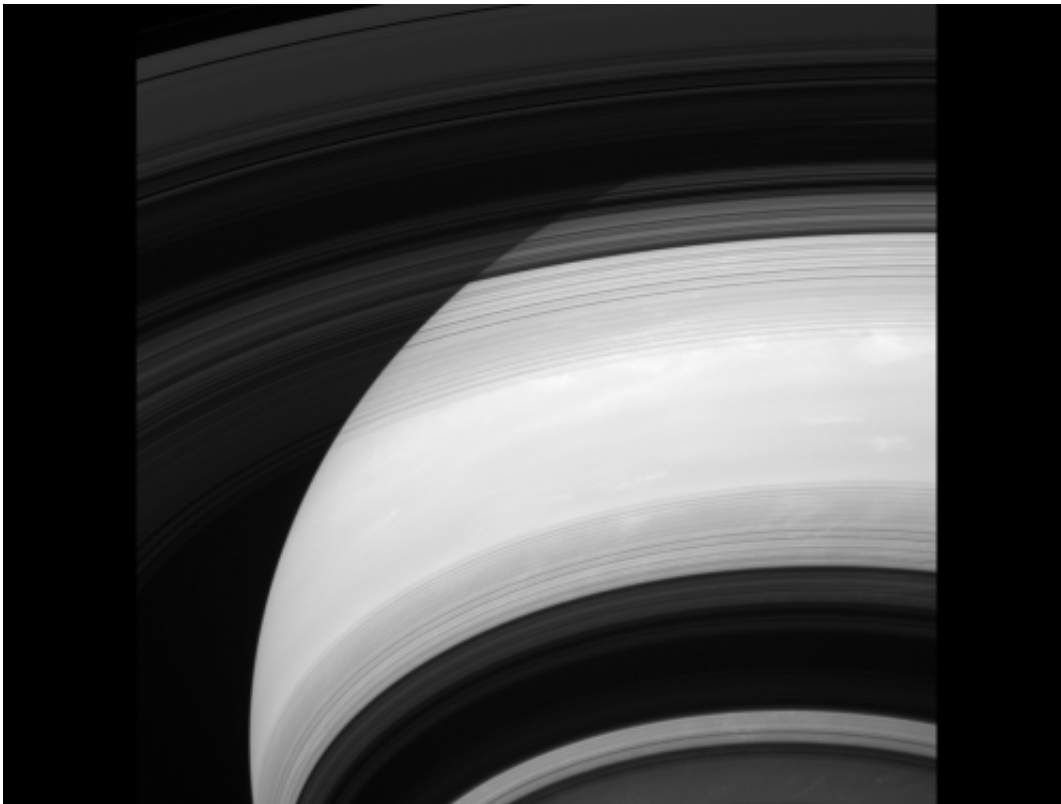


Image: The unilluminated side of Saturn's rings

April 30 2014



Credit: NASA/JPL-Caltech/Space Science Institute

(Phys.org) —Saturn's rings cast shadows on the planet, but the shadows appear to be inside out! The edge of Saturn's outermost A ring can be seen at the top left corner of the image. Moving towards the bottom of the page, one can see the faint Cassini Division, the opaque B ring and the innermost C ring, which contains several ringlets that appear dark

against Saturn in this geometry. The bottom half of the image features the shadows of these rings in reverse order superposed against the disk of the planet: the C ring, the B ring, the Cassini Division and the inner half of the A ring.

This view looks toward the unilluminated side of the rings from about 28 degrees below the ringplane. The image was taken with the Cassini spacecraft wide-angle camera on Dec. 2, 2013, using a spectral filter which preferentially admits wavelengths of near-infrared light centered at 752 nanometers.

The view was acquired at a distance of approximately 750,000 miles (1.2 million kilometers) from Saturn and at a Sun-Saturn-spacecraft, or phase, angle of 57 degrees. Image scale is 45 miles (72 kilometers) per pixel.

The Cassini-Huygens mission is a cooperative project of NASA, the European Space Agency and the Italian Space Agency. The Jet Propulsion Laboratory, a division of the California Institute of Technology in Pasadena, manages the mission for NASA's Science Mission Directorate, Washington, D.C. The Cassini orbiter and its two onboard cameras were designed, developed and assembled at JPL. The imaging operations center is based at the Space Science Institute in Boulder, Colo.

Provided by NASA

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