

Mars Exploration Rover Mission

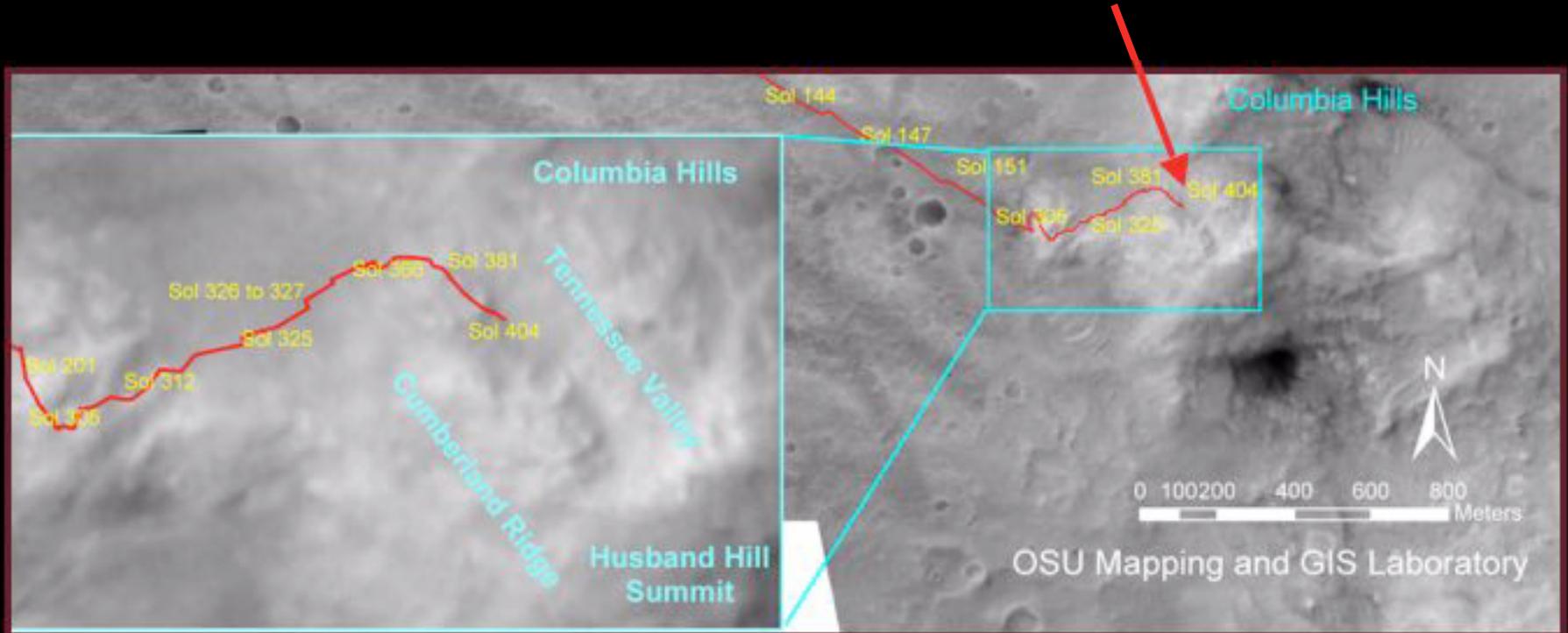
**Spirit
and
Opportunity**



Month in Review

February 1, 2005 - February 28, 2005

**As of February 20, 2005,
Spirit has driven 2.57 miles (4,143 meters)
to a peak nicknamed “Larry’s Lookout.”**



Mars Orbiter Camera on NASA's Mars Global Surveyor. NASA/JPL/MSSS

**This map shows the course Spirit has driven
over the last few months.**

As Spirit struggled up steep terrain around an area dubbed “Cumberland Ridge,” the rover slipped and churned up some soil.



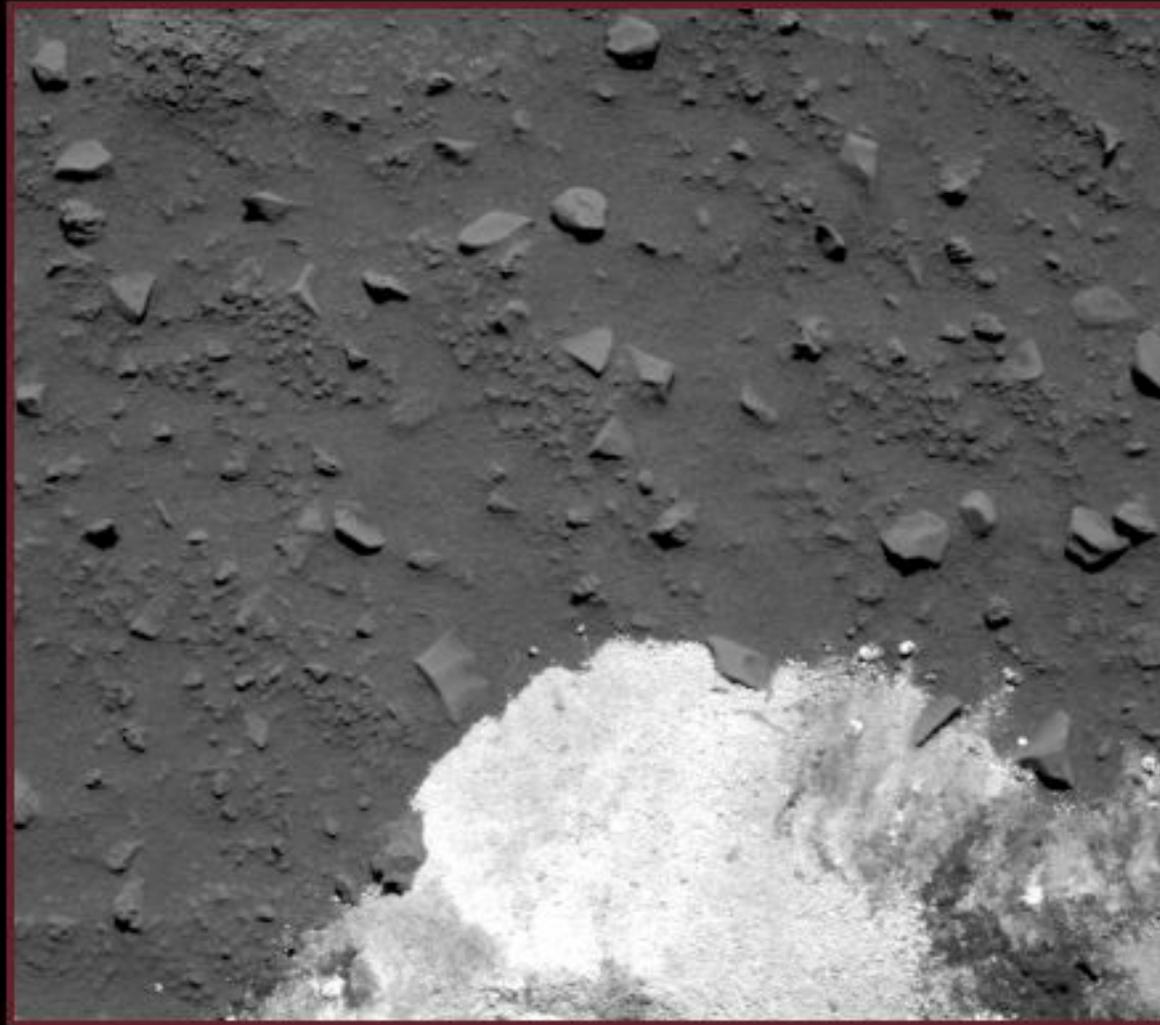
Panoramic camera, February 14, 2005. NASA/JPL/Cornell

The bright patch of disturbed soil grabbed scientists' attention and made a few hearts flutter on Valentine's Day.



Front hazard-avoidance camera, February 14, 2005. NASA/JPL

Further investigation revealed the soil's main ingredient is iron sulfate salt with water molecules bound into it, adding to the evidence for Mars' wet past.



Panoramic camera image, February 17, 2005. NASA/JPL/Cornell

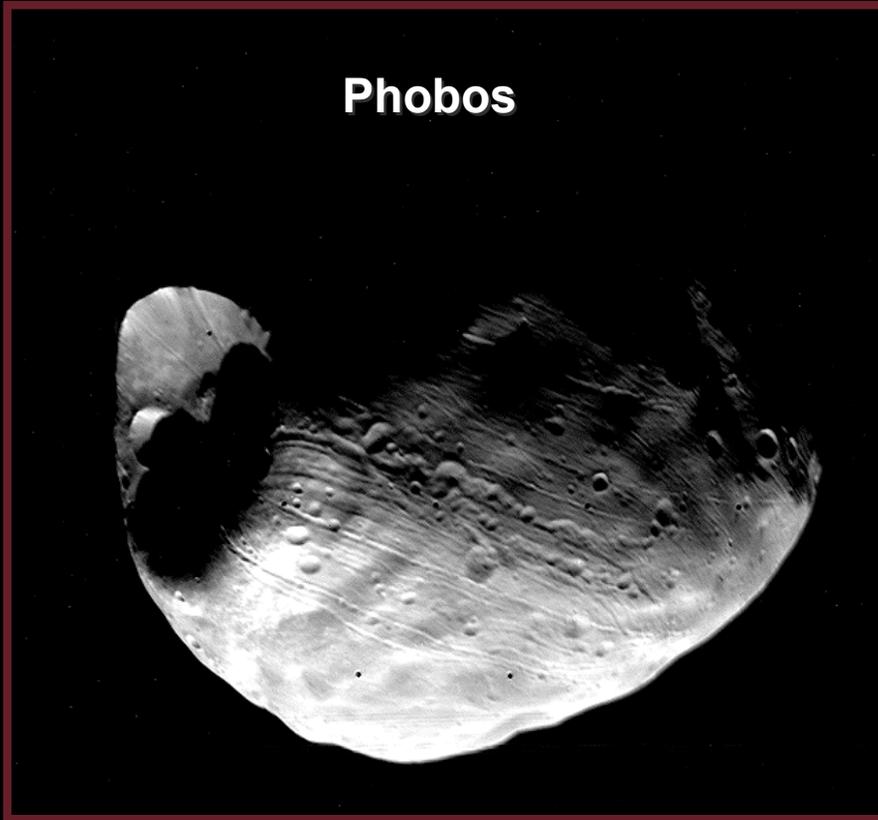
**Spirit also took a picture of an eclipse!
Phobos, one of the two martian moons,
passed in front of the Sun!**



Panoramic camera, February 20, 2005. NASA/JPL/Cornell

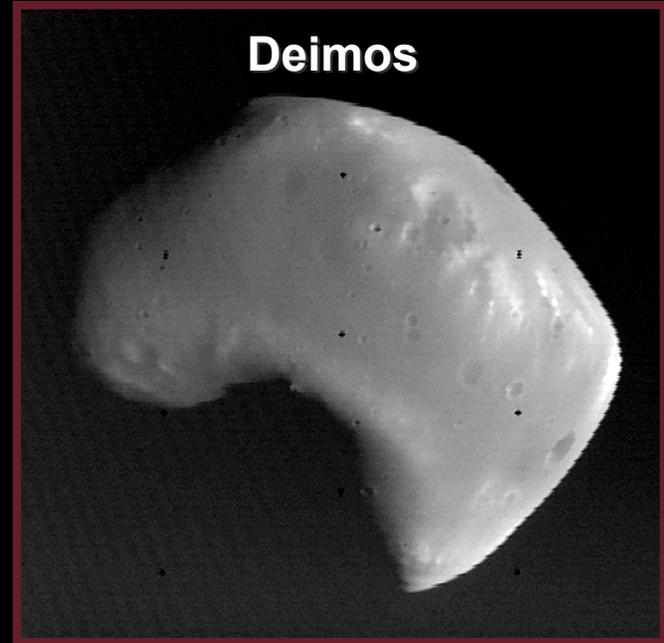
**Phobos is the largest moon of Mars.
Phobos means “fear” and orbits Mars three times a day.**

Phobos



Images taken by Viking 1.

Deimos



Deimos means “panic” and orbits Mars once a day.

Opportunity shattered driving records in February, moving nearly a quarter mile (390 feet) in three sols!



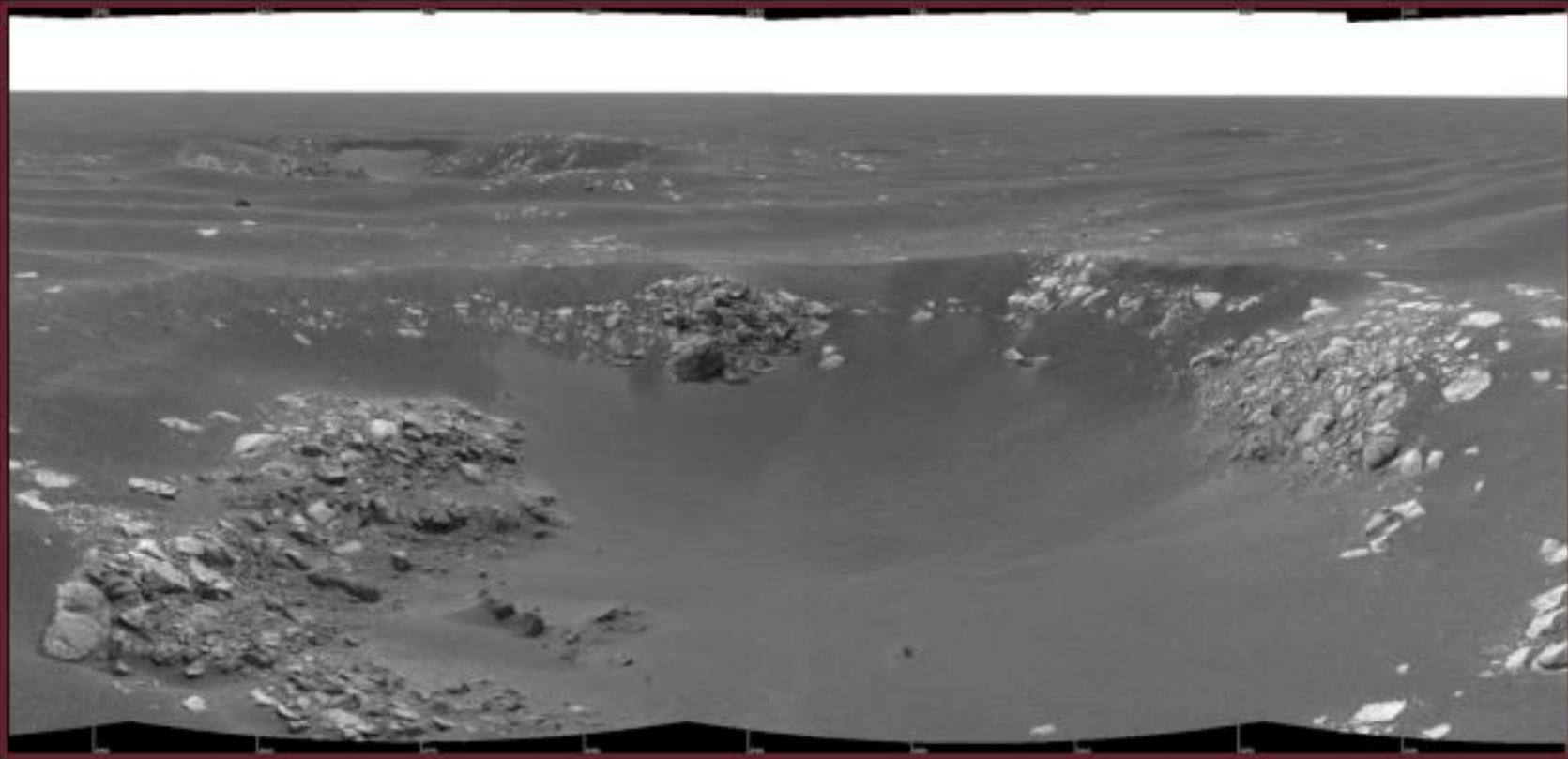
Navigation camera image mosaic, February 24, 2005. NASA/JPL

**Using new autonomous navigation software,
Opportunity covered more ground in one weekend
than either rover did in the first 70 sols on Mars!**



Rear hazard-avoidance camera, February 22, 2005. NASA/JPL

**Opportunity made it to the lip of a crater
informally called “Naturaliste.”**



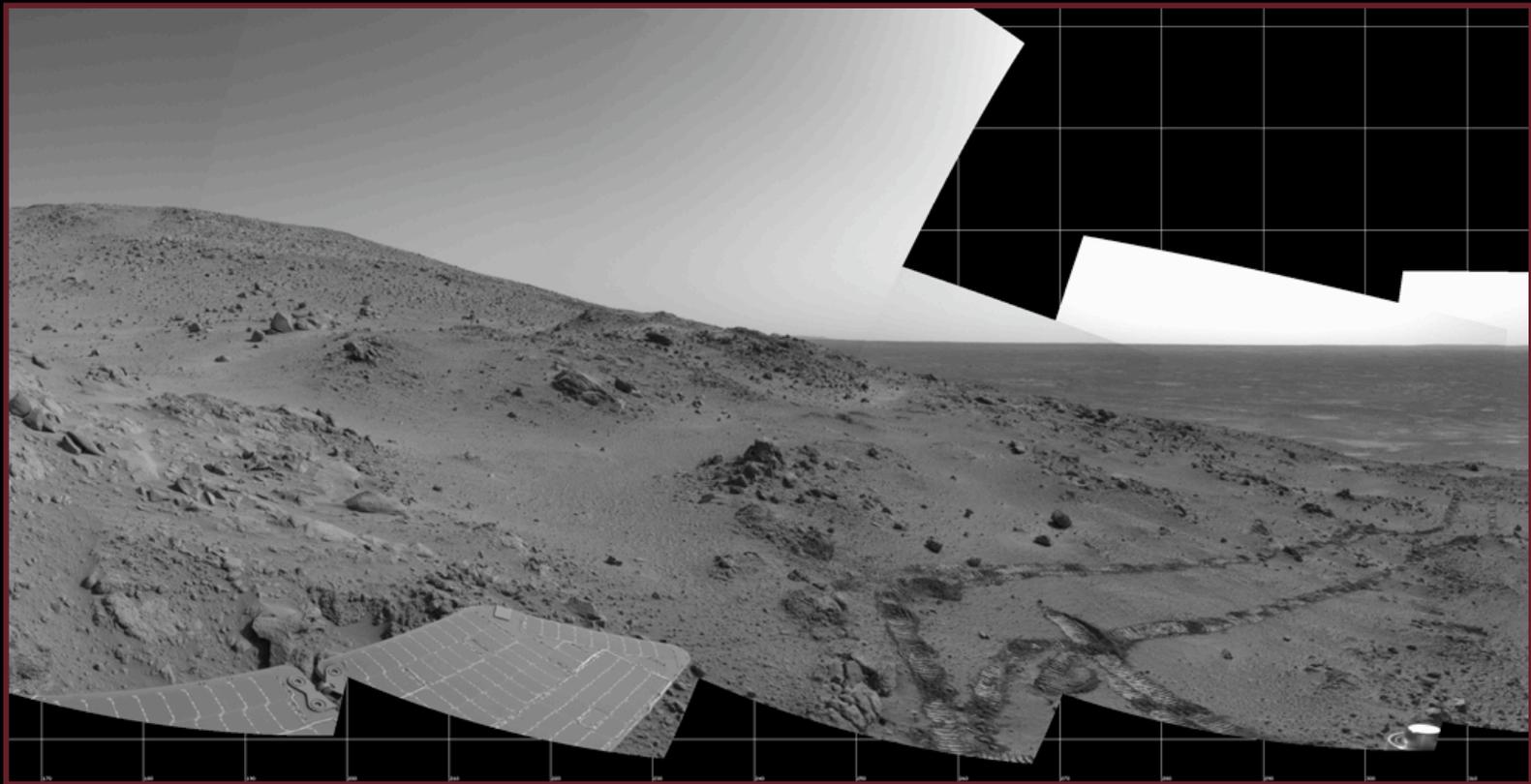
Navigation camera image mosaic, February 24, 2005. NASA/JPL

**Opportunity is peering inside the crater
with its science instruments.**



**Spirit will acquire a panorama
of the valley below its current location.**

Spirit navigation camera mosaic, February 26, 2005. NASA/JPL



**Opportunity will back away from the crater
and move toward a target nicknamed "Vostok."**