

Fine-Branched Ridges

The raised relief of these branching ridges suggests that these are ancient channels are inverted due to lithification and cementation of the riverbed sediment, which made it more resistant to erosion than the surrounding material.



uahirise.org/ESP_024497_1745



A Cone Shaped Hill

There are many hills and knobs on Mars that reveal aspects of the local geologic history. Typically the hills in the relatively-smooth region surrounding this image are flat topped erosional remnants or mesas with irregular or even polyhedral margins. These landforms suggest wide spread erosion of the soft or weakly-cemented sedimentary layers.





Kasei Valles

Kasei Valles is a valley system was likely carved by some combination of flowing water and lava. In some areas, erosion formed cliffs along the flow path resulting in water or lava falls. The flowing liquid is gone but the channels and "dry falls" remain.



uahirise.org/ESP_042518_2065



Gullies in a Central Pit Crater

Sometimes a central pit forms inside some Martian craters, especially when there's substantial ground ice. Such is the case in this observation. Sometimes what we call "mass wasting" processes (think small avalanches or landslides) occur on the slopes of the central pit. We took this image to search for any recent activity that would add to or modify previously identified gullies.

