

Swirls, gullies and bedrock create two jaw-dropping etherial Mars landscapes

May 19 2011, By Nancy Atkinson



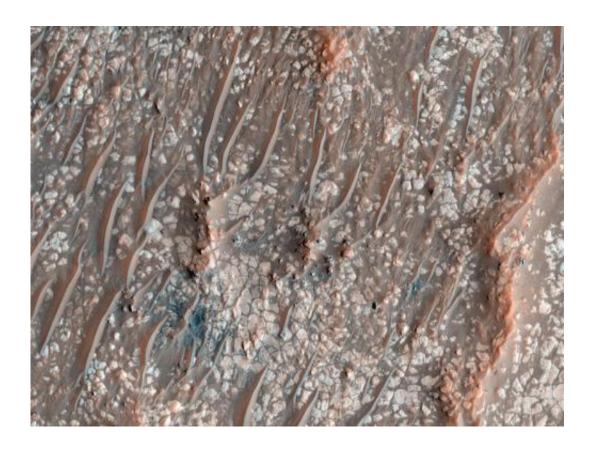
A new image from the HiRISE camera on the Mars Reconnaissance Orbiter shows an ethereal landscape. Credit: NASA/HiRISE team

Wow! These two latest images from the HiRISE Camera on the Mars Reconnaissance Orbiter are simply amazing. I couldn't decide which to post on top as the lead image, so did a coin flip. This observation shows dune gullies laced with beautiful swirls of tracks left by dust devils. Just



like on Earth, dust devils move across the Martian surface and expose the underlying darker material, creating a striking view. The HiRISE team has been tracking changes in this location (-70.3 degrees latitude and 178.2 degrees Longitude East), and they also compare it with dune gully activity going on in other regions. The science team says the activity here is rather anomalous for their high altitude location.

And the other image...



Dunes and bedrock near Noachis Terra on Mars. Credit: NASA/HiRISE team.

This HiRISE image shows a very unique butter brickle-like landscape — it is actually dunes and bedrock on the floor of a crater near Noachis Terra. What strikes me most is the clarity of the detail in this image — it



is absolutely stunning.

Scientifically, this crater is unique because it has been very well characterized as being olivine-rich. Olivine is a magnesium-iron silicate that is very common on Earth. There are other regions of Mars that are also rich in olivine, and since olivine turns into other minerals in the presence of water, scientists are interested in looking for those minerals as well.

The science team says that while the large scale morphology of these craters is well characterized, this is not the case with fine scale layering and fracturing, such as what is seen here. Studying landscapes like this could help the understanding of large scale crustal processes on Mars, including the genesis of magmas and the creation of regolith.

All I know is that it is just plain pretty.

Source: <u>Universe Today</u>

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