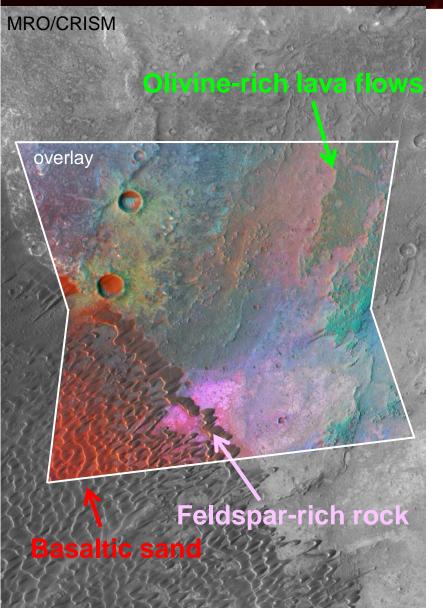


Feldspar-rich Rock Units Identified on Mars



In three geologically disparate locations on Mars, ranging in age from ancient highland rocks to younger volcanic flows (shown here), light-colored rocks rich in the high-aluminum mineral feldspar were detected – potentially indicating prolonged magmatic activity.

- Feldspar forms from evolution of more primitive basaltic and olivine-rich melts.
- Feldspar-rich rock dominates the lunar highland crust, where it was concentrated by floating out of a magma ocean. It can also form as low-density fraction from magma bodies when heavier minerals crystallize and settle out.
- This new work is the first evidence for rock units on Mars with high percentages of feldspar minerals. These rocks indicate that magma on Mars continued in a molten state much longer than previously thought, changing in composition throughout that period.