

Light-Toned Layers in Tithonium Chasma

Approximately 800 kilometers long, Tithonium Chasma is part of the massive Valles Marineris canyon system. The walls of canyons often contain bedrock exposing numerous layers. In some regions, light-toned layered deposits erode faster than the darker-toned ones. The layered deposits in the canyons are of great interest to scientists, as these exposures may shed light on past water activity on Mars.





Ridge and Talus in Lycus Sulci

These outcrops are interpreted to still have abundant coatings and dust, obscuring the underlying bedrock. This interpretation is based on the lack of bluish color for volcanic bedrock from the infrared-red-blue swath of our camera, and consistent with the homogenous tannish color we see throughout the same swath.





Yardang-Sculpted Deposits from Apollonaris Patera

We see here a terrain with an incredible morphologic dichotomy: a relatively smooth region that transitions into sharp ridges. These ridges, aligned in the nearly same direction, are called yardangs. Yardangs are not unique to Mars. Many yardangs can be found on Earth, in very dry regions with strong prevailing winds.

