

Tuesday, March 19, 2013

[T621]

**POSTER SESSION: MASS MOVEMENTS AND EROSION ON MARS****6:00 p.m. Town Center Exhibit Area**

Hooper D. M. Smart K. J. **POSTER LOCATION #296**  
[Characterization of Landslides on Mars and Implications for Possible Failure Mechanisms](#) [#1795]

We examine geologic, geomorphic, structural, and hydrologic contextual relations of landslides on Mars to understand conditions likely to initiate failure.

Lucchitta B. K. **POSTER LOCATION #297**  
[Floor Deposits and Landslides in West Candor Chasma, Mars](#) [#1684]

Most landslides in the Valles Marineris are younger than ILD. In west Candor Chasma, layered floor deposits overlap landslides. Implications are discussed.

Chuang F. C. Crown D. A. Berman D. C. Joseph E. C. S. **POSTER LOCATION #298**  
[Mapping Lobate Debris Aprons and Related Ice-Rich Flow Features in the Southern Hemisphere of Mars](#) [#2512]

In an effort to produce a global inventory of lobate debris aprons, over 1000 aprons have been mapped thus far in the southern hemisphere of Mars using ArcGIS.

Joseph E. C. S. Crown D. A. Chuang F. C. Berman D. C. **POSTER LOCATION #299**  
[Formation and Modification of Martian Debris Aprons: Insights from Surface Textures and Categorized Crater Counts](#) [#2774]

This investigation examines the formation and modification of martian debris aprons using analyses of surface textures and categorized crater counts.

Sylvest M. E. Dixon J. C. Barnes A. Ito G. **POSTER LOCATION #300**  
[Experimental Study of CO<sub>2</sub> Sublimation as a Trigger for Mass Wasting](#) [#1626]

We examine the influence of CO<sub>2</sub> frost sublimation on martian gully initiation. Process controls and their relationships to triggering events are examined.

Smart K. J. Hooper D. M. **POSTER LOCATION #301**  
[Discrete Element Modeling of Martian Landslides](#) [#1609]

High-resolution image data and geomorphology from MOLA-derived topography are used for discrete-element models of landslides in Valles Marineris.

Brunetti M. T. Cardinali M. Fiorucci F. Santangelo M. Guzzetti F. et al. **POSTER LOCATION #302**  
[Statistics of Mass Movements in Valles Marineris, Mars](#) [#1898]

We mapped and characterized 219 mass movements in Valles Marineris. The statistics of landslide area and volume is compared to terrestrial distributions.

Howard A. D. **POSTER LOCATION #303**  
[Quantifying Denudation on Planetary Surfaces](#) [#1618]

Planetary landscapes evolve, but denudation is difficult to quantify. Erosion may or may not cause net elevation change. Denudation measurements are proposed.

Tanaka K. L. Fortezzo C. M. Skinner J. A. Jr. Hare T. M. Robbins S. **POSTER LOCATION #304**  
[Updated Resurfacing History of Mars Based on the New Global Geologic Map](#) [#1588]

The new global geologic map of Mars reveals how and where the planet has been resurfaced through time.