Frosty Alcoves on Kaiser Crater Dunes

In this image, the dunes in Kaiser Crater are partially free of seasonal ice, with the contrast making it easy to see the ripples. Deep alcoves have been carved at the crest of the dune. We hypothesize that this is the result of the gas coming from the dry ice, destabilizing the sand at the crest.

HIRISE

uahirise.org/ESP_045614_1330

The Color Wonderland of Mawrth Vallis

Mawrth Vallis has some of the most spectacular color variations seen anywhere on Mars. This color variability is due to a range of hydrated minerals--water caused alteration of these ancient deposits--which is why this site is of interest to study the past habitability of Mars.

HIRISE

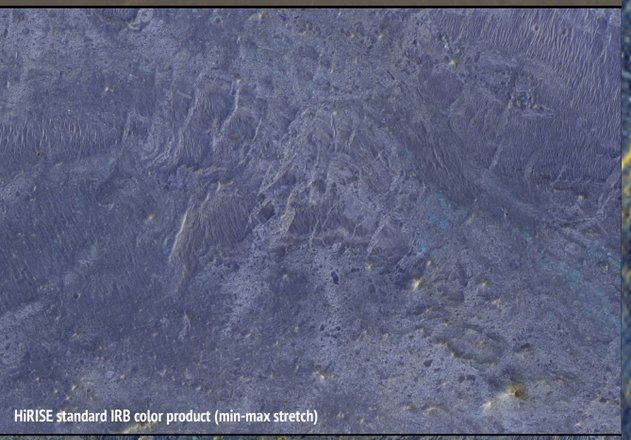
uahirise.org/ESP_045747_2030

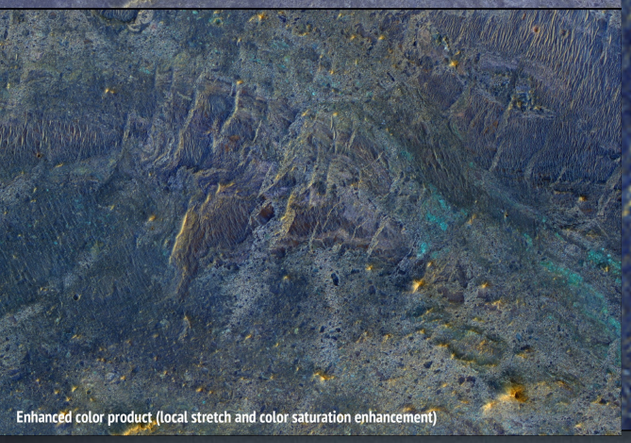
A Streamlined Form in Lethe Vallis

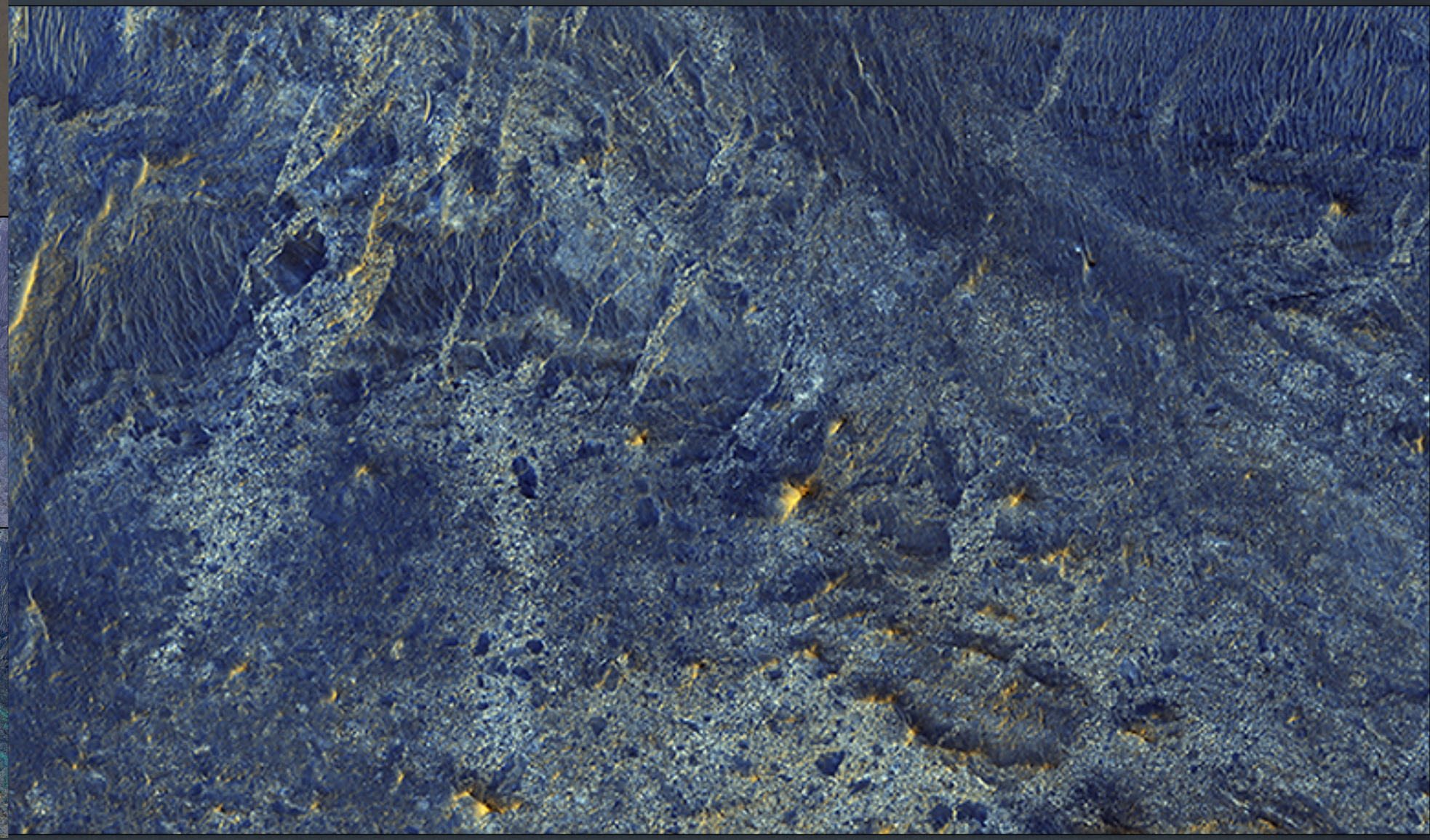
This is one of only a few places on Mars where these pristine-appearing landforms have been identified. The channel formed by catastrophic floods, during which it produced the prominent crater-cored, teardroped-shaped island in the middle. The island has the blunter end pointing upstream and the long tail pointing downstream.

HIRISE

uahirise.org/ESP_045833_1845







A Human Bird's Eye View of Mars

Here is an example from the Nili Patera region of Mars, a candidate future landing site. This is an enhanced color product, in which each bandpass is given a linear stretch, sometimes saturating a small percentage of data to black or white to give the rest of the scene more contrast, followed by color saturation enhancement. Now we can see a diversity of colors that distinguish different surface units: dust, sand, and rocks with different minerals.

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