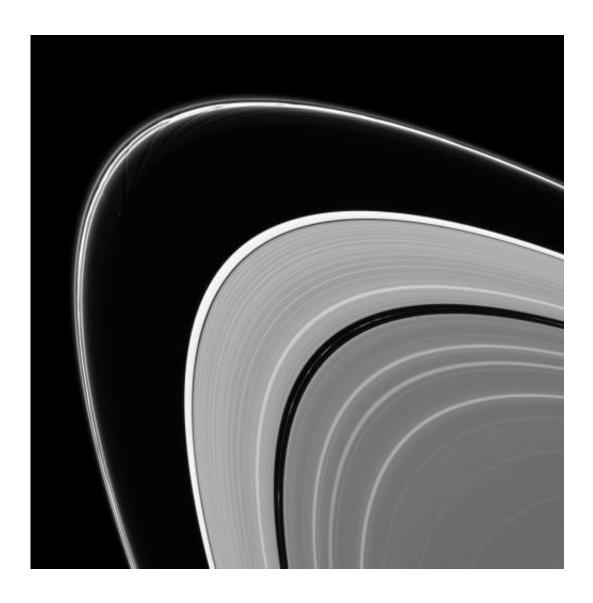


## Image: Prometheus creates gores and streamers in Saturn's F ring

June 10 2014



Credit: NASA/JPL-Caltech/Space Science Institute



(Phys.org) —Prometheus is caught in the act of creating gores and streamers in the F ring. Scientists believe that Prometheus and its partner-moon Pandora are responsible for much of the structure in the F ring.

The orbit of Prometheus (53 miles, or 86 kilometers across) regularly brings it into the F ring. When this happens, it creates gores, or channels, in the ring where it entered. Prometheus then draws ring material with it as it exits the ring, leaving streamers in its wake. This process creates the pattern of structures seen in this image. This process is described in detail, along with a movie of Prometheus creating one of the streamer/channel features, in PIA08397.

This view looks toward the sunlit side of the rings from about 8.6 degrees above the ringplane. The image was taken in <u>visible light</u> with the Cassini spacecraft narrow-angle camera on Feb. 11, 2014.

The view was acquired at a distance of approximately 1.3 million miles (2.1 million kilometers) from Saturn and at a Sun-Saturn-spacecraft, or phase, angle of 147 degrees. Image scale is 8 miles (13 kilometers) per pixel.

## Provided by NASA

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