

Image: Dione's contrasts

August 23 2016



Credit: NASA/JPL-Caltech/Space Science Institute



Dione reveals its past via contrasts in this view from NASA's Cassini spacecraft. The features visible here are a mixture of tectonics—the bright, linear features—and impact cratering—the round features, which are spread across the entire surface.

Tectonic features tell the story of how Dione (698 miles or 1,123 kilometers across) has been heated and cooled since its formation, and scientists use those clues to piece together the moon's past. Impact craters are evidence of external debris striking the surface, and thus they tell about the environment in which the moon has existed over its history.

This view looks toward the trailing hemisphere of Dione. North on Dione is up. The image was taken in visible light with the Cassini narrowangle camera on April 11, 2015.

The view was obtained at a distance of approximately 68,000 miles (110,000 kilometers) from Dione and at a Sun-Dione-spacecraft, or phase, angle of 28 degrees. Image scale is 2,165 feet (660 meters) per pixel.

Provided by NASA

Citation: Image: Dione's contrasts (2016, August 23) retrieved 28 April 2024 from <u>https://phys.org/news/2016-08-image-dione-contrasts.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.