

Gullies Old and New Near the Argyre Region

As gullies form on slopes, sediment can become deposited to form lobe-shaped fans. Gullies can form with flowing water, but don't have to: sometimes they can be formed by the dry flow of sand and dust grains.



uahirise.org/ESP_038931_1355



Higher Terrain between Sinai and Solis Plana The terrain in this observation looks like an ancient uplifted crustal block. The area is riddled with faults (big cracks that allow rocks to slide) and ridges that look like uncovered magma dikes. A Mars Orbital Camera picture shows the region to be moderately dusty, but rocks do poke out along the ridges. With a high resolution images, we want to know if the dikes are of the same composition as the flood lavas that surround this high terrain.





Filled Crater and Scallops

In this observation made for a study of ancient craters, we see the craters filled with smooth material that has subsequently degraded into scallops. These formations might be possibly due to ground ice sublimation.



uahirise.org/ESP_038967_1230



Pits in Hale Crater Ejecta

The pits visible here aren't impact craters. The material they're embedded into is ejecta (stuff thrown out of an impact crater when it forms) from a large crater called Hale which is not seen in this image. Substances called "volatiles"—which can explode as gases when they're quickly warmed by the immense heat of an impact—exploded out of the ejecta and caused these pits. Unrelated sand dunes near the top of the image have since blown over portions of the pits.

