

Two NASA satellites capture monster Super Typhoon Melor

October 5 2009



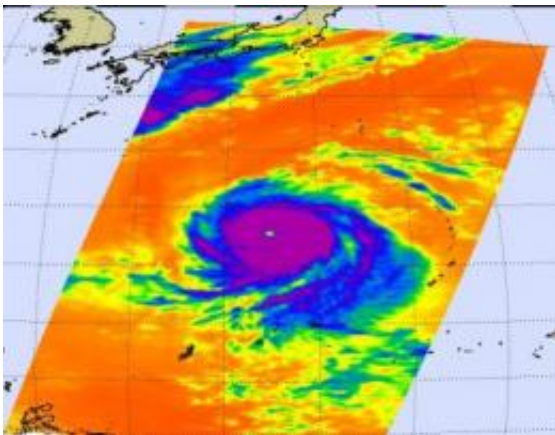
The Moderate Imaging Spectroradiometer (MODIS) instrument on NASA's Terra satellite captured an image of Super Typhoon Melor in the Western Pacific Ocean during the early morning hours of Oct. 5, 2009. Melor has intensified to Super Typhoon strength and is currently a category 5 typhoon (with maximum sustained winds near 161 mph) on the Saffir Simpson scale. Credit: NASA MODIS Rapid Response Team

NASA's Terra and Aqua satellites flew over Super Typhoon Melor early today, October 5 and captured some impressive images of the storm's clouds on a track toward Japan. The Western Pacific Ocean has the edge on super typhoons, and Melor's maximum sustained winds near 161 mph are more proof.

Typhoon Melor tracked through the channel between Saipan and Agrihan on Saturday night, and became a Super Typhoon on Sunday. Melor's winds dropped to 130 mph just before it passed near the island of Saipan this weekend and it was far enough away to not cause any major damage, according to local news reports. Downed trees and heavy rain were experienced Saturday afternoon and overnight into Sunday (local time), but no major flooding was reported.

On October 5 at 5 a.m. EDT (0900 UTC), Super Typhoon Melor's winds were up to 161 mph, and it was located approximately 585 nautical miles southeast of Okinawa, near 19.6 North and 134.3 East. Melor is moving west-northwestward at 19 mph.

NASA's Terra satellite flew over Melor during the early morning hours on October 5. The Moderate Imaging Spectroradiometer (MODIS) instrument on Terra provided a dramatic image of Melor at Category 5 strength on the Saffir-Simpson scale with maximum sustained winds near 161 mph!



Aqua's Atmospheric Infrared Sounder (AIRS) instrument captured Melor's high thunderstorm cloud temperatures (in purple) that were colder than minus 63 Fahrenheit. This image from Oct. 4 at 12:29 EDT clearly shows Melor's eye. Credit: NASA JPL, Ed Olsen

NASA's Aqua satellite flew over Super Typhoon Melor mid-day on October 4 and captured an [infrared image](#) of the monster typhoon. Aqua's Atmospheric Infrared Sounder (AIRS) instrument and Moderate Imaging Spectroradiometer (MODIS) analyzed temperatures in Melor's [clouds](#). AIRS revealed the cold high [thunderstorm](#) cloud temperatures were colder than minus 63 Fahrenheit indicating a very strong tropical cyclone.

Forecasters at the U.S. Navy's Joint Typhoon Warning Center have amended the forecast track for Melor, and take the super typhoon on a path resembling the letter "C" in the Western Pacific Ocean. The storm is forecast to swing just east of Kadena island Japan, then turn northeast (because westerly winds will push it northeast) and its center is now expected to brush Tokyo before it swings northeast back into the open Western Pacific.

There's good news about the storm's strength however. Melor will slowly weaken as a because of increased vertical [wind](#) shear (winds blowing sometimes at different directions, at different levels of the atmosphere that can tear a storm apart) and cooler waters. When Melor is south of Tokyo, it's expected to interact with a baroclinic boundary (i.e. a front) and become extratropical.

Source: NASA/Goddard Space Flight Center

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