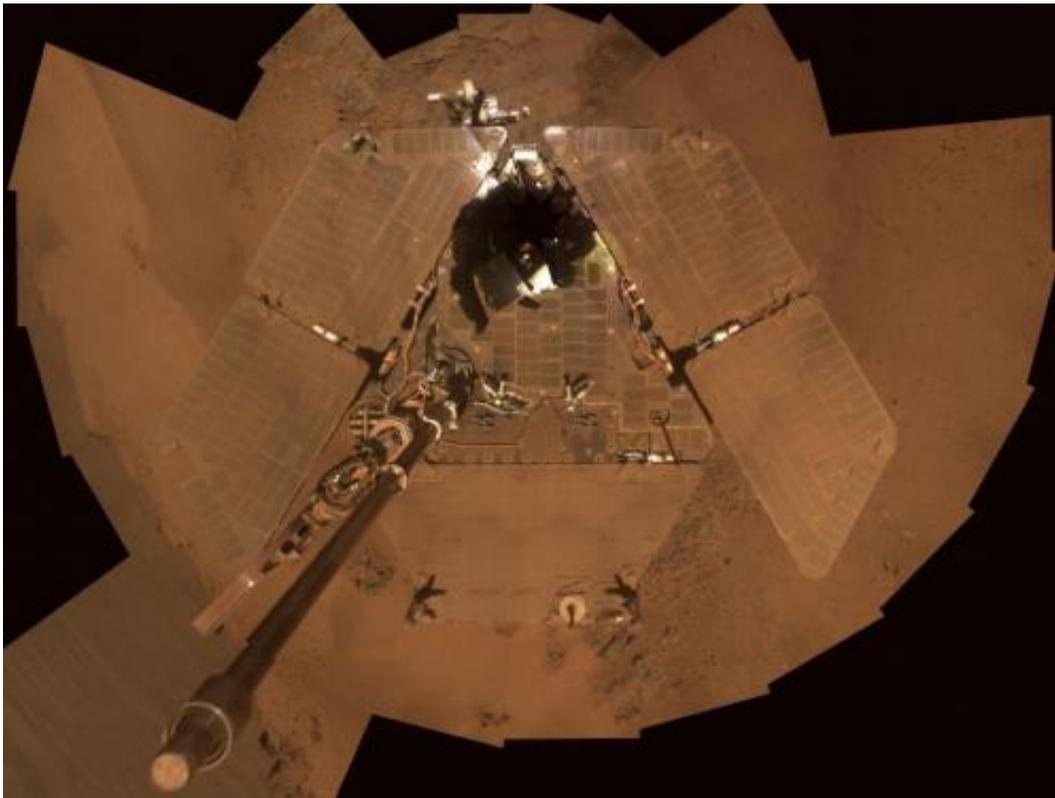


Space Image: Dusty Mars rover's self portrait

March 23 2012



Credit: NASA/JPL-Caltech/Cornell/Arizona State Univ.

(PhysOrg.com) -- This self portrait from NASA's Mars Exploration Rover Opportunity shows dust accumulation on the rover's solar panels as the mission approached its fifth Martian winter. The dust reduces the rover's power supply, and the rover's mobility is limited until the winter is over or wind cleans the panels.

This is a mosaic of images taken by Opportunity's panoramic camera (Pancam) during the 2,111th to 2,814th Martian days, or sols, of the rover's mission (Dec. 21 to Dec. 24, 2011). The downward-looking view omits the mast on which the camera is mounted.

The portrait is presented in approximate true color, the camera team's best estimate of what the scene would look like if humans were there and able to see it with their own eyes.

Opportunity has worked through four Martian southern hemisphere winters since it landed in in January 2004 about 14 miles (23 kilometers) northwest of its current location. Closer to the equator than its twin rover, Spirit, Opportunity has not needed to stay on a sun-facing slope during the previous winters. Now, however, Opportunity's solar panels carry a thicker coating of dust, and the team is using a strategy employed for three winters with Spirit: staying on a sun-facing slope. The sun will pass relatively low in the northern sky from the rover's perspective for several months of shortened daylight before and after the southern Mars [winter solstice](#) on March 30, 2012. Opportunity is conducting research while located on the north-facing slope of a site called "Greeley Haven."

Provided by JPL/NASA

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