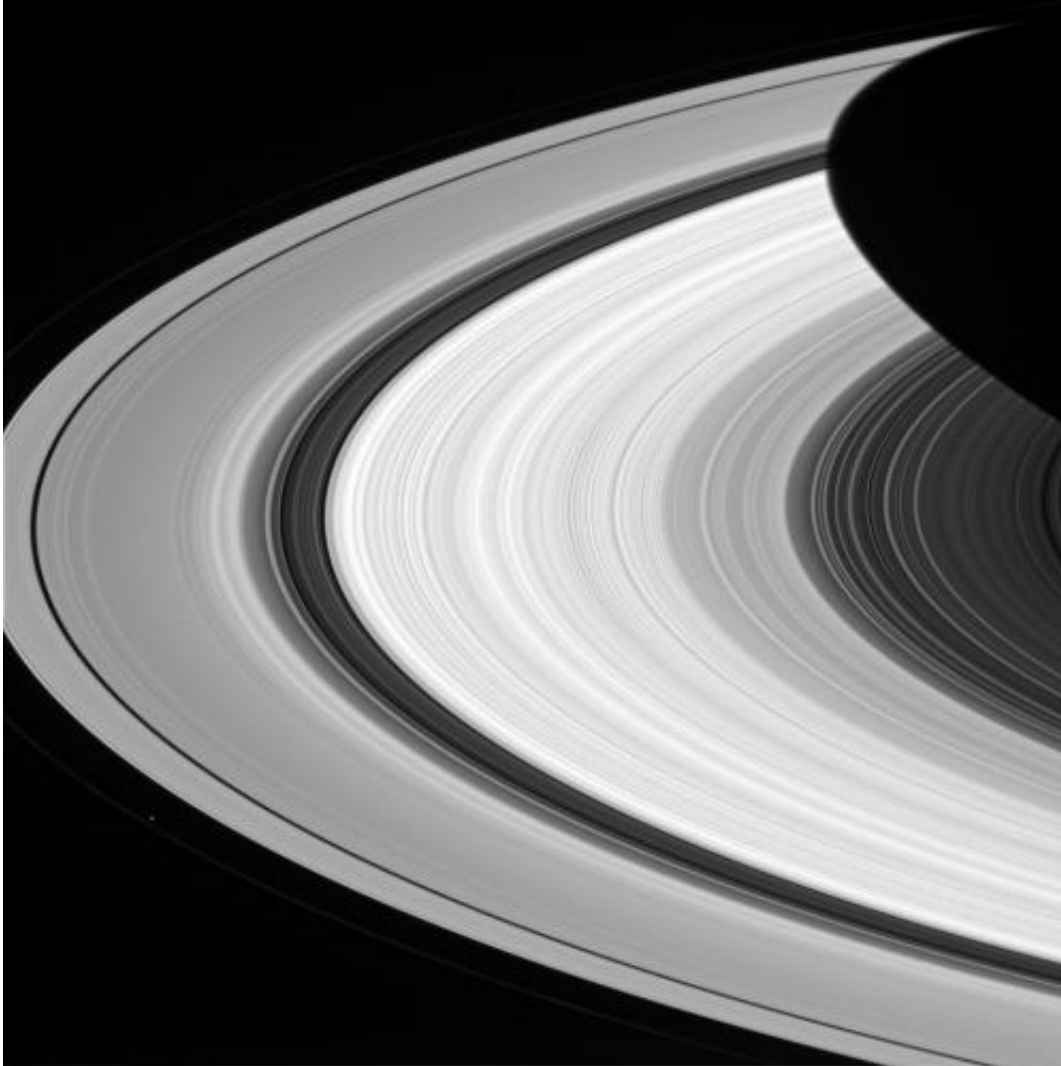


Image: Groovy rings of Saturn

March 17 2015



Credit: NASA/JPL-Caltech/Space Science Institute

From afar, Saturn's rings look like a solid, homogenous disk of material.

But upon closer examination from Cassini, we see that there are varied structures in the rings at almost every scale imaginable.

Structures in the rings can be caused by many things, but often times Saturn's many moons are the culprits. The dark gaps near the left edge of the A ring (the broad, outermost ring here) are caused by the moons (Pan and Daphnis) embedded in the gaps, while the wider Cassini division (dark area between the B ring and A ring here) is created by a resonance with the medium-sized moon Mimas (which orbits well outside the rings). Prometheus is seen orbiting just outside the A ring in the lower left quadrant of this image; the F ring can be faintly seen to the left of Prometheus.

This view looks toward the sunlit side of the rings from about 15 degrees above the ringplane. The image was taken in red light with the Cassini spacecraft wide-angle camera on Jan. 8, 2015.

The view was obtained at a distance of approximately 566,000 miles (911,000 kilometers) from Saturn and at a Sun-Saturn-spacecraft, or phase, angle of 37 degrees. Image scale is 34 miles (54 kilometers) per pixel.

The Cassini 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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