M^3 Data Tutorial

Hosted by the PDS and M^3 Science Team

2010 AGU

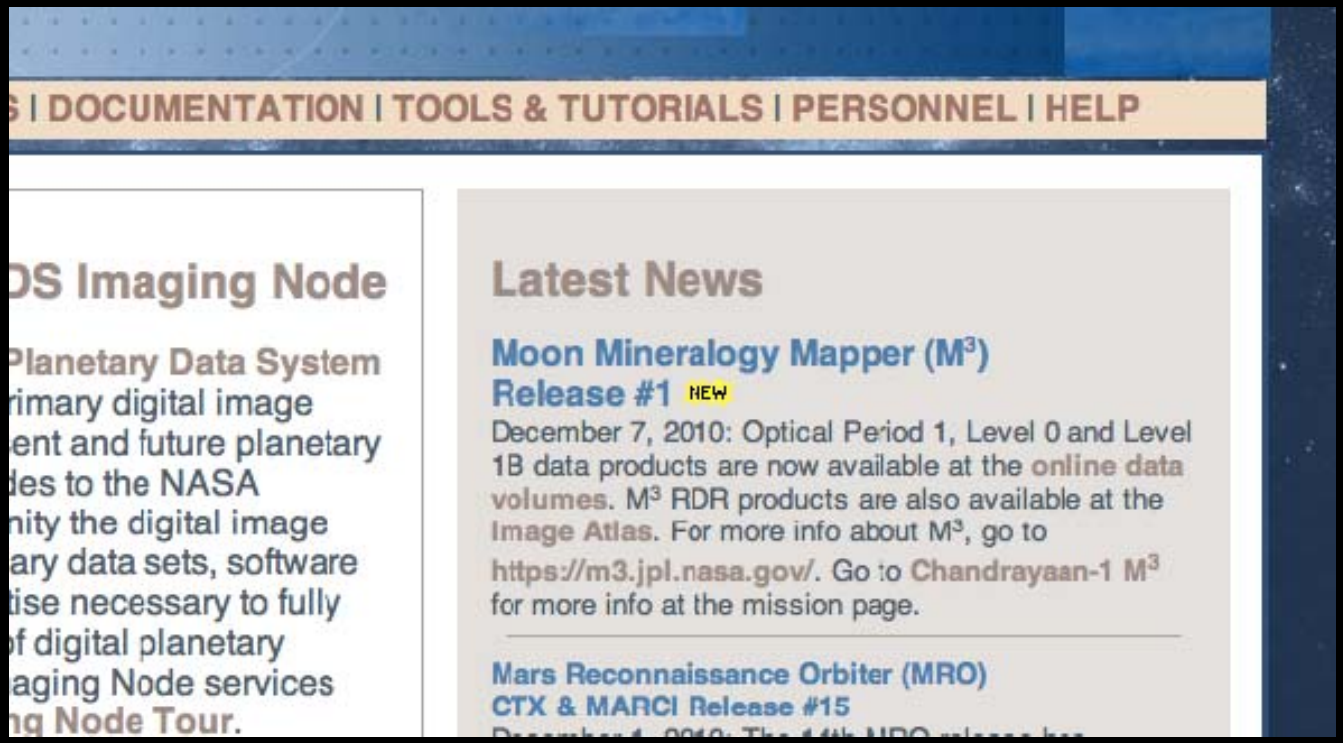
December 13, 2010

Tutorial Goals

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

Updates

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



How To Find M^3 Data

Noah E. Petro

M^3 Data Tutorial at AGU

December 13, 2010

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:
  - The Lunar Orbital Data Explorer hosted by the PDS Geosciences Node at Wash. U.
  - PDS Imaging Node hosted by JPL.

- Requires web connection, web browser (tested using Safari 5.0.2 and Firefox 3.6.12)

http://m3dataquest.jpl.nasa.gov/

M3 – Moon Mineralogy Mapper – M3 Data

http://m3dataquest.jpl.nasa.gov/

M3 – Moon Mineralogy Mapper – ...

MOON MINERALOGY MAPPER
M3 Data

M^3 Data

Ask Us

Get M^3 Data

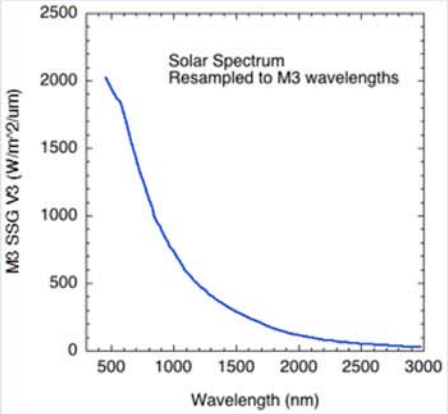
M^3 data products are free and available to the science community and general public. M^3 data is distributed by the NASA Planetary Data System (PDS) Imaging Node. At the PDS, you will find information and tools designed to help you find the M^3 data you need.

Online Data Volumes

Planetary Image Atlas for M^3 data products

Lunar Orbital Data Explorer

The Solar Spectrum Resampled to M^3 wavelengths for supplemental use with the M3 PDS Archive is available for download *here*.



Got a Question? Ask us!

Got a question regarding M^3 data products or documentation? Post your question on the **Ask Us** web page and the M^3 Project will endeavor to provide the answer.

Open "http://m3.jpl.nasa.gov/" in a new tab

"Ask Us"

M3 – Moon Mineralogy Mapper – Ask Us

http://m3dataquest.jpl.nasa.gov/ask_us.html

M3 – Moon Mineralogy Mapper – ...

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MOON MINERALOGY MAPPER

Ask Us - Questions or Comments

M³ Data

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

PRIVACY/COPYRIGHT | FEEDBACK

Site Manager: Mary White
Webmaster: Sarah Lundeen

The Lunar Orbital Data Explorer

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

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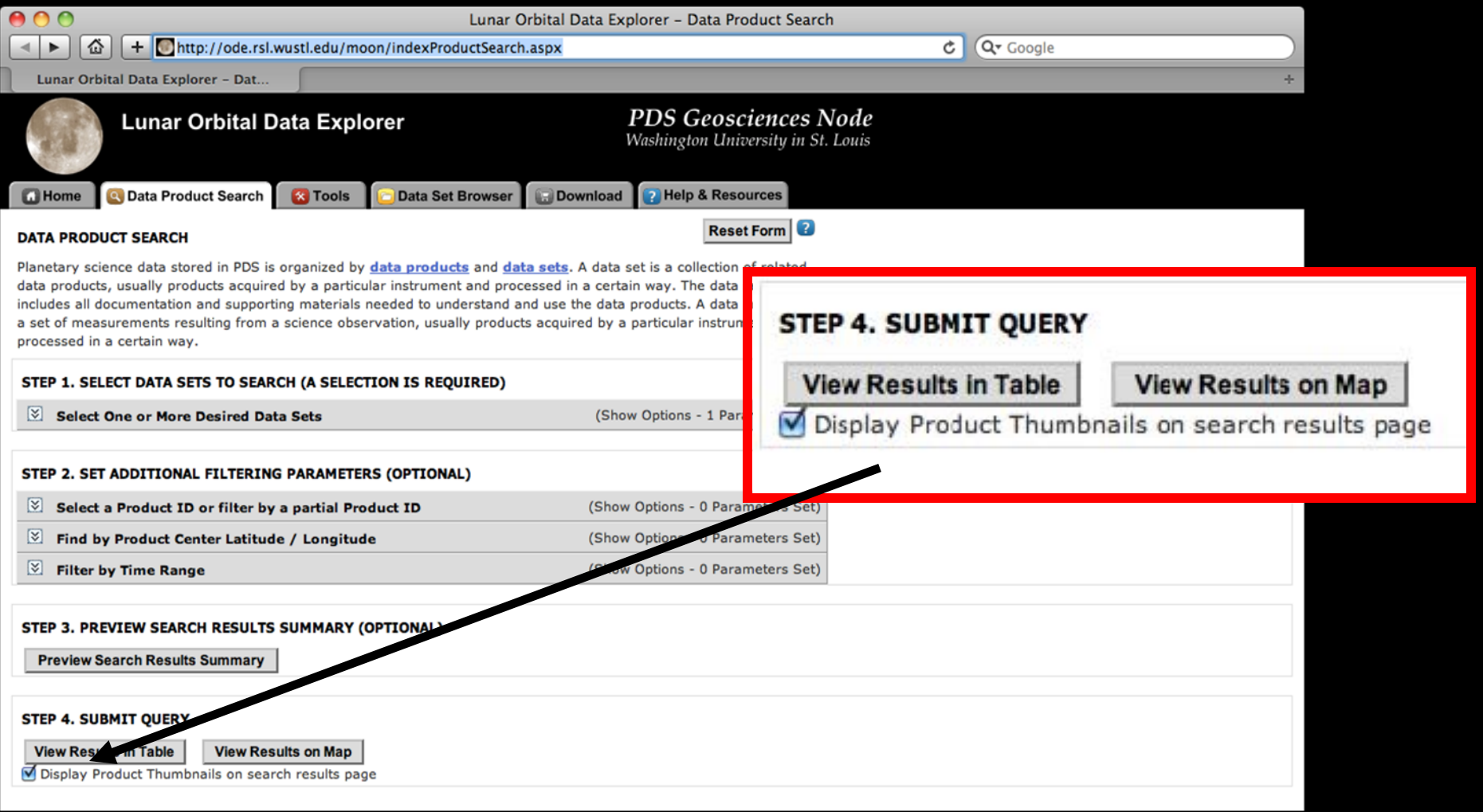
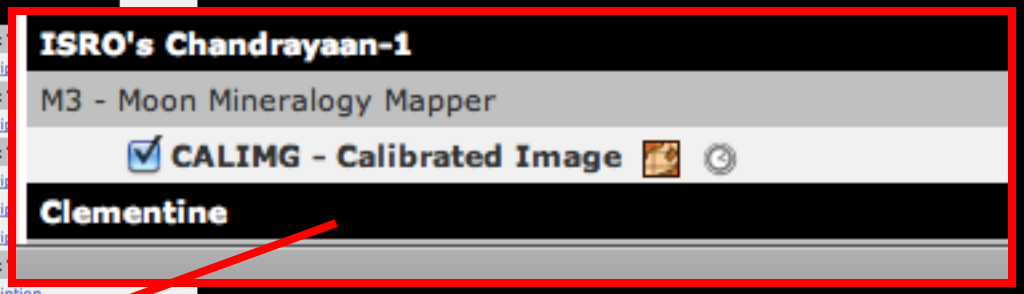
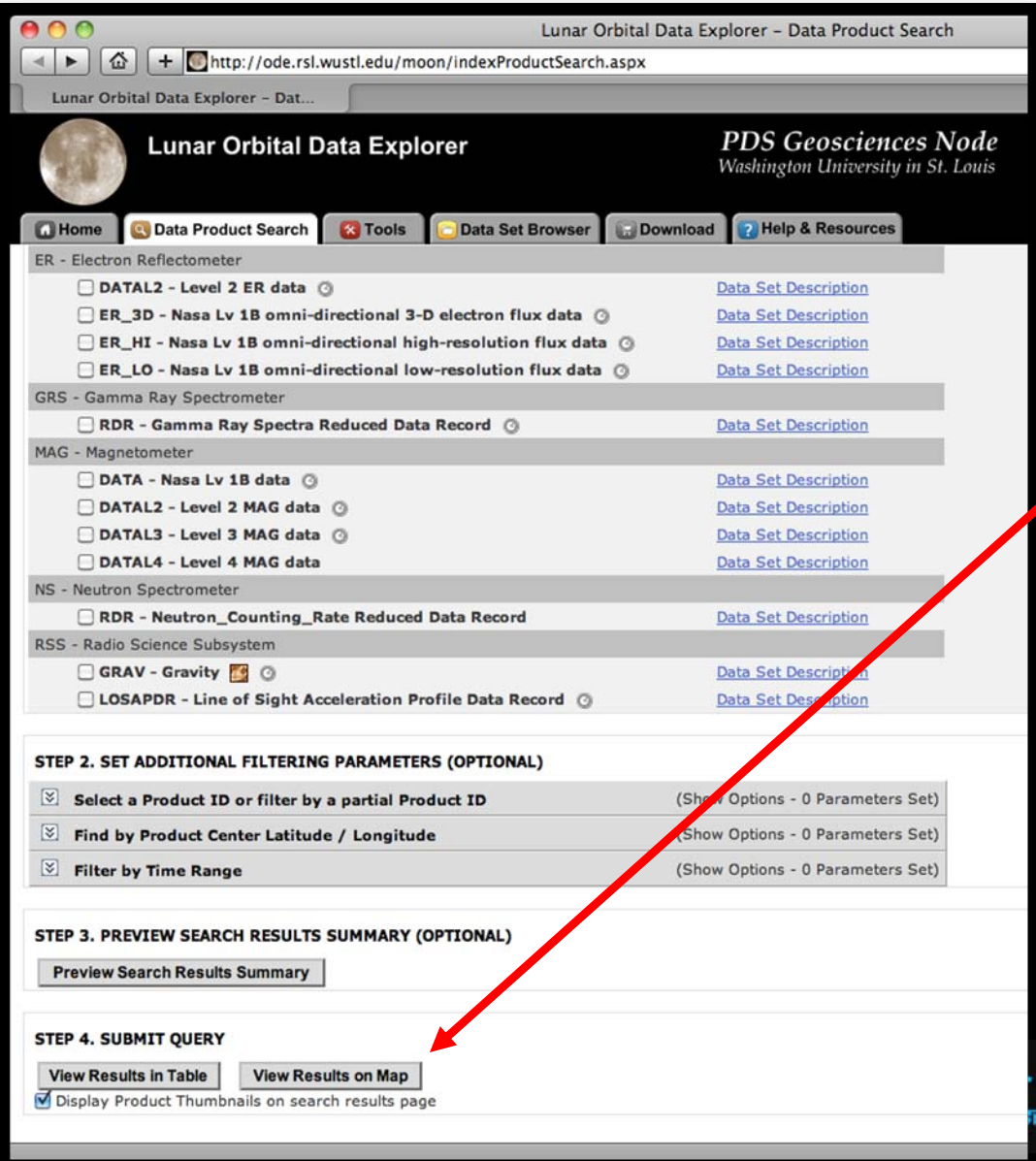


The Lunar Orbital Data Explorer



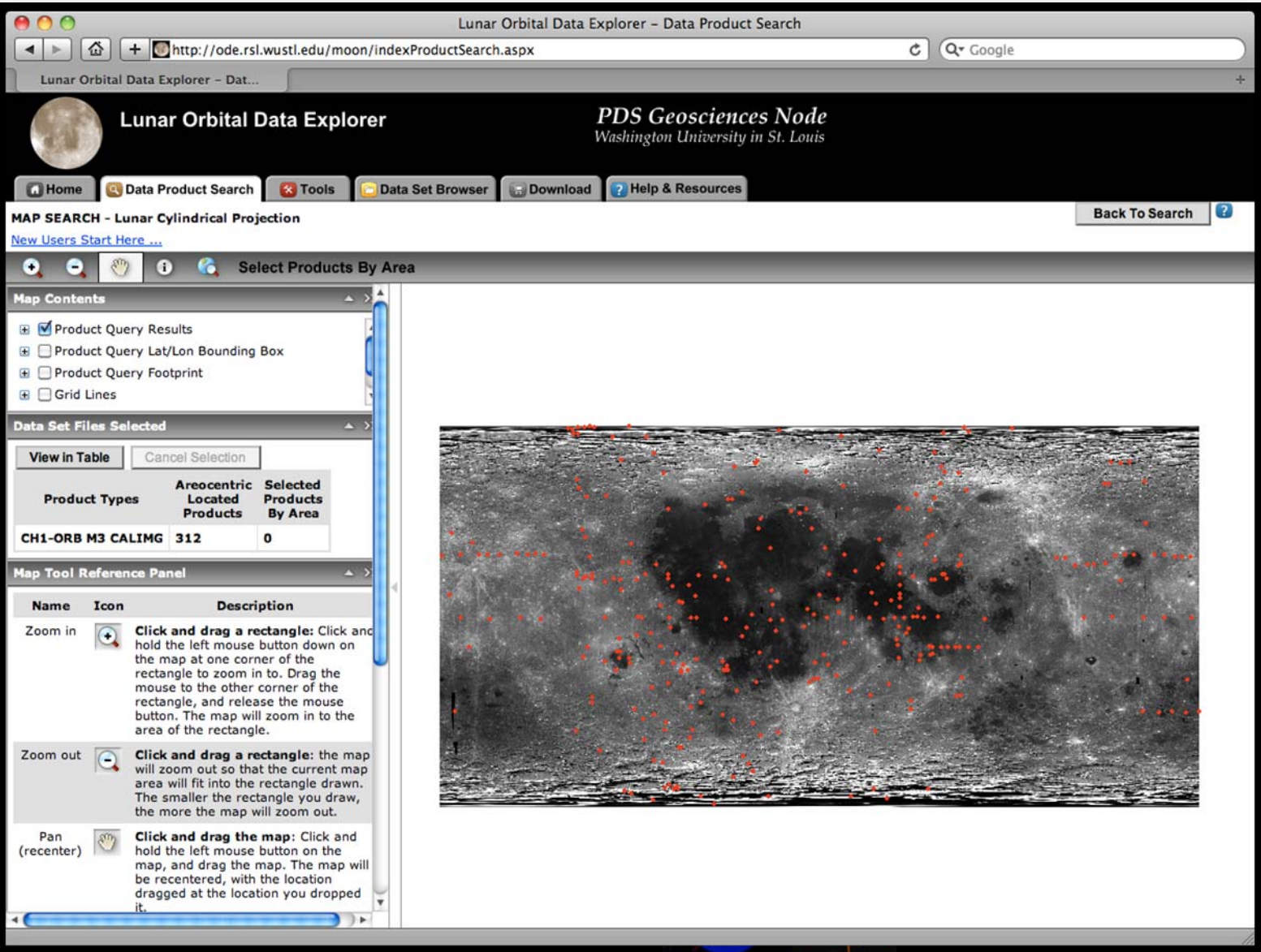
- Click “Select One or More Desired Data Sets”
- Check box next to “CALIMG-Calibrated Image” below “ISRO’s Chandrayaan-1”

The Lunar Orbital Data Explorer

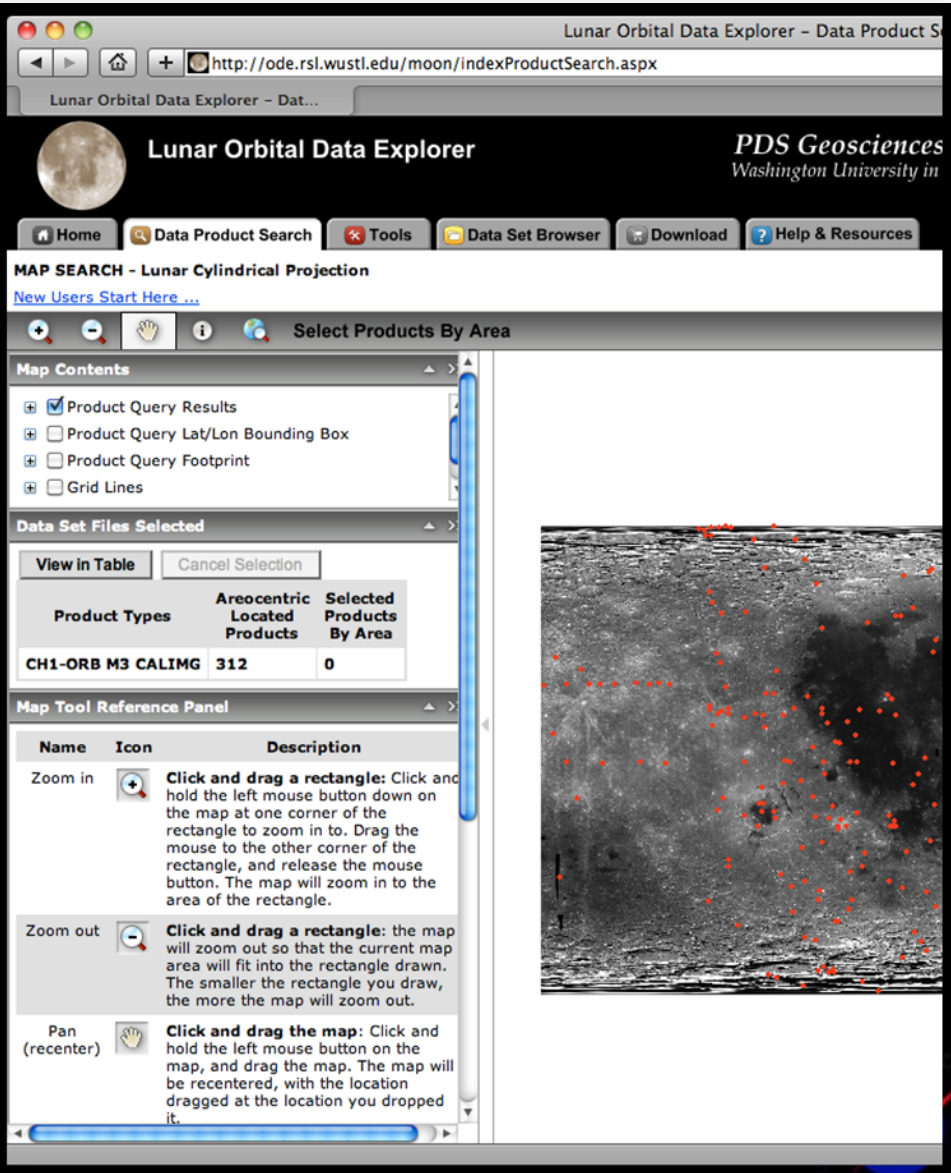


- Scroll to bottom of page, click on “View Results on Map”

The Lunar Orbital Data Explorer

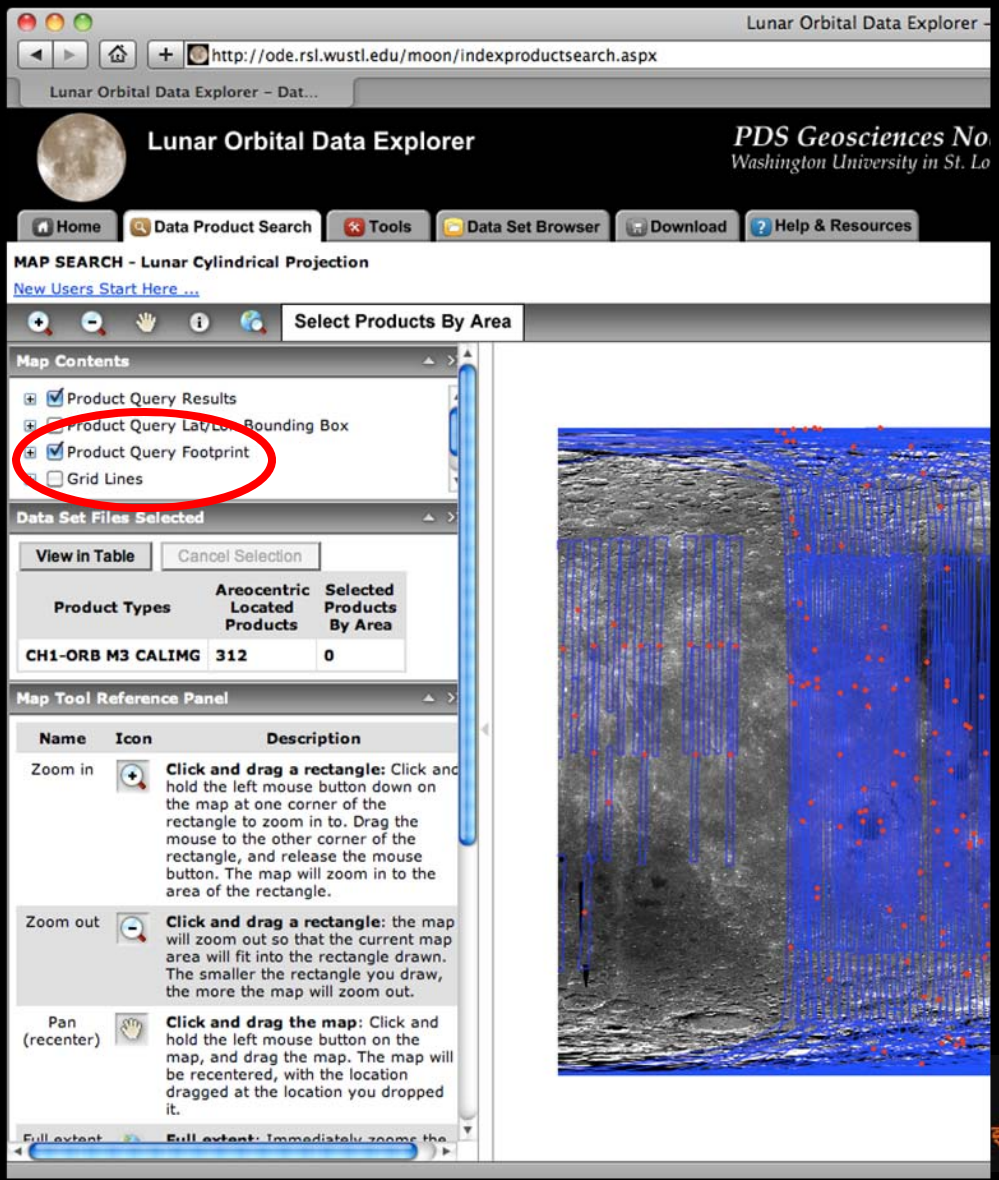


The Lunar Orbital Data Explorer



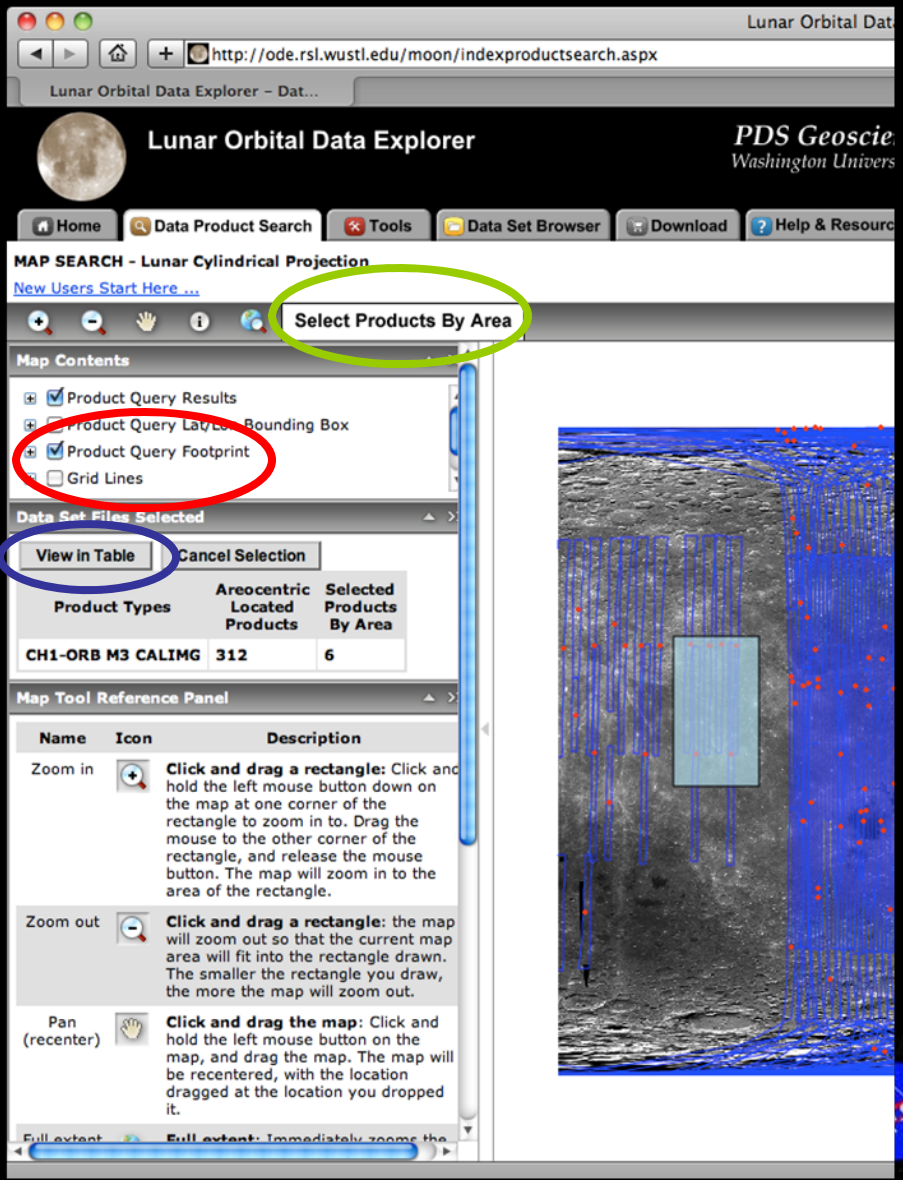
- Click box next to “Product Query Footprint” to see the outline of each data strip.

The Lunar Orbital Data Explorer



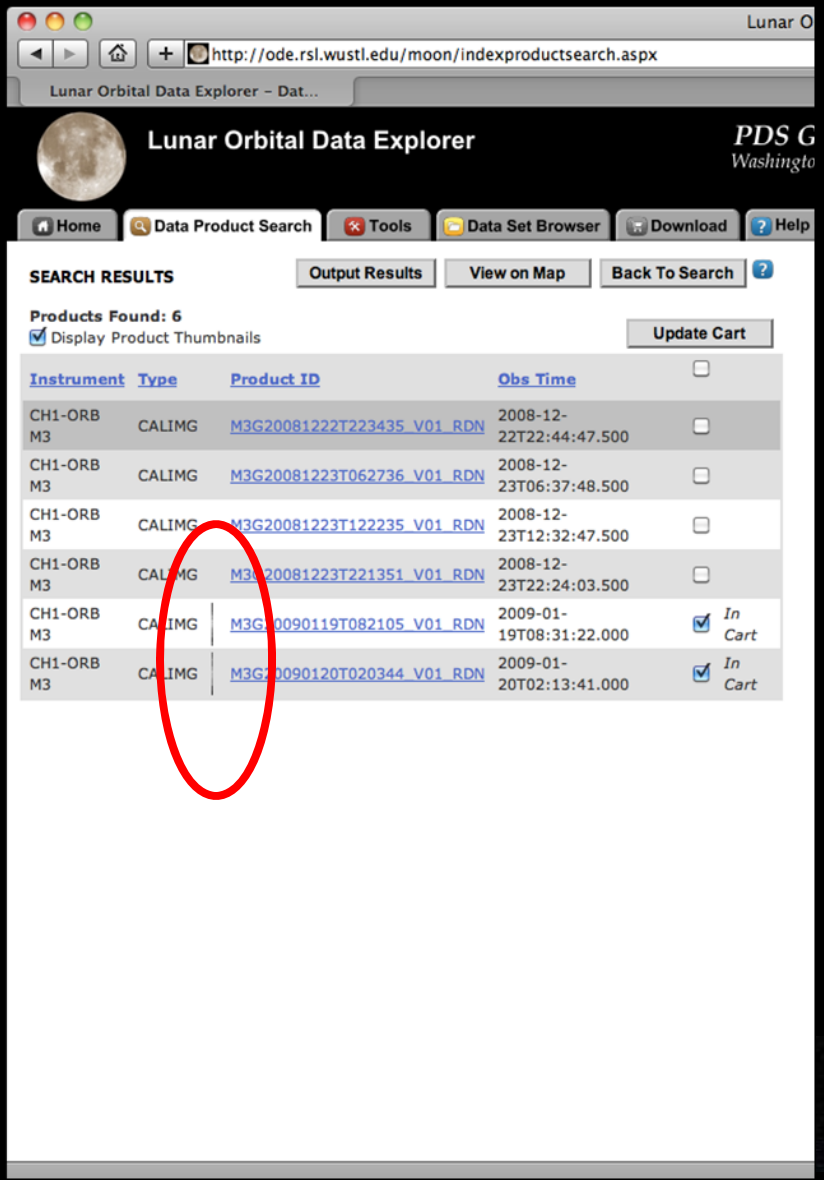
- Click box next to “Product Query Footprint” to see the outline of each data strip.
- Click “Select Products By Area”, cursor becomes a cross-hair…

The Lunar Orbital Data Explorer



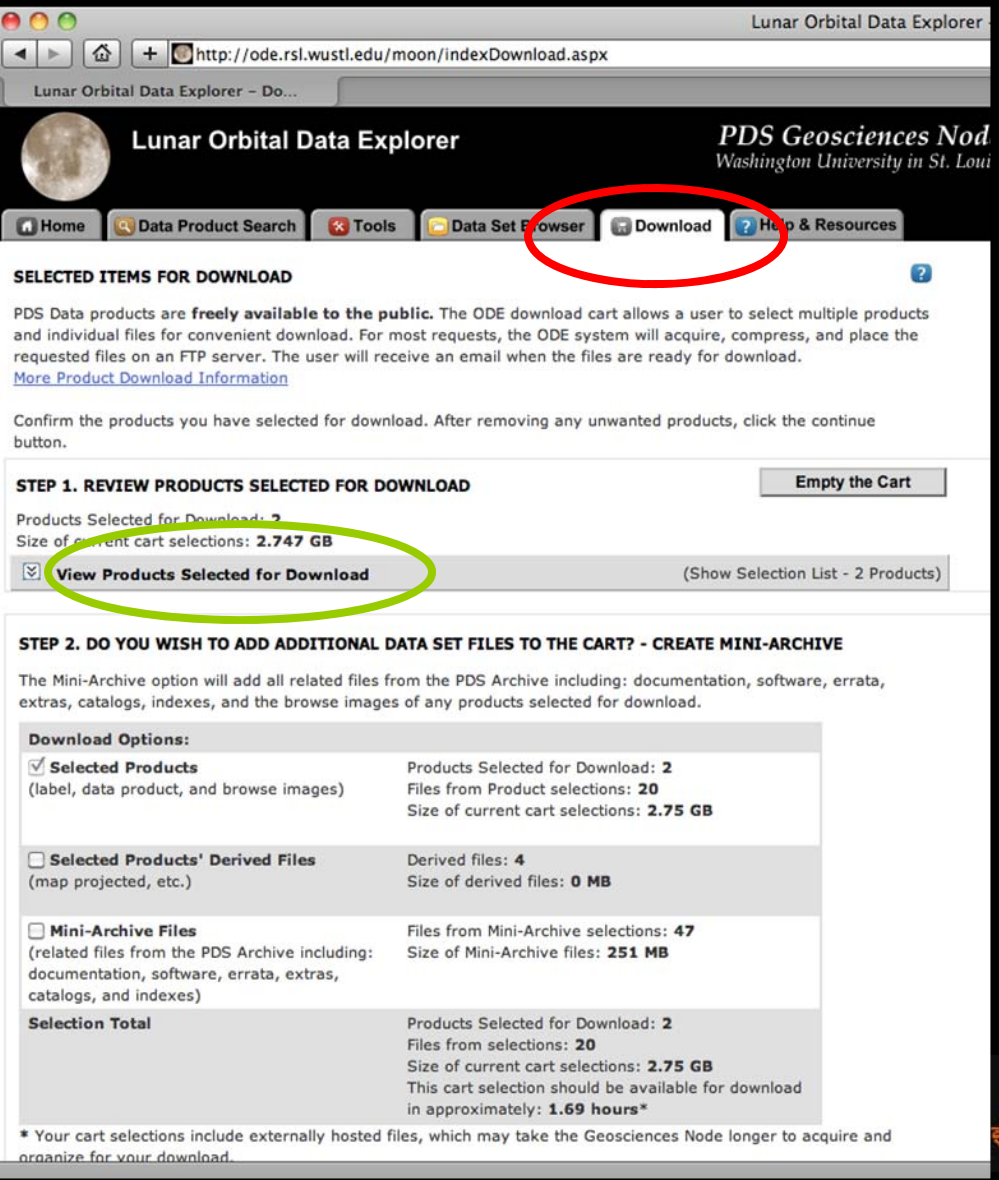
- You can drag over the strips you want, <u>be sure to cover the center red point.</u>
  - 6 products were selected
  - If you select "View In Table"…

The Lunar Orbital Data Explorer



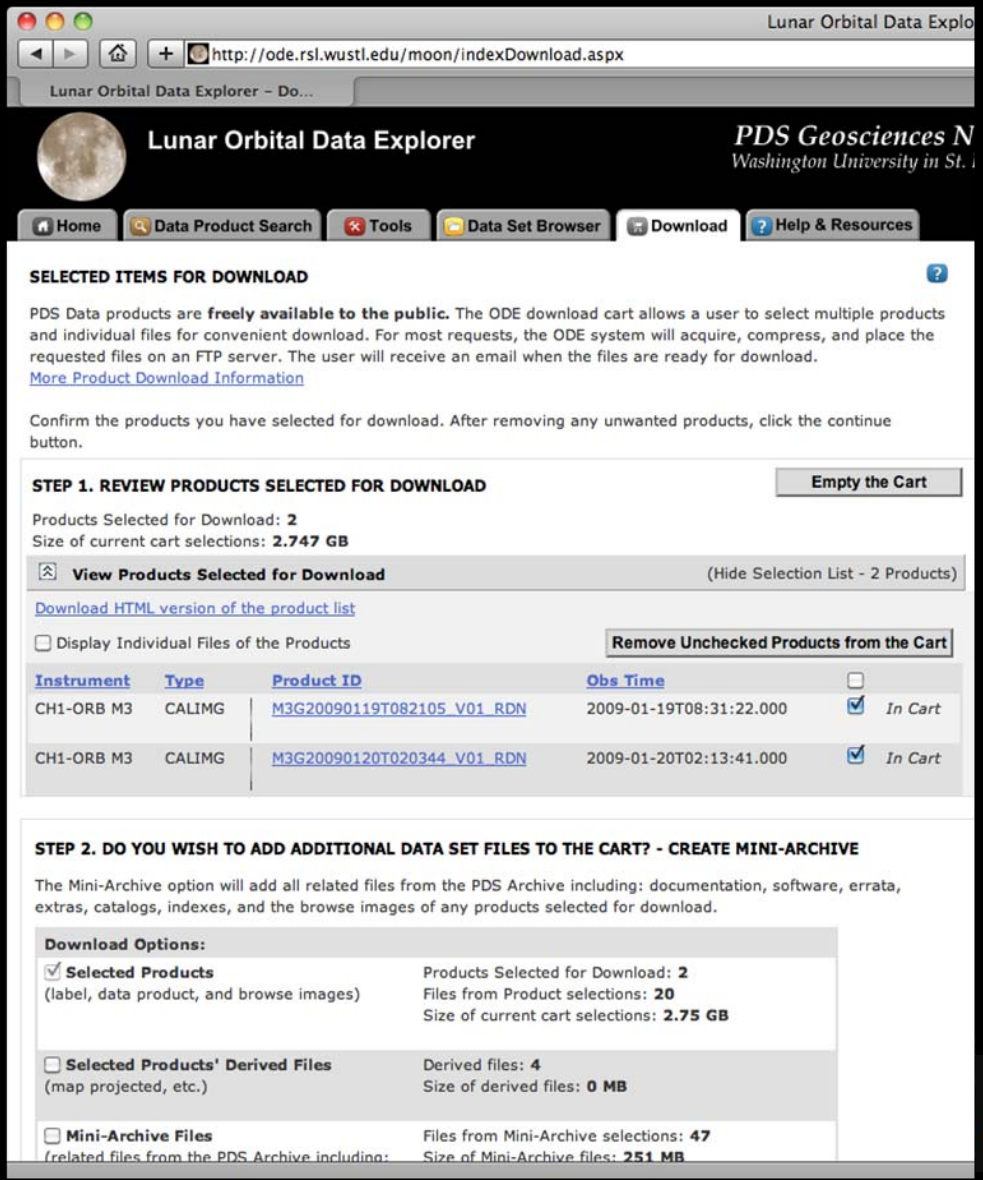
- Of that 6, only 2 have thumbnail images, the other 4 are dark images, taken early in the mission
- Click on the files you want to obtain

The Lunar Orbital Data Explorer



- Click on the “Download” tab, you’ll note that the two files are in your Cart
- Select the “View Products Selected for Download”

The Lunar Orbital Data Explorer



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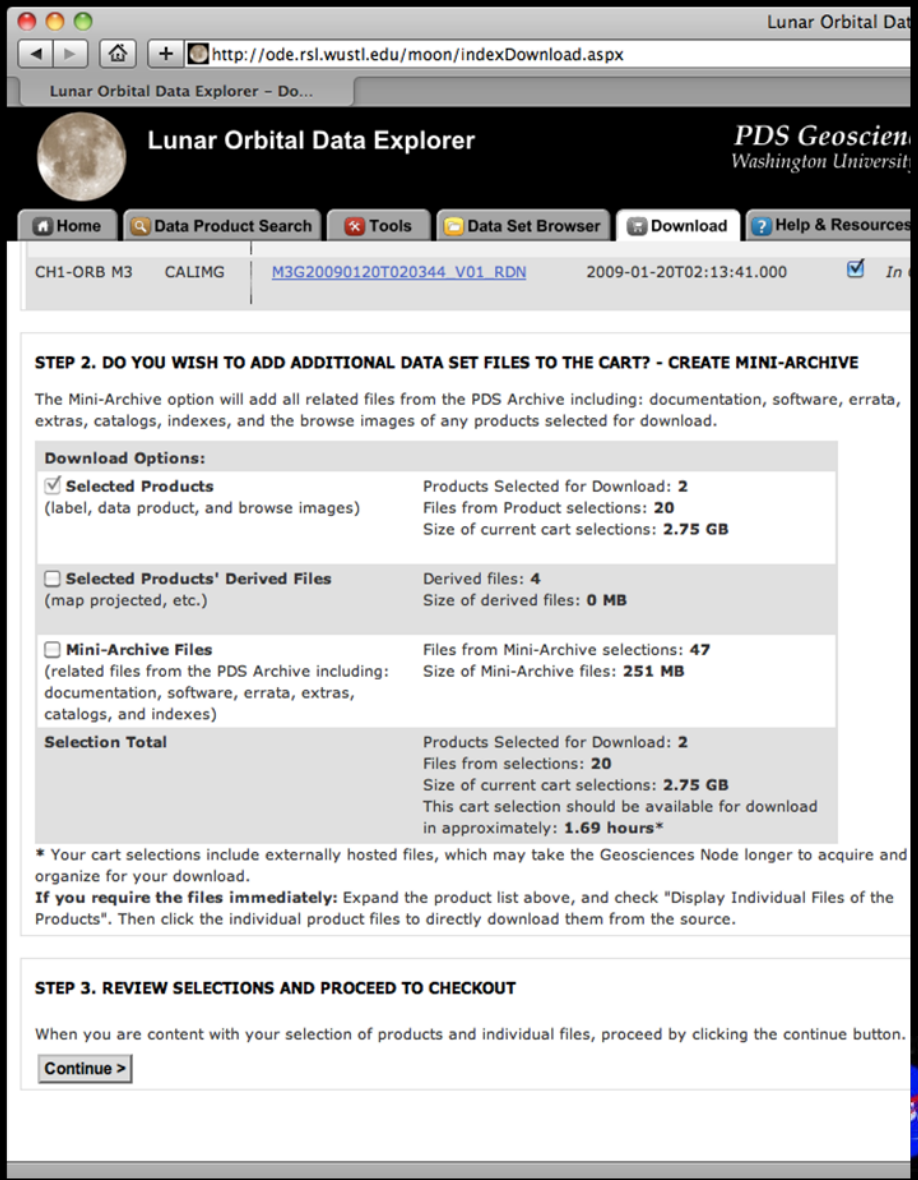
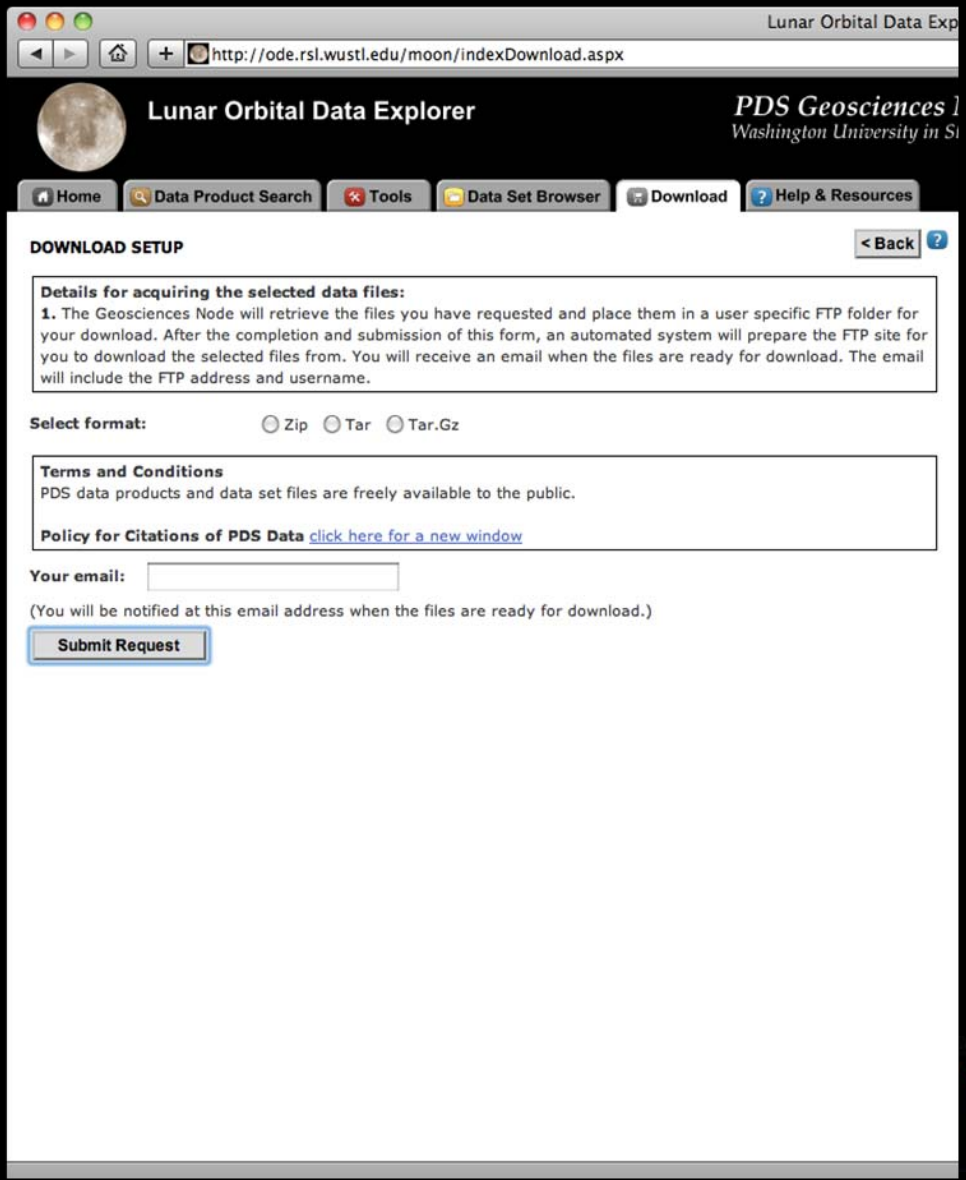
The Lunar Orbital Data Explorer



- Scrolling down, you have the option of adding several additional files (the Selected Products option is the default)
- Click Continue

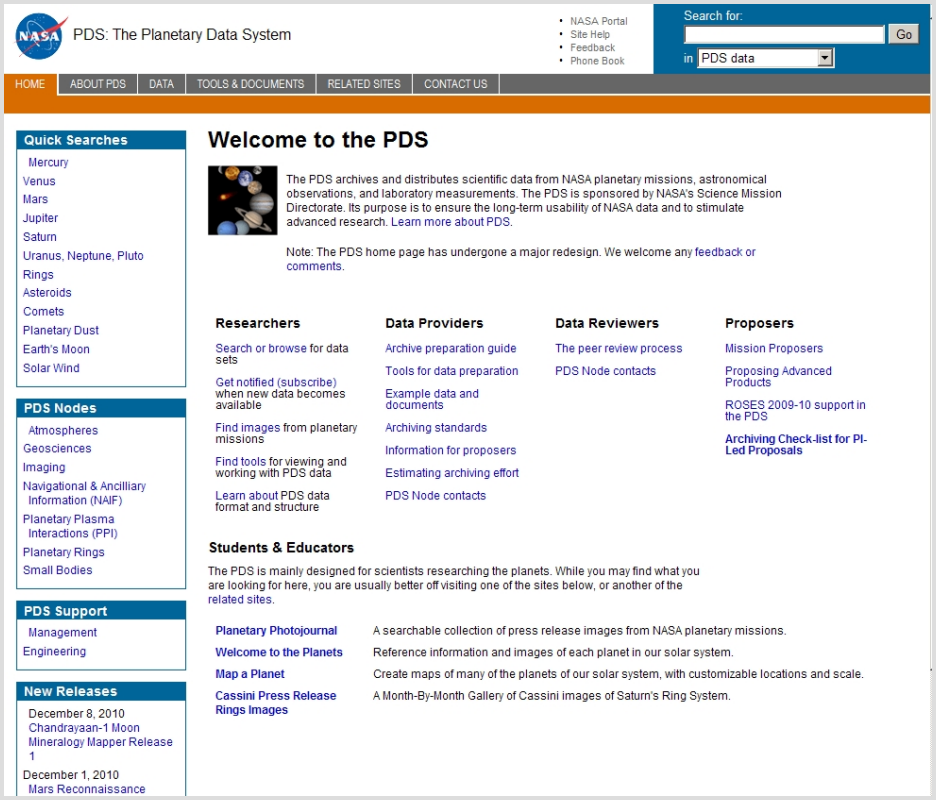
The Lunar Orbital Data Explorer



- Finally, you order your files (Zip, Tar, Tar.Gz are the file bundling options)
- Add your email address, and in a few hours (or so) you will receive an email with an FTP link (odewebmaster@wunder.wustl.edu)

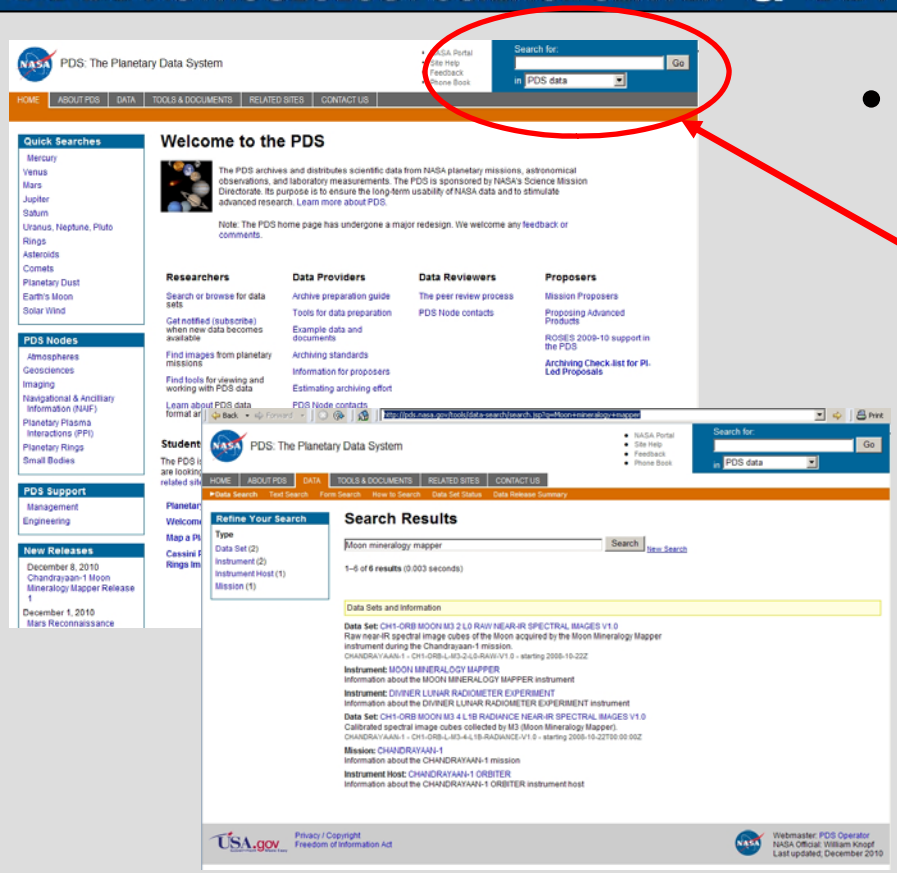
NASA Planetary Data System:

Access to Moon Mineralogy Mapper Archives



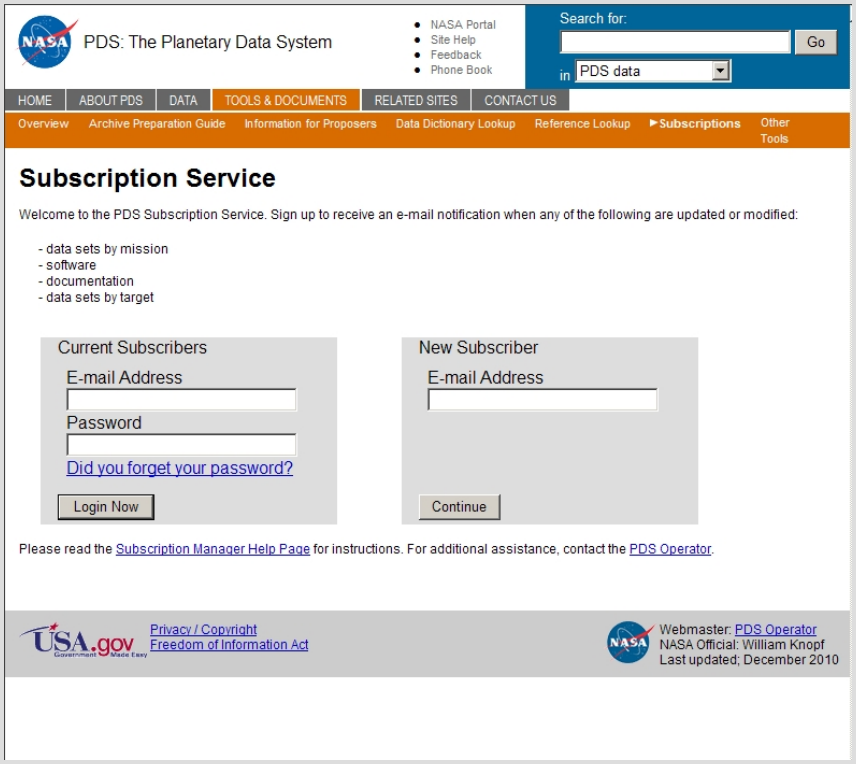
- ***The Planetary Data System*** (PDS) archives and distributes scientific data from NASA planetary missions, astronomical observations, and laboratory measurements.
- Its purpose is to ensure the long-term usability of NASA data and to stimulate advanced research.
- The PDS is sponsored by NASA's Science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



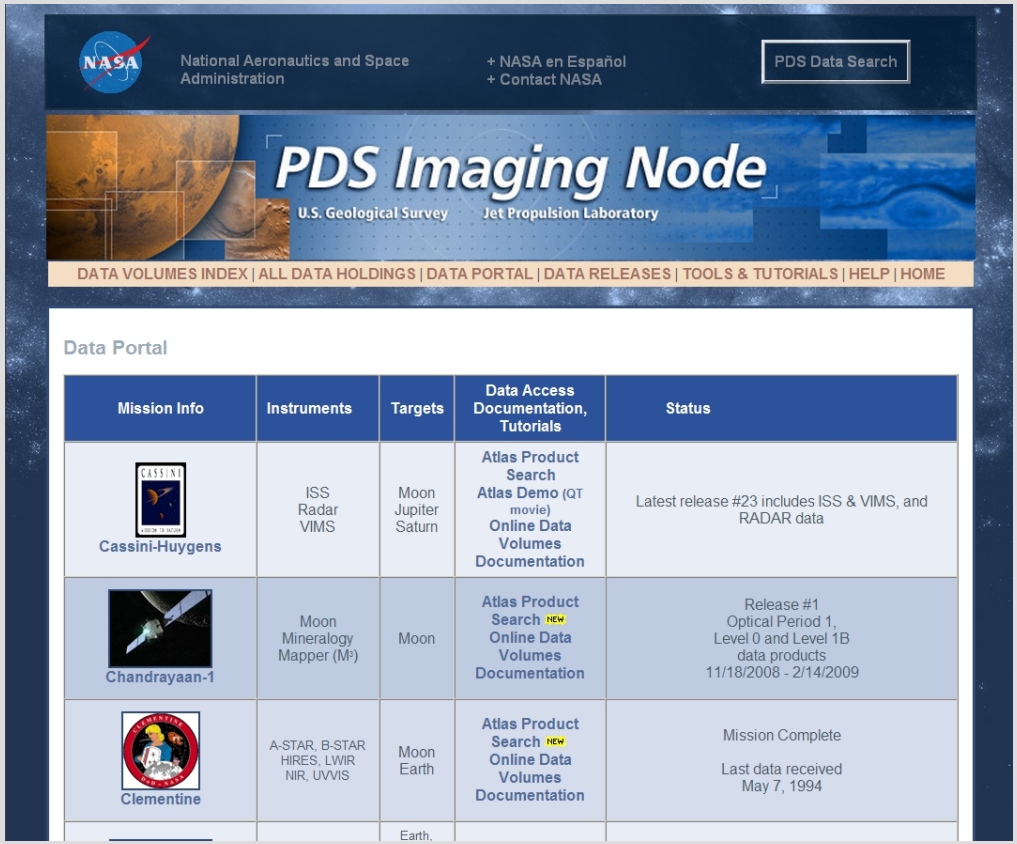
- Subscribe to the ***PDS Subscription Service*** to receive email notification when new data are released

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

NASA PDS Imaging Node:
Access to M3 Archives

Data Portal

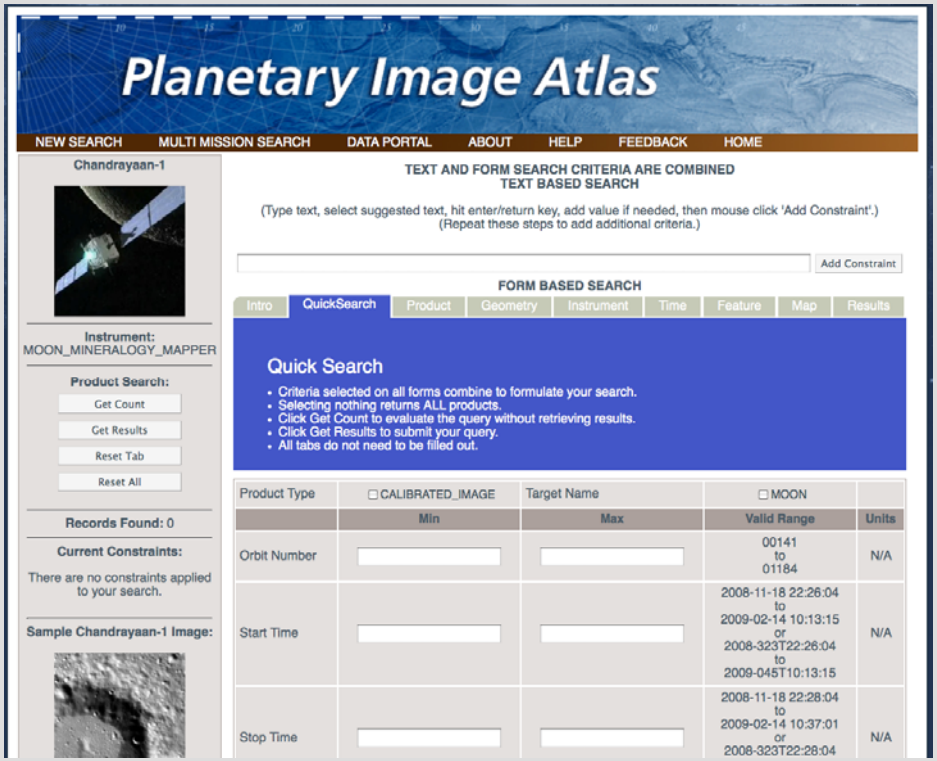
- **Pointers to data and mission information**
  - Atlas Product Search
  - Online volumes
  - Archive documentation
  - Mission & instrument overview
- **Data release status**



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?