

NASA sees Tropical Storm Usagi's central and southern power

September 18 2013, by Rob Gutro



The MODIS instrument aboard NASA's Aqua satellite captured this visible image of Tropical Storm Usagi strengthening in the Pacific Ocean on Sept. 18. Credit: NASA Goddard MODIS Rapid Response Team

Powerful thunderstorms wrapped around Tropical Storm Usagi's center and its southern quadrant in visible data from NASA's Aqua satellite on



Sept. 18.

When NASA's Aqua satellite passed over Usagi on Sept. 18 at 04:40 UTC/12:40 a.m. EDT, the Moderate Resolution Imaging Spectroradiometer known better as "MODIS" took a picture of the northwestern Pacific Ocean storm. The image showed thick bands of powerful thunderstorms south of the center of circulation, and wrapping tightly around the center. Convective banding was also developing in other quadrants of the storm, indicating the storm was intensifying. At the time of the MODIS image Usagi was far to the east of the Philippines.

Usagi is in an area of warm <u>sea surface temperatures</u> near 29 to 30 Celsius/84.2 to 86 Fahrenheit, which is helping the storm strengthen. Tropical cyclones need sea surface temperatures of at least 26.6C/80F to maintain intensity, and warmer temperatures can help a storm strengthen through evaporation.

On Sept. 18 at 0900 UTC/5 a.m. EDT, Usagi's maximum sustained winds were near 55 knots/63 mph/102 kph. Forecasters at the Joint Typhoon Warning Center expect Usagi to strengthen into a typhoon over the next day. Usagi was centered near 17.3 north and 128.7 east, about 565 nautical miles south-southeast of Kadena Air Base, Japan. Usagi is moving to the west at 3 knots/3.4 mph/5.5 kph.

The <u>storm</u> is expected to move northwest and stay over <u>open waters</u> of the northwestern Pacific Ocean while passing between the northern Philippines and southern Taiwan.

Provided by NASA's Goddard Space Flight Center

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