

Thursday, March 20, 2003
POSTER SESSION II
7:00 p.m. Fitness Center

Lunar Geophysics

Williams J. G. Boggs D. H. Ratcliff J. T. Dickey J. O.

Lunar Rotation and the Lunar Interior [#1161]

Solutions for lunar science parameters continue to improve. A fluid core and strong tidal dissipation are inferred from the effect of dissipation on rotation. In addition, evidence for fluid core oblateness strengthens.

Nakamura Y.

Search for Far-Side Deep Moonquakes — A Progress Report [#1160]

Cross-correlation of every possible pair of waveforms of non-impact, non-shallow-moonquake seismic events from the Apollo project has greatly expanded the number of confirmed deep moonquakes, possibly including those from the far side.

Bulow R. C. Johnson C. L. Shearer P. M.

Comprehensive Processing of the Apollo Lunar Seismic Event Data [#1138]

Using new techniques and our processed version of the Apollo seismic data, we focus on: better identification and cataloguing of moonquakes, moonquake locations, and estimating lateral variability in scattering properties of the lunar regolith.

Khan A. Lognonné P. Gagnepain-Beyneix J. Chenet H. Mosegaard K.

Recent Advances in Lunar Seismology [#1706]

Inversion of the Apollo lunar seismic data set in order to obtain information on the elastic moduli and the density structure of the Moon.

Ping J. Heki K. Matumoto K. RISE Group

360-Orders and Degrees Spherical Harmonic Model for Lunar Global Topography and the Corresponding Crustal Thickness [#1301]

A topography model, NLT360 is estimated by using spherical harmonic function through 360-orders and degrees. The corresponding lunar Moho topography and crustal thickness are also estimated by assuming a single layered crust on the top of Moho.

Asmar S. W. Schubert G. Nimmo F.

Estimations of Lunar Elastic Thickness from Admittance Computations [#1963]

Recent updates by Lunar Prospector to the historical lunar gravity dataset provide for a high resolution field. Lunar topography from the Clementine lidar was augmented by radio occultations in the polar regions to provide a global field. Admittance is computed to estimate elastic thickness.

Potts L. V. Leftwich T. Kim H. R. Han S.-C. von Frese R. R. B.

Gravity Drilling of Mass Differentiated Planets [#1934]

Analysis of satellite-measured gravity and topography can provide crust-to-core mass variation models for considering the geologic evolution of the poorly understood crustal and subcrustal features of the terrestrial planets.