

Image: Saturn's north pole

October 31 2017



Credit: NASA/JPL-Caltech/Space Science Institute



Reflected sunlight is the source of the illumination for visible wavelength images such as the one above. However, at longer infrared wavelengths, direct thermal emission from objects dominates over reflected sunlight. This enabled instruments that can detect infrared radiation to observe the pole even in the dark days of winter when Cassini first arrived at Saturn and Saturn's northern hemisphere was shrouded in shadow.

Now, 13 years later, the north pole basks in full sunlight. Close to the northern summer solstice, <u>sunlight</u> illuminates the previously dark region, permitting Cassini scientists to study this area with the spacecraft's full suite of imagers.

This view looks toward the <u>northern hemisphere</u> from about 34 degrees above Saturn's ringplane. The image was taken with the Cassini spacecraft wide-angle camera on April 25, 2017 using a spectral filter which preferentially admits wavelengths of near-infrared light centered at 752 nanometers.

The view was acquired at a distance of approximately 274,000 miles (441,000 kilometers) from Saturn and at a Sun-Saturn-spacecraft, or phase, angle of 111 degrees. Image scale is 16 miles (26 kilometers) per pixel.

The Cassini spacecraft ended its mission on Sept. 15, 2017.

Provided by Jet Propulsion Laboratory

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