

Tropical Cyclone Pam gives NASA an eye-opening view

March 12 2015, by Rob Gutro



NASA's Terra satellite captured this visible image of Tropical Cyclone Pam showing her eye in the South Pacific Ocean on March 11 at 22:50 UTC. Credit: NASA Goddard MODIS Rapid Response Team

NASA's Terra satellite passed over Tropical Cyclone Pam as it continued intensifying in the Southern Pacific Ocean and captured an image of the

storm's 20 nautical mile-wide, cloud-filled eye. Pam is a strong Category 4 hurricane on the Saffir-Simpson Wind Scale and is strengthening.

Pam has been intensifying over the last couple of days and forecasters at the Joint Typhoon Warning Center (JTWC) expect it to continue strengthening as it heads past Vanuatu and toward northern New Zealand.

When NASA's Terra satellite passed over Pam on March 11 at 22:50 UTC (6:50 p.m. EDT), the MODIS instrument captured visible data on the storm. The data was made into an image at NASA's Goddard Space Flight Center in Greenbelt, Maryland. The image showed a thick band of powerful thunderstorms wrapped around the eye of the storm. Banding of thunderstorms from the east and north wrapped into the center of circulation. At the time of the image, Pam was moving through the Solomon Islands and Vanuatu was southwest of the storm.

On March 12 at 1500 UTC (11 a.m. EDT) Tropical cyclone Pam's maximum sustained winds were near 135 knots (155.4 mph/250 kph) making it a strong Category 4 hurricane on the Saffir-Simpson Wind Scale. Hurricane-force winds extended 30 nautical miles (34.5 miles/55.5 km) out from the center, while tropical storm force winds extended as far as 170 nautical miles (195.6 miles/314.8 km) making the storm over 340 nautical miles (391.3 miles/629.7 km) in diameter.

It was centered near 14.7 south latitude and 169.8 east longitude, about 521 nautical miles (200 miles/ 965 km) north-northeast of Noumea, New Caledonia. Pam was moving to the south-southeast at 8 knots (9.2 mph/14.8 kph).

Pam was also generating dangerous seas and high swells along the coastlines in the Solomon Islands. The Joint Typhoon Warning Center (JTWC) noted that wave heights were up to 40 feet (12.1 meters).

Warnings and watches remain in the Solomon Islands, Vanuatu and New Zealand. In the Solomon Islands there is a tropical cyclone warning in effect for the Temotu province, and a watch remains in effect for remaining provinces. In Vanuatu a tropical cyclone warning is in effect for Torba, Penama, Sanma, Malampa, Shefa and Tafea provinces. In New Zealand warnings are up for parts of the North island, which is likely to be affected by severe weather on March 16, especially Gisborne and northern Hawkes Bay.

JTWC forecasters expect Pam to peak in intensity tomorrow, March 13, when maximum sustained winds are expected to reach 150 knots (172 mph/277.8 kph) making it a Category 5 hurricane on the Saffir-Simpson Wind Scale. After tomorrow, a weakening trend is expected as Pam starts moving in more of a southeasterly direction.

Provided by NASA's Goddard Space Flight Center

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