Saturnian Moon Gets Glamour Shots

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In spite of the meteoric blemishes covering the face of Saturn's moon lapetus, the walnut-shaped celestial body was the subject of another photo shoot by the Cassini spacecraft.

Mission scientists are now poring over hundreds of snapshots made during the spacecraft's closest-ever flyby with lapetus this week, which show its "yin-and-yang" contrastive halves and <u>strange mountain range</u> in great detail

"The images are really stunning," said Tilmann Denk, a Cassini imaging scientist at the Free University in Berlin who began planning the photo shoot seven years ago.

The photos traveled 947 million miles (1.52 billion kilometers) to reach Earth from Saturn's vicinity and were taken only 1,000 miles (1,640 kilometers) from the surface--100 times closer than Cassini's 2004 flyby.

Close-ups of lapetus' hemispheres are revealed by the images: a white half resembling snow and a second half as <u>black as tar</u>. The snapshots also show the ridge of mountains 12 miles (20 kilometers) high along lapetus' equator, which scientists have recently tried to explain.

"lapetus provides us a window back in time, to the formation of the planets over four billion years ago," said Torrence Johnson, a Cassini imaging team member at NASA's Jet Propulsion Laboratory in Pasadena, Calif. "Since then its icy crust has been cold and stiff, preserving this ancient surface for our study."

A blast of galactic cosmic rays delayed delivery of Cassini's latest work by several days, but the spacecraft automatically entered into a protective "safe mode" after the event, according to a statement released by NASA. Had the energetic blast arrived a few days sooner, however, the close-up imaging opportunity may have been lost due to the temporary shut-down.

NASA said that Cassini is operating normally, and its scientific instruments "are expected to return to normal operations in a few days."

"There's never a dull moment on this mission," said Bob Mitchell, Cassini program manager at JPL. "We are very excited about the stunning images being returned. There's plenty here to keep many scientists busy for many years."