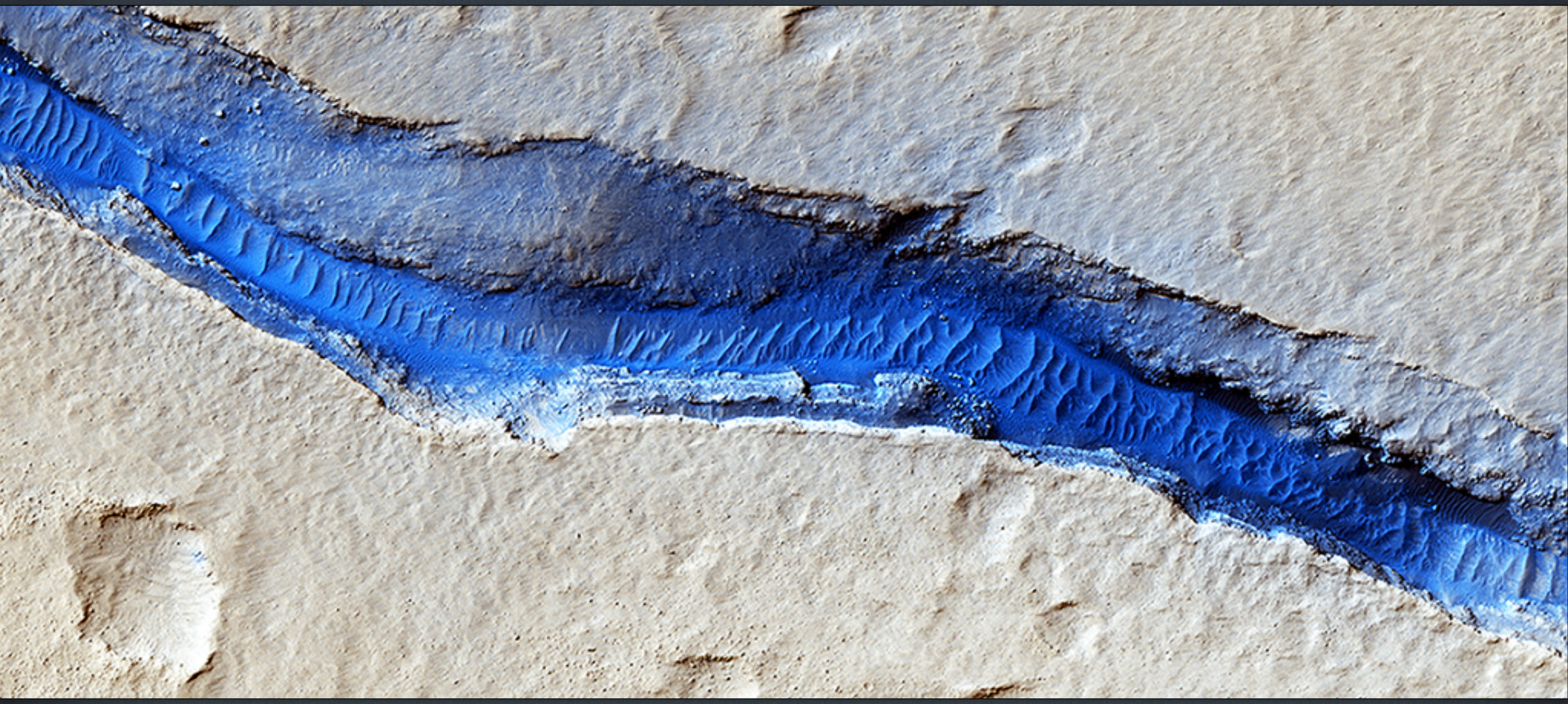

River of Sand

A dominant driver of surface processes on Mars today is aeolian (wind) activity. In many cases, sediment from this activity is trapped in low-lying areas, such as craters. Aeolian features in the form of dunes and ripples can occur in many places on Mars depending upon regional wind regimes.

HIRISE

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Intersecting Channels near Olympica Fossae

This complicated area contains various types of channels, pits and fractures. We can determine the relative ages of the pits and channels based on which features cross-cut others. Older channels appear smooth-edged and shallow. Younger channels and pits are deeper and more sharp-edged, as well as less sinuous than the shallower channels.

HIRISE

uahirise.org/ESP_045091_2045

The Wind-Scoured Lava Flows of Pavonis Mons

This deeply wind-scoured terrain type is unique to Mars. Wind-carved stream-lined landforms on Earth are called “yardangs,” but they don’t form extensive terrains like this one. The basaltic lavas on the flanks of this volcano has been exposed to wind for such a long time that there are no parallels on Earth.

HIRISE

uahirise.org/ESP_045777_1765

What Lies Beneath: Surface Patterns of Glacier-Like Landforms

In this image, we see that some areas show numerous depressions, which suggests that these areas have lost some of the ice creating these “deflation features.” If we look closer, we can see surface polygonal patterns, which are common in cold regions on Earth (such as Alaska) and are indicators of shallow sub-surface water-ice.

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