
[EJ] Evening Poster | P (Space and Planetary Sciences) | P-PS Planetary Sciences

[P-PS05]Lunar science and exploration

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Scientific data sets acquired by not only Japanese lunar mission SELENE (Kaguya), but also other countries' missions, have become new standard for lunar science. Analyses of these data have been providing several new knowledge and changing some hypotheses into the truth of the Moon. In concurrence with these studies, some countries including Japan are planning future lunar missions. In this session, we will discuss scientific results based on newly acquired lunar data, strategy for future missions including SLIM, and theoretical and experimental studies for lunar science.

[PPS05-P03]Characterization of L1613 , LUNA 16 regolith sample

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Lunar sample is important to discuss lunar evolution. Lunar regolith is the mixture of fine grains/powders found on the surface of the Moon, and is considered to be the result of mechanical disintegration of basaltic and anorthositic rocks, caused by continuous meteoric bombardment over billions of years. So, for the chronological studies on regolith, it should be taken into account that individual grains have a different origin. In this work, we report the characterization of L1613, LUNA 16 regolith collected from Mare Foecunditatis. We performed elemental mapping of about 1500 grains using Spectral imaging function of SEM-EDS, and investigated the chemical composition of individual Ca-phosphate and pyroxene mineral using Point & shoot for the identification of the origins. As a result, we confirmed that the L1613 consists of mostly low-Ti-basalt with small amount of highland component. At the conference, the future-plan and/or progress of in-situ U-Pb analysis for Ca-phosphates also will be discussed.