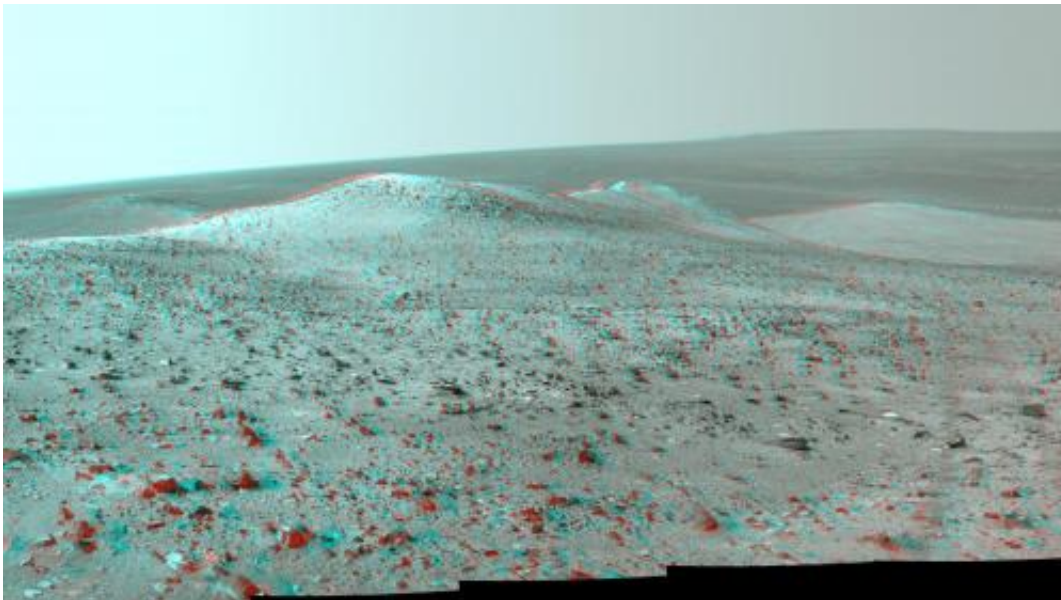


Opportunity rover gets panorama image at 'Wdowiak Ridge'

October 17 2014



This stereo vista from NASA's Mars Exploration Rover Opportunity shows "Wdowiak Ridge," from left foreground to center, as part of a northward look with the rover's tracks visible at right. The image combines views from the left eye and right eye of Opportunity's panoramic camera (Pancam) to appear three-dimensional when seen through blue-red glasses with the red lens on the left. Credit: NASA/JPL-Caltech/Cornell Univ./Arizona State Univ.

The latest fieldwork site for NASA's Mars Exploration Rover Opportunity, which has been examining a series of Martian craters since 2004, is on the slope of a prominent hill jutting out of the rim of a large crater and bearing its own much smaller crater. It's called "Wdowiak

Ridge."

"Wdowiak Ridge sticks out like a sore thumb. We want to understand why this ridge is located off the primary rim of Endeavour Crater and how it fits into the geologic story of this region," said Opportunity science-team member Jim Rice of the Planetary Science Institute, Tucson, Arizona.

The ridge extends about 500 feet (about 150 meters) long and stands about 40 feet (12 meters) above surrounding ground, about two football fields' distance outside the main crest line of Endeavour Crater's western rim.

The science team calls it "Wdowiak Ridge" [DOW-ee-ak] as a tribute to former team member Thomas J. Wdowiak (1939-2013), who taught astronomy for decades at the University of Alabama, Birmingham.

"Tom would have enjoyed this view," said Rice, who first knew of Wdowiak as the enthusiastic outer-space expert who appeared on local television when Rice was a grade-schooler in Alabama in the 1960s.

"Decades later, when I was selected by NASA to be on the Mars rover science team with him, I told Tom I was one of the kids he inspired," Rice said. "Inspiring young people to become interested in space exploration is important to us on this mission."



This vista from NASA's Mars Exploration Rover Opportunity shows "Wdowiak Ridge," from left foreground to center, as part of a northward look with the rover's tracks visible at right. Credit: NASA/JPL-Caltech/Cornell Univ./Arizona State Univ.

Opportunity approached Wdowiak Ridge from the north on the rover's traverse along the western rim of Endeavour [crater](#), which is about 14 miles (22 kilometers) in diameter. The rover is now examining rocks that were tossed outward by an impact that dug a crater 100 feet wide (30 meters) into the southern end of the ridge. That much-smaller crater is called "Ulysses."

"Ulysses is punched down into Wdowiak Ridge, so this boulder field around the crater gives us samples of different types of rocks from inside the ridge," said Opportunity Principal Investigator Steve Squyres, of Cornell University, Ithaca, New York. "Wdowiak Ridge is one on the most dramatic topographic features we've seen on this mission. Why does it stand up the way it does? Is it especially resistant to erosion? What formed it?"

During Opportunity's first decade on Mars and the 2004-2010 career of its twin, Spirit, NASA's Mars Exploration Rover Project yielded a range of findings proving wet environmental conditions on ancient Mars—some very acidic, others milder and more conducive to supporting life.



This vista from NASA's Mars Exploration Rover Opportunity shows "Wdowiak Ridge" in false color, from left foreground to center, as part of a northward look with the rover's tracks visible at right. Credit: NASA/JPL-Caltech/Cornell Univ./Arizona State Univ.

Provided by NASA

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