

[815]

PRINT ONLY: MARTIAN GEOMORPHOLOGY

Applebaum I. G. Viviano C. E. Morgan G. A. Keller M. R. Cahill J. T. S.

[*Analysis of Potential Subsurface Reflectors and Integration with Exposed Surface Mineralogy in the Mawrth Vallis and Oxia Planum Regions*](#) [#2820]

Analyzing and integrating SHARAD and CRISM to examine the potential ExoMars landing sites Mawrth Vallis and Oxia Planum.

Arfstrom J. D. Hartmann W. K.

[*The Causes of Viscous Flow Surface Patterns at Crater Greg and Dao Vallis*](#) [#1156]

We compare glacier-like flows and features (~GLF) at Dao Vallis and Crater Greg to extreme elevation terrestrial glaciers and consider interpretations.

Baioni D.

[*Karst Landforms as Marker of Evaporite Deposits Within a Crater in Northern Sinus Meridiani, Mars*](#) [#1103]

Crater-floor LTDs in Sinus Meridiani display karst morphologies. The analyses of these LTDs suggest that sinkhole landforms are indicative of evaporite deposits.

De Blasio F. V.

[*Olympus Mons' Pristine Radius*](#) [#1941]

The pristine radius of the Olympus Mons volcano on Mars is measured based on the landslide material in the aureole deposit, and found approximately 200 km longer than present.

Ettahri M. A. Kereszuri A. Hargitai Henrik.

[*Topographical and Morphological Analysis of Mawrth Vallis to Target ExoMars Rover Mission*](#) [#2448]

This landing area covers morphological units showing scientific interest with phyllosilicates bright outcrops and a crossing dark layered channel.

García-Arnay Á. Gutiérrez F. Fernández S.

[*Coastal-Like Features in Nepenthes Mensae, Mars as Paleowater-Level Indicators, and a Terrestrial Analog*](#) [#2595]

A geomorphological analysis was carried out in Nepenthes Mensae, Mars to identify deltas and coastal-like features, and explore a possible terrestrial analog.

Hencz M.

[*Hypothetical Phreatomagmatic Origin of Two Depressions Near Galaxias Fossae, Mars — Based on HiRISE DTM Analysis*](#) [#1046]

We investigated two enigmatic depressions near Galaxias Fossae, Mars. In contrast to previous studies, we infer phreatomagmatic origin for both of them.

Pathare A. V. Joseph E. C. S. Chuang F. C. Crown D. A. Berman D. C. et al.

[*Glacial Flow Within Martian Lobate Debris Aprons: Evidence from Surface Texture Mapping in Deuteronilus Mensae*](#) [#1879]

Flow-altered textures / Within Deuteronilus / Lobate debris aprons.

Rivas S. Ruiz J. Romeo I.

[*Preliminary Mapping of Dike Systems in Northern Elysium Planitia*](#) [#2718]

Using high-resolution and regional images, we have mapped two possible dike systems in northern Elysium Planitia; an early NW-SE and a late NE-SW set of dikes.

Singh D. Mukherjee S. Singh P. Roy N.

[*Evidence of Glaciation Based on Peak Ring Morphology of Huygens Basin*](#) [#1925]

Detailed analysis of formation of the peak ring of Huygens Crater may help gain insight into geological processes that shaped present day crust of Mars.

Vaz D. A. Di Achille G. Hynek B. M. Nelson W. Williams R. M. E.

[*Global Morphometric Survey of Martian Deltaic Deposits: Methods and Validation*](#) [#1421]

We are compiling a global database that integrates the morphometry of fan deposits and valley networks on Mars. Here we discuss the applied techniques.

Zalewska N. E. Kubiak-Siwińska K. Małuj J. Woźniakowski Z. Borkowski R.

[*Laboratory Experiments of Martian Cryogenic Processes*](#) [#2139]

Four experiments have been carried out in the Climats Chamber for the study of cryogenic processes on Mars.

Zhao J. Xiao L. Glotch T. D.

[*Paleolakes in the Northwest Hellas Region: Implications for Paleo-Climate and Regional Geologic History*](#) [#1397]

We identified 64 paleolakes in the northwest Hellas region and studied their geomorphology, post-lacustrine modification, mineralogy, and ages.