

Tuesday, March 18, 2014

[T615]

POSTER SESSION: CRATERS: INVENTORY, IMAGERY, AND MORPHOLOGY
6:00 p.m. Town Center Exhibit Area

- Kenkmann T. **POSTER LOCATION #151**
[*The Structural Inventory of Mid-Sized Complex Impact Craters Formed in Sedimentary Targets*](#) [#1724]
 This is a review-type presentation of the macro-scale deformation inventory of terrestrial craters, but it also includes aspects of martian and lunar craters.
- Choe B.-H. Tornabene L. L. Osinski G. R. **POSTER LOCATION #152**
[*Mineral and Lithologic Spectral Mapping of the Tunnunik Impact Structure in the Canadian Arctic Using LANDSAT ETM 7+ and ASTER Data*](#) [#2354]
 Mineral and lithologic spectral mapping of the Tunnunik impact structure in the Canadian Arctic using LANDSAT ETM 7+ and ASTER data.
- Robbins S. J. Antonenko I. Kirchoff M. R. Chapman C. R. Fassett C. I. et al. **POSTER LOCATION #153**
[*The Variability of Crater Identification Among Expert and Community Crater Analysts*](#) [#1675]
 All crater counters / May identify different / Numbers of craters.
- Thompson S. D. Bowles Z. R. Povilaitis R. Z. Daubar I. J. Robinson M. S. **POSTER LOCATION #154**
[*Recent Impacts on the Moon*](#) [#2769]
 Newly discovered impact features on the Moon are allowing for an assessment of the current lunar cratering rate down to the resolution of the LROC NACs.
- Liu T. Fa W. Zhu M. Haruyama J. **POSTER LOCATION #155**
[*Regolith Thickness Estimation over Sinus Iridum Using Morphology and Size-Frequency Distribution of Small Craters from LROC Images*](#) [#1347]
 Regolith thickness over the Sinus Iridum region is estimated using morphology and size-frequency distribution of small impact craters from LROC NAC images.
- Malinski P. T. Milam K. A. **POSTER LOCATION #156**
[*A Reevaluation of Lunar Impact-Related Pit Craters*](#) [#2901]
 We reevaluated lunar pit craters by analyzing morphology and morphometry of these features and determined relations of pits to volatile concentrations.
- Lalor E. F. Sharpton V. L. **POSTER LOCATION #157**
[*Analyzing Rim Crest Variations in Lunar Impact Craters*](#) [#2484]
 High-resolution imagery from the LRO is used to analyze morphological variations in lunar impact craters for insight into lunar geology and the impact process.
- Byrne C. J. **POSTER LOCATION #158**
[*Bridging the Gap Between Two Methods of Measuring Impact Features*](#) [#1028]
 Impacts are measured in two ways, based on the apparent crater or on the rim. Conversion algorithms are found for comparing datasets that used different ways.
- Calla O. P. N. Jangid M. Mathur S. **POSTER LOCATION #159**
[*Analysis and Classification of Oppenheimer Crater as a Class Floor-Fractured Craters*](#) [#1793]
 Analyzing Oppenheimer Crater using the Mini-RF and LOLA datasets with physical and electrical parameters helps classify the crater class under FFC subclasses.
- Sriram Saran Anup Das Pandey D. Raj Kumar Chakraborty M. **POSTER LOCATION #160**
[*Regolith Properties in the North Polar Region of the Moon from 12.6-cm Radar Polarimetry*](#) [#1985]
 We examine several new features at the north pole of the Moon (>70°N) with images at optical and radar wavelengths which were not previously observed.

Skinner J. A. Jr. Laura J. R. Fortezzo C. M. Hagerty J. J. Hare T. M. et al. **POSTER LOCATION #161**
[Analysis and Chronostratigraphic Implications of Lunar Source-to-Secondary Impact Relationships: Technical Approach and Feature Mapping](#) [#2617]

We present technical development and mapping results for using secondary impact landforms to identify potential source-secondary relationships on the Moon.

Bandeira L. Salamunićcar G. Hare T. M. **POSTER LOCATION #162**
[Global Crater Catalogues of the Moon, Mars and Phobos](#) [#2088]

This abstract presents the conversion and redistribution of three global crater catalogs for the Moon, Mars, and the small martian moon Phobos.

Palucis M. C. Dietrich W. E. **POSTER LOCATION #163**
[How Small is too Small? A Simple Model for Assessing Uncertainties of Individual Crater Age Measurements for Martian Surfaces](#) [#2353]

We developed a model to address uncertainties within an individual crater model age measurement, focused on determining errors in ages derived from small areas.

Golombek M. Bloom C. Wigton N. Warner N. **POSTER LOCATION #164**
[Constraints on the Age of Corinto Crater from Mapping Secondaries in Elysium Planitia on Mars](#) [#1470]

Mapping of secondary craters, constrains the age of the fresh-rayed Corinto crater in Elysium Planitia, Mars to between 0.1 and 1 Ma and 2.8 ± 0.5 Ma.

Piatek J. L. Tornabene L. L. Osinski G. R. **POSTER LOCATION #165**
[In Search of Pristine Martian Impact Crater Ejecta Deposits](#) [#2813]

Crater ejecta / Thermal, visible images / What is “young” on Mars?

Schwegman R. D. Osinski G. R. Jones E. Tornabene L. L. **POSTER LOCATION #166**
[Assessing the Morphology of Double Layered Ejecta Craters at Equatorial Regions on Mars](#) [#2385]

We assess the morphology of DLEs found at equatorial regions on Mars and compare them with more common DLE morphologies at northern latitudes.

Bart G. D. Daubar I. J. Spinolo P. L. **POSTER LOCATION #167**
[Dependence of Martian Airblast Diameter on Crater Diameter](#) [#2852]

We examine small martian airblast features and their central craters to ascertain what controls the diameter of the airblast.

Watters W. A. Radford A. C. **POSTER LOCATION #168**
[3-D Morphometry of Martian Secondary Impact Craters from Zunil and Gratteri](#) [#2836]

Statistical study of shape characteristics measured from stereo HiRISE-derived elevation models of the secondary craters of two recent primary craters on Mars.

Cannon K. M. Mustard J. F. Herd C. D. K. Filiberto J. **POSTER LOCATION #169**
[Melting Mars with Impacts: Proximal Melt Deposits and Their Compositions as Determined by Remote Sensing](#) [#1954]

Impact-induced melting of different target compositions leads to predictable melt mineralogies detected on the surface in many different locations.

Iqbal W. Wulf G. Kenkmann T. **POSTER LOCATION #170**
[Study of Breccia Types in the Central Peak of an Unnamed Complex Crater on Mars](#) [#1762]

The fragmentation of target rocks of impact craters has important mechanical implications. We mapped a martian crater that shows different types of breccias.

Sturm S. Krüger T. Kenkmann T.

POSTER LOCATION #171

[Structural Uplift and Ejecta Measurements Along the Crater Wall of an Unnamed 16 km-Diameter Complex Impact Crater on Mars](#) [#1801]

We calculated the structural uplift and ejecta thickness along the crater wall of a complex martian impact crater situated in Marte Valles.

Mannoia L. M. Frey H. V.

POSTER LOCATION #172

[A Revised, Rated and Dated Inventory of Very Large Candidate Impact Basins on Mars](#) [#1892]

MOLA topography, the most recent crustal thickness model, and large-scale geology are used to revise, rate, and date the inventory of very large basins on Mars.

Pedrosa M. M. Pina P. Machado M. Bandeira L. Silva E. A.

POSTER LOCATION #173

[Automated Crater Detection in the Surface of Mercury in MDISC-NAC Imagery](#) [#2472]

This abstract is about development of automated methods for detect impact craters on Mercury's surface from digital images.

Susorney H. C. M. Barnouin O. S. Ernst C. M.

POSTER LOCATION #174

[The Role of Target Properties and Projectile Velocity on Final Crater Morphology of Craters on Mercury](#) [#1276]

The variations in depth of impact craters on Mercury may be the result of two different major geologic terrains and a large range of projectile velocities.

Neeseemann A. Kneissl T. Schmedemann N. Walter S. Raymond C. et al.

POSTER LOCATION #175

[Size-Frequency Distributions of Small Impact Craters on Vesta - Implications for Secondary Cratering](#) [#1712]

We measured size-frequency distributions of small impact craters on the protoplanet Vesta to investigate probabilities of contamination by secondary craters.