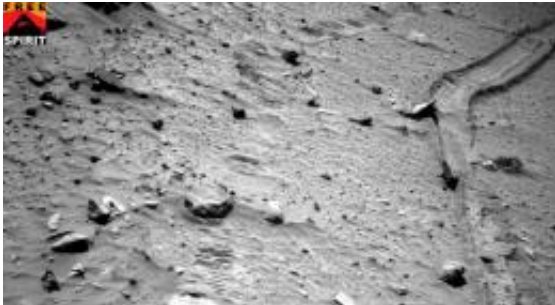


Spirit Mars Rover: No Wheel Stall in Diagnostic Drive

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This view from the navigation camera near the top of the mast on NASA's Mars Exploration Rover Spirit shows the tracks left by the rover as it drove southward and backward, dragging its inoperable right-front wheel, to the location where the rover broke through a crust in April 2009 and became embedded in soft sand. Image credit: NASA/JPL-Caltech

(PhysOrg.com) -- On Sol 2095 (Tuesday, Nov. 24), Spirit performed a set of diagnostic actions related to a stall of the right-rear wheel on the previous drive, three days earlier.

The diagnostics showed a fully functioning [wheel](#) free of obstruction. The rover was commanded forward with 1.5 meters (4.9 feet) of wheel spin. The rover moved 2.1 millimeters (0.08 inch) forward, 1.1 millimeters (0.04 inch) to the left, and 0.3 millimeters (0.01 inch) down.

The cumulative results from Sols 2088 to 2095 (Nov. 17 to 24) are 8.1

meters (27 feet) of commanded motion, 15.7 millimeters (0.6 inch) of forward progress, 9.9 millimeters (0.4 inch) of movement to the left, and 4.8 millimeters (0.2 inch) of sinkage.

The plan for a drive during the long holiday weekend is another two-step drive, with each step 2.5 meters (8.2 feet) of commanded wheel spin. All wheels will be straight and run at the same speed. Results of this commanded drive will be analyzed Monday, Nov. 30.

Provided by JPL/NASA ([news](#) : [web](#))

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