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PPS25-P20

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Lithological variations in the Nearside of the Moon

SUGIHARA, Takamitsu^{1*}, Makiko Ohtake², Junichi Haruyama², Tsuneo Matsunaga³, Yasuhiro Yokota³, Chikatoshi Honda⁴, Tomokatsu Morota⁵, Yoshiko Ogawa⁴

¹JAMSTEC, ²JAXA, ³NIES, ⁴Aizu Univ., ⁵Nagoya Univ.

Procellarum KREEP Terrane (PKT) that is characterized by high-Th concentration has been recognized to be one of important crustal constituents. However spatial distribution of the PKT materials has not been precisely understood since most of the PKT area is covered by maria. High-Th concentration area in the PKT shows complex irregular shape and apparently seen as main constituents of Imbrium basin rims. Therefore origin of the high-Th area in the PKT have been considered to result from Imbrium forming impact. However the highest Th concentration is observed in Fra Mauro area where includes the Apollo 14 landing site but not in the Imbrium basin rims and interior of the Imbrium basin though some high-Th spots in Imbrium basin are observed in some small craters (e.g., Aristillus). Mineralogical and petrological characteristics of some regions in the PKT are investigated to make sure distribution of the Th-rich PKT materials. In this presentation, variations of petrological characteristics in and around the PKT are compared and addressed issue on distribution of the PKT materials.

Keywords: The Moon, Crust, Magma ocean, Kaguya, Remote-sensing, Procellarum KREEP Terrane