

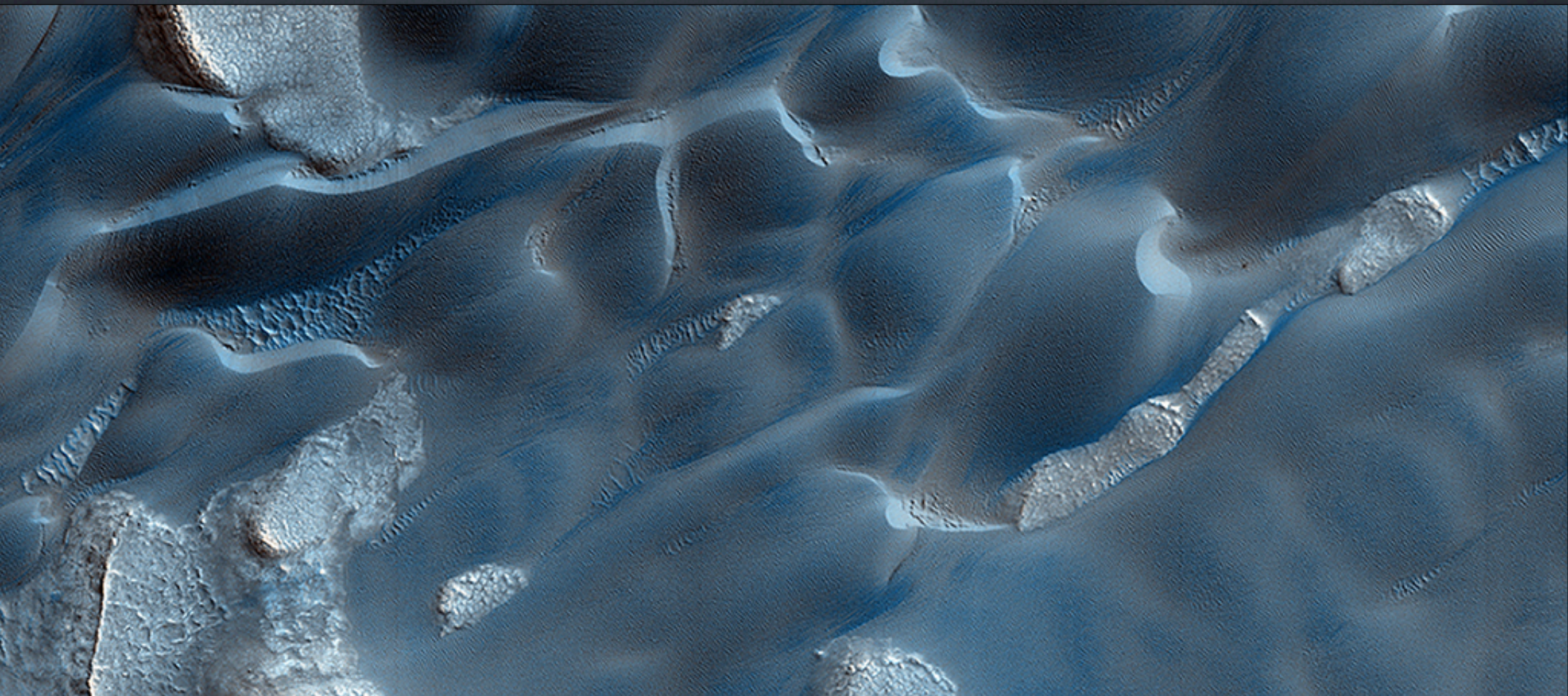
What Gullies Can Say

There are two possible science goals that we can study here: what does the terrain look like during the Martian summer, because HiRISE resolution can track changes over time. And second, could the gullies in this crater be a reasonable place to look for recurring slope lineae (or RSL) to occur?



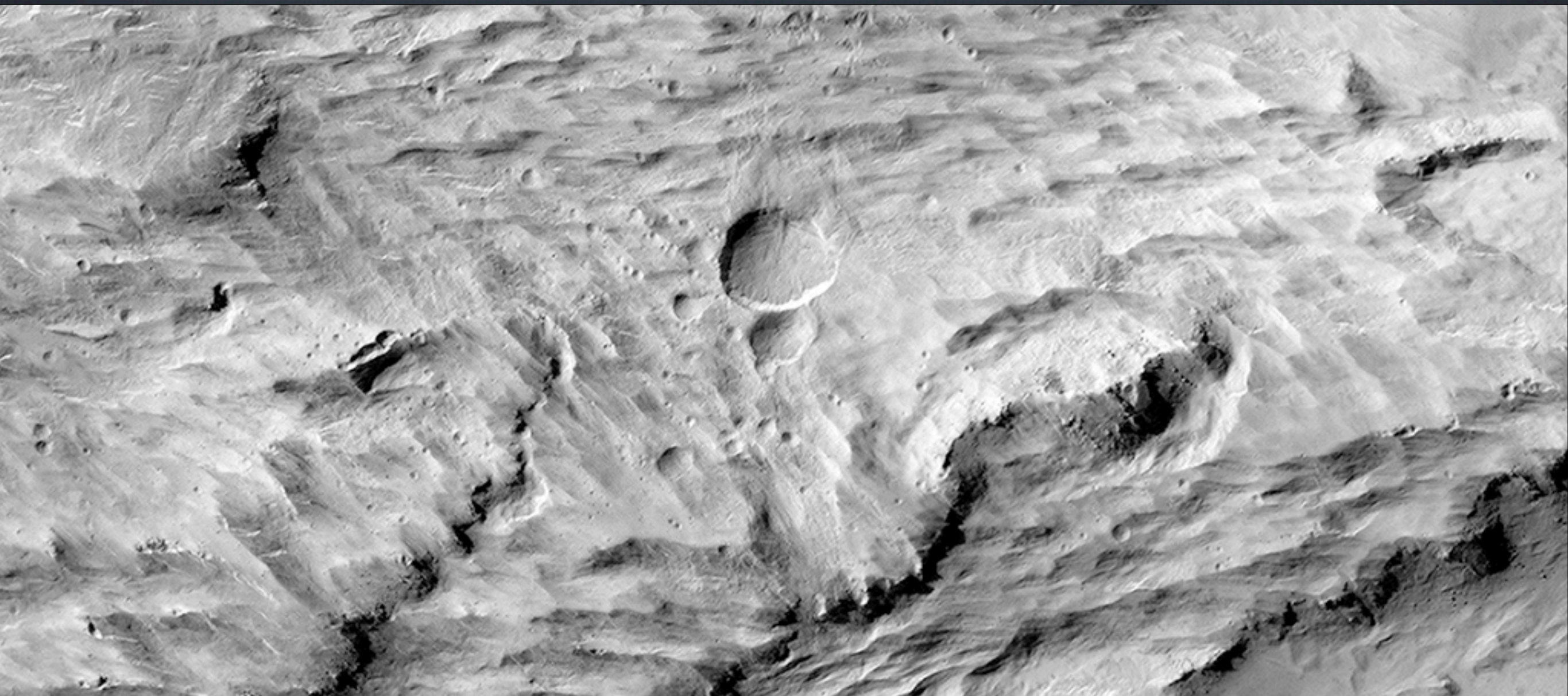
The Busy Flank of Arsia Mons

This observation shows an incredible diversity of ancient lava tubes and impact craters filled with sediment on the flank of Arsia Mons. The rationale for this observation is to get a better look at those lava tubes; their shapes, morphology, and erosional degradation, which ultimately might help to date active period when lava flowed through the volcano.



At the Edge of a Polar Cap

Formative down-slope winds descending on Mars' North Polar ice cap likely play an important role in transporting sediment from the base of the ice cap into the dune fields that sit beyond the ice cap.



Global Eyes on an Impact Prize

Based on a previous, low-resolution image from the Mars Color Imager on MRO, our camera was able to show the fine surface details within the blast zone of this new impact crater. The largest of the new craters, appears slightly asymmetric in shape, and measures 159 x 143 feet (48.5 x 43.5 meters) in diameter, making it the largest new crater detected on Mars by MRO to date.