

Tuesday, March 22, 2016  
**POSTER SESSION I: MARS IMPACTS**  
 6:00 p.m. Town Center Exhibit Area

[T309]

Baker D. M. H. *POSTER LOCATION #173*  
[Updated Catalogs of Peak-Ring Basins and Protobasins on Mars](#) [#3046]

Previous catalogs of basins on Mars are reanalyzed with current orbital data to provide updated catalogs of peak-ring basins and protobasins.

Tornabene L. L. Piatek J. L. Hansen K. T.  
 Hutchinson S. J. Barlow N. G. et al. *POSTER LOCATION #174*  
[Visible and Thermophysical Characteristics of the Best-Preserved Martian Craters, Part 1: Detailed Morphological Mapping of Resen and Noord](#) [#2879]

Visible mapping / Thermal images add depth / Best preserved craters.

Pan C. Rogers A. D. *POSTER LOCATION #175*  
[Thermally and Compositionally Distinct Crater Ejecta on Mars and Geological Implications](#) [#1544]

Thermal and compositional distinct ejecta are found in Chryse Planitia, Northern Hellas, and Tyrrhena Terra regions, which may represent the subsurface lithology.

Piatek J. L. Tornabene L. L. Barlow N. G. Osinski G. R. Robbins S. J. *POSTER LOCATION #176*  
[Visible and Thermophysical Characteristics of the Best-Preserved Martian Craters, Part 2: Thermophysical Mapping of Resen and Noord](#) [#2903]

Infrared reveals / Blocky floors, radial sand / Best-preserved craters.

Mouginis-Mark P. J. Sharpton V. L. *POSTER LOCATION #177*  
[The Asymmetric Ejecta Pattern of Zunil Crater, Mars](#) [#1368]

We explore the azimuthal differences in rim topography and morphology of Zunil Crater, Mars, in the context of the crater's secondary crater field.

Daubar I. J. Golombek M. P. McEwen A. S.  
 Tornabene L. L. Calef F. J. III et al. *POSTER LOCATION #178*  
[Depth-Diameter Ratio of Corinto Secondary Craters](#) [#2950]

Secondary craters ~850 km from Corinto crater have unusually low depth/diameter ratios. This could be due to lower impact velocities than expected.

Daubar I. J. Golombek M. P. McEwen A. S.  
 Dundas C. Britton A. W. et al. *POSTER LOCATION #179*  
[New Impact Modification of Corinto Secondary Craters](#) [#2984]

A new impact in the InSight landing site area affected secondary craters from Corinto, shedding light on the nature of their ejecta and new impact blast zones.

Boyce J. M. Mouginis-Mark P. J. Barlow N. G. *POSTER LOCATION #180*  
[The Two Types of Double Layer Ejecta \(DLE\) Craters on Mars](#) [#1327]

Morphometric data is presented to support the contention that there are fundamentally two types of layered ejecta craters on Mars.

Jones E. *POSTER LOCATION #181*  
[An Index of Subsurface Volatiles On Mars](#) [#1147]

Results from a principal component analysis (PCA) study of martian layered ejecta craters, identifying indices of target volatiles.

Moretti P. J. Gregg T. K. P.

**POSTER LOCATION #182**

[\*Do Ejecta Features Support Volatiles as a Basis for Central Pit Craters on Mars?\*](#) [#2788]

Assuming that martian impact craters with central pits are associated with volatiles in the target material, we examine their ejecta for evidence of volatiles.

Turner S. M. R. Bridges J. C. Grebby S. Ehlmann B. L.

**POSTER LOCATION #183**

[\*Hydrothermal Activity Recorded in Post Noachian-Aged Impact Craters on Mars\*](#) [#2915]

CRISM characterization of post Noachian-aged impact craters on Mars, with one crater showing evidence for phyllosilicates located in fans on its central peak.

Hill J. R. Christensen P. R.

**POSTER LOCATION #184**

[\*Global Distribution of Low Thermal Inertia Halos Surrounding Small Young Martian Impact Craters\*](#) [#2964]

The global distribution and classification, based on their apparent state of degradation, of low thermal inertia halos surrounding small young impact craters.

Slezak T. J. Radebaugh J. Christiansen E. H.

**POSTER LOCATION #185**

[\*Quantitative Planetary Landform Analysis Using Geometric Morphometrics\*](#) [#2980]

We apply methods of geometric morphometrics to paterae on Io and simple lunar impact craters for a quantitative comparison and analysis of these landforms.

Ivanov B. A.

**POSTER LOCATION #186**

[\*Impact Shaking of the Phobos Surface\*](#) [#1833]

Impact numerical modeling illustrates how the Phobos internal structure attenuates seismic shaking of the surface.