

PRINT-ONLY PRESENTATIONS

Alves E. I. Madeira V. M. C.

Rationale for the Deployment of a Magnetic Gradiometer on Mars [#3014]

We show how magnetic gradiometry can increase our knowledge of the planet's life sustainability. It can also help us select a landing site for the first human explorers and increase our knowledge of the geology and geological evolution of Mars.

Boroughs L. L. Parmentier E. M.

Depth-dependent Thermal Stress on a One-Plate Planet, Mars [#3131]

We calculate the accumulated deviatoric thermal stresses and strains for a one-plate planet such as Mars, using a parameterized thermal evolution model. We determine that global cooling should be a major contributor to stresses on Mars.

de Pablo M. A.

MOLA Topographic Data Analysis of the Atlantis Paleolake Basin, Sirenum Terrae, Mars [#3037]

The topographic data analysis of a basin located in Sirenum Terrae, Mars, permit us to extract some information about the origin and evolution of this basin, that there was a part of a great lake that was the water source of Ma'adim Vallis.

Gunnlaugsson H. P. Jensen J. Kinch K. M. Merrison J. M. Madsen M. B. Nørnberg P. Rasmussen K. R. Walgren H. Weyer G.

Optical Detection of Magnetic and Electrically Charged Dust Particles on Mars [#3044]

The scientific objectives for a device that can measure the accumulation of electrically charged and/or magnetic dust on surfaces are described. Test results obtained under simulated martian conditions are discussed.

Ozorovich Y. R. Lukomski A. K. Zoubkov B. V. Babkin F. V.

Mars Electromagnetic Sounding Experiment (MARSES): Comparative and Calibration Studies on the Example Spatial and Temporal Variations Subsurface Geoelectrical Sections of the Saltwater Interface on Sicily (Donnalucata Beach) and Shelter Island [#3026]

The MARSES is the sounding instrument program on the base new portable geophysical instrumentation developed of searching for water, water-ice, or permafrost layers existing in some depth under the visible surface of Mars.

Shean D. E. Head J. W.

Pavonis Mons Fan-shaped Deposit: A Cold-based Glacial Origin [#3036]

The Pavonis Mons fan-shaped deposit displays several unusual features including a ridged facies, a knobby facies, a smooth facies, flow features, and radial ridges. Here we discuss these features and propose a cold-based glacial model for their formation.