Thursday, March 21, 2013 [R732]
POSTER SESSION: PLANETARY CARTOGRAPHY: DATABASES AND TOOLS
6:00 p.m. Town Center Exhibit Area

Mest S. C. Barlow N. G. Boyce J. M. Gaddis L. R. Hare T. M. et al. ***POSTER LOCATION #609***
The Lunar Impact Crater Database: Update From the Polar Regions **[#2368]**
We report on the construction of the Catalog of Large Lunar Impact Craters (diameters >5 km), which here focuses on the north and south polar regions.

Hargitai H. I. ***POSTER LOCATION #610***
Art of Landing Site Cartography **[#1596]**
We give examples of scientific maps and outreach maps of landing sites with special attention to its map design suitable for children.

Speyerer E. J. Lawrence S. J. Stopar J. D. Robinson M. S. ***POSTER LOCATION #611***
Traverse Planning Using Elevation Models Derived from LROC NAC Images **[#1745]**
We describe a least-energy traverse planning tool that integrates LROC NAC DEMs and other data products to facilitate the design of future surface missions.

Calzada-Diaz A. Mest S. C. ***POSTER LOCATION #612***
Cartography and Design of Traverses for Future Scientific Expeditions to Mare Moscoviense ROI **[#1275]**
A map of Mare Moscoviense ROI was created using data from Clementine and LRO missions. Three hypothetical traverses were designed to address geological questions.

Huang Yong. Hu X. Liu Q. ***POSTER LOCATION #613***
Relative Positon Determination Between Lunar Lander and Rover Using Same Beam VLBI Technique **[#1083]**
The simulation shows relative position accuracy between the lunar lander and the rover on the Chang'e-3 mission using same beam VLBI data will be better than 50 m.

Henriksen M. R. Robinson M. S. Speyerer E. J.
Boyd A. K. Wagner R. V. et al. ***POSTER LOCATION #614***
Overview of Lunar Reconnaissance Orbiter Camera Reduced Data Products **[#1676]**
Images acquired by the Lunar Reconnaissance Orbiter Camera have been reduced into a set of publicly released digital map products and image mosaics.

Sato H. Hapke B. W. Robinson M. S. Boyd A. K. Denevi B. W. et al. ***POSTER LOCATION #615***
Precision of "Tile-by-Tile" Photometric Solutions from LROC WAC Images **[#2447]**
We performed uncertainty analysis of photometrically normalized images from the "tile-by-tile" method.

Ishidate K. Yamamoto A. Koizumi E. Otake H. Yamazaki H. et al. ***POSTER LOCATION #616***
Data Visualization System and Data Utilization Promotion Activities of SELENE (Kaguya) **[#1869]**
"Kaguya 3-D GIS" become more familiar application and promotion of data utilization of SELENE data will be into next stage.

McBride M. J. Williams D. R. Hills H. K. Turner N. E. ***POSTER LOCATION #617***
First Time Analysis of Completely Restored DTREM Instrument Data from Apollo 14 and 15 **[#2868]**
The Apollo 14 and 15 Dust, Thermal and Radiation Engineering Measurement (DTREM) datasets were restored and analyzed as a digital dataset for the first time.

Anderson J. A. Becker K. J. Speyerer E. J. Wagner R. V. Cook D. A. et al. ***POSTER LOCATION #618***
Analysis of Light Time and Stellar Aberration Corrections in ISIS Using Lunar Reconnaissance Orbiter Narrow Angle Camera Images **[#2318]**
Presents an analysis of light time and stellar aberration corrections in ISIS using images from the LROC Narrow Angle Camera and Apollo-era retroreflectors.

Anderson J. A. ***POSTER LOCATION #619***
Comparing Patch Orthorectification Algorithms in ISIS Based on Camera Type **[#2069]**
Comparison of ISIS patch orthorectification algorithms for framing, linescan/pushbroom, and pushframe cameras.

Keszthelyi L. Becker T. L. Sides S. Barrett J. Cook D. et al. ***POSTER LOCATION #620***
Support and Future Vision for the Integrated Software for Imagers and Spectrometers (ISIS) **[#2546]**
The new support process and future vision for the USGS ISIS package is discussed.

Becker K. J. Anderson J. A. Weller L. A. Becker T. L. ***POSTER LOCATION #621***
ISIS Support for NASA Mission Instrument Ground Data Processing Systems **[#2829]**
ISIS provides support for NASA mission instrument ground data processing systems. These collaborations have matured and improved ISIS for research scientists.

Hare T. M. Gaddis L. R. Bailen M. S. LaVoie S. K. ***POSTER LOCATION #622***
Astropedia Annex: A PDS Imaging Node Repository for Geospatial Planetary Research Products **[#2044]**
Astropedia Annex is a new delivery portal in development by the PDS Imaging Node to support scientists who use PDS data to create derived geospatial products.

Bailen M. S. Sucharski R. M. Akins S. W. Hare T. M. Gaddis L. R. ***POSTER LOCATION #623***
Using the PDS Planetary Image Locator Tool (PILOT) to Identify and Download Spacecraft Data for Research **[#2246]**
The Planetary Image Locator Tool (PILOT) is a web-based interface (http://pilot.wr.usgs.gov) that provides robust access to Planetary Data System image sets.

Archinal B. A. Becker T. L. Lee E. M. Edmundson K. L. ***POSTER LOCATION #624***
Initial Global Control Network and Mosaicking of ISS Images of Titan **[#2957]**
We report on the science and exploration enabling first global (all longitudes, +45° to –65° latitude) control network and controlled ISS mosaics of Titan.

Kirk R. L. Howington-Kraus E. Redding B. Aharonson O. Bills B. G. et al. ***POSTER LOCATION #625***
Topographic Mapping of Titan: Completion of a Global Radargrammetric Control Network Opens the Floodgates for Stereo DTM Production **[#2898]**
Having controlled Cassini RADAR images of Titan, we are rapidly producing new topographic maps, revealing the secrets of the southern hemisphere.

Laura J. Hare T. M. Gaddis L. R. ***POSTER LOCATION #626***
Using Python, an Interactive Open-Source Programming Language for Planetary Data Processing **[#2226]**
Data analysis and visualization for planetary science is explored through three development and implementation use cases.

Garcia P. A. Stefanov W. L. Lofgren G. E. Todd N. S. Gaddis L. R. ***POSTER LOCATION #627***
PDS Archive Release of Apollo 11, Apollo 12, and Apollo 17 Lunar Rock Sample Images **[#2646]**
The NASA Planetary Data System (PDS) Imaging Node is pleased to announce the release of Lunar Rock Sample Image Archives for Apollo missions 11, 12, and 17.

Rickman D. L. Edmunson J. E. ***POSTER LOCATION #628***
Reference Images from Thin Sections of Lunar Regolith **[#2503]**
Reference images of lunar soil is needed for education. and research. Three thin sections were imaged using reflected, plain and Xnicols. Data will be published by NTRS.

Williams D. R. Hills H. K. Guinness E. A. Taylor P. T. McBride M. J. ***POSTER LOCATION #629***
Lunar Data Node: Apollo Data Restoration and Archiving Update **[#1620]**
We present an update to the work being done on the restoration and archiving of Apollo data by the Lunar Data Node of the Planetary Data System.

Rilee M L. Clark P. E. Bailin S. Portree D. Hughes J. S. ***POSTER LOCATION #630***
MoonCapture: Concept for Transforming Lunar Document Archives into an Online Lunar Discovery and Planning Tool **[#1238]**
We discuss MoonCapture, a state of the art semantic web-based knowledge management tool for indepth analysis for lunar mission documentation.

Estes N. M. Hanger C. D. Licht A. A. Bowman-Cisneros E. ***POSTER LOCATION #631***
Lunaserv Web Map Service: History, Implementation Details, Development, and Uses **[#2609]**
The Lunar Reconnaissance Orbiter Camera team developed a new web map service called Lunaserv that streamlines access to large planetary datasets.

Ohtake M. Otake H. Haruyama J. Hareyama M. Hohjyoh K. ***POSTER LOCATION #632***
Data Selection and Conversion Tool of Japanese Lunar Orbiter Kaguya for Integrated Science Analyses **[#1846]**
We are developing a data selection and conversion tool to handle Kaguya datasets to promote scientific analyses by combining multiple-instrument datasets.

Kinser R. M. Gibbs V. B. Barlow N. G. ***POSTER LOCATION #633***
A New Database of Craters 5-km-Diameter and Larger for the Moon: Western Nearside **[#1679]**
We are compiling a database of all lunar craters 5 km in diameter and larger. We present results for the western equatorial nearside region.

Nefian A. V. Alexandrov O. Kim T. Moratto Z. Beyer R. A. ***POSTER LOCATION #634***
Albedo Reconstruction of the Apollo Metric Camera Zone **[#1649]**
The Apollo 15,16 and 17 Metric camera images are used to reconstruct at 10 meters/pixel the lunar albedo and cover approximately 16% of the lunar surface.

Law E. Malhotra S. Muery K. Nall M. ***POSTER LOCATION #635***
The Lunar Mapping and Modeling Portal: A Lunar Exploration Portal in Support of Return to the Moon **[#1307]**
The LMMP is a web-based portal that enables lunar scientists, mission planners, and others to access mapped lunar data products from lunar missions.

Crichton D. J. Sarkissian A. Hughes J. S. Heather D. Martinez S. et al. ***POSTER LOCATION #636***
Towards an International Planetary Data Standard Based on PDS4 **[#1815]**
The International Planetary Data Alliance (IPDA) and the Planetary Data System (PDS) are working toward a next-generation system based on the PDS4 standard.

Wingo D. R. Epps A. E. Moss N. G. ***POSTER LOCATION #637***
Status of the Digitization of Lunar Orbiter Images From Original Master Tapes **[#3044]**
The Lunar Orbiter Image Recovery Project is digitizing from original master tapes the original images from the Lunar Orbiter Missions. This is our status.

Wang J. Bennett K. J. Arvidson R. E. Guinness E. A. ***POSTER LOCATION #638***
Virtual Astronaut Developed for Selected Sites on Mars **[#1204]**
NASA's PDS Geosciences Node's Virtual Astronaut is a desktop and web-based interactive virtual environment for scientific visualization of Mars orbital and ground data.

Palmer E. E. Gaskell R. W. Sykes M. V. ***POSTER LOCATION #639***
Mercator — Using High Resolution Topography for Navigation **[#2650]**
Mercator generates synthetic panoramas from high-resolution topographic models to match surface-based panoramas to determine the location on the ground.

Thomson B. J. Lang N. P. ***POSTER LOCATION #640***
Inferring Crustal Stress-Strain on Venus Using Shield Fields: A MATLAB Software Tool **[#2021]**
Shield fields on Venus / Emplaced in response to stress / But when did they form?

Clark C. S. Clark P. E. ***POSTER LOCATION #641***
Systematic Utilization of Constant-Scale Natural Boundary Mapping for Interpreting Formation Processes of Celestial Objects **[#1245]**
We systematically apply CSNB mapping to identify patterns in feature distribution and interpret processes on a global scale on the range of celestial objects.

Neakrase L. D. V. Huber L. Rees S. White D. Gonzalez E. et al. ***POSTER LOCATION #642***
Beta Testing the PDS4 Archive: Mars Phoenix Revisited **[#2150]**
Beta testing of the PDS4 websites for delivering the Mars Phoenix Lander atmospheric data have been reviewed by external reviewers for content and usability.

Oosthoek J. H. P. Flahaut J. Rossi A. P. Baumann P. Misev D. et al. ***POSTER LOCATION #643***
PlanetServer: Towards Online Analysis of Integrated Planetary Data **[#2523]**
PlanetServer is an experimental WebGIS that allows for the online spectral and spatial analysis of hyperspectral CRISM data.

Pompilio L. Pedrazzi G. Pepe M. Marinangeli L. ***POSTER LOCATION #644***
CLUEGO, an Informational Hyperspectral Classifier **[#2005]**
The present research is focused on the development and testing of an hyperspectral classifier aimed at preserving the informational content of hypercubes.