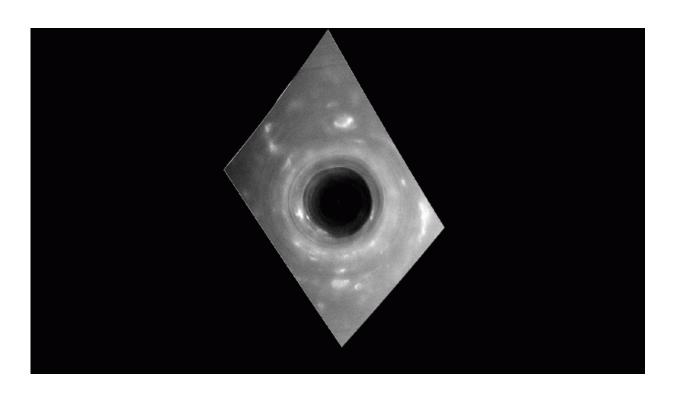


New movie shows Cassini's first dive over Saturn

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Cassini took a movie sequence of images during its first dive between Saturn and its rings on April 26, 2017. Credit: NASA/JPL-Caltech

A new movie sequence of images from NASA's Cassini spacecraft shows the view as the spacecraft swooped over Saturn during the first of its Grand Finale dives between the planet and its rings on April 26.

The movie comprises one hour of observations as the spacecraft moved



southward over Saturn. It begins with a view of the swirling vortex at the planet's <u>north pole</u>, then heads past the outer boundary of the hexagon-shaped jet stream and beyond.

"I was surprised to see so many sharp edges along the hexagon's outer boundary and the eye-wall of the <u>polar vortex</u>," said Kunio Sayanagi, an associate of the Cassini imaging team based at Hampton University in Virginia, who helped produce the new movie. "Something must be keeping different latitudes from mixing to maintain those edges," he said.

Toward the end of the movie, the camera frame rotates as the spacecraft reorients to point its large, saucer-shaped antenna in the direction of the spacecraft's motion. The antenna was used as a protective shield during the crossing of Saturn's ring plane.

As the movie frames were captured, the Cassini <u>spacecraft</u>'s altitude above the clouds dropped from 45,000 to 4,200 miles (72,400 to 6,700 kilometers). As this occurred, the smallest resolvable features in the atmosphere changed from 5.4 miles (8.7 kilometers) per pixel to 0.5 mile (810 meters) per pixel.

"The images from the first pass were great, but we were conservative with the camera settings. We plan to make updates to our observations for a similar opportunity on June 28 that we think will result in even better views," said Andrew Ingersoll, a member of the Cassini imaging team based at Caltech in Pasadena, California.

More information: For more information about Cassini, visit www.nasa.gov/cassini



Provided by Jet Propulsion Laboratory

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