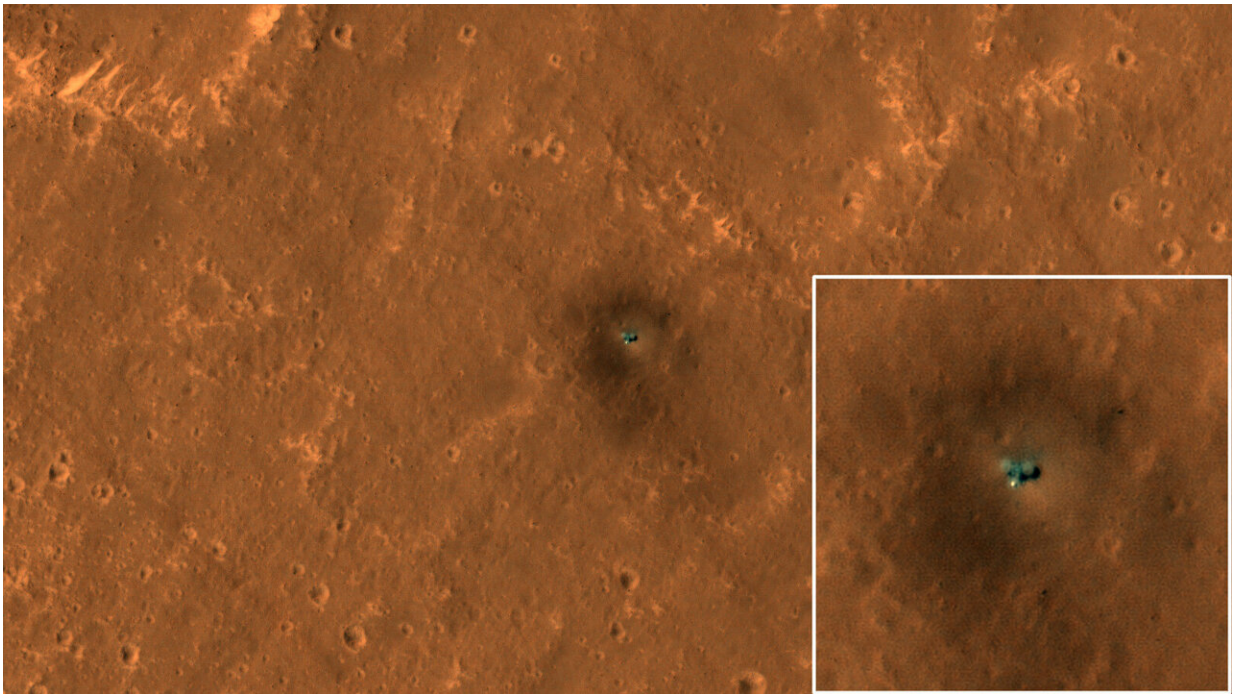


HiRISE views NASA's InSight and Curiosity on Mars

October 17 2019



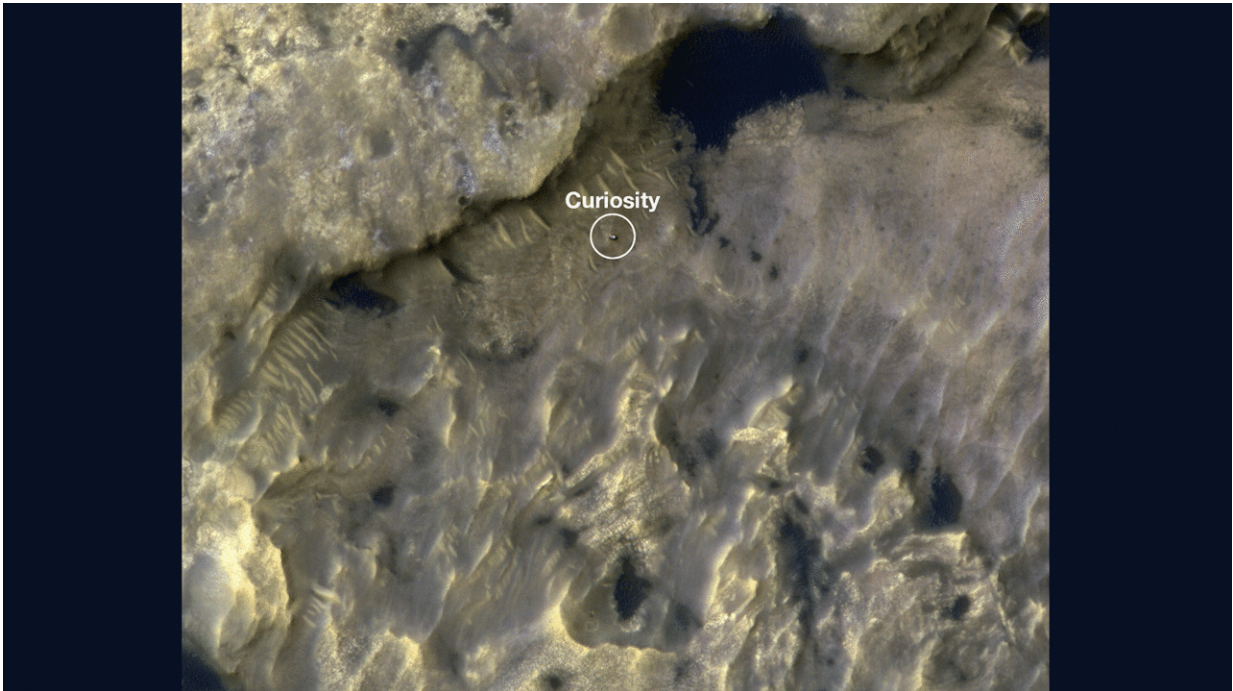
The HiRISE camera on NASA's Mars Reconnaissance Orbiter got its best view yet of the InSight lander on September 23, 2019. Credit: NASA/JPL-Caltech/University of Arizona

The HiRISE camera on NASA's Mars Reconnaissance Orbiter recently sent home eye-catching views of the agency's InSight lander and its Curiosity rover.

HiRISE has been monitoring InSight's [landing site](#) in the Elysium Planitia region of the Red Planet for changes to the surface, such as dust-devil tracks. Taken on Sept. 23, 2019, at an altitude of 169 miles (272 kilometers) above the surface, the new image is NASA's best view yet of InSight from space. It clearly shows the two circular solar panels on either side of the lander body, spanning 20 feet (six meters) from end to end.

The bright spot on the lower side of the spacecraft is the dome-shaped protective cover over InSight's seismometer. The [dark halo](#) surrounding the spacecraft resulted from retrorocket thrusters scouring the surface during landing, while dust devils created the dark streaks that run diagonally across the surface.

Several factors make this image crisper than a set of images released after InSight's November 2018 landing. For one thing, there's less dust in the air this time. Shadows are offset from the lander because this is an oblique view looking west. The lighting was also optimal for avoiding the bright reflections from the lander or its solar panels that have obscured surrounding pixels in other images. However, bright reflections are unavoidable with the seismometer cover just south of the lander because of its dome shape.



This animation shows the position of NASA's Curiosity rover as it journeyed through "the clay-bearing unit" on Mars between May 31 and July 20, 2019. The HiRISE camera on NASA's Mars Reconnaissance Orbiter took both images.
Credit: NASA/JPL-Caltech/University of Arizona

Driven by Curiosity

HiRISE has also been keeping tabs on NASA's Curiosity, which is roughly 373 miles (600 kilometers) from InSight, exploring a region called "the clay-bearing unit."

A GIF released today shows Curiosity as a gray speck as it traveled 1,106 feet (337 meters) from a location within the [clay-bearing unit](#) called "Woodland Bay" (top center) to "Sandside Harbour" (bottom center, near the dark sand patch) between May 31 and July 20, 2019.

Look carefully and you can even see the rover's tracks arcing to the right side of the second image.

More information: Find more information about InSight, Curiosity, MRO and HiRISE at:

mars.nasa.gov/insight/

mars.nasa.gov/msl/

mars.nasa.gov/mro/

Provided by Jet Propulsion Laboratory

Citation: HiRISE views NASA's InSight and Curiosity on Mars (2019, October 17) retrieved 27 April 2024 from <https://phys.org/news/2019-10-hirise-views-nasa-insight-curiosity.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>
--