

# Cassini Captures Swiss-Cheese Look of Saturn Moon

April 28 2005

---



An image of Saturn's small moon, Epimetheus (epp-ee-MEE-thee-uss), was captured by the Cassini spacecraft in the closest view ever taken of the pockmarked body.

*Image: The color of Epimetheus in this view appears to vary in a non-uniform way across the different facets of the moon's irregular surface.*

Epimetheus is irregularly shaped and dotted with soft-edged craters. The

many large, softened craters on Epimetheus indicate a surface that is several billion years old. The moon shares an orbit with another of Saturn's small moons, Janus. The two dance in a planetary tango as they move in almost identical orbits, exchanging orbits every four years, instead of colliding. Both play a role in creating intricate waves in Saturn's rings; both have densities significantly lower than that of solid ice, suggesting they may be "rubble piles" held together by gravity. At 116 kilometers (72 miles) across, Epimetheus is slightly smaller than Janus at 181 kilometers (113 miles) across. Spectra of Epimetheus from the Cassini visual infrared mapping spectrometer indicate that the moon is mostly water ice.

The images for this false color composite were obtained with the Cassini spacecraft narrow-angle camera on March 30, 2005, at a distance of approximately 74,600 kilometers (46,350 miles) from Epimetheus.

Source: NASA

Citation: Cassini Captures Swiss-Cheese Look of Saturn Moon (2005, April 28) retrieved 18 April 2024 from <https://phys.org/news/2005-04-cassini-captures-swiss-cheese-saturn-moon.html>

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.