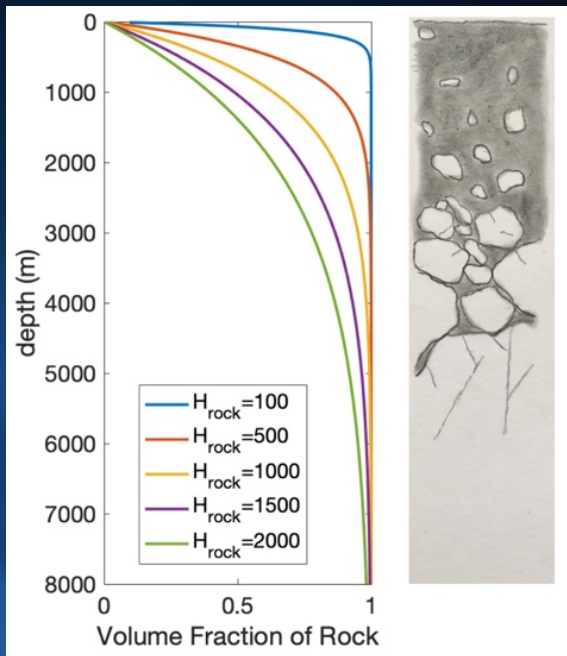


# Subsurface Rocks on the Moon



Left: There is no abrupt transition between rocks and regolith on the Moon. Below: There are more subsurface rocks in the maria (blue; low  $H_{\text{rock}}$  values) than in the highlands (red), but some craters in the highlands are as rocky as those in the maria.

The subsurface distribution of rocks on the Moon can be used to benchmark surface evolution models for regolith on airless bodies in the solar system.

- Cold-spot craters on the Moon are less than 1 Myr old; not enough time has passed for rocks excavated by these craters to become buried or broken down by micrometeorites.
- Looking at cold-spot crater ejecta rockiness using data from the Diviner instrument on LRO, has shown that there are more buried rocks in the more recently resurfaced lunar maria than in the ancient lunar highlands. This data is not consistent with an abrupt transition between a layer of rock and a layer of regolith, implying a gradual increase in subsurface rocks.
- Most planetary bodies are covered in a layer of fine-grained regolith, and this work informs understanding of how regolith forms and evolves.

