



M³ Data Tutorial

Hosted by the PDS and M³ Science Team

2010 AGU

December 13, 2010





Tutorial Goals

- Learn how to access M³ data and search for areas of interest
- Learn about the M³ 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/>

DOCUMENTATION | TOOLS & TUTORIALS | PERSONNEL | HELP

PDS Imaging Node

Planetary Data System
primary digital image
ent and future planetary
des to the NASA
nity the digital image
ary data sets, software
ise necessary to fully
of digital planetary
aging Node services
ng Node Tour.

Latest News

Moon Mineralogy Mapper (M³) Release #1 NEW

December 7, 2010: Optical Period 1, Level 0 and Level 1B data products are now available at the **online data volumes**. M³ RDR products are also available at the **Image Atlas**. For more info about M³, go to <https://m3.jpl.nasa.gov/>. Go to **Chandrayaan-1 M³** for more info at the mission page.

Mars Reconnaissance Orbiter (MRO) CTX & MARCI Release #15

December 4, 2010: The 14th MRO release has





How To Find M³ Data

Noah E. Petro

M³ Data Tutorial at AGU

December 13, 2010





How to Find M³ Data

- This tutorial will guide you through the steps necessary to find M³ 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/>

Google

M3 - Moon Mineralogy Mapper - ...

MOON MINERALOGY MAPPER M3 Data

M³ Data



Get M³ Data

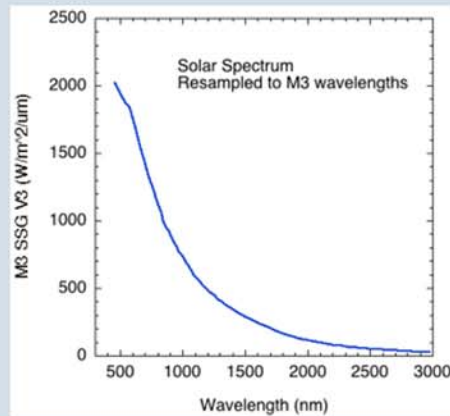
M³ data products are free and available to the science community and general public. M³ data is distributed by the NASA Planetary Data System (PDS) Imaging Node. At the PDS, you will find information and tools designed to help you find the M³ data you need.

[Online Data Volumes](#)

[Planetary Image Atlas for M³ data products](#)

[Lunar Orbital Data Explorer](#)

The Solar Spectrum Resampled to M³ wavelengths for supplemental use with the M3 PDS Archive is available for download [here](#).



[Got a Question? Ask us!](#)

Got a question regarding M³ data products or documentation? Post your question on the [Ask Us](#) web page and the M³ Project will endeavor to provide the answer.



"Ask Us"

MOON MINERALOGY MAPPER

Ask Us - Questions or Comments

M³ Data



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 your subject category

Enter your message

Submit



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 screenshot shows a web browser window titled "Lunar Orbital Data Explorer - Data Product Search". The address bar contains the URL <http://ode.rsl.wustl.edu/moon/indexProductSearch.aspx>. The page header includes a moon image, the text "Lunar Orbital Data Explorer", and "PDS Geosciences Node Washington University in St. Louis". A navigation bar contains links for Home, Data Product Search, Tools, Data Set Browser, Download, and Help & Resources. The main content area is titled "DATA PRODUCT SEARCH" and includes a "Reset Form" button. Below this is a paragraph explaining that planetary science data in PDS is organized by data products and data sets. The interface is divided into four steps: 1. SELECT DATA SETS TO SEARCH (A SELECTION IS REQUIRED), 2. SET ADDITIONAL FILTERING PARAMETERS (OPTIONAL), 3. PREVIEW SEARCH RESULTS SUMMARY (OPTIONAL), and 4. SUBMIT QUERY. Step 1 includes a dropdown menu for "Select One or More Desired Data Sets" (1 Parameter Set). Step 2 includes three dropdown menus for "Select a Product ID or filter by a partial Product ID" (0 Parameters Set), "Find by Product Center Latitude / Longitude" (0 Parameters Set), and "Filter by Time Range" (0 Parameters Set). Step 3 includes a "Preview Search Results Summary" button. Step 4 includes two buttons for "View Results in Table" and "View Results on Map", and a checked checkbox for "Display Product Thumbnails on search results page".

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 (Show Options - 1 Parameter Set)

STEP 2. SET ADDITIONAL FILTERING PARAMETERS (OPTIONAL)

Select a Product ID or filter by a partial Product ID (Show Options - 0 Parameters Set)

Find by Product Center Latitude / Longitude (Show Options - 0 Parameters Set)

Filter by Time Range (Show Options - 0 Parameters Set)

STEP 3. PREVIEW SEARCH RESULTS SUMMARY (OPTIONAL)

[Preview Search Results Summary](#)

STEP 4. SUBMIT QUERY

[View Results in Table](#) [View Results on Map](#)

Display Product Thumbnails on search results page



The Lunar Orbital Data Explorer

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

Lunar Orbital Data Explorer - Data Product Search

<http://ode.rsl.wustl.edu/moon/indexProductSearch.aspx> Google

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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 includes all documentation and supporting materials needed to understand and use the data products. A data set also includes 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 (Show Options - 1 Parameter Set)

STEP 2. SET ADDITIONAL FILTERING PARAMETERS (OPTIONAL)

Select a Product ID or filter by a partial Product ID (Show Options - 0 Parameters Set)

Find by Product Center Latitude / Longitude (Show Options - 0 Parameters Set)

Filter by Time Range (Show Options - 0 Parameters Set)

STEP 3. PREVIEW SEARCH RESULTS SUMMARY (OPTIONAL)

[Preview Search Results Summary](#)

STEP 4. SUBMIT QUERY

[View Results in Table](#) [View Results on Map](#)

Display Product Thumbnails on search results page



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”

Lunar Orbital Data Explorer - Data Product Search

http://ode.rsl.wustl.edu/moon/indexProductSearch.aspx

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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 (Hide Options - 1 Parameter Set)

Map location data is available for these products.
 Observation time data is available for these products.

Lunar Reconnaissance Orbiter

DLRE - DIVINER Lunar Radiometer Experiment **Other Product Types** **RDR - Reduced Data Rec. (See Tools: DIVINER RDR Query Tool)** [Data Set Description](#)

LAMP - Lymap Alpha Mapping Project **Other Product Types** **RDR - Reduced Data Record** [Data Set Description](#)

LEND - Lunar Exploration Neutron Detector **Other Product Types** **RDRCHK - Reduced Data Record** [Data Set Description](#)
 RDRDLD - Reduced Data Record [Data Set Description](#)
 RDRRSCI - Reduced Data Record [Data Set Description](#)

LOLA - Lunar Orbiter Laser Altimeter **Other Product Types** **RDR - Reduced Data Rec. (See Tools: LOLA RDR Query Tool)** [Data Set Description](#)
 GDR - Gridded Data Records [Data Set Description](#)
 SHADR - Spherical Harmonic Data Records [Data Set Description](#)

LROC - Lunar Reconnaissance Orbiter Camera **Other Product Types** **CDR - Calibrated Data Record** [Data Set Description](#)

MRFLRO - MINI-RF LRO **Other Product Types** **CDR - Calibrated Data Record** [Data Set Description](#)
 MAPCDR - Map-Projected Calibrated Data Record [Data Set Description](#)

ISRO's Chandrayaan-1

M3 - Moon Mineralogy Mapper **CALIMG - Calibrated Image** [Data Set Description](#)

Clementine

ISRO's Chandrayaan-1

M3 - Moon Mineralogy Mapper

CALIMG - Calibrated Image [Data Set Description](#)

Clementine



The Lunar Orbital Data Explorer

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

Lunar Orbital Data Explorer - Data Product Search

http://ode.rsl.wustl.edu/moon/indexProductSearch.aspx

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ER - Electron Reflectometer

- DATAL2 - Level 2 ER data [Data Set Description](#)
- ER_3D - Nasa Lv 1B omni-directional 3-D electron flux data [Data Set Description](#)
- ER_HI - Nasa Lv 1B omni-directional high-resolution flux data [Data Set Description](#)
- ER_LO - Nasa Lv 1B omni-directional low-resolution flux data [Data Set Description](#)

GRS - Gamma Ray Spectrometer

- RDR - Gamma Ray Spectra Reduced Data Record [Data Set Description](#)

MAG - Magnetometer

- DATA - Nasa Lv 1B data [Data Set Description](#)
- DATAL2 - Level 2 MAG data [Data Set Description](#)
- DATAL3 - Level 3 MAG data [Data Set Description](#)
- DATAL4 - Level 4 MAG data [Data Set Description](#)

NS - Neutron Spectrometer

- RDR - Neutron_Counting_Rate Reduced Data Record [Data Set Description](#)

RSS - Radio Science Subsystem

- GRAV - Gravity [Data Set Description](#)
- LOSAPDR - Line of Sight Acceleration Profile Data Record [Data Set Description](#)

STEP 2. SET ADDITIONAL FILTERING PARAMETERS (OPTIONAL)

- Select a Product ID or filter by a partial Product ID (Show Options - 0 Parameters Set)
- Find by Product Center Latitude / Longitude (Show Options - 0 Parameters Set)
- Filter by Time Range (Show Options - 0 Parameters Set)

STEP 3. PREVIEW SEARCH RESULTS SUMMARY (OPTIONAL)

Preview Search Results Summary

STEP 4. SUBMIT QUERY

Display Product Thumbnails on search results page



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MAP SEARCH - Lunar Cylindrical Projection [Back To Search](#)

[New Users Start Here ...](#)

Select Products By Area

Map Contents

- Product Query Results
- Product Query Lat/Lon Bounding Box
- Product Query Footprint
- Grid Lines

Data Set Files Selected

View in Table Cancel Selection

| Product Types | Areocentric Located Products | Selected Products By Area |
|-------------------|------------------------------|---------------------------|
| CH1-ORB M3 CALIMG | 312 | 0 |

Map Tool Reference Panel

| Name | Icon | Description |
|----------------|------|---|
| Zoom in | | Click and drag a rectangle: Click and hold the left mouse button down on the map at one corner of the rectangle to zoom in to. Drag the mouse to the other corner of the rectangle, and release the mouse button. The map will zoom in to the area of the rectangle. |
| Zoom out | | Click and drag a rectangle: the map will zoom out so that the current map area will fit into the rectangle drawn. The smaller the rectangle you draw, the more the map will zoom out. |
| Pan (recenter) | | Click and drag the map: Click and hold the left mouse button on the map, and drag the map. The map will be recentered, with the location dragged at the location you dropped it. |



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Lunar Orbital Data Explorer - Data Product S

http://ode.rsl.wustl.edu/moon/indexProductSearch.aspx

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MAP SEARCH - Lunar Cylindrical Projection

[New Users Start Here ...](#)

Select Products By Area

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- Grid Lines

Data Set Files Selected

View in Table Cancel Selection

| Product Types | Areocentric Located Products | Selected Products By Area |
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| Pan (recenter) | | Click and drag the map: Click and hold the left mouse button on the map, and drag the map. The map will be recentered, with the location dragged at the location you dropped it. |

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



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Lunar Orbital Data Explorer -
http://ode.rsl.wustl.edu/moon/indexproductsearch.aspx

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Select Products By Area

Map Contents

- Product Query Results
- Product Query Labels Bounding Box
- Product Query Footprint
- Grid Lines

Data Set Files Selected

View In Table Cancel Selection

| Product Types | Areocentric Located Products | Selected Products By Area |
|-------------------|------------------------------|---------------------------|
| CH1-ORB M3 CALIMG | 312 | 0 |

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| Zoom out | | Click and drag a rectangle: the map will zoom out so that the current map area will fit into the rectangle drawn. The smaller the rectangle you draw, the more the map will zoom out. |
| Pan (recenter) | | Click and drag the map: Click and hold the left mouse button on the map, and drag the map. The map will be recentered, with the location dragged at the location you dropped it. |
| Full extent | | Full extent: Immediately zooms the |

- 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...



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Select Products By Area

Map Contents

- Product Query Results
- Product Query Layer Bounding Box
- Product Query Footprint
- Grid Lines

Data Set Files Selected

View In Table Cancel Selection

| Product Types | Areocentric Located Products | Selected Products By Area |
|-------------------|------------------------------|---------------------------|
| CH1-ORB M3 CALIMG | 312 | 6 |

Map Tool Reference Panel

| Name | Icon | Description |
|----------------|------|---|
| Zoom in | | Click and drag a rectangle: Click and hold the left mouse button down on the map at one corner of the rectangle to zoom in to. Drag the mouse to the other corner of the rectangle, and release the mouse button. The map will zoom in to the area of the rectangle. |
| Zoom out | | Click and drag a rectangle: the map will zoom out so that the current map area will fit into the rectangle drawn. The smaller the rectangle you draw, the more the map will zoom out. |
| Pan (recenter) | | Click and drag the map: Click and hold the left mouse button on the map, and drag the map. The map will be recentered, with the location dragged at the location you dropped it. |
| Full extent | | Full extent: Immediately zooms the |

- You can drag over the strips you want, be sure to cover the center red point.
 - 6 products were selected
 - If you select “View In Table”...





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SEARCH RESULTS Output Results View on Map Back To Search

Products Found: 6
 Display Product Thumbnails Update Cart

| Instrument | Type | Product ID | Obs Time | |
|---------------|--------|--|-------------------------|---|
| CH1-ORB M3 | CALIMG | M3G20081222T223435_V01_RDN | 2008-12-22T22:44:47.500 | <input type="checkbox"/> |
| CH1-ORB M3 | CALIMG | M3G20081223T062736_V01_RDN | 2008-12-23T06:37:48.500 | <input type="checkbox"/> |
| CH1-ORB M3 | CALIMG | M3G20081223T122235_V01_RDN | 2008-12-23T12:32:47.500 | <input type="checkbox"/> |
| CH1-ORB M3 | CALIMG | M3G20081223T221351_V01_RDN | 2008-12-23T22:24:03.500 | <input type="checkbox"/> |
| CH1-ORB M3 | CALIMG | M3G20090119T082105_V01_RDN | 2009-01-19T08:31:22.000 | <input checked="" type="checkbox"/> In Cart |
| CH1-ORB M3 | CALIMG | M3G20090120T020344_V01_RDN | 2009-01-20T02:13:41.000 | <input checked="" type="checkbox"/> In Cart |

- 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





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http://ode.rsl.wustl.edu/moon/indexDownload.aspx

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SELECTED ITEMS FOR DOWNLOAD

PDS Data products are **freely available to the public**. The ODE download cart allows a user to select multiple products and individual files for convenient download. For most requests, the ODE system will acquire, compress, and place the requested files on an FTP server. The user will receive an email when the files are ready for download.
[More Product Download Information](#)

Confirm the products you have selected for download. After removing any unwanted products, click the continue button.

STEP 1. REVIEW PRODUCTS SELECTED FOR DOWNLOAD Empty the Cart

Products Selected for Download: 2
Size of current cart selections: **2.747 GB**

View Products Selected for Download (Show Selection List - 2 Products)

STEP 2. DO YOU WISH TO ADD ADDITIONAL DATA SET FILES TO THE CART? - CREATE MINI-ARCHIVE

The Mini-Archive option will add all related files from the PDS Archive including: documentation, software, errata, extras, catalogs, indexes, and the browse images of any products selected for download.

| Download Options: | |
|--|--|
| <input checked="" type="checkbox"/> Selected Products (label, data product, and browse images) | Products Selected for Download: 2 Files from Product selections: 20 Size of current cart selections: 2.75 GB |
| <input type="checkbox"/> Selected Products' Derived Files (map projected, etc.) | Derived files: 4 Size of derived files: 0 MB |
| <input type="checkbox"/> Mini-Archive Files (related files from the PDS Archive including: documentation, software, errata, extras, catalogs, and indexes) | Files from Mini-Archive selections: 47 Size of Mini-Archive files: 251 MB |
| Selection Total | Products Selected for Download: 2 Files from selections: 20 Size of current cart selections: 2.75 GB This cart selection should be available for download in approximately: 1.69 hours* |

* Your cart selections include externally hosted files, which may take the Geosciences Node longer to acquire and organize for your download.

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





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SELECTED ITEMS FOR DOWNLOAD

PDS Data products are **freely available to the public**. The ODE download cart allows a user to select multiple products and individual files for convenient download. For most requests, the ODE system will acquire, compress, and place the requested files on an FTP server. The user will receive an email when the files are ready for download.
[More Product Download Information](#)

Confirm the products you have selected for download. After removing any unwanted products, click the continue button.

STEP 1. REVIEW PRODUCTS SELECTED FOR DOWNLOAD Empty the Cart

Products Selected for Download: **2**
Size of current cart selections: **2.747 GB**

View Products Selected for Download (Hide Selection List - 2 Products)
[Download HTML version of the product list](#)

Display Individual Files of the Products Remove Unchecked Products from the Cart

| Instrument | Type | Product ID | Obs Time | <input type="checkbox"/> |
|------------|--------|--|-------------------------|---|
| CH1-ORB M3 | CALIMG | M3G20090119T082105_V01_RDN | 2009-01-19T08:31:22.000 | <input checked="" type="checkbox"/> In Cart |
| CH1-ORB M3 | CALIMG | M3G20090120T020344_V01_RDN | 2009-01-20T02:13:41.000 | <input checked="" type="checkbox"/> In Cart |

STEP 2. DO YOU WISH TO ADD ADDITIONAL DATA SET FILES TO THE CART? - CREATE MINI-ARCHIVE

The Mini-Archive option will add all related files from the PDS Archive including: documentation, software, errata, extras, catalogs, indexes, and the browse images of any products selected for download.

Download Options:

| | |
|--|---|
| <input checked="" type="checkbox"/> Selected Products (label, data product, and browse images) | Products Selected for Download: 2 Files from Product selections: 20 Size of current cart selections: 2.75 GB |
| <input type="checkbox"/> Selected Products' Derived Files (map projected, etc.) | Derived files: 4 Size of derived files: 0 MB |
| <input type="checkbox"/> Mini-Archive Files (related files from the PDS Archive including: | Files from Mini-Archive selections: 47 Size of Mini-Archive files: 251 MB |

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





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CH1-ORB M3 CALIMG [M3G20090120T020344_V01_RDN](#) 2009-01-20T02:13:41.000

STEP 2. DO YOU WISH TO ADD ADDITIONAL DATA SET FILES TO THE CART? - CREATE MINI-ARCHIVE

The Mini-Archive option will add all related files from the PDS Archive including: documentation, software, errata, extras, catalogs, indexes, and the browse images of any products selected for download.

Download Options:

| | |
|--|---|
| <input checked="" type="checkbox"/> Selected Products (label, data product, and browse images) | Products Selected for Download: 2 Files from Product selections: 20 Size of current cart selections: 2.75 GB |
| <input type="checkbox"/> Selected Products' Derived Files (map projected, etc.) | Derived files: 4 Size of derived files: 0 MB |
| <input type="checkbox"/> Mini-Archive Files (related files from the PDS Archive including: documentation, software, errata, extras, catalogs, and indexes) | Files from Mini-Archive selections: 47 Size of Mini-Archive files: 251 MB |

Selection Total

Products Selected for Download: **2**
Files from selections: **20**
Size of current cart selections: **2.75 GB**
This cart selection should be available for download in approximately: **1.69 hours***

* Your cart selections include externally hosted files, which may take the Geosciences Node longer to acquire and organize for your download.
If you require the files immediately: Expand the product list above, and check "Display Individual Files of the Products". Then click the individual product files to directly download them from the source.

STEP 3. REVIEW SELECTIONS AND PROCEED TO CHECKOUT

When you are content with your selection of products and individual files, proceed by clicking the continue button.

[Continue >](#)

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





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DOWNLOAD SETUP

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Details for acquiring the selected data files:
1. The Geosciences Node will retrieve the files you have requested and place them in a user specific FTP folder for your download. After the completion and submission of this form, an automated system will prepare the FTP site for you to download the selected files from. You will receive an email when the files are ready for download. The email will include the FTP address and username.

Select format: Zip Tar Tar.Gz

Terms and Conditions
PDS data products and data set files are freely available to the public.

Policy for Citations of PDS Data [click here for a new window](#)

Your email:

(You will be notified at this email address when the files are ready for download.)

- 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)



PDS Imaging Node

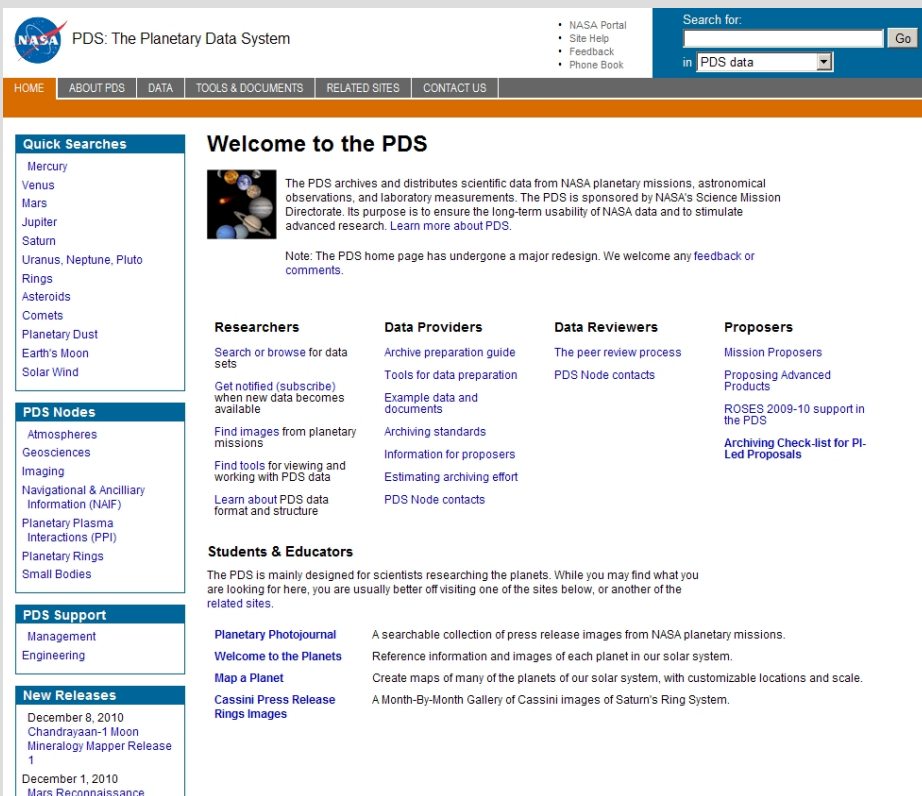
USGS ASTROGEOLOGY SCIENCE CENTER & JET PROPULSION LABORATORY

NASA Planetary Data System: Access to Moon Mineralogy Mapper Archives

PDS Imaging Node



USGS ASTROGEOLOGY SCIENCE CENTER & JET PROPULSION LABORATORY



The screenshot shows the PDS website homepage. At the top left is the NASA logo and the text "PDS: The Planetary Data System". To the right is a search bar with "Search for:" and a "Go" button, and a dropdown menu set to "in PDS data". Below the search bar is a navigation menu with links: HOME, ABOUT PDS, DATA, TOOLS & DOCUMENTS, RELATED SITES, CONTACT US. The main content area is titled "Welcome to the PDS" and features a "Quick Searches" sidebar with links to various celestial bodies and objects. The main text includes a welcome message, a note about a redesign, and four columns of links for Researchers, Data Providers, Data Reviewers, and Proposers. At the bottom, there are sections for "PDS Support" and "New Releases".

- **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>

PDS Imaging Node



USGS ASTROGEOLOGY SCIENCE CENTER & JET PROPULSION LABORATORY

The screenshot shows the PDS website interface. At the top, there is a search bar with the text 'Search for:' and a dropdown menu set to 'in PDS data'. A red circle highlights this search bar, and a red arrow points from it to the first bullet point of the text on the right. Below the search bar, the website content is visible, including a 'Welcome to the PDS' message, navigation links, and search results for 'Moon mineralogy mapper'. The search results show 1-6 of 6 results (0.303 seconds) and list data sets and information for the Moon Mineralogy Mapper instrument.

- **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>

PDS Imaging Node



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Subscription Service

Welcome to the PDS Subscription Service. Sign up to receive an e-mail notification when any of the following are updated or modified:

- data sets by mission
- software
- documentation
- data sets by target

Current Subscribers

E-mail Address
Password
[Did you forget your password?](#)
Login Now

New Subscriber

E-mail Address
Continue

Please read the [Subscription Manager Help Page](#) for instructions. For additional assistance, contact the [PDS Operator](#).

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Freedom of Information Act

NASA Webmaster: [PDS Operator](#)
NASA Official: William Knopf
Last updated: December 2010

- 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



PDS Imaging Node

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NASA PDS Imaging Node: Access to M3 Archives

PDS Imaging Node



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Data Portal

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

| Mission Info | Instruments | Targets | Data Access Documentation, Tutorials | Status |
|---------------------|---|---------------------------|--|--|
| Cassini-Huygens | ISS Radar VIMS | Moon Jupiter Saturn | Atlas Product Search Atlas Demo (QT movie) Online Data Volumes Documentation | Latest release #23 includes ISS & VIMS, and RADAR data |
| Chandrayaan-1 | Moon Mineralogy Mapper (M ²) | Moon | Atlas Product Search NEW Online Data Volumes Documentation | Release #1 Optical Period 1, Level 0 and Level 1B data products 11/18/2008 - 2/14/2009 |
| Clementine | A-STAR, B-STAR HIRES, LWIR NIR, UVVIS | Moon Earth | Atlas Product Search NEW Online Data Volumes Documentation | Mission Complete Last data received May 7, 1994 |
| | | Earth. | | |

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

PDS Imaging Node



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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

Planetary Image Atlas

NEW SEARCH MULTI MISSION SEARCH DATA PORTAL ABOUT HELP FEEDBACK HOME

TEXT AND FORM SEARCH CRITERIA ARE COMBINED
TEXT BASED SEARCH

(Type text, select suggested text, hit enter/return key, add value if needed, then mouse click 'Add Constraint'.)
(Repeat these steps to add additional criteria.)

Add Constraint

FORM BASED SEARCH

Intro QuickSearch Product Geometry Instrument Time Feature Map Results

Quick Search

- Criteria selected on all forms combine to formulate your search.
- Selecting nothing returns ALL products.
- Click Get Count to evaluate the query without retrieving results.
- Click Get Results to submit your query.
- All tabs do not need to be filled out.

| Product Type | <input type="checkbox"/> CALIBRATED_IMAGE | Target Name | <input type="checkbox"/> MOON | Units |
|--------------|---|----------------------|--|-------|
| | Min | Max | Valid Range | |
| Orbit Number | <input type="text"/> | <input type="text"/> | 00141 to 01184 | N/A |
| Start Time | <input type="text"/> | <input type="text"/> | 2008-11-18 22:26:04 to 2009-02-14 10:13:15 or 2008-323T22:26:04 to 2009-045T10:13:15 | N/A |
| Stop Time | <input type="text"/> | <input type="text"/> | 2008-11-18 22:28:04 to 2009-02-14 10:37:01 or 2008-323T22:26:04 | N/A |

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



Questions?

