M³ Data Tutorial

Hosted by the M³ Science Team

EPSC/DPS

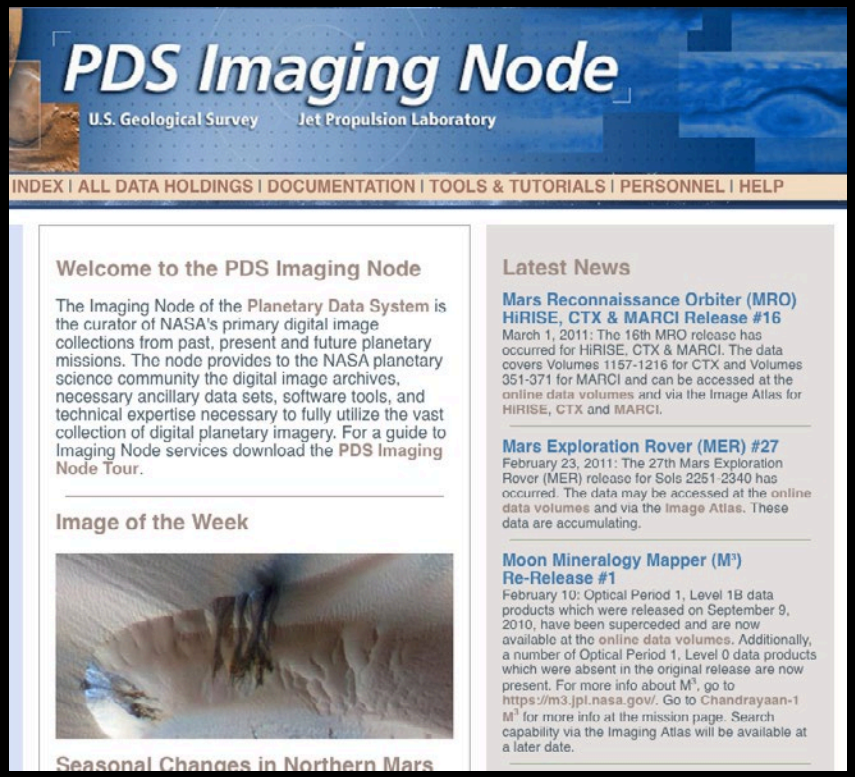
Fall 2011

Tutorial Goals

- Learn how to access M^3 data and search for areas of interest
- Learn about available M^3 data, the instrument, and what you need to know about the data
- Please fill short survey out at the end of the tutorial

M^3 Release Updates/Information

- http://pds-imaging.jpl.nasa.gov/



How To Find M³ Data

Noah E. Petro

M³ Data Tutorial at EPSC/DPS

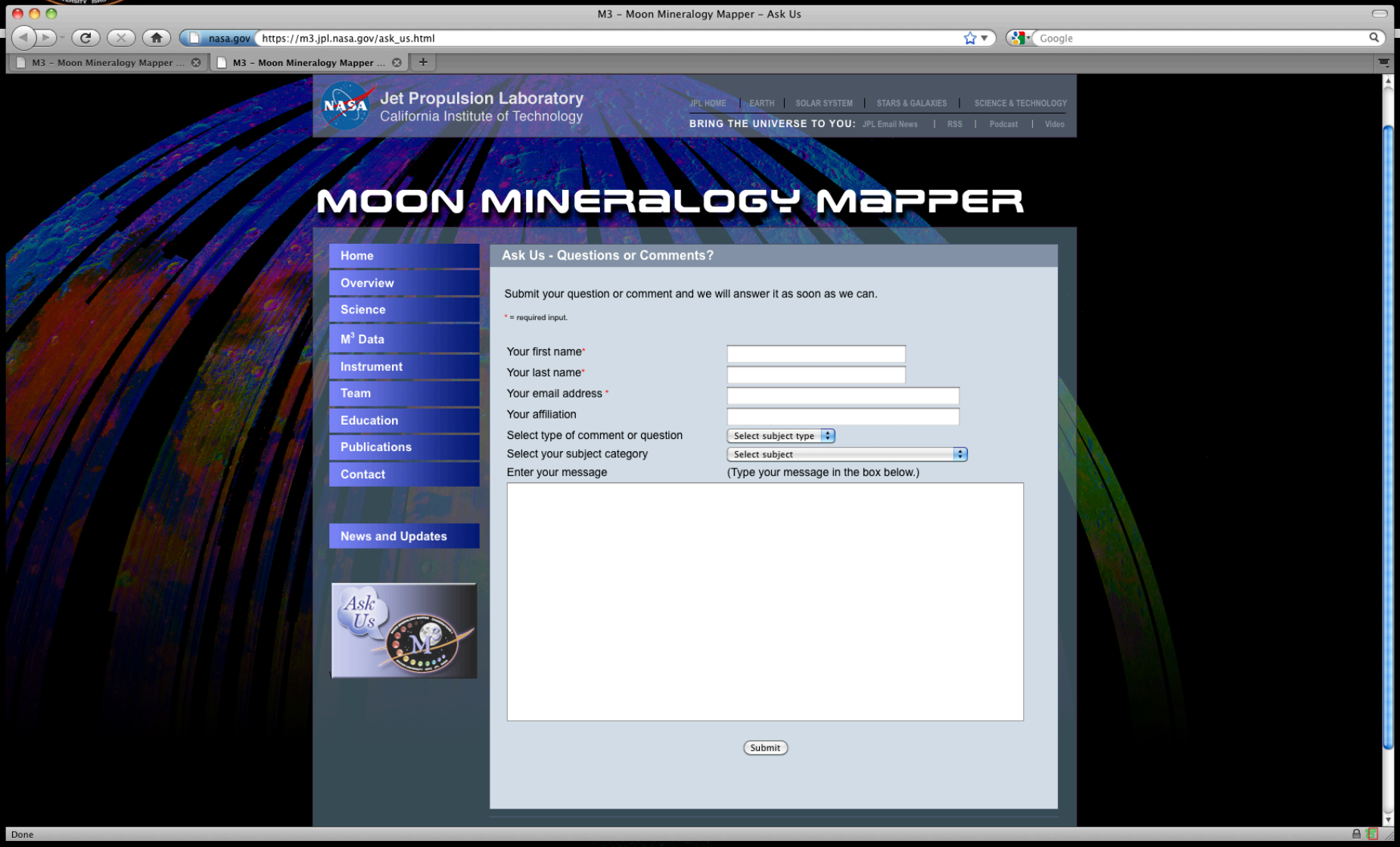
October 2011

How to Find M^3 Data

- This tutorial will guide you through the steps necessary to find M^3 data for areas of interest.
- Uses:
  - PDS Imaging Node hosted by JPL.
  - The Lunar Orbital Data Explorer hosted by the PDS Geosciences Node at Washington University.
- Requires web connection, web browser (tested using Safari 5.0.2 and Firefox 6.0.2).
- Typical data cubes are ~2.4 GB.

https://m3.jpl.nasa.gov/m3data.html

"Ask Us"


M3 – Moon Mineralogy Mapper – Ask Us
nasa.gov https://m3.jpl.nasa.gov/ask_us.html
Google
M3 – Moon Mineralogy Mapper ...
M3 – Moon Mineralogy Mapper ...
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California Institute of Technology
JPL HOME | EARTH | SOLAR SYSTEM | STARS & GALAXIES | SCIENCE & TECHNOLOGY
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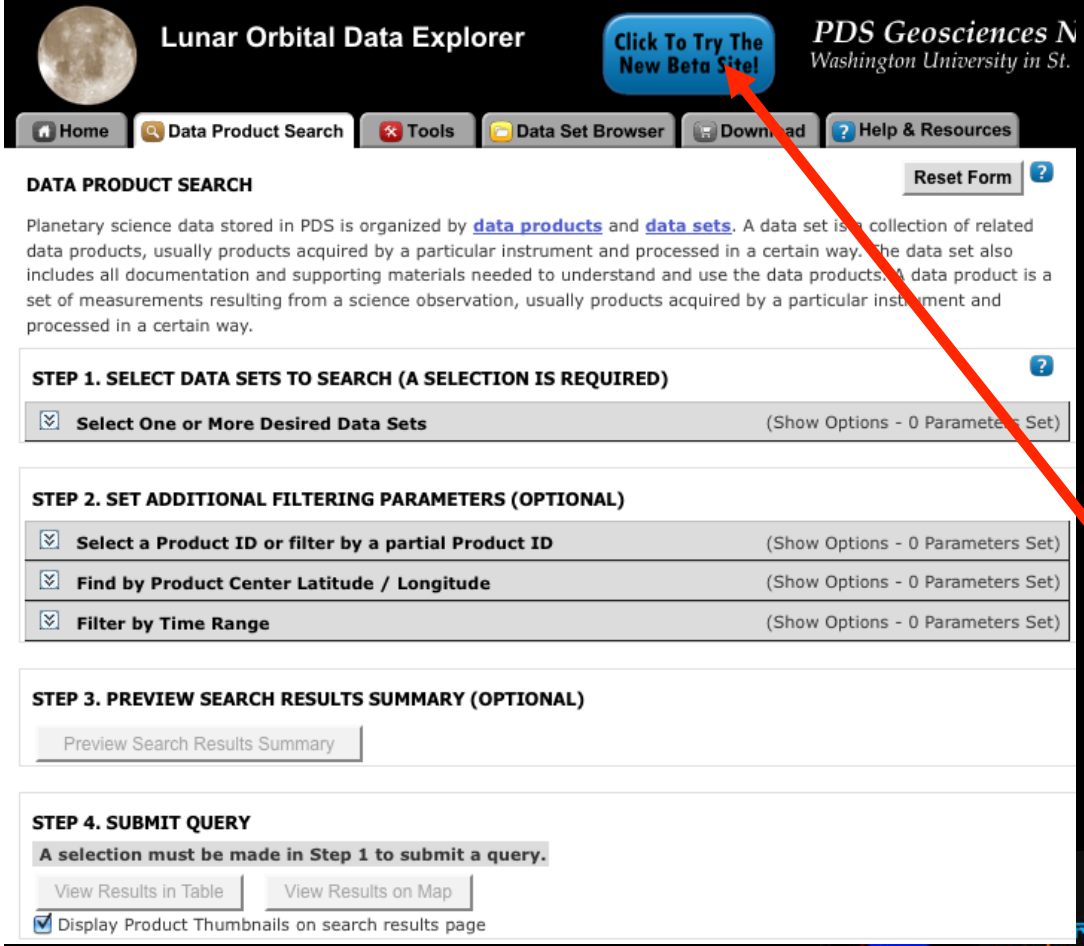
Instrument
Team
Education
Publications
Contact
News and Updates
Ask Us
Ask Us - Questions or Comments?
Submit your question or comment and we will answer it as soon as we can.
* = required input.
Your first name*
Your last name*
Your email address *
Your affiliation
Select type of comment or question
Select subject type
Select your subject category
Select subject
Enter your message
(Type your message in the box below.)
Submit
Done

The Lunar Orbital Data Explorer

- Start at the Data Product Search Tool
  - http://ode.rsl.wustl.edu/moon/indexProductSearch.aspx
  - http://tinyurl.com/lunarODE



- The PDS has unveiled a Beta version of the ODE (v3.0)
- This beta version has an important feature that will make finding M^3 data of interest much easier.
- This tutorial will guide you through the Beta version of the ODE as the improvements are very useful.

ODE Beta Version – Go To Data Product Search

The Lunar Orbital Data Explorer

Lunar Orbital Data Explorer
Beta Site - ODE v3.0

Click To Return To The Live Site

PDS Geosciences Node
Washington University in St. Louis

Home | Data Product Search | Map Search | Tools | Data Set Browser | Download | Help & Resources

DATA PRODUCT SEARCH

Reset Form

Planetary science data stored in PDS is organized by data products and data sets. A data set is a collection of related data products, usually products acquired by a particular instrument and processed in a certain way. The data set also includes all documentation and supporting materials needed to understand and use the data products. A data product is a set of measurements resulting from a science observation, usually products acquired by a particular instrument and processed in a certain way.

STEP 1. SELECT DATA SETS TO SEARCH (A SELECTION IS REQUIRED)

Select One or More Desired Data Sets (Released PDS Archives)

STEP 2. SET ADDITIONAL FILTERING PARAMETERS (OPTIONAL)

Select a Product ID or filter by a partial Product ID

Find by Product Location

Filter by Time Range

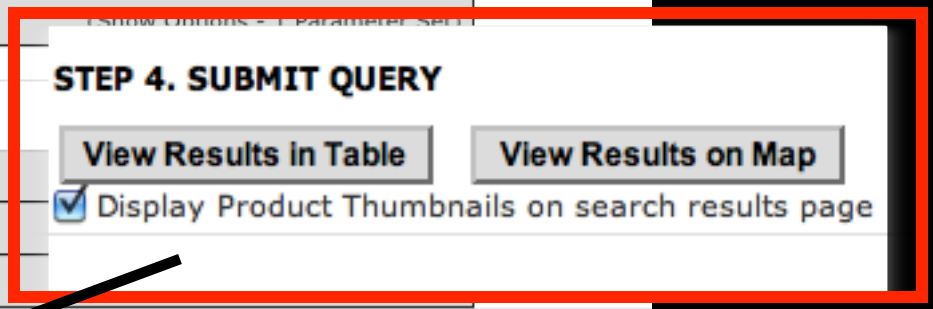
STEP 3. PREVIEW SEARCH RESULTS SUMMARY (OPTIONAL)

Preview Search Results Summary

STEP 4. SUBMIT QUERY

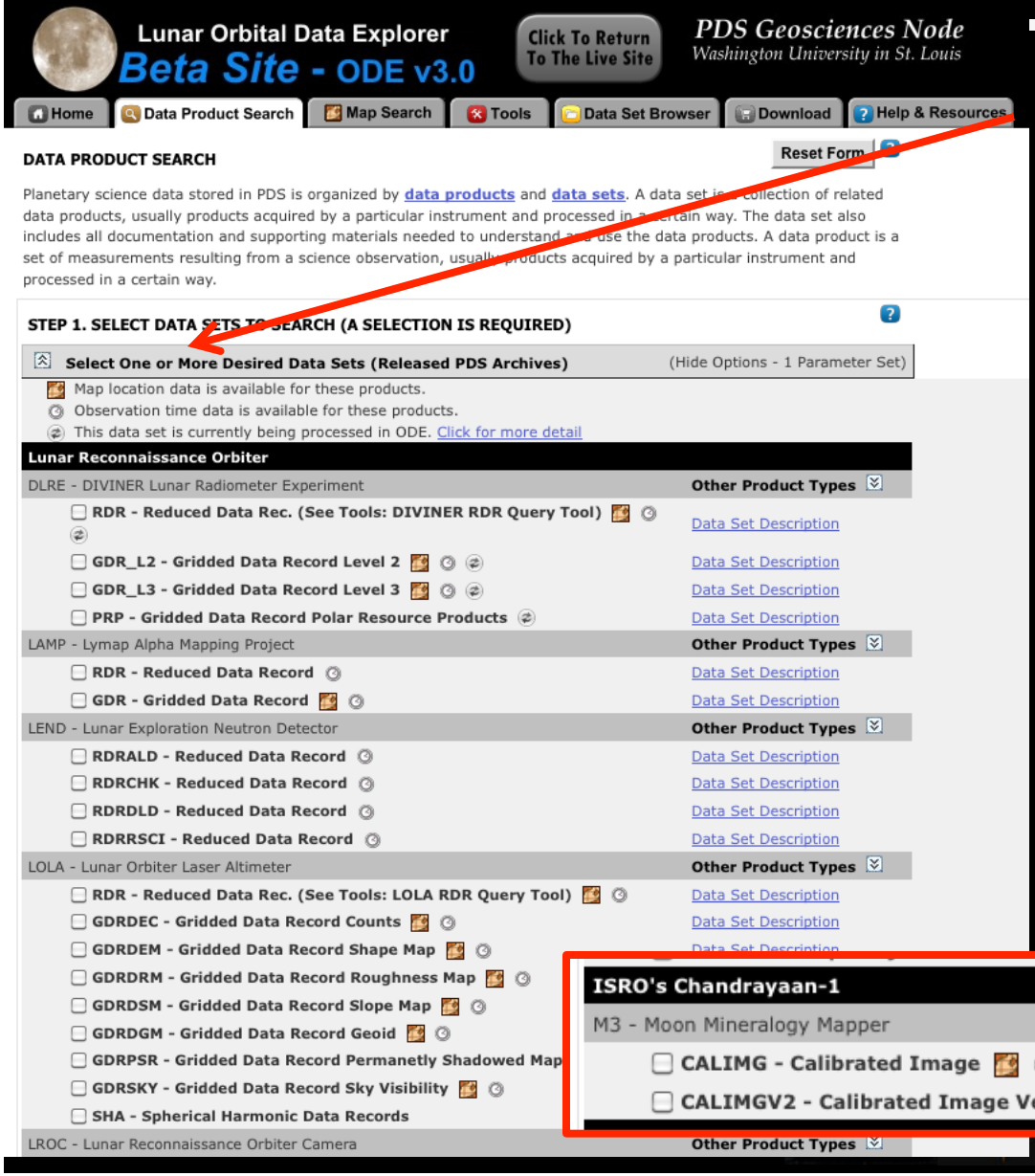
View Results in Table | Select Results on Map Display

Display Product Thumbnails on search results page



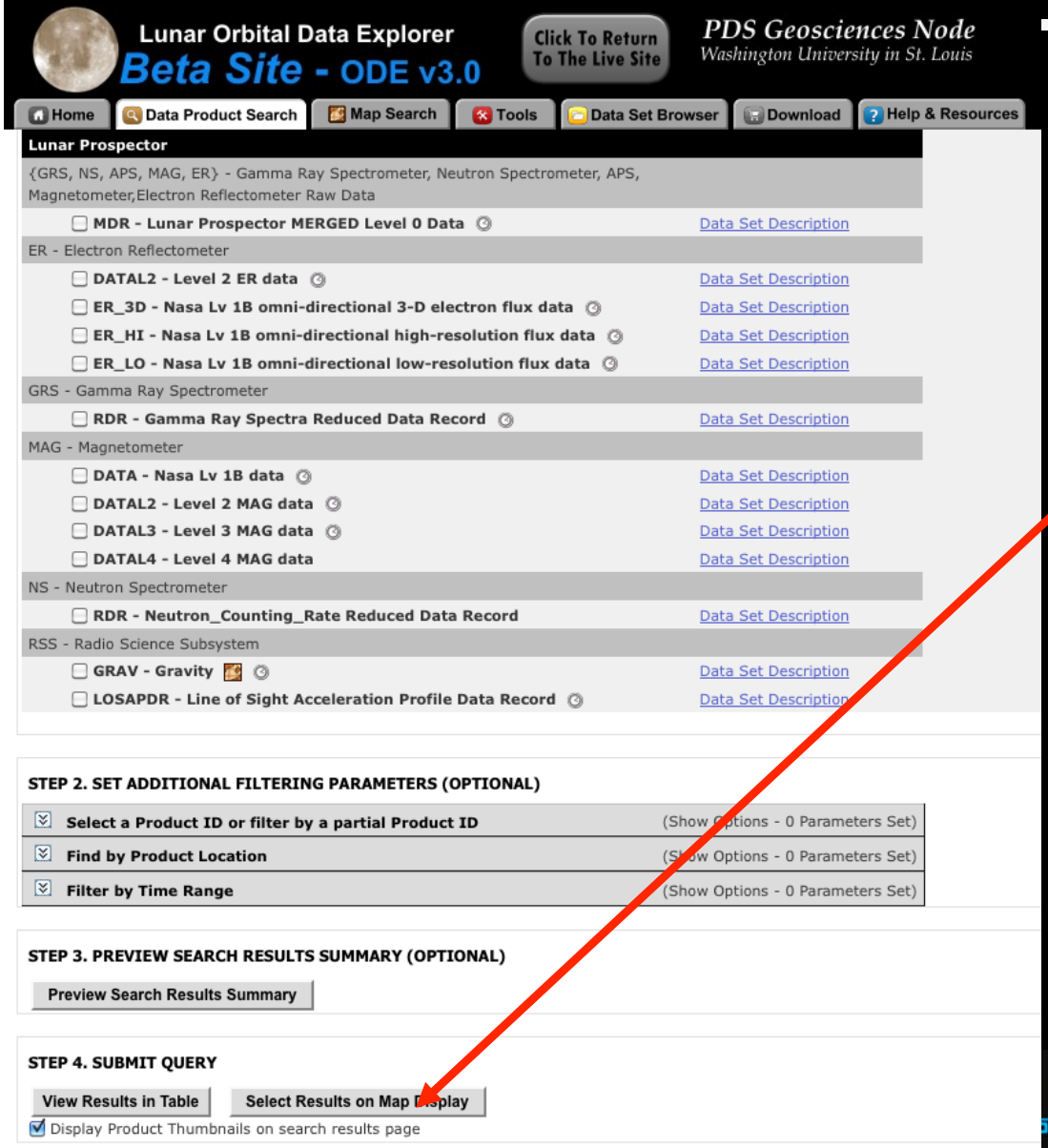
Scroll to bottom of page and check box.

The Lunar Orbital Data Explorer



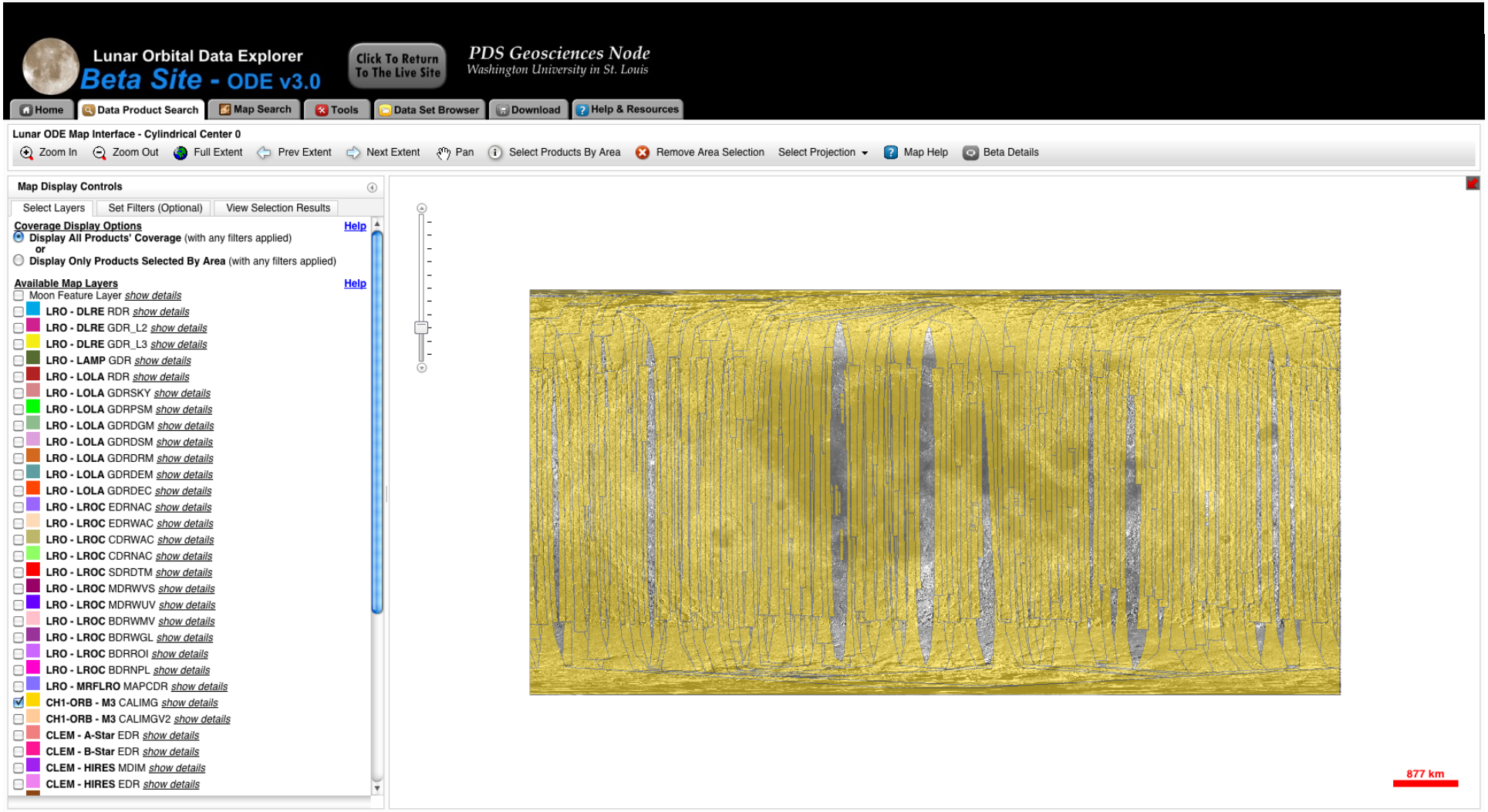
- Click “Select One or More Desired Data Sets” to get a list of all available data, scroll down to get to “ISRO’s Chandrayaan-1”
- Click box next to “CALIMG-Calibrated Image” below “ISRO’s Chandrayaan-1”
- NOTE: When Level 2 data is made available, this option will change (note, it will likely still be “Calibrated Image” with the other options being changed)

The Lunar Orbital Data Explorer

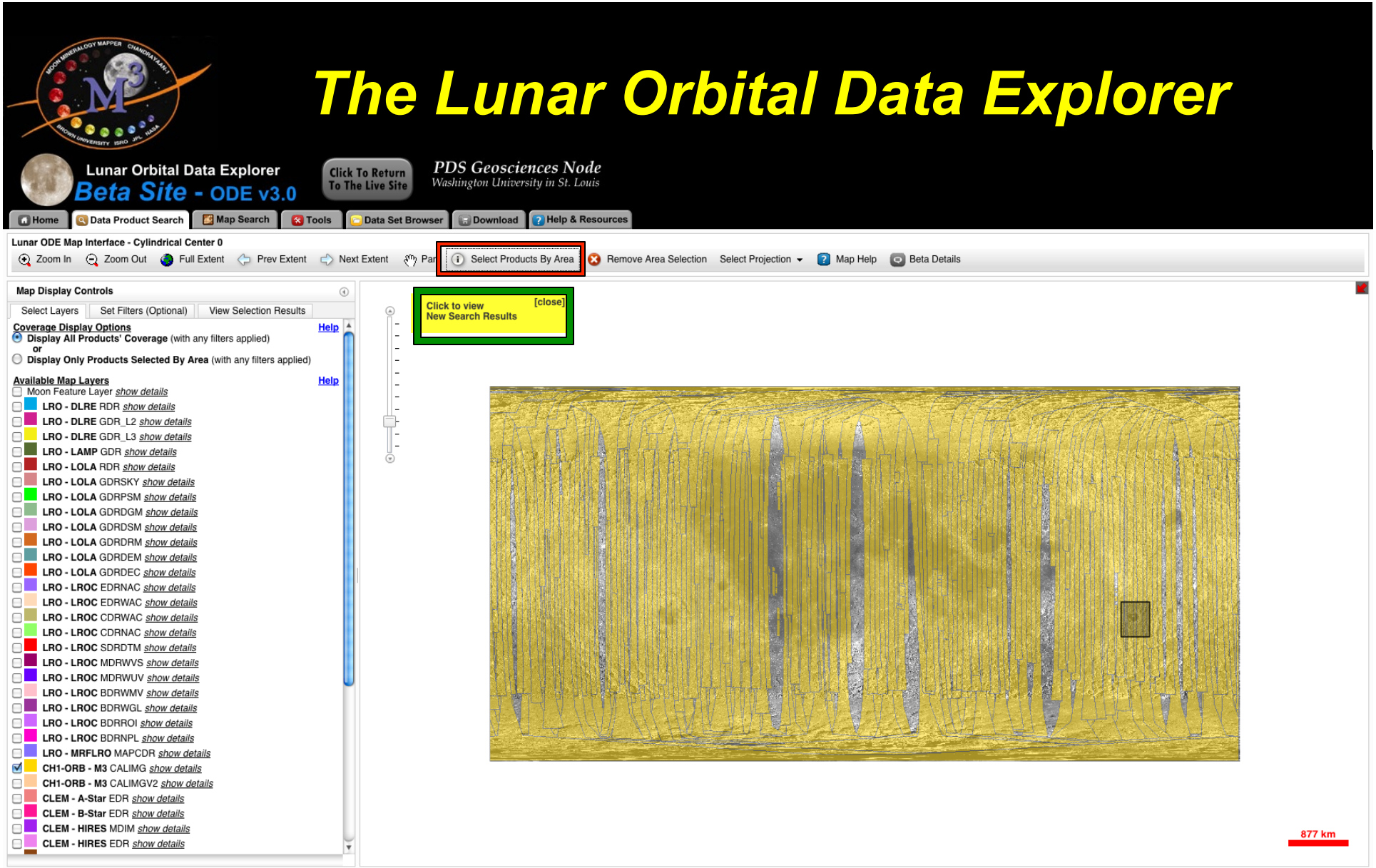


- Scroll to bottom of page, click on “View Results on Map”

The Lunar Orbital Data Explorer

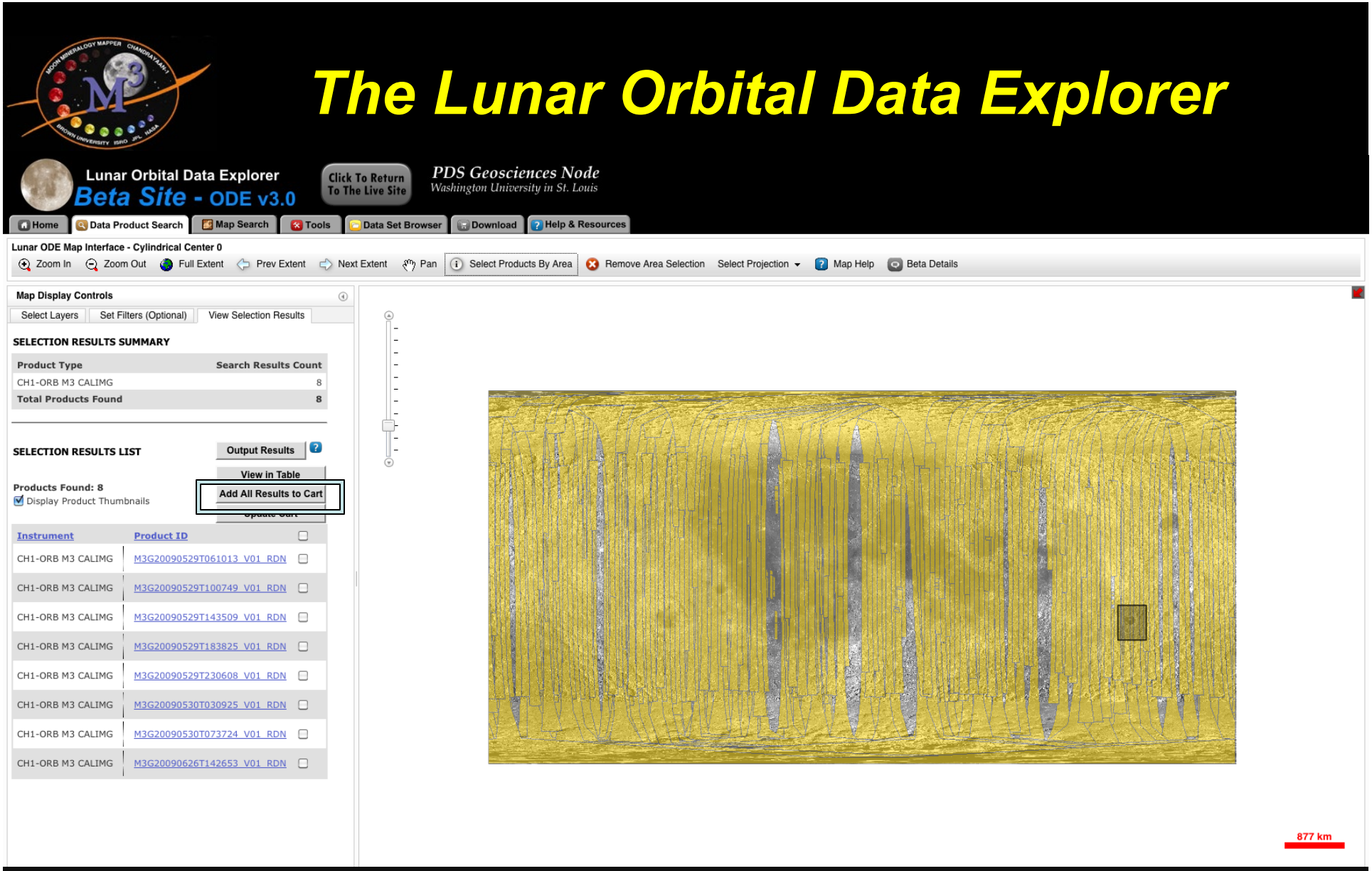


The Lunar Orbital Data Explorer



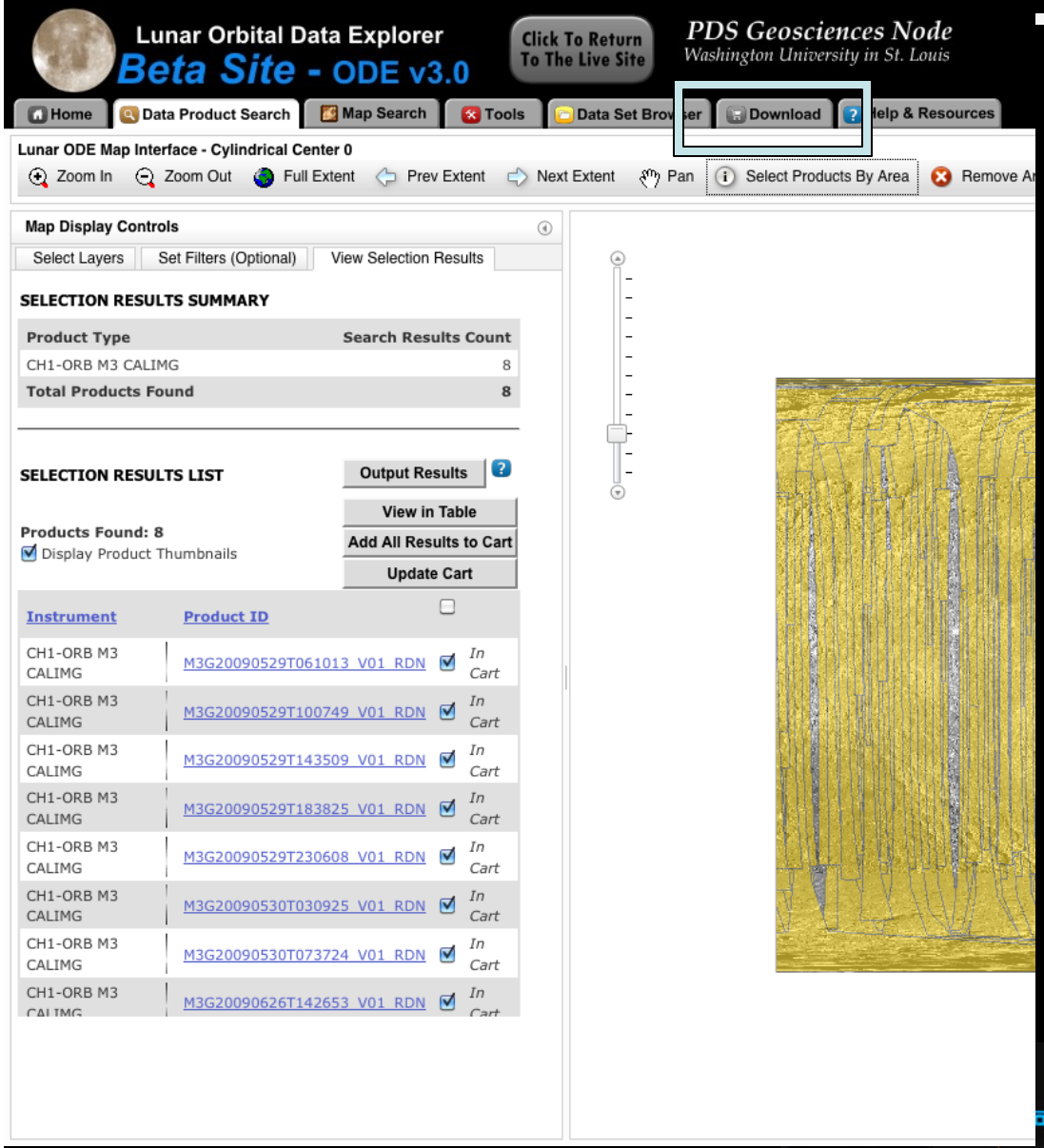
- Click on “Select Products By Area” at top [red], drag over area of interest, then click “Click to View New Search Results” [green]

The Lunar Orbital Data Explorer



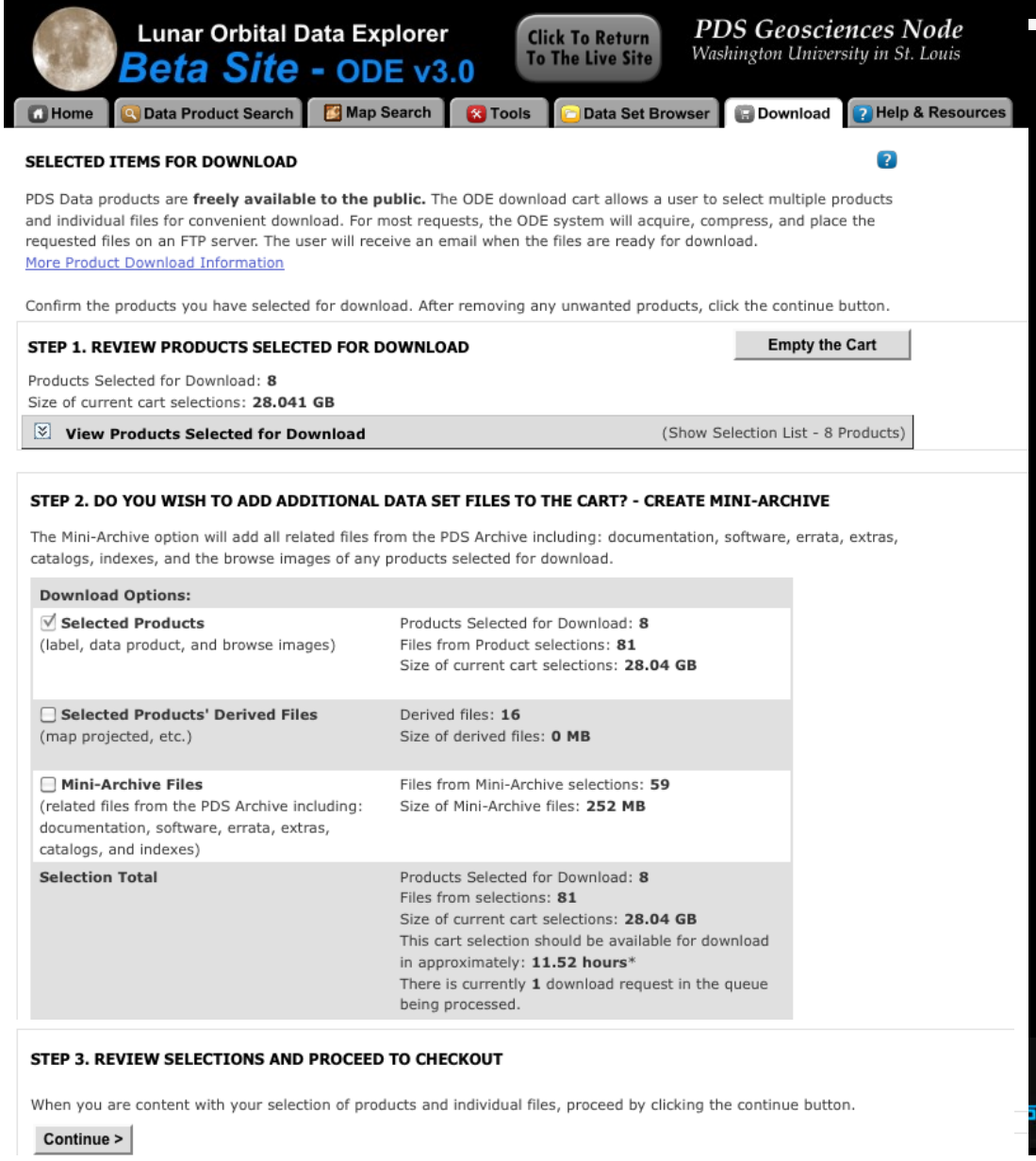
- At left, a list of all cubes located in the area of interest will be shown. Click “Add All Results to Cart.”

The Lunar Orbital Data Explorer



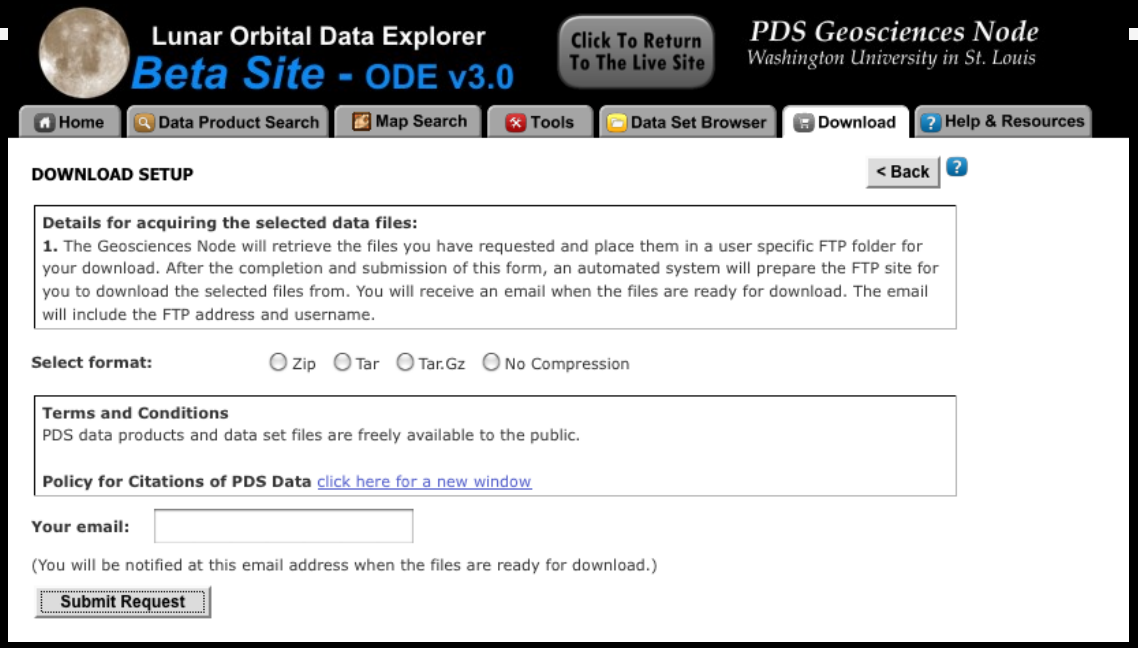
- The files you selected will be "*In Cart*".
- Click on Download tab, at top, to continue to order those files.

The Lunar Orbital Data Explorer



- In the "Download" tab, you'll note that the 8 files are in your Cart
- Option of adding additional files (the Selected Products option is the default)
- Click Continue

The Lunar Orbital Data Explorer



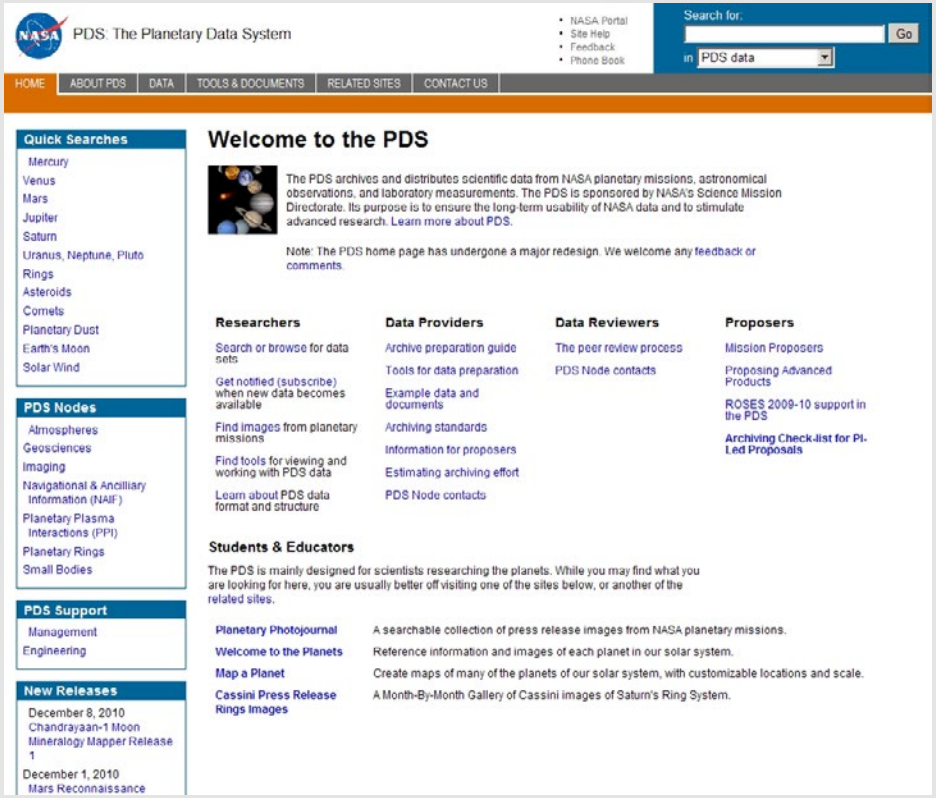
- Finally, you order your files by grouping them together (Zip, Tar, Tar.Gz are the file bundling options)
- Enter your email address, and in a few hours (or so) you will receive an email with an FTP link (odewebmaster@wunder.wustl.edu), it took about 10 hours to get these files

NASA Planetary Data System:

Access to Moon Mineralogy Mapper Archives

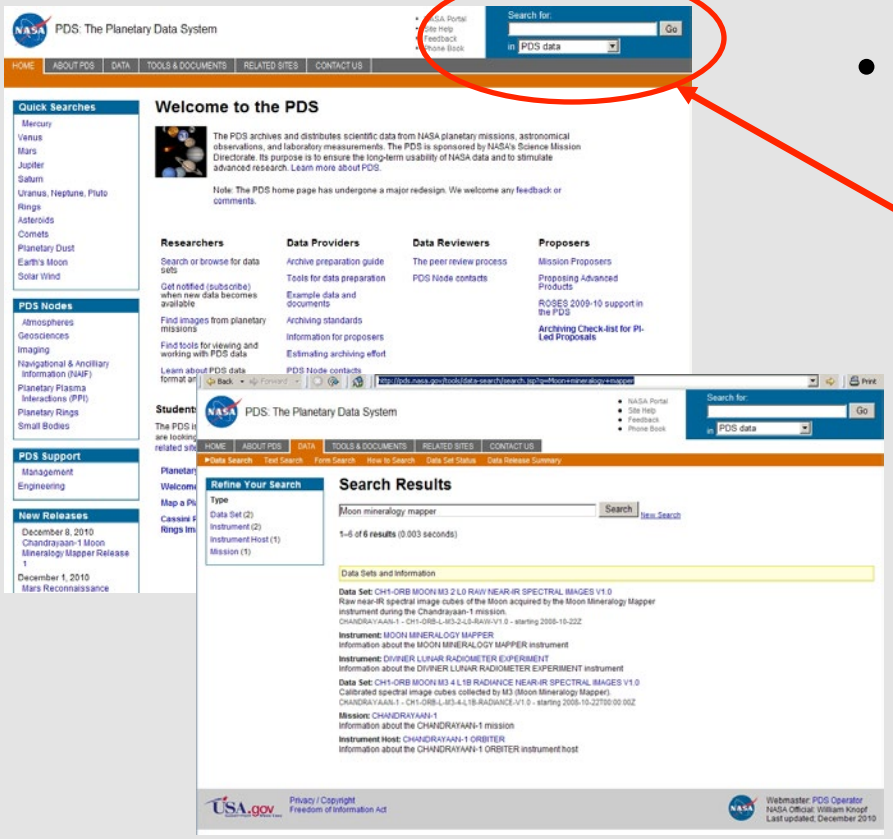
PDS Imaging Node

USGS ASTROGEOLOGY SCIENCE CENTER & JET PROPULSION LABORATORY



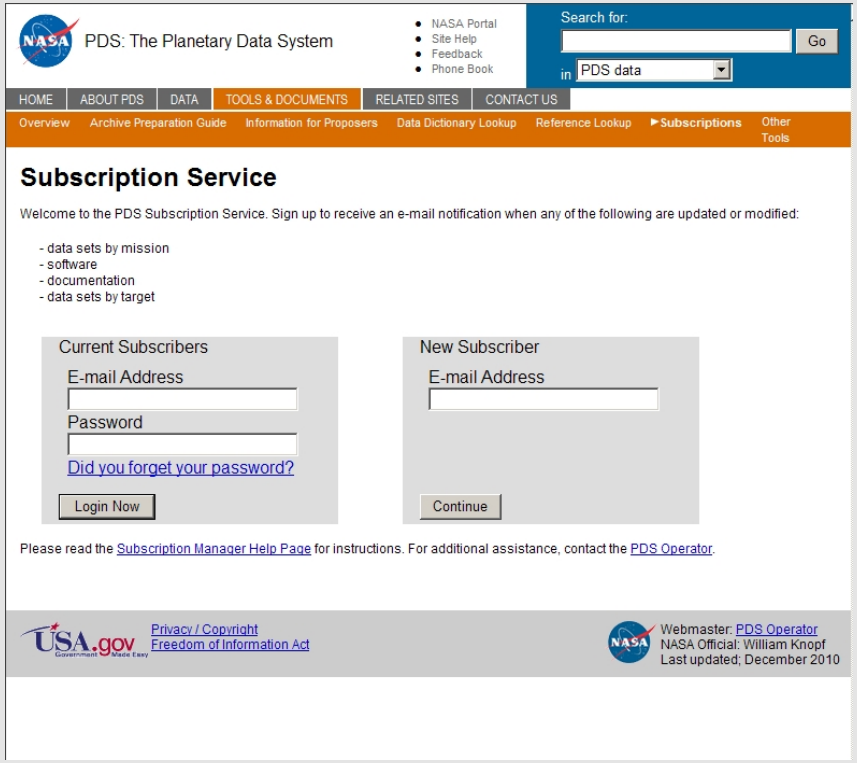
- ***The Planetary Data System*** (PDS) archives and distributes scientific data from NASA planetary missions, astronomical observations, and laboratory measurements.
- Its purpose is to ensure the long-term usability of NASA data and to stimulate advanced research.
- The PDS is sponsored by NASA's Science Mission Directorate.

http://pds.nasa.gov



- ***Find Moon Mineralogy Mapper (M3)data***
  - Search the PDS Data Catalog from the ***PDS Home Page***
  - Within PDS
    - ***Imaging Node***
      - Online Data Volumes
      - Image Atlas Product Search
      - Mission Pages
    - ***Geosciences Node***
      - Orbital Data Explorer

PDS Home Page: http://pds.nasa.gov



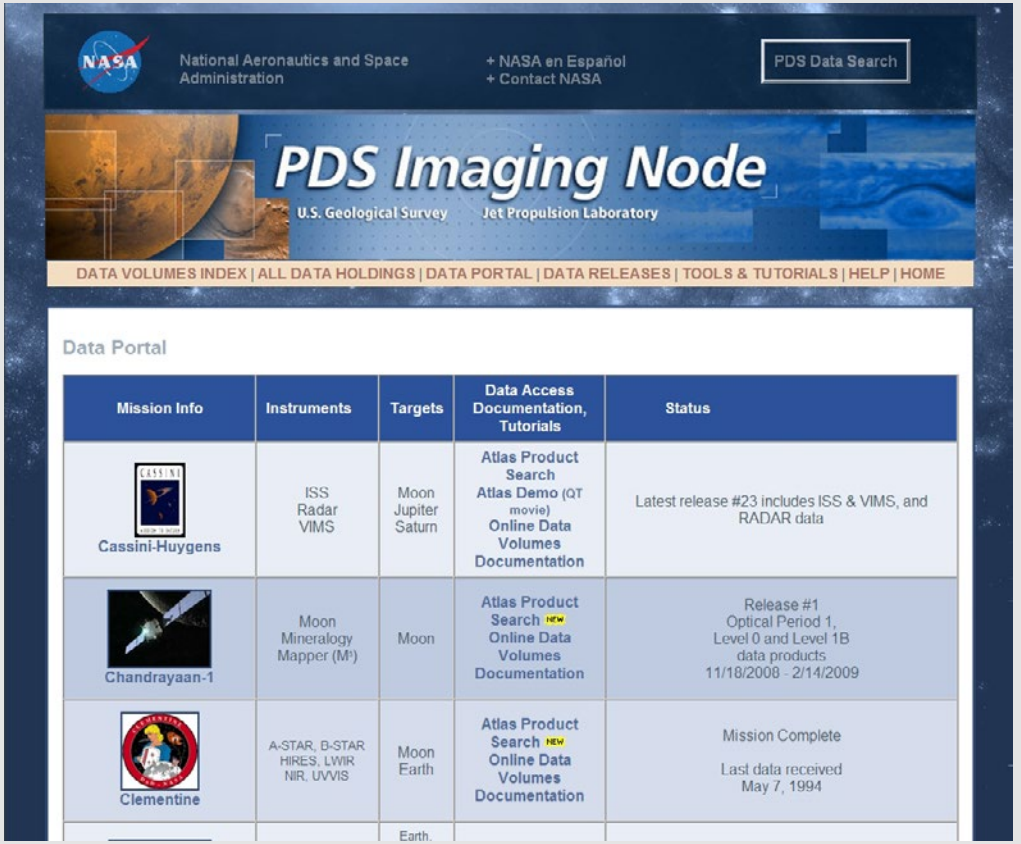
- Subscribe to the ***PDS Subscription Service*** to receive email notification when new data are released

http://pds.jpl.nasa.gov/tools/subscription_service/top.cfm

NASA PDS Imaging Node:
Access to M3 Archives

Data Portal

- **Pointers to data and mission information**
  - Atlas Product Search
  - Online volumes
  - Archive documentation
  - Mission & instrument overview
- **Data release status**



http://img.pds.nasa.gov/portal/

Planetary Image Atlas

- Mission-specific: search, browse & download by
  - Product type
  - Lat/Long
  - Orbit
  - Time
  - Etc
- Cross-mission: search, browse & download by:
  - Target
  - Lat/Long
- User tutorial available @ 'Intro' tab

http://pds-imaging.jpl.nasa.gov/search

Questions?