

Rheological investigation of lunar highland and mare impact melt simulants

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Highlights

- Measured viscosities of lunar impact melt analogs between 660-1600°C
- Anorthosite, norite and JSC-1a liquid have similar viscosity 0.5-2 Pas at 1600-2000°C
- Subliquidus results for mare basalt (JSC-1a) show low crystal fraction until ~1200°C
- Mare basalt impact melts should remain mobile to lower temperatures than highlands

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