

Differentiation of impact-induced magma seas on the Moon

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It is widely accepted that a huge impact on the Moon, such as the South Pole-Aiken (SPA) basin forming event, entirely removed the feldspathic crust and melted the mantle below. The tremendous amount of impact melt must have formed a magma sea in the excavated basin. Such magma seas likely have experienced a significant differentiation as global magma ocean. In this presentation, we summarize recent results of global hyperspectral mapping of the Moon by Spectral Profiler (SP) onboard Kaguya and discuss the implications on the differentiation processes of magma seas.

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