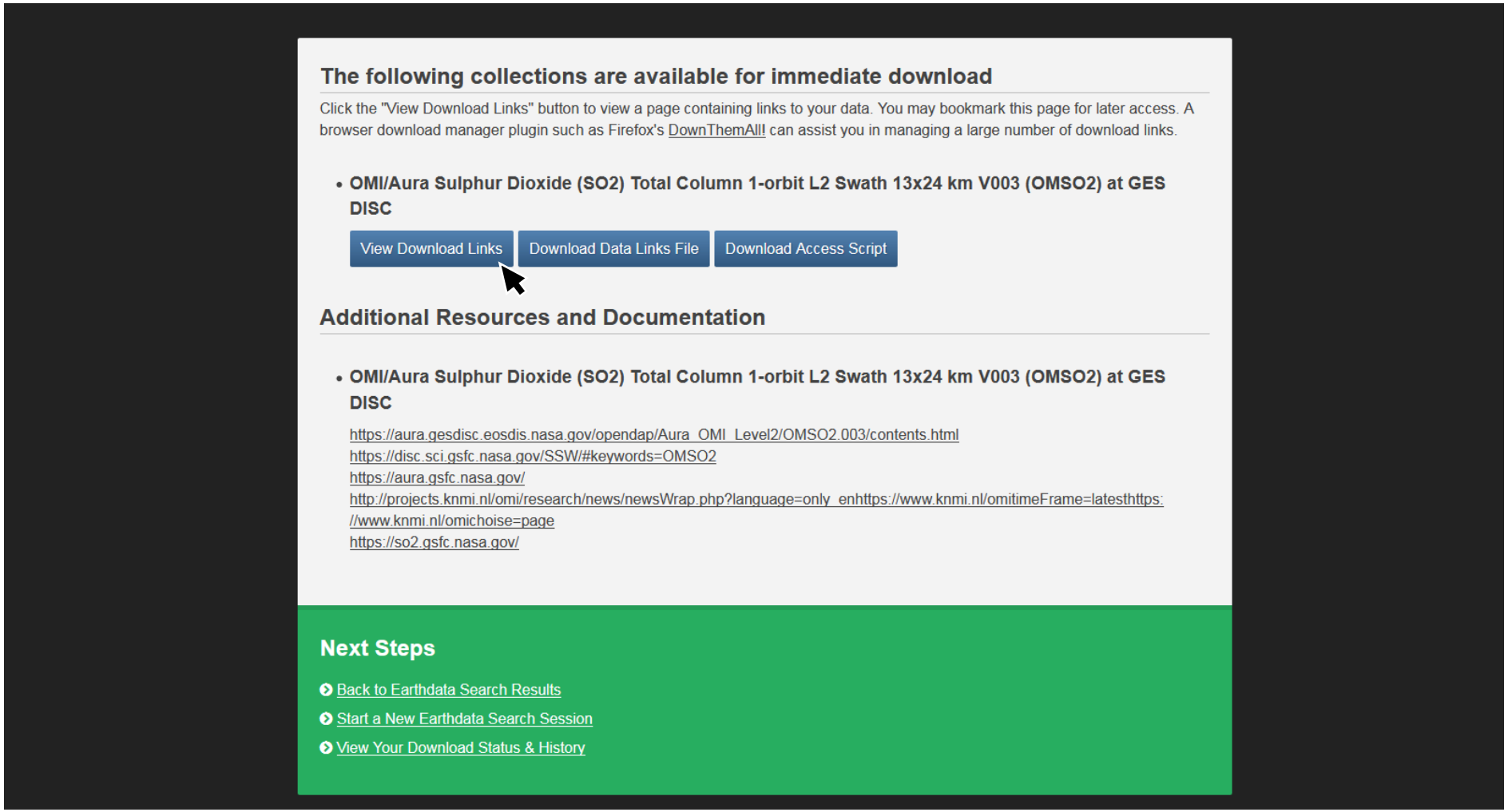
Step 10: Download single granule by clicking gear icon



Step 11: Choose “Direct Download” and Click “Submit”



Step 12: Click “View Download Link” to Download



Step 13: Download the Data

- http://aura.gesdisc.eosdis.nasa.gov/data//Aura_OMI_Level2/OMSO2.003/2016/298/OMI-Aura_L2-OMSO2_2016m1024t0910-o65300_v003-2016m1024t174753.he5

- Click on the provided link and save the data in your directory where you will run your python scripts