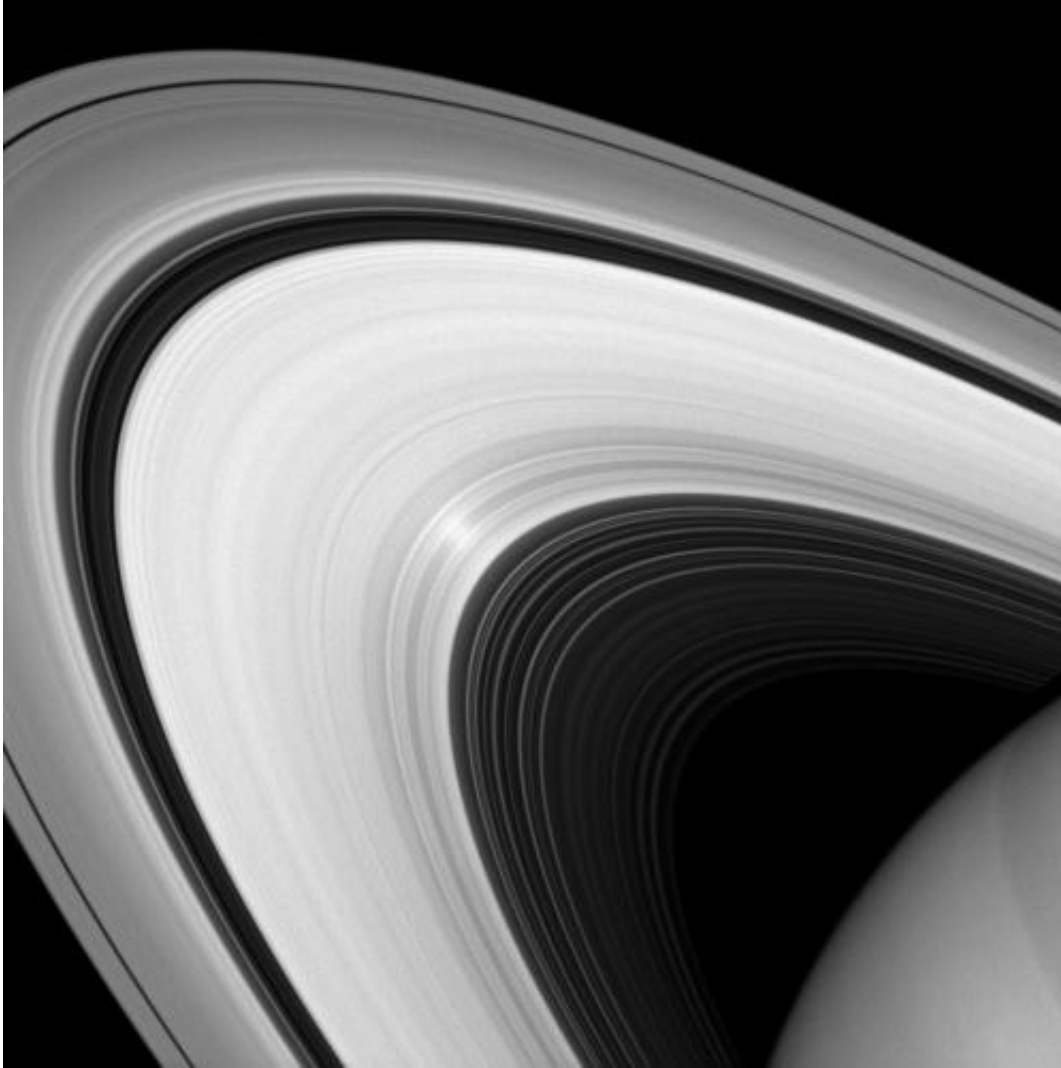


Image: Infrared image of Saturn's rings

January 22 2014



Credit: NASA/JPL-Caltech/Space Science Institute

(Phys.org) —Although it may look to our eyes like other images of the

rings, this infrared image of Saturn's rings was taken with a special filter that will only admit light polarized in one direction. Scientists can use these images to learn more about the nature of the particles that make up Saturn's rings.

The bright spot in the rings is the "opposition surge" where the Sun-Ring-Spacecraft angle passes through zero degrees. Ring scientists can also use the size and magnitude of this bright spot to learn more about the surface properties of the ring particles.

This view looks toward the sunlit side of the rings from about 19 degrees above the ringplane. The image was taken with the Cassini spacecraft wide-angle camera on Aug. 18, 2013 using a spectral filter sensitive to wavelengths of near-infrared light centered at 705 nanometers.

The view was acquired at a distance of approximately 712,000 miles (1.1 million kilometers) from Saturn and at a Sun-rings-spacecraft, or phase, angle of 7 [degrees](#). Image scale is 43 miles (68 kilometers) per pixel.

Provided by NASA

Citation: Image: Infrared image of Saturn's rings (2014, January 22) retrieved 20 March 2024 from <https://phys.org/news/2014-01-image-infrared-saturn.html>

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