NASA image: Tethys 'eyes' Saturn

June 15 2015, by Tony Greicius

Credit: NASA/JPL-Caltech/Space Science Institute
The two large craters on Tethys, near the line where day fades to night, almost resemble two giant eyes observing Saturn.

The location of these craters on Tethys' terminator throws their topography into sharp relief. Both are large craters, but the larger and southernmost of the two shows a more complex structure. The angle of the lighting highlights a central peak in this crater. Central peaks are the result of the surface reacting to the violent post-impact excavation of the crater. The northern crater does not show a similar feature. Possibly the impact was too small to form a central peak, or the composition of the material in the immediate vicinity couldn't support the formation of a central peak.

In this image Tethys is significantly closer to the camera, while the planet is in the background. Yet the moon is still utterly dwarfed by the giant Saturn.

This view looks toward the anti-Saturn side of Tethys. North on Tethys is up and rotated 42 degrees to the right. The image was taken in visible light with the Cassini spacecraft wide-angle camera on April 11, 2015.

The view was obtained at a distance of approximately 75,000 miles (120,000 kilometers) from Tethys. Image scale at Tethys is 4 miles (7 kilometers) per pixel.

The Cassini mission is a cooperative project of NASA, ESA (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. 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, Colorado.


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.