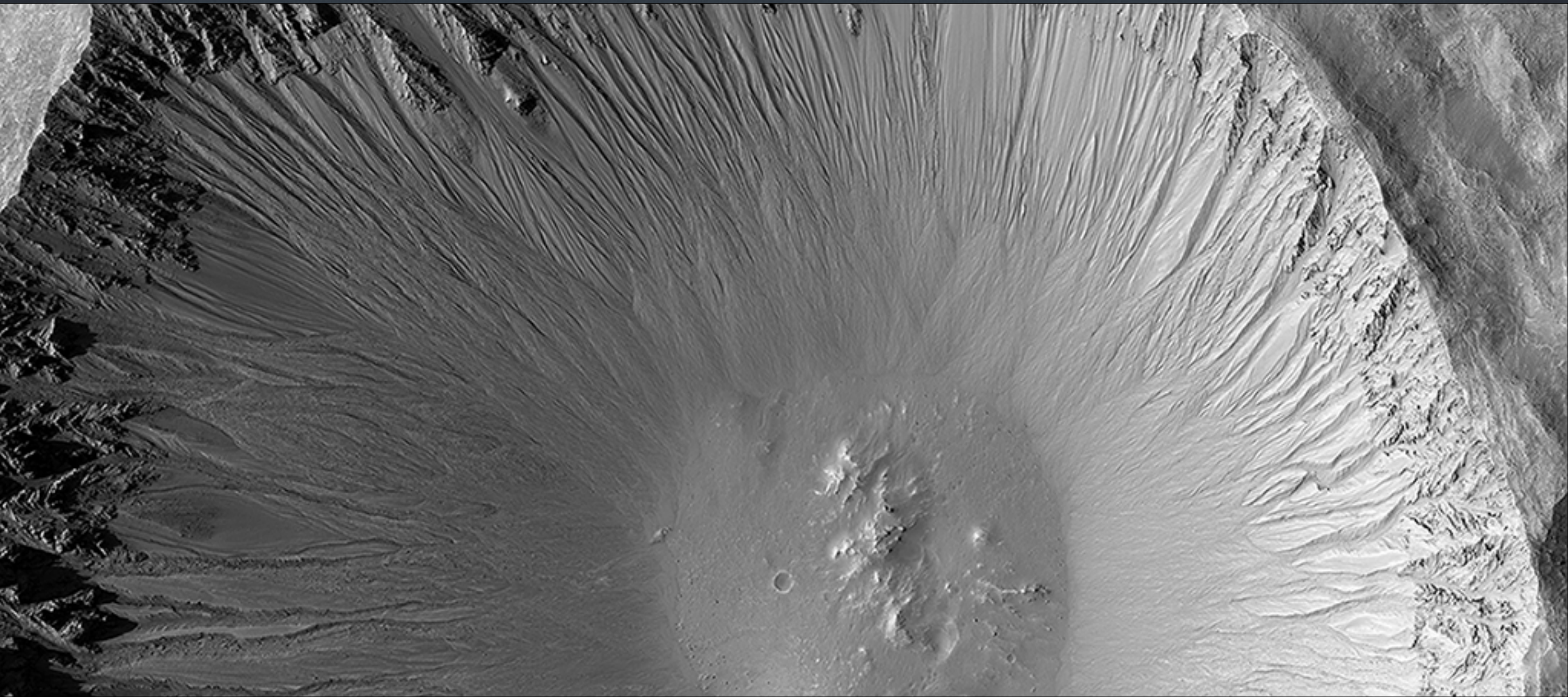




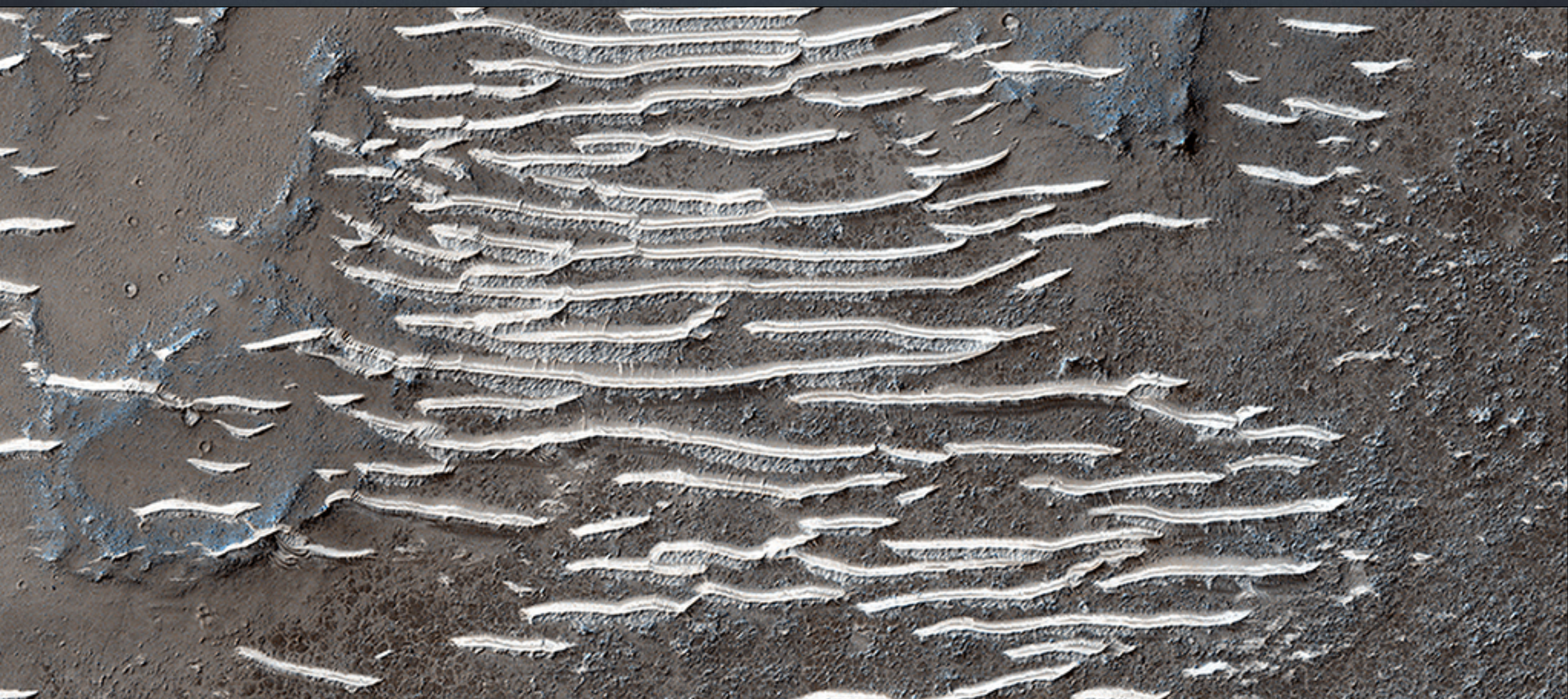
Inverted Meandering Rivers at a Possible Future Mars Landing Site

In this image, an ancient sinuous meandering river system is surrounded by features called “yardangs.” The yardangs are the ridge-like landforms that align approximately north-south. These features were created as the wind scoured and eroded the bedrock. The raised relief of the meandering river suggests inverted topography, likely due to lithification and cementation of the riverbed sediment.



A Youthful Crater in the Cydonia Colles Region

The central portion of this image is dominated by a sharp-rimmed crater that is roughly 5 kilometers in diameter. On its slopes, gullies show young (i.e., geologically recent) headward erosion, which is the lengthening of the gully in the upslope direction.



Down in the Paleochannels

Transverse aeolian ridges—or TAR—are mysterious, wind-blown features that are intermediate in size between ripples and much larger sand dunes. Ripples form from hopping sand grains, and dunes form from sand grains being blown over longer distances. One hypothesis for TAR formation is that larger grains like pebbles are rolled on top of smaller ripples; then, finer dust settles into the cracks, “inflating” the pebbles, making the TAR larger than typical ripples.



A Landing Site for ExoMars 2016

The landing site is the flattest, safest place on Mars: part of Meridiani Planum, close to where the Opportunity rover landed. This image shows what this terrain is like: very flat and featureless! A full-resolution sample reveals the major surface features: small craters and wind ripples.