



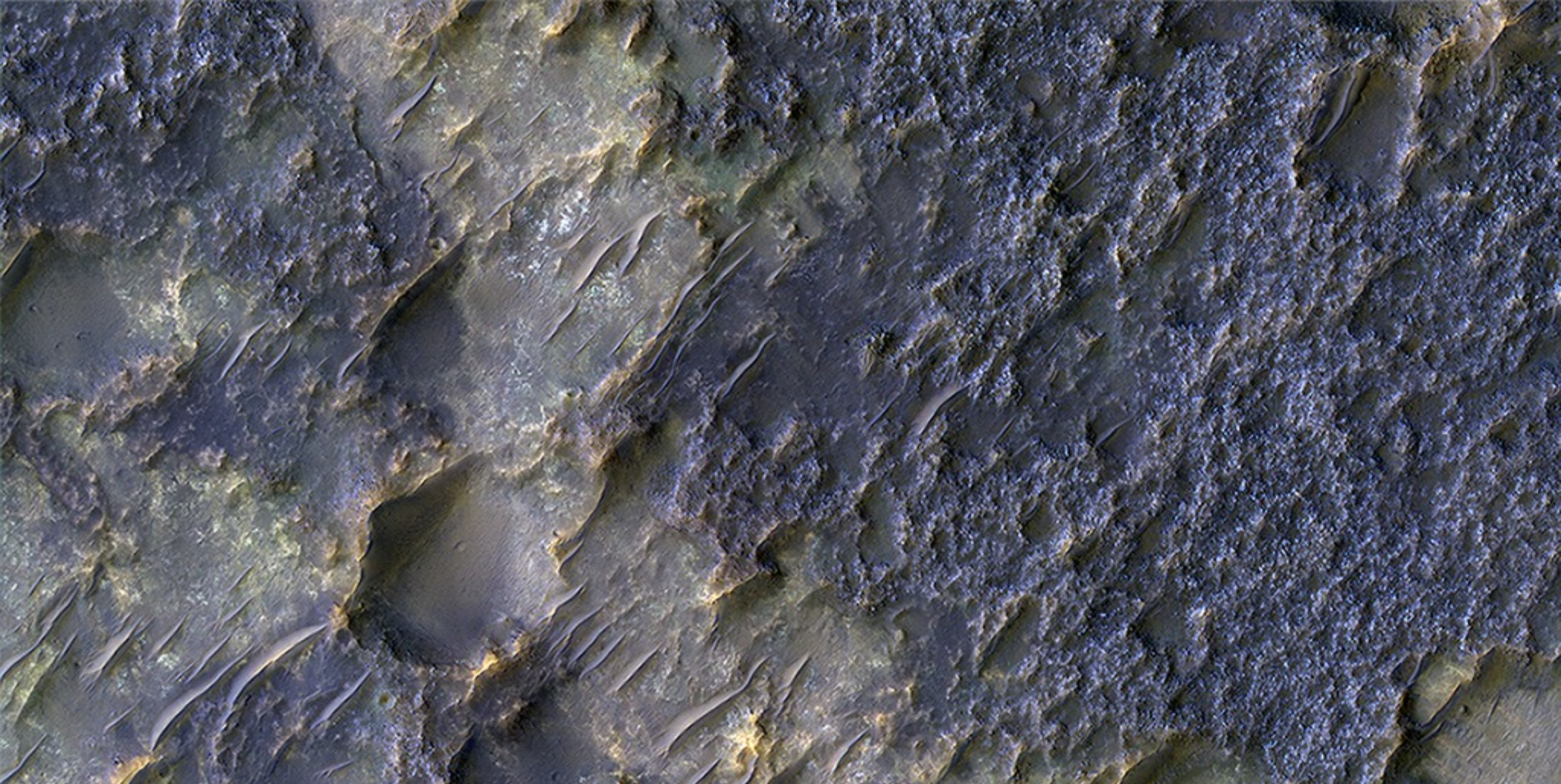
## How Gas Carves Channels

The ground likely started as polygonal patterned ground (common in water-ice-rich surfaces), and then escaping gas widened the channels. Fans of dark material are bits of the surface carried onto the top of the seasonal ice layer and deposited in a direction determined by local winds.

[uahirise.org/ESP\\_046845\\_0975](http://uahirise.org/ESP_046845_0975)







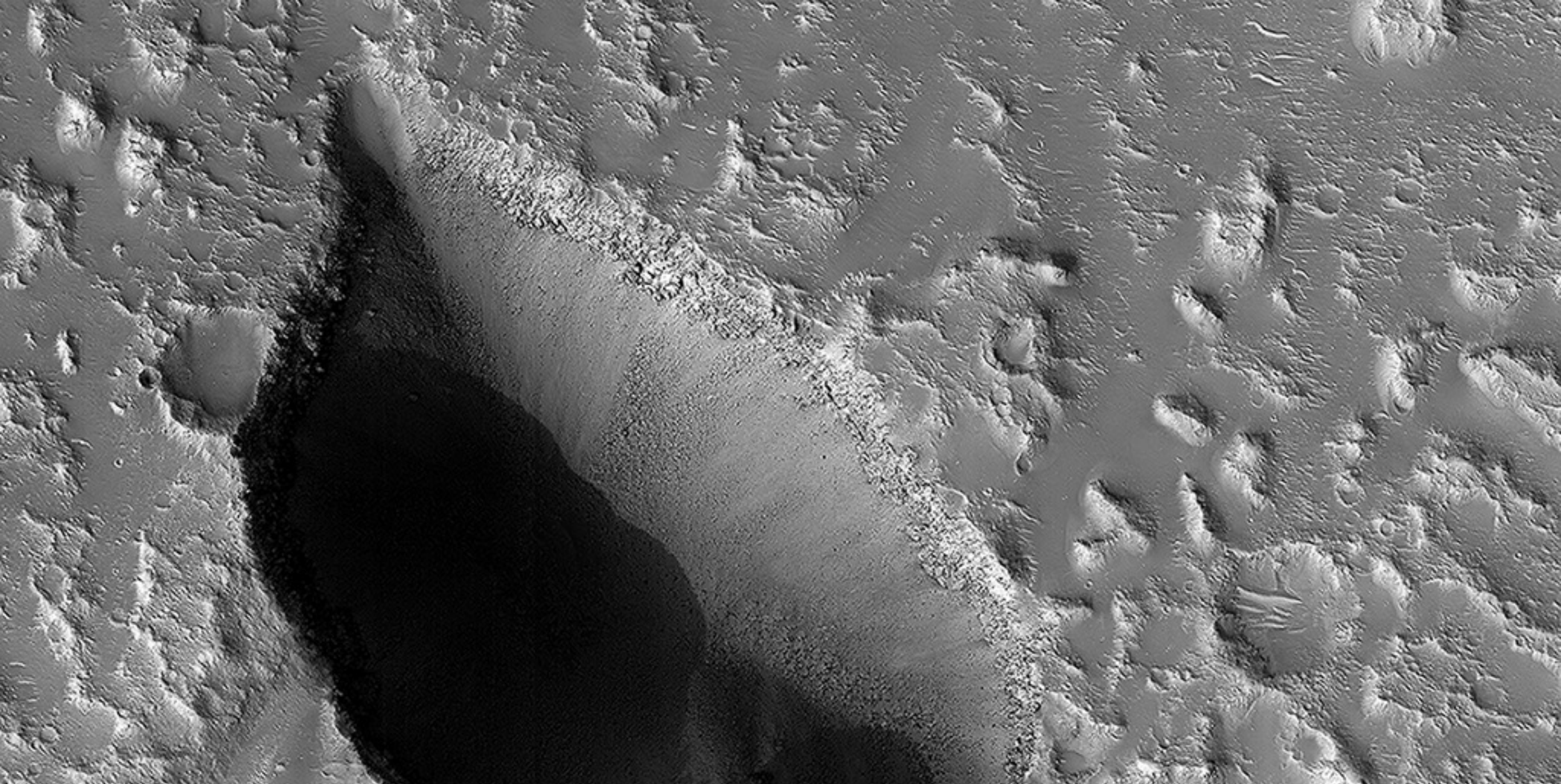
## Contact between Two Distinct Types of Bedrock Northwest of Hellas Planitia

The overlying, rougher blueish-toned bedrock appears to have undergone the most extensive erosion, revealing the smoother, fractured yellowish-toned bedrock below. We see windblown (aeolian) bedforms across the image, possibly the culprit behind the erosive forces that have removed and uncovered the underlying yellowish-toned bedrock visible today.

[uahirise.org/ESP\\_047762\\_1585](http://uahirise.org/ESP_047762_1585)







## Pits and Channels of Hebrus Valles

Hebrus Valles is located in the plains of the Northern lowlands, just west of the Elysium volcanic region. Individual channels range from several hundred meters to several kilometers wide and form multi-threaded patterns. The channels seemingly terminate in an elongated pit that is approximately 1875 meters long and 1125 meters wide, and nearly 500 meters deep.

[uahirise.org/ESP\\_048036\\_2025](http://uahirise.org/ESP_048036_2025)







## Rectangles with Wiggly Sides

In the spring as the seasonal cap sublimates gas is trapped underneath the seasonal ice layer until it can escape to an opening. At this site, faint rectangular channels in the surface are visible. The escaping carbon dioxide gas has exploited these channels and in the process, deepened them and added sinuosity to the formerly straight segments.

[uahirise.org/ESP\\_048124\\_0975](http://uahirise.org/ESP_048124_0975)

