

Tuesday, March 22, 2016

[T326]

POSTER SESSION I: PLANETARY GEOLOGIC MAPPING**6:00 p.m. Town Center Exhibit Area**

Prockter L. M. Kinczyk M. J. Byrne P. K.

Denevi B. W. Head J. W. III et al.

POSTER LOCATION #401[*The First Global Geological Map of Mercury*](#) [#1245]

We present the first global geological map of Mercury, using MESSENGER image data.

Goosmann E. Buczkowski D. L. Ernst C. M. Denevi B. W. Kinczyk M. J.

POSTER LOCATION #402[*Geologic Map of the Caloris Basin, Mercury*](#) [#1254]

We present a 1:5M geologic map of the Caloris basin, based on MESSENGER data and previously published scientific analyses.

Wright J. Rothery D. A. Balme M. R. Conway S. J.

POSTER LOCATION #403[*Preliminary Findings from Geological Mapping of the Hokusai \(H5\) Quadrangle of Mercury*](#) [#2067]

This is the first quadrangle geological map of this region. The map will be produced at a 1:2M scale. We introduce the prominent features of the area.

Galluzzi V. Guzzetta L. Mancinelli P. Giacomini L. Ferranti L. et al.

POSTER LOCATION #404[*Merging of New 1:3M Mercury Geologic Maps at Northern Mid-Latitudes: Status Report*](#) [#2119]

This work describes the newly mapped quadrangles of Mercury H02, H03, H04, H06 and the methods used for merging these products into an unique 1:3M geologic map.

Hynek B. M. Robbins S. J. Osterloo M. K.

Mueller K. Gemperline J. et al.

POSTER LOCATION #405[*Unlocking Mercury's Geological History with Detailed Mapping of Rembrandt Basin*](#) [#2312]

Draft geologic map of the Rembrandt basin, Mercury (to be submitted to the USGS) is unraveling the complex history of this region.

Liu J. Z. Guo D. J. Chen S. B. Sun Y. Chen J. P. et al.

POSTER LOCATION #406[*Chinese 1:2.5 M Geologic Mapping of the Global Moon*](#) [#2039]

This abstract talks about the Chinese lunar global geologic mapping at the scale of 1:2.5 M, including the data, mapping objectives and contents, and approaches.

Sliz M. U. Spudis P. D.

POSTER LOCATION #407[*New Geological Map of the Lunar Crisium Basin*](#) [#1678]

An updated geological map of the Crisium Basin allowed compositional studies and identification of possible melt sheet remnants within the Mare Crisium.

Han K. Y. Ding X. Z. Pang j. F.

POSTER LOCATION #408[*Geological Mapping of Sinus Iridum Area of the Moon Based on the Chang'e-1 Data of China*](#) [#1825]

Based on CCD image, DEM data obtained by the Chang'e-1 lunar exploration project of China in 2007, a 1:2.5M-scale digital geological map of Sinus Iridum area was compiled.

Yingst R. A. Chuang F. C. Berman D. C. Mest S. C.

POSTER LOCATION #409[*Geologic Mapping of the Planck Quadrangle of the Moon \(LQ-29\)*](#) [#1188]

As part of a new systematic lunar geologic mapping effort, we present a 1:2,500,000-scale geologic map of the lunar Planck Quadrangle (Lunar Quadrangle 29).

Mest S. C. Garry W. B. Ostrach L. R. Han S.-C. Staid M. I.

POSTER LOCATION #410[*Characterization of Lunar Farside Plains*](#) [#1565]

Plains materials within the lunar farside highlands are being investigated to evaluate their nature as mare, cryptomare, impact melt, or impact ejecta.

Wang J. Zhou C. H. Cheng W. M. Luo W. **POSTER LOCATION #411**
[Automatic Mapping of Landforms from DEM on Moon](#) [#1302]

Iso cluster unsupervised classification performs landforms mapping of Moon on input raster bands of six morphologic parameters.

Salih A. L. Mühlbauer M. Grumpe A. Pasckert J. H. Wöhler C. et al. **POSTER LOCATION #412**
[Automatic Age Map Construction for the Floor of Lunar Crater Tsiolkovsky](#) [#1526]

A spatially resolved CSFD-based age map of the lunar crater Tsiolkovsky was constructed by applying an automatic crater detection algorithm to Kaguya TC data.

Mohr K. J. Williams D. A. Garry W. B. **POSTER LOCATION #413**
[Geologic Mapping of Ascræus Mons, Mars](#) [#1550]

Preliminary geologic mapping of Ascræus Mons has provided diverse lava morphologies indicating differing types of eruptions styles during shield formation.

Caudil C. M. Osinski G. R. Tornabene L. L. McEwen A. S. **POSTER LOCATION #414**
[Geologic Mapping of Bakhuisen Crater, Mars: Insights into Large Basin Impact Cratering Processes](#) [#2360]

Bakhuisen Crater is mapped here to lend to the understanding of basin structures at the meter to sub-meter scale using current remote sensing datasets.

Huff A. E. Hunter M. A. Skinner J. A. Jr. Hare T. M. **POSTER LOCATION #415**
[Digitization of the 1:5,000,000-Scale Mariner 9-Based Geological Maps of Mars: Packaging, Deployment and Analysis](#) [#2501]

The 1:5,000,000-scale Mariner 9-based geologic maps of Mars were digitized using ArcGIS and will be published as a historical resource in a modern format.

Skinner J. A. Jr. Fortezzo C. M. Barton M. L. **POSTER LOCATION #416**
[Surface and Section Geology of Non-Crater Basin Strata Exposed in Central Hadriacus Cavi, Mars](#) [#2806]

We describe and interpret strata exposed in the Hadriacus Cavi, NE Hellas basin rim of Mars based on 1:24,000 scale geologic mapping and section analyses.

Fortezzo C. M. Gullikson A. L. Rodriguez J. A. P. Platz T. Kumar P. S. **POSTER LOCATION #417**
[Mapping Geology in Central Valles Marineris, Mars](#) [#1981]

Mapping in central Valles Marineris is nearing completion. New results include categorized mass wasting deposits, subdivided ILD, and an initial CMU and DMU.

Crown D. A. Berman D. C. Platz T. **POSTER LOCATION #418**
[Geologic Mapping of Alba Mons, Mars](#) [#2383]

Geologic mapping of Alba Mons provides new constraints on the distribution, styles, and timing of volcanism in the northern Tharsis region of Mars.

Martin J. R. Hynek B. M. Chojnacki M. **POSTER LOCATION #419**
[Geologic Mapping of Putative Paleolake Deposits in a Coprates Catena, Mars](#) [#2625]

Work on a 1:25,000-scale map in the Coprates Chasma quadrangle catena revealed putative lake deposits, interpreted as laterally continuous basal deposits.

Wilson S. A. Grant J. A. **POSTER LOCATION #420**
[Geologic Mapping in Margaritifer Terra on Mars and a Closer Look at the Confluence of Nirgal and Uzboi Valles](#) [#2505]

Mapping at 1:1M scale in Uzboi Vallis and vicinity constrains the timing, source, and duration of aqueous and other geomorphic processes in shaping the landscape.

Chojnacki M. Hynek B. M. Black S. R. Hoover R. Martin J. R. **POSTER LOCATION #421**
[Geologic Mapping of the Coprates Chasma \(MTM -15057\), Mars: Year 2](#) [#2828]
We report work related to a geologic map in eastern Coprates Chasma that will be submitted for peer-review and publication by the USGS.

Pascuzzo A. C. Mustard J. F. Newton R. M. **POSTER LOCATION #422**
[Geologic Mapping and Characterization of Nicholson Crater, Mars](#) [#2435]
Morphologic analyses of Nicholson crater-understanding its recent geologic past and likely origin of its 3.6 km thick sedimentary central mound deposit.

Tirsch D. Pritzkow C. Söte T. Nass A. Walter S. et al. **POSTER LOCATION #423**
[HRSC Mapping Database: A New Tool to Collect and View Available HRSC-Based Geological Maps Worldwide](#) [#1849]
We present a new online database for quick and easy access to already published HRSC-based geological mappings on Mars.

Ebinger E. K. Mustard J. F. **POSTER LOCATION #424**
[Classification of Curvilinear Ridges in the Nilosyrtis Highlands of Mars](#) [#2731]
We mapped the characteristics, orientations, elevations, and geologic contexts of over 12,000 ridges in the Nilosyrtis Highlands to test hypotheses of formation.

Clark C. S. Clark P. E. Stooke P. J. **POSTER LOCATION #425**
[Constant-Scale Natural Boundary Mapping and \(I\) Graphic Analysis of Shear Cracks on Enceladus, \(II\) Geomorphology on Comet 67P/Churyumov-Gerasimenko, and \(III\) Context of Tombaugh Regio on Pluto](#) [#1044]
Here we apply our natural boundary based cartographic alternative to three small body, very different targets: Enceladus, Comet 67P, and Pluto.

Lazareva M. S. Kokhanov A. A. Karachevtseva I. P. **POSTER LOCATION #426**
[Mapping of Outer Planet Satellites](#) [#1074]
Geomorphologic studies and mapping of Galilean moons and Enceladus on base of new created CPN are described.

Stryk T. Stooke P. J. **POSTER LOCATION #427**
[The Surface of Asteroid 5535 Annefrank](#) [#1148]
In 2002, the Stardust spacecraft passed 5535 Annefrank. Images presented as processed by T. Stryk, with mapping of the asteroid surface by P. Stooke.

Johnson C. A. DellaGiustina D. N. **POSTER LOCATION #428**
[Thematic Map of Hazards and Regions of Interest for Asteroid Bennu](#) [#1672]
This abstract describes the thematic map of Hazards and Regions of Interest, a data product that highlights hazards and regions of exclusion and interest.

Lee J.-C. Massironi M. Giacomini L. Ip W.-H. OSIRIS Team **POSTER LOCATION #429**
[Geomorphological Mapping on the Southern Hemisphere of Comet 67P/Churyumov-Gerasimenko](#) [#1727]
We provide the geomorphological maps on the southern hemisphere of comet 67P/Churyumov-Gerasimenko with linear features and geological units identified.