PRESS RELEASE

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OPPORTUNITY ROVER REACHES 5000 MARTIAN DAYS ON MARS

Boulder Researchers Part of Long-Lived Mission

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On Friday, February 16, 2018, NASA's Mars Exploration Rover, Opportunity, will be conducting its 5000th Martian day of operating on the Red Planet.

NASA's Mars Exploration Rover program landed Opportunity and her twin rover, Spirit, on the Martian surface in January 2004. Though a wheel failure caused Spirit to become mired in a sand trap and cease operations in 2010, Opportunity has continued on exploring Meridiani Planum and providing valuable information on the early geologic history of Mars. Originally charged with a mission success goal of 90 Martian days (known as "sols" to the rover operators), Opportunity has far surpassed that goal and has driven farther than an earthly marathon race's distance, traversing over 28 miles. It is currently investigating terrain near the Martian equator in Perseverance Valley: a morphologic feature on the rim of the 13 mile diameter Endeavour crater that might have been carved by water in Mars' distant past.

Senior scientists at the Space Science Institute in Boulder, CO, including Dr. Bill Farrand, Dr. Mike Wolff, and Dr. Ben Clark, are core members of the MER science team and have contributed to the success of Opportunity's mission since 2004. SSI's Center for Mars Science lead Bill Farrand said, "Wow! If someone had told me early in 2004 that Opportunity would still be going in 2018 at sol 5000, I never would have believed them. The mission's longevity is a huge testament to the engineers who built and who have operated the rover."

In 5000 Martian days, the scientists analyzing data from Opportunity have discovered evidence of flowing surface and subsurface waters in the salt-rich sedimentary rocks of the plains of Meridiani Planum and the alteration of rocks in the rim of the ancient Endeavour crater into clay minerals. We look forward to the next big discoveries from this little rover.

About SPACE SCIENCE INSTITUTE

Space Science Institute (SSI) is a nonprofit, public benefit research and education 501(c)(3) corporation founded in 1992 with a vision to expand humankind's understanding and appreciation of planet Earth, our Solar System, and the universe beyond. SSI's mission is to (a) enable scientists to make new discoveries, (b) increase science and technology literacy for people of all ages and backgrounds, and (c) inspire youth to pursue science-technology education and career opportunities. It is headquartered in Boulder, Colorado, with locations distributed across the U.S. and internationally.

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SSI scientists work on many prestigious space missions, including but not limited to the Mars Exploration Rovers, Rosetta, Cassini, Mars and Lunar Reconnaissance Orbiters, Mars Science Lander, Juno, ExoMars, OSIRIS-REx, and Mars 2020. Areas of research also include heliophysics, observational astronomy (with such facilities as Hubble Space Telescope, SOFIA), and exoplanets (Kepler). SSI's National Center for Interactive Learning (NCIL) fosters collaboration between scientists and educators to create nationally touring exhibits for museums and libraries, provide professional development and webinar training for science educators, and build popular digital games and apps with over a million hits.

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