

Wednesday, March 21, 2018

[W453]

PLANETARY VOLCANISM I: FIRE AND FURY IN THE SOLAR SYSTEM

1:30 p.m. Waterway Ballroom 5

Chairs: Jacob Bleacher
Sean Peters

- 1:30 p.m. Sauro F. * Pozzobon R. Deberardinis P. Massironi M. De Waele J.
[Morphometry of Terrestrial, Lunar, and Martian Lava Tube Candidates](#) [#1105]
Morphometry of lunar and martian lava tube candidates are inferred through direct measurements of pit chains in DTMs and comparison with terrestrial analogues.
- 1:45 p.m. Young K. E. * Whelley P. L. Kruse S. Esmaeili S. Jazayeri S. et al.
[Using GPR, LiDAR, Magnetometry, and In Situ Geochemistry to Develop a Strategy for the Exploration and Characterization of Lava Tubes](#) [#2504]
We use field portable technologies to both develop a strategy for lava tube exploration and to investigate lava tube formation mechanisms.
- 2:00 p.m. Rader E. * Wysocki R. Heldmann J.
[Handmade Spatter Bombs: Assessing Lunar Cone-Building Using Clast Morphology](#) [#1109]
We made analog spatter deposits to study what the morphology of the clasts can tell us about eruptions.
- 2:15 p.m. Keszthelyi L. * Gaddis L. Hunter M. Glaspie L. M.
[A Simple Ballistic Model for Pyroclastic Eruptions: Application to the Moon, Mars, and Io](#) [#1317]
The venerable ballistic model for pyroclastic eruptions is still useful.
- 2:30 p.m. Bleacher J. E. * Crumpler L. S. Hamilton C. W. Zimbelman J. R. Garry W. B. et al.
[Implications of Inflated Sheet-Like Flow Emplacement on Planetary Surfaces](#) [#2034]
Inflated lava flow emplacement occurs during low emplacement rates over shallow slopes and can enable a flow field to advance in an upslope direction.
- 2:45 p.m. McGovern P. J. *
[Intra- and Trans-\(Impact\)-Basin Igneous Provinces on the Moon and Mars: Signposts of Broad-Scale Primordial Events](#) [#1814]
Volcanic provinces located within and around large impact basins on the Moon and Mars reveal structures related to primordial events in planetary histories.