

PPS024-P11

Room:Convention Hall

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## Geology of Th and K enriched Aristillus on the moon

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Global Th and K abundance map of the moon derived by the Lunar Prospector and SELENE gamma-ray spectrometer indicate that there are several highly enriched spots (hot spots) in these elements within the Procellarum KREEP Terrane. To understand the origin and distribution of the KREEP material, information of geologic characteristics and occurrence of these hot spots is important.

In this study we selected Aristillus crater among the hot spot and investigated geologic structure of this area by using SELENE Multiband Imager data.

Results indicate that relatively Fe-poor ejecta are observed in the northern area of the crater which is apparently corresponding to the Th rich material as previously suggested by [1] although reflectance spectra of this Fe-poor and surrounded relatively Fe-rich ejecta suggest basically similar mineralogy of these ejecta. Central peak of the crater has distinctively different Fe content compare to the Fe-poor ejecta and this may suggest the crater excavated Th rich material.

[1] Gillis et al. (1999) in Workshop on New Views of the Moon II, LPI.