

Tuesday, March 20, 2012

POSTER SESSION I: RECENT SLOPE PROCESSES ON MARS

6:00 p.m. Town Center Exhibit Area

Raack J. Reiss D. Hiesinger H.

[*Gullies and Their Relationships to the Dust-Ice Mantle in the Northwestern Argyre Basin, Mars*](#) [#1798]

We investigated gullies and their relationship to the atmospherically derived dust-ice mantle and aeolian features in the northwestern part of the Argyre basin and constrained stratigraphic relationships and relative ages of gullies.

Capitan R. D. Osinski G. R. Van De Wiel M. J. Kerrigan M. Barry N. Blain S.

[*Distribution of Gullies in Utopia Planitia, Mars*](#) [#2240]

Gullies in Utopia Planitia are distributed mainly within craters in the eastern part of this region.

Conway S. J. Mangold N. Balme M. R. Ansan V.

[*Comparison of the Morphology of Crater-Slopes with Gullies to those Without Gullies*](#) [#2281]

We use HRSC topography in three regions to quantify the slope and curvature of craters with and without gullies. Gullies form on steeper more concave slopes for a given orientation and latitude. Gullies in the northern hemisphere are less developed.

Schaefer E. I. McEwen A. S. Ojha L. Mattson S. S.

[*Comprehensive Survey of Recurring Slope Lineae in Tivat Crater, Mars*](#) [#2558]

We are conducting a comprehensive survey of the evolution of recurring slope lineae (RSL) in Tivat Crater in the southern midlatitudes of Mars over two martian years. The results will help to constrain the as yet unknown formation mechanism for RSL.