

## Gullies with Dramatic Lighting

This image was acquired to look for frost on these generally equatorfacing slopes, which are visible in the shadows after enhancing the brightness levels. It is also a dramatic image given the low-sun illumination.



uahirise.org/ESP\_044514\_1315



## **Many Fantastic Colors**

The colors over many regions of Mars are homogenized by the dust and regolith, but here the bedrock is very well exposed, except where there are sand dunes. The rocks also have diverse compositions, which produce different colors in HiRISE infrared-red-blue color images.



uahirise.org/ESP\_044662\_2010



## Flood Lavas and Mass Extinctions

Amazonis Planitia is one of the flattest places on Mars, because of the thick lava fill. Most of this lava was likely erupted in relatively short periods of time, perhaps thousands of years. Earth has also experienced relatively short-lived pulses with very high lava eruption rates, and these pulses precisely match the dates of four mass extinction events and a dozen of so smaller extinction peaks.





## Cratered Cones in Acidalia Planitia

These cones are typically lighter and smoother than their surroundings, and also have different colors. One possible explanation for these features is that they formed as mud volcanoes. In a mud volcano, wet mud is pressurized and then erupts onto the surface. This can take a variety of forms, depending on how wet and fluid the mud is.



uahirise.org/ESP\_044745\_2210