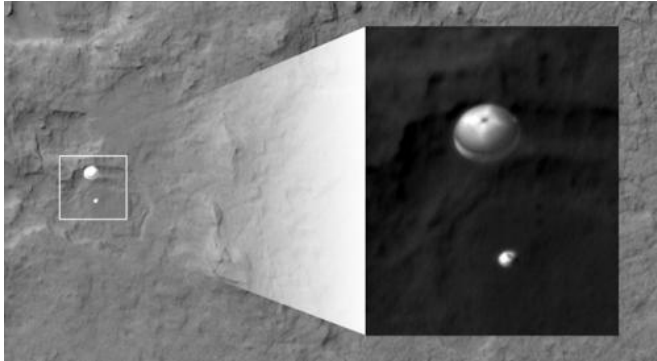
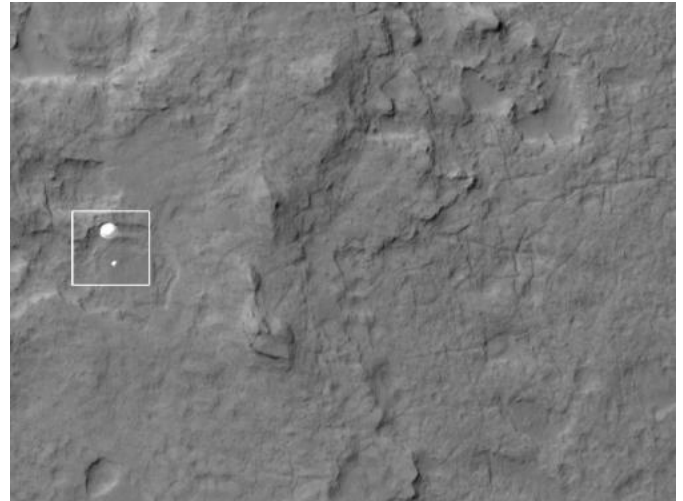


Image: Mars Curiosity rover caught in the act of landing by HiRISE

6 August 2012



[Martian surface.](#)



NASA's Curiosity rover and its parachute were spotted by NASA's Mars Reconnaissance Orbiter as Curiosity descended to the surface on Aug. 5 PDT (Aug. 6 EDT). Image Credit: NASA/JPL-Caltech/Univ. of Arizona

(Phys.org) -- An image from the High Resolution Imaging Science Experiment (HiRISE) camera aboard NASA's Mars Reconnaissance Orbiter captured the Curiosity rover still connected to its 51-foot-wide (almost 16 meter) parachute as it descended towards its landing site at Gale Crater.

"If HiRISE took the image one second before or one second after, we probably would be looking at an empty [Martian landscape](#)," said Sarah Milkovich, HiRISE investigation scientist at NASA's Jet Propulsion Laboratory in Pasadena, Calif. "When you consider that we have been working on this sequence since March and had to upload commands to the spacecraft about 72 hours prior to the image being taken, you begin to realize how challenging this picture was to obtain."

The image was taken while MRO was 211 miles (340 kilometers) away from the parachuting rover. Curiosity and its rocket-propelled backpack, contained within the conical-shaped back shell, had yet to be deployed. At the time, Curiosity was about two miles (three kilometers) above the

NASA's Curiosity rover and its parachute were spotted by NASA's Mars Reconnaissance Orbiter as Curiosity descended to the surface on Aug. 5 PDT (Aug. 6 EDT). Image credit: NASA/JPL-Caltech/Univ. of Arizona

"Guess you could consider us the closest thing to paparazzi on Mars," said Milkovich. "We definitely caught NASA's newest celebrity in the act."

Curiosity, [NASA's](#) latest contribution to the Martian landscape, landed at 10:32 p.m. Aug. 5, PDT, (1:32 on Aug. 6, EDT) near the foot of a mountain three miles tall inside Gale Crater, 96 miles in diameter.

In other Curiosity news, one part of the rover team at the JPL continues to analyze the data from last night's landing while another continues to prepare the one-ton [mobile laboratory](#) for its future explorations of Gale Crater. One key assignment given to Curiosity for its first full day on Mars is to raise its high-gain antenna. Using this antenna will increase the data rate at which the rover can communicate directly with Earth. The mission will

use relays to orbiters as the primary method for sending data home, because that method is much more energy-efficient for the rover.

Curiosity carries 10 science instruments with a total mass 15 times as large as the science payloads on the Mars rovers Spirit and Opportunity. Some of the tools are the first of their kind on Mars, such as a laser-firing instrument for checking rocks' elemental composition from a distance. Later in the mission, the rover will use a drill and scoop at the end of its robotic arm to gather soil and powdered samples of rock interiors, then sieve and parcel out these samples into analytical laboratory instruments inside the rover.

To handle this science toolkit, [Curiosity](#) is twice as long and five times as heavy as Spirit or Opportunity. The Gale Crater landing site places the rover within driving distance to layers of the crater's interior mountain. Observations from orbit have identified clay and sulfate minerals in the lower layers, indicating a wet history.

More information: The image of Curiosity on its parachute can be found at:

[www.nasa.gov/mission_pages/msl...
media/pia15978b.html](http://www.nasa.gov/mission_pages/msl...media/pia15978b.html)

Provided by JPL/NASA

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