



The Day the Earth Smiled

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On July 19, 2013, in an event celebrated the world over, NASA's Cassini spacecraft slipped into Saturn's shadow and turned to image the planet, seven of its moons, its rings — and, in the background, our home planet, Earth. With the sun's powerful and potentially damaging rays eclipsed by Saturn itself, Cassini's onboard cameras were able to take advantage of this unique viewing geometry. They acquired a panoramic mosaic of the Saturn system that allows scientists to see details in the rings and throughout the system as they are backlit by the sun.

This mosaic of 141 wide-angle images is special as it marks only the third time our home planet has been imaged from the outer solar system. The first was Voyager 1's "Pale Blue Dot" in 1990; the second was in 2006 when Earth was imaged by Cassini from Saturn's orbit; and this, the third, was the first time ever that inhabitants of Earth were made aware in advance that their photo would be taken from such a great distance.

This image, which has been contrast-enhanced to bring out details, spans about 405,000 miles (652,000 kilometers) across. In the lower right of the mosaic, in between the diffuse, bluish E ring (the outermost ring seen here) and the faint but narrower G ring, is the pale blue dot of our planet, Earth. Look closely and you can see the moon protruding from the Earth's lower right. Earth's twin, Venus, appears as a bright white dot in the upper left quadrant of the mosaic between the G and E rings. Mars also appears as a faint red dot embedded in the outer edge of the E ring, above and to the left of Venus. Note also that Venus appears far from Earth, as does Mars, because they were on the opposite side of the sun from Earth when this view was obtained. For full details of this image, visit: http://saturn.jpl.nasa.gov/photos/imagedetails/index. cfm?imageld=4915

The Cassini mission to Saturn is a cooperative project of the National Aeronautics and Space Administration (NASA), the European Space Agency and the Italian Space Agency. The Jet Propulsion Laboratory, a division of the California Institute of Technology, manages the mission for NASA.

For images and information about the Cassini mission, visit — http://saturn.jpl.nasa.gov/

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