NASA sees Tropical Storm 04W's thunderstorms grow quickly

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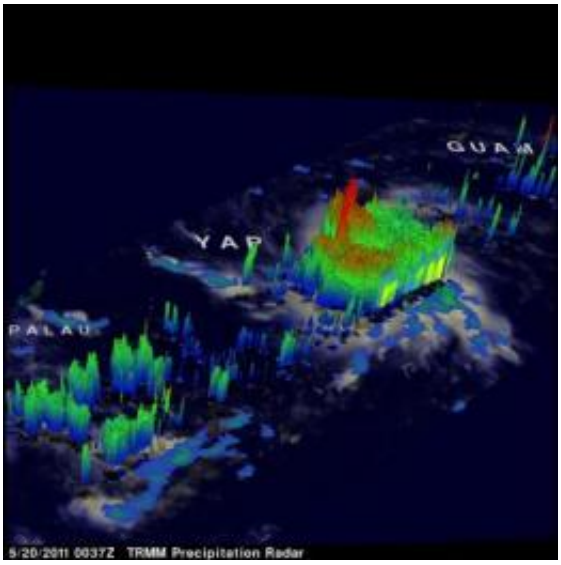

This TRMM satellite 3-D image shows that some thunderstorm towers near TSO4W's center of circulation were punching up to heights of over 16 km (~9.9 miles) above the ocean's surface. Credit: Credit: NASA/SSAI, Hal Pierce

Tropical Storm 04W formed from the low pressure System 98W this morning in the northwestern Pacific. NASA's Tropical Rainfall Measuring Mission (TRMM) satellite watched the towering thunderstorms in the center of the tropical storm grow to almost 10 miles (16 km) high as it powered up quickly.

At 1500 UTC (11 a.m. EDT) on May 20, Tropical Storm 04W (TS04W)

was located 180 miles (290 km) east-southeast of Yap near 8.3 North and 141.9 East. It had maximum sustained winds near 35 knots (40 mph/65 kmh). On its west-northwest track it is already generating rough seas, with waves up to 12 feet (~3.6 meters) high.

The TRMM satellite flew over rapidly forming Tropical Storm 04W in the western Pacific on May 20, 2011 at 0037 UTC (~10:37 a.m. Local time). This daylight TRMM pass showed that TS04W was becoming much better organized. The TRMM data showed that TSO4W now contained several areas of heavy thunderstorms dropping rain at over ~2 inches/hour (50 mm/hour).

Using TRMM data, Hal Pierce of NASA's TRMM satellite team created a 3-D image of Tropical Storm 04W at NASA's Goddard Space Flight Center in Greenbelt, Md. The 3-D perspective image helps forecasters see the cloud heights within tropical cyclones, giving indications of the storm's strength. The higher the thunderstorms go into the atmosphere, the stronger they are.

The 3-D image was created using data from TRMM's Precipitation Radar (PR). It showed that some thunderstorm towers near TSO4W's center of circulation were punching up to heights of over 9.9 miles (16 km) above the ocean's surface.

Regional warnings have been posted for TS04W. A tropical storm warning is in force for Fais and Ulithi in Yap State. That means that winds of 40 mph (65 kmh) or higher are expected within 24 hours in the warning area. In addition, a tropical storm watch is in force for Yap and Ngulu in Yap State. The watch means that in 48 hours, those areas could experience winds of 40 mph (65 kmh) or higher.

Now, Tropical Storm 04W is on a west-northwesterly track and residents of the northern Philippines should be on guard as it heads in that

direction. The current forecast track from the Joint Typhoon Warning Center extends to May 25 and it is not yet expected to be close enough to land at that time. However, in the days after May 25 residents of Luzon, the Philippines may experience the effects of the approaching tropical storm (which is expected to strengthen by that time).

This storm is predicted to become a category 2 typhoon with wind speeds of 90 knots (~103 mph/166 kmh) within five days as it moves toward the west-northwest.

Provided by NASA's Goddard Space Flight Center