

# Typhoon Nida's cloud tops dropping as it zigzags in wind shear

December 1 2009

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NASA's Aqua satellite's Moderate Imaging Spectroradiometer instrument captured an image of Typhoon Nida on November 30 at 4:15 UTC. The image showed the eye is now cloud-filled, one sign of a weakening storm. Credit: NASA, MODIS Rapid Response

Nida is battling to keep its typhoon strength in the Western Pacific Ocean as wind shear continues to tear at the storm and weaken it. NASA's CloudSat satellite noticed that Nida's cloud tops are not as high as they were over the weekend, and lower cloud tops mean less powerful thunderstorms.

Over the last few days, satellites have shown forecasters that Nida has zigzagged between 18 and 20 degrees North Latitude on its somewhat erratic northern track. It has moved west, then east, and now back in a westward direction on its general track north.

After a westward movement, Nida is expected to now travel to the west of the islands of Iwo To and Chichi Jima over the next several days.

On December 1 at 4 a.m. ET (0900 UTC), Nida was now a Category One typhoon, with [maximum sustained winds](#) near 86 mph (75 knots). Winds are still gusting near 100 mph near the center of the [storm](#). The range for typhoon storm-force winds now extend to 45 miles from the center, while tropical storm-force winds extend up to 135 miles from the center.

Nida is located about 335 miles southwest of the island of Iwo To (formerly known as Iwo Jima), near 20.6 North and 137.3 East. Nida is still trudging along at a slow rate near 5 mph in a west-northwesterly direction, but is expected to move in a more westerly direction over the next couple of days before turning north.

NASA's Aqua satellite's Moderate Imaging Spectroradiometer (MODIS) instrument captured an image of Typhoon Nida on November 30 at 4:15 UTC. The image showed the eye is now cloud-filled, one sign of a weakening storm, and since that image, Nida had weakened from a Category Two Typhoon to a Category One storm.

Forecasters at the Joint [Typhoon](#) Warning Center noted that infrared imagery like that from NASA's Atmospheric Infrared Sounder on NASA's Aqua satellite, has shown that Nida's eye has degenerated. Satellite imagery also has shown that Nida is elongating in a southwest to northeast direction, a sign that the storm can't maintain its shape and strength. Satellite imagery has also shown that dry air is entering the

system, and it will wick up moisture and weaken the storm further.

NASA's CloudSat satellite gives forecasters a unique look at tropical cyclones because its Cloud Profiling Radar basically "cuts a storm in half" and looks at it from the side. What CloudSat saw in the latest imagery was that Nida's cloud tops have dropped from over 9 miles high (15 kilometers) to around 8 miles (13 kilometers) high. Those dropping cloud heights indicate that Nida doesn't have the uplift, or strong convection that it had earlier, and that's also reflected in its slowing sustained winds. There were still some areas of cloud ice (indicating highest thunderstorm tops with strongest uplift), but the areas of heavy precipitation have diminished.

Nida is expected to re-curve northeast and become an extra-tropical low within 2 to 3 days.

Source: JPL/NASA ([news](#) : [web](#))

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