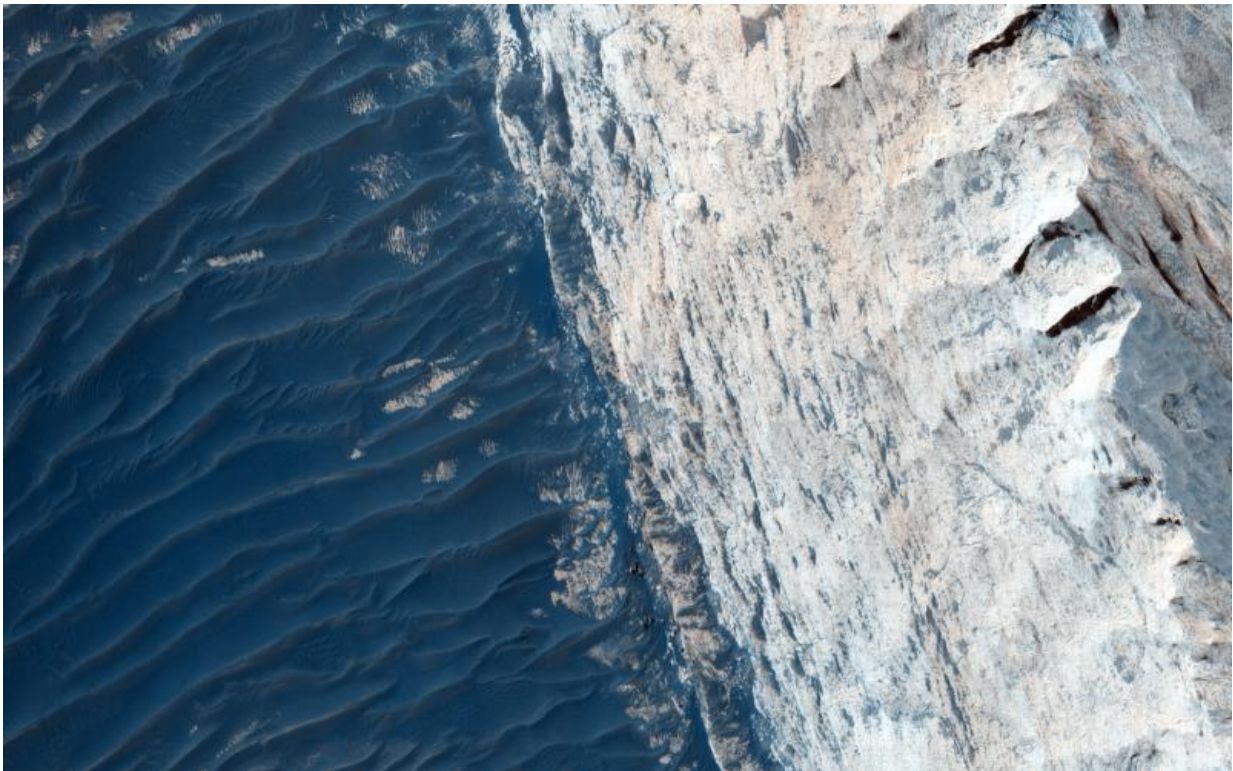


# Image: Layers and fractures in Ophir Chasma, Mars

November 10 2015, by Kirby Runyon

---



Credit: NASA/JPL/University of Arizona

Ophir Chasma forms the northern portion of the vast Mars canyon system Valles Marineris, and this image, acquired on Aug. 10, 2015, by the High Resolution Imaging Science Experiment (HiRISE) camera on NASA's Mars Reconnaissance Orbiter, features a small part of its wall

and floor.

The wall rock shows many [sedimentary layers](#) and the floor is covered with wind-blown ridges, which are intermediate in size between sand ripples and sand dunes. Rocks protruding on the floor could be volcanic intrusions of once-molten magma that pushed aside the surrounding sedimentary layers and "froze" in place.

Images like this can help geologists study the formation mechanisms of large tectonic systems like Valles Marineris. (The word "tectonics" does not mean the same thing as "plate tectonics." Tectonics simply refers to large stresses and strains in a planet's crust. Plate tectonics is the main type of tectonics that Earth has; Mars does not have [plate tectonics](#).)

Provided by NASA

Citation: Image: Layers and fractures in Ophir Chasma, Mars (2015, November 10) retrieved 25 April 2024 from <https://phys.org/news/2015-11-image-layers-fractures-ophir-chasma.html>

|  |
|--|
| <p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p> |
|--|