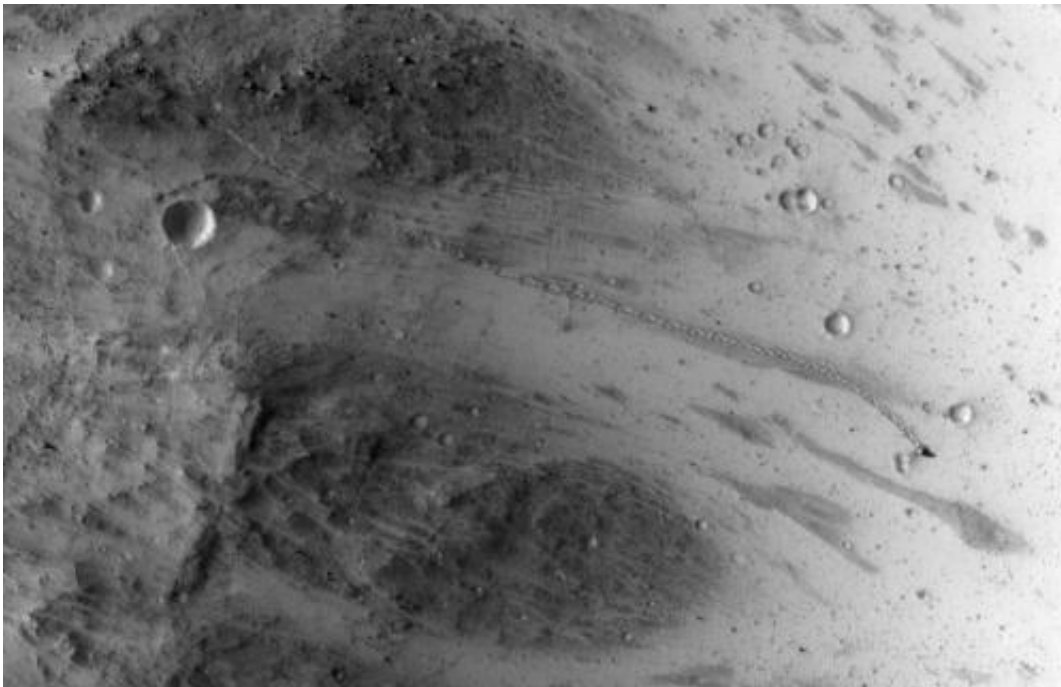


# Tall boulder rolls down martian hill, lands upright

August 14 2014, by Guy Webster

---



A path resembling a dotted line from the upper left to middle right of this image is the track left by an irregularly shaped, oblong boulder as it tumbled down a slope on Mars before coming to rest in an upright attitude at the downhill end of the track. The High Resolution Imaging Science Experiment (HiRISE) camera on NASA's Mars Reconnaissance Orbiter recorded this view on July 3, 2014. The boulder's trail down the slope is about one-third of a mile (about 500 meters) long. The trail has an odd repeating pattern, suggesting the boulder could not roll straight due to its shape. Calculated from the length of the shadow cast by the rock and the known angle of sunlight during this afternoon exposure, the height of the boulder is about 20 feet (6 meters). Its width as seen from overhead is only about 11.5 feet (3.5 meters), so it indeed has an irregular shape. It came to rest with its long axis pointed up. Credit: NASA

(Phys.org) —A track about one-third of a mile (500 meters) long on Mars shows where an irregularly shaped boulder careened downhill to its current upright position, seen in a July 3, 2014, image from the High Resolution Imaging Science Experiment (HiRISE) camera aboard NASA's Mars Reconnaissance Orbiter.

The shadow cast by the rock in mid-afternoon sunlight reveals it is about 20 feet (6 meters) tall. In the downward-looking image, the boulder is only about 11.5 feet (3.5 meters) wide. It happened to come to rest with its long dimension vertical. The trail it left on the slope has a pattern that suggests the boulder couldn't roll smoothly or straight due to its shape.

NASA's Jet Propulsion Laboratory, a division of the California Institute of Technology, Pasadena, manages the Mars Reconnaissance Orbiter for NASA's Science Mission Directorate in Washington. HiRISE, one of six science instruments on the orbiter, is operated by the University of Arizona, Tucson. The instrument was built by Ball Aerospace & Technologies Corp., Boulder, Colorado.

Provided by NASA

Citation: Tall boulder rolls down martian hill, lands upright (2014, August 14) retrieved 19 April 2024 from <https://phys.org/news/2014-08-tall-boulder-martian-hill-upright.html>

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.