

**Tuesday, March 8, 2011**  
**POSTER SESSION I: MARS: TERRESTRIAL ANALOGS**  
**6:00 p.m. Town Center Exhibit Area**

Platz T. Hauber E. Chevrel O. M. Le Deit L. Trauthan F. Preusker F. Jaumann R. Neukum G.  
[\*Preliminary Results on Lava Flow Morphologies and Vent Structures: An Example from the Western Volcanic Zone, Iceland\*](#) [#2108]

Lava flow morphologies and morphometries are studied to derive rheological flow properties.

Hauber E. Platz T. Le Deit L. Chevrel O. Hoffmann B. Kuhlmann L. Trauthan F.  
 Preusker F. Jaumann R.

[\*Mapping of Postglacial Icelandic Lava Flows as Analogues for Mars\*](#) [#1749]

Photogeologic mapping of an Icelandic lava flow, based on airborne HRSC images and topographic data, is complemented by field observations. The results help to interpret the mapping results of martian lava flows, i.e. flow emplacement and rheology.

Zimbelman J. R. Garry W. B. Bleacher J. E. Crumpler L. S.

[\*Inflation Features on the Distal Pahoehoe Portion of the 1859 Mauna Loa Flow, Hawaii: Implications for Evaluating Planetary Lava Flows\*](#) [#2443]

The 1859 Mauna Loa pahoehoe flow includes many classic features related to flow inflation. Two field excursions documented several inflation features as aids to evaluating their detectability on planetary lava flows.

Johnsson A. Reiss D. Hauber E. Johansson L. Zanetti M. Hiesinger H. Ulrich M. R. Olvmo M.  
 Carlsson E. Jaumann R. Trauthan F. Preusker F. Johansson H. A. B.

[\*Possible Freeze and Thaw Landforms on High Latitude Slopes on Mars: Insights from Terrestrial Analogs in Spitsbergen, Svalbard\*](#) [#2758]

We use solifluction lobes in Svalbard as analogs to high-latitude lobate landforms on Mars. We investigate a freeze-and-thaw origin and aim to constrain formation processes.

Allred K. Luo W. Konen M.

[\*Elongation Analysis from Prevailing Winds of Glacial Landforms in Northern Illinois\*](#) [#1168]

This study examines the relationship between the orientation of ice walled-lake plains and the prevailing wind direction. It offers a potential terrestrial analog for understanding the morphology and processes of glacial landforms on Mars.

Moscardelli L. Wood L.

[\*Erosional Shadow Remnants as Terrestrial Analogs for Teardrop-Shaped Islands on Mars: Implications for Outflow Channel Formation\*](#) [#1005]

This work proposes that teardrop-shaped islands located on the outflow channels of Mars might have been formed as the result of catastrophic submarine mass movements similar to those documented within continental margins on Earth.

ElSenousy A. Gavin P. Chevier V. Sayyed M. R. G. Islam R.

[\*Thermal Alteration of Deccan Paleosols, India: A Correlation with Martian Phyllosilicates Using Fourier Transform Infrared Spectroscopy\*](#) [#2770]

The purpose of this study is to heat the Deccan soils under atmospheric conditions of Mars to determine paleotemperature.

Kienenberger R. L. Greeley R.

[\*Distribution of Windblown Sediment in Small Craters on Mars: Preliminary Field Analog Studies at Amboy Crater, California\*](#) [#1053]

We present the results of field wind measurements and assessments of sediment deposition in small, shallow craters.