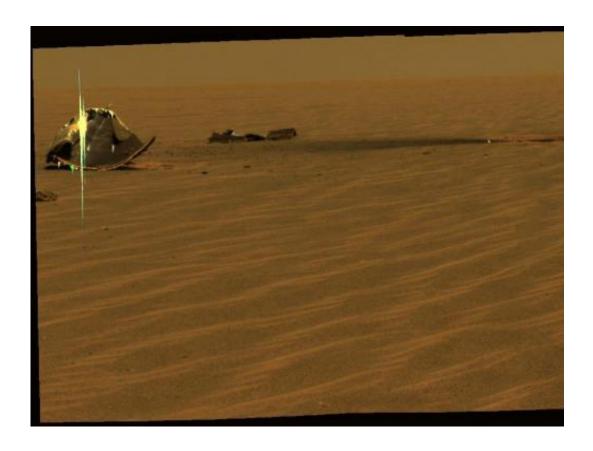


Image: Opportunity's heat shield

August 17 2011



Credit: NASA/JPL/Cornell

This image from 2005 shows the remains of the heat shield from NASA's Mars Exploration Rover Opportunity, broken into two key pieces, the main piece on the left side and a broken-off flank piece near the middle of the image. The heat shield impact site is identified by the circle of red dust on the right side of the picture. In this view, Opportunity is approximately 66 feet (20 meters) from the heat shield,



which protected it while hurtling through the Martian atmosphere.

In the far left of the image, a meteorite called 'Heat Shield Rock' sits nearby, as the sun reflected off the silver-colored underside of the internal thermal blankets of the heat shield. The rover spent 36 sols investigating how the severe heating during entry through the atmosphere affected the heat shield. The most obvious is the fact that the heat shield inverted upon impact.

This is an approximately true-color rendering of the scene acquired around 1:22 p.m. local solar time on Opportunity sol 324 (Dec. 21, 2004) in an image mosaic using panoramic filters at wavelengths of 750, 530, and 430 nanometers. Opportunity has now spent more than 2,680 sols, or Martian days, on the Red Planet.

Provided by JPL/NASA

Citation: Image: Opportunity's heat shield (2011, August 17) retrieved 25 April 2024 from https://phys.org/news/2011-08-image-opportunity-shield.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.