



A Possible Landing Site in Aram Dorsum for the ExoMars Rover

One of the important roles of HiRISE is to take high resolution images of potential landing sites for future landing missions. This image is of an area called Aram Dorsum (also known by its old name, Oxia Palus) that has been suggested for the 2018/2020 ExoMars Rover, because it contains an ancient, exhumed alluvial system.



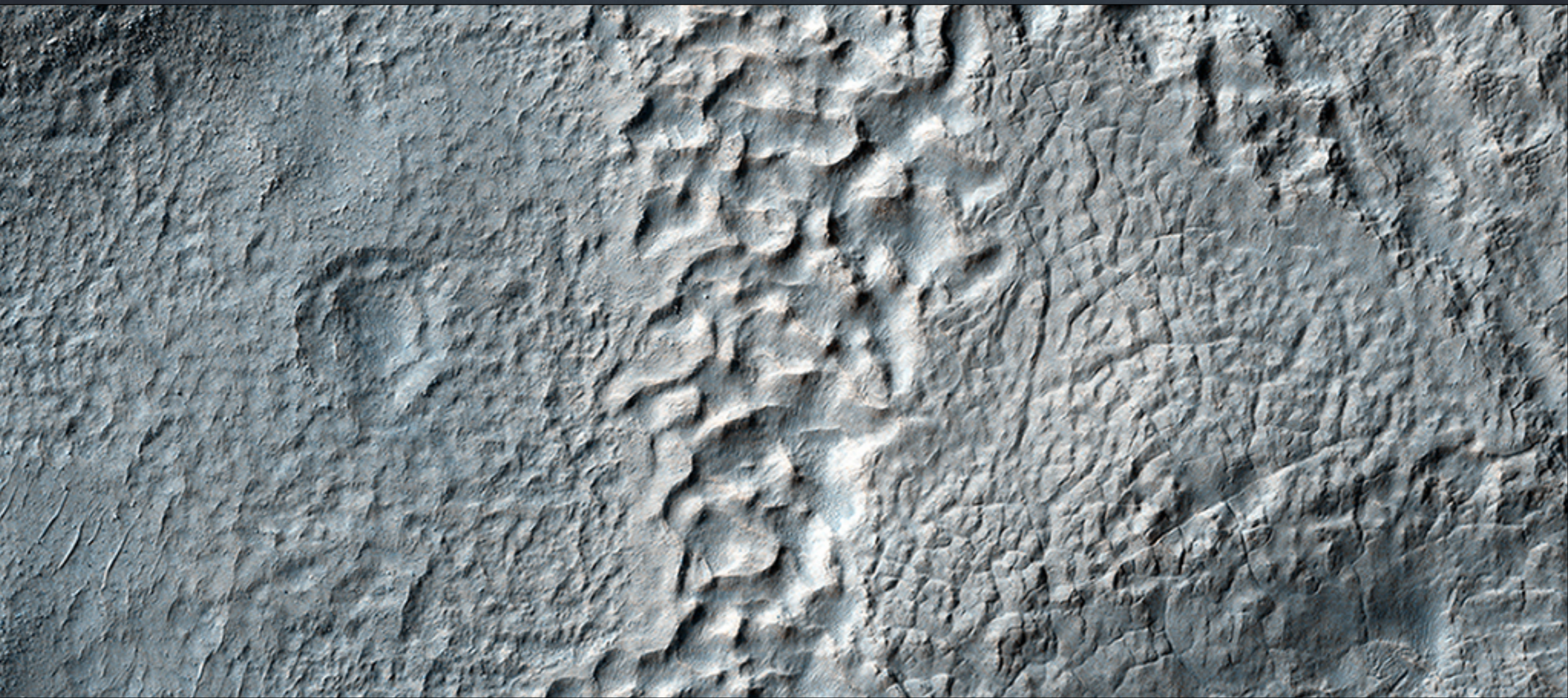
Weird Crater

This feature has a strange appearance, as if the crater has feet with toes sticking out of two sides. It appears that there was a highly oblique impact event, with the bolide (or meteorite) striking the ground while flying almost horizontally over the surface. Such oblique impacts tend to send ejecta in two directions to the sides of the bolide trajectory, rather than in all directions around the crater.



A New Impact Crater Near NASA's InSight Landing Region

This recent HiRISE image, acquired to certify a landing site for the mission, shows a distinctive crater with a very sharp rim and ejecta that is darker and bluer than almost all of this dust-covered region. This must be a very recent impact because there hasn't been sufficient time for atmospheric dust to settle over this spot and re-brighten the surface.



Mantled Terrain in the Southern Mid-Latitudes

The mid-latitudes of Mars are covered in ice-rich mantling deposits in varying states of degradation. This mantle is thought to be deposited as snow during periods when the angle of the tilt of Mars' rotational axis—called obliquity—is much higher, which last happened around 10 million years ago.