

PRINT-ONLY PRESENTATIONS

Moon

Byrne C. J.

Proposed High-Level Regional Focal Points for Lunar Geography [#1517]

A list of 11 focal points, based on interesting features and approximately uniformly distributed around the moon is proposed. The objective of establishing these focal points is to organize photos and other images with minimal distortion and maximal mnemonic value.

Cudnik B. M.

Multi-Wavelength Observations of the Mercury Transit of November 1999 [#1240]

This work discusses optical effects in several wavelengths, both ground-based and space-based, of the Mercury transit across the edge of the Sun's disk. The famous "Black Drop effect" as well as its little-known component, termed the "Gray Drop effect" by the author, is described.

Dunkin S. K. Heather D. J. Crawford I. A.

Mapping of Lava Flows in Oceanus Procellarum Using Clementine Multispectral Data: A Progress Report [#1672]

An outline on continuing work to map the spectrally distinct lava flows across the whole of Oceanus Procellarum using Clementine data.

Holin I. V.

Limiting Accuracy of Mars, Mercury, Venus Instantaneous Spin Components Estimation by Ground-based Radar [#1109]

A new Earth-based radar speckle displacement interferometry (RSDI) technique is discussed to measure instantaneous spin components of Mercury, Venus, and Mars with an unprecedented accuracy of ~1 arcsec.

Ivliev A. I. Kashkarov L. L. Kalinina G. V.

Track-Thermoluminescence Analysis of the Luna-24 Silicate Grains: The Degree of Shock-Thermal Reworking [#1024]

The data presented here are the result of track-thermoluminescence measuring of the Luna-24 silicate crystals which to be used for determining of radiation and shock-thermal parameters of the lunar mater.

Jackson N. W.

Isopach Mapping of Lunar Basalts in the Northern Oceanus Procellarum Region, Using Clementine Data [#1086]

To understand the underlying morphology of northern Oceanus Procellarum using Clementine data. Isopach maps of northern OP have been constructed and Cross sections have been derived.

Kazantseva L. V.

Kyiv Database of Lunar Occultations and Some Preliminary Results [#1095]

Presented here is the Kyiv database of observations of lunar occultations obtained over 38 years, along with some preliminary analyses.

Noble S. K. Keller L. P. Pieters C. M.

Making a Regolith Breccia [#1626]

A significant percentage of grains in lunar regolith breccias are coated with melt glass rims. The existence of these glass rims can give us insight into the impact and breccia forming process.

Schmitt H. H.

Ancient Zircons Suggest Melt from Very Large Terrestrial Impacts Produced First Continents [#1177]

South Pole-Aitken basin and strong evidence of other extremely large, very old basins on the Moon and Mars indicates that such basins formed on Earth. Thick sheets of aqueous impact melt in such terrestrial basins may have differentiated to produce recently discovered ancient zircons.

Ustinova G. K.

Effects of the Ion Charge States in Lunar Ilmenites [#1216]

The noble gases in the lunar ilmenites are analyzed with respect to the charge states of their ions in the solar wind and with respect to the shock wave acceleration of the solar energetic particles.

Wilson T. L. Andersen V. Pinsky L. S.

Lunar Regolith Albedos Using Monte Carlo [#1392]

We report on the preliminary results of our Monte Carlo investigation into the CR-induced albedo of the lunar surface using FLUKA, which includes the effects of charm. The successful simulation of prompt neutrino production by charmed meson decay on the Moon is presented here for the first time.

Yakovlev O. I. Ivanov L. I. Kolotov V. P. Dogadkin N. N. Karandashev V. K. Kazilin E. E. Popov V. S.

Study of Evaporation of Microelements from Anorthosite and ICP-MS Analyses of the Condensate Products [#1044]

We studied experimental evaporation on anorthosite sample using ICP-MS analyses of vapor-condensate phase. Vapor-residual melt distribution data were obtained for trace elements on the Moon and possible origin of alkali anorthosite was considered.

Yakshinskiy B. V. Madey T. E.

Electron- and Photon-stimulated Desorption of Alkali Atoms from Lunar Sample and a Model Mineral Surface [#2106]

The laboratory study of electron- and photon-stimulated desorption of alkali atoms from model surface and lunar basalt sample is presented. The desorption by UV solar irradiation is shown to be a dominant source process for alkalis in the tenuous lunar atmosphere.