

[808]

PRINT ONLY: GENERAL MOON

Amitabh S. Srinivasan T. P. Suresh K.

[*Potential Landing Sites for Chandrayaan-2 Lander in Southern Hemisphere of Moon*](#) [#1975]

This paper deals with potential landing sites selection for Chandrayaan-2 mission of ISRO. The selected sites are on the south polar area of Moon.

Basilevsky A. B. Kozlova N. A. Ivanov B. A.

[*Secondaries of Lunar Crater Tycho: Dependence of Their Morphometric Characteristics vs. Diameters*](#) [#1161]

For 12 secondary craters of lunar crater Tycho with D=200–1400 m were measured relative depth and inner slopes' steepness and considered their dependence on D.

Bhatt M. Woehler C. Srivastava N. Shevchenko V. V. Berezhnoy A. A. et al.

[*Regolith Alteration Processes at Reiner Gamma Shed Light on the Formation of Lunar Swirls*](#) [#1765]

The two different locations of Reiner Gamma can be ascribed to predominant formation mechanisms; regolith compaction and space-weathering effects.

Bugiolacchi R.

[*Tycho Crater Rays — Small Craters Distribution Patterns*](#) [#1140]

Craters <30 meters in diameter are investigated across prominent Tycho's rays. Crater populations from 4 to 30 m follow a power law trend and no rollover.

Chauhan P. Bhatt H. Chauhan M.

[*Multi Sensor Image Fusion to Study Lithological Variability Around Central Peak of Tycho Crater on the Moon*](#) [#2364]

A technique to generate a higher resolution multispectral fusion image using two different sensor image data has been presented in this work.

Dias P. Pina P.

[*The Ages of Sinus Iridum Based on Crater Densities*](#) [#1217]

Quantitative method based on crater densities to determine the boundaries and ages of units within large volcanic plains. Application to Sinus Iridum.

Dubrovin I. O. Bricheva S. S.

[*Determination of Lunar Surface Characteristics with Ground Penetrating Radar \(GPR\) Using Mathematical Modelling*](#) [#2616]

The goal of our research is to find the best possible way of determining the characteristics of lunar surface such as content of stones and craters via GPR.

Fitz-Gerald B. Lena R.

[*Aristillus: The Unusual Narrow Ribbon of Dark Material*](#) [#1010]

We define and map the rock/mineral composition of the Aristillus and its two dark rays and view results in the context of local stratigraphic relationships.

Hunter M. A. Gaddis L. R. Keszthelyi L. P. Gaspie L.

[*GIS-Modeled Morphometry of Dark-Halo Craters in Alphonsus Crater*](#) [#1234]

A GIS-based analysis of lunar pyroclastic deposits, this study reconstructed the pre-eruptive surfaces of three dark-halo vents and calculated volume changes.

Ivanov B. A. Budkov A. M. Besedina A. N.

[*Seismic Impact Shaking: How Important for Small Lunar Crater Degradation?*](#) [#2380]

We study the surface impact shaking 10 to 20 crater radii. The goal is to check could this shaking accelerate the small lunar crater degradation.

Kaydash V. G. Surkov Ye. S. Shkuratov Yu. G. Videen G.

[Mapping Parameters of the Lunar 1-Micron Spectral Band with Improved Chandrayaan-1 M³ Data](#) [#1649]

Improvement of the quality of Chandrayaan-1 M³ data allowed mapping the shape, depth, asymmetry, and position of the minimum of 1 micron band in lunar spectra.

Korokhin V. Shkuratov Y. Kaydash V. Videen G. Marchenko G.

[Photometric Anomalies in Oceanus Procellarum](#) [#1665]

On the base of LROC WAC data, we propose explanations of origin of photometrically anomalous areas in south part of Oceanus Procellarum.

Kronrod E. V. Matsumoto K. Kuskov O. L. Kronrod V. A. Yamada R. et al.

[Adjustment of Geophysical and Geochemical Models of the Moon](#) [#1667]

A goal of the present study was to develop the most favourable model of the Moon matching both geophysical and geochemical data.

Kyoda H. Ishihara Y. Tanaka S. Inoue H. Ohtake M. et al.

[Analysis of Lunar Surface Data Using Machine Learning: Identification of Sunlit Area and Shade Area of High Latitude Area Using Kaguya SP Data](#) [#2255]

In order to label Spectral Profiler with sunlit or shade, we developed a automatic classifier of sunlit and shade area using a machine learning method.

Kyryliuk S. M. Kyryliuk O. V.

[Landscape Interpretation of Various Age Lunar Craters](#) [#1126]

Landscape modeling of craters Pomortsev, Yerkes, Picard, and Menelaus has carried out in the framework of the project "Landscape map of the Moon."

Lena R. Phillips J.

[Lunar Domes in the Cauchy Shield: Morphometry and Mode of Formation](#) [#1005]

We provide an analysis of sixteen domes detected using CCD telescopic images and located principally in the western and southern region of the Cauchy shield.

Lucey P. G. Costello E. S. Ghent R. R. Li S.

[Ice Distribution at the Poles of the Moon and Mercury: The Role of Regolith Overturn](#) [#1678]

Regolith overturn is examined as an explanation for the difference between ice distribution at the poles of the Moon and Mercury. It explains a lot.

Mandt K. E. Mazarico E. Greathouse T. K. Retherford K. D. Gladstone G. R. et al.

[LRO Multi-Instrument Study of Illumination Conditions and Physical Properties of Three Lunar South Pole Permanently Shaded Regions](#) [#2069]

Multi-instrument study from LRO data evaluating the illumination conditions and material properties within three lunar south pole permanently shaded regions (PSRs).

Pathak S. Bhattacharya S. Chauhan M.

[Geological Analysis of Class-2 Lunar Floor-Fractured Crater Briggs](#) [#2046]

Lunar FFCs have diverse mineralogical and morphological features, which can help to understand the magmatic evolutions of the lunar surface and interior.

Pau K. C. Lena R.

[Lunar Domes in Delisle Region: Morphometry and Mode of Formation](#) [#1009]

We provide an analysis of two domes located in Delisle region near the crater Artsimovich and Diophantus D, termed De1 and 2.

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

[Mineralogical Analysis of the Fractured Floor Region Within Cardanus Crater](#) [#1915]

Cardanus Crater has diverse mineralogy indicating the availability of mafic body from deep crustal zone. It also shows the traces of olivine associated with OH.

Shkuratov Y. G. Kaydash V. G. Videen G.

[The Influence of Lander's Rocket Jets on the Lunar Surface at Landing Sites: Smoothing of Roughness or Maturity Reduction?](#) [#2264]

Albedo and phase-ratio variations in the Apollo 15 landing site are due to regolith structure changes caused by engine jets; maturity produces a secondary effect.

Sinityn M. P.

[An Investigation of Epithermal Neutron Fluxes from Lunar Impact Basins](#) [#1357]

This report is devoted to study of epithermal neutron fluxes from LEND spectrometer data for impact basins and maria formations of the Moon.