

PRINT-ONLY: MARS: VOLCANISM AND TECTONICS

Arkani-Hamed J.

The Magnetic Crust of Mars [#1994]

This paper determines the thickness of the potentially magnetic layer of Mars in the Cimmeria and Sirenum Terrae, on the basis of thermal evolution models of Mars and the demagnetization of the uppermost crust by shock waves produced by impacts that have created craters of 100 km diameter or less.

Bazilevskaya E. A.

Thickness of the Olympus Mons Lava Flows as Measured from the MGS MOC and MOLA Data: Volcano Caldera and Flanks [#1082]

Thicknesses of the Olympus Mons lava flows have been measured: 4 to 11 m (mean ~ 6 m) for the volcano flanks and 4 to 26 m (mean ~ 10 m) for the caldera scarps, being similar to typical thicknesses of terrestrial basaltic flows.

Bruno B. C. Fagents S. A. Pilger E. Rowland S. Garbeil H.

Lava Flows on Olympus Mons, Mars: Estimates of Flow Speeds and Volume Fluxes from MOC, THEMIS and MOLA Data [#2012]

Lava flow velocities on Olympus Mons are estimated using *Jeffreys* (1925) based on dimensional data and assumed input parameters. Relationships among flow dimensions, slope, emplacement style and location on the edifice are also explored.

Martín-González F. de Pablo M. A. Márquez A.

Folded Structure in Terra Sirenum, Mars [#1430]

Located in Terra Sirenum, Mars, an elongated relief is surrounded by bedding surfaces. The asymmetric shape (cuesta) and the slope calculated from MOLA data, and also the images have been used to propose a folded structure. This folded structure is an upright fold.

Watters T. R. McGovern P. J.

Flexure and the Topography of the Dichotomy Boundary on Mars [#1874]

We model lithospheric flexure of the southern highlands and compare deflection profiles for both a weakened and a continuous plate to the long wavelength topography of the dichotomy boundary in the eastern hemisphere of Mars.