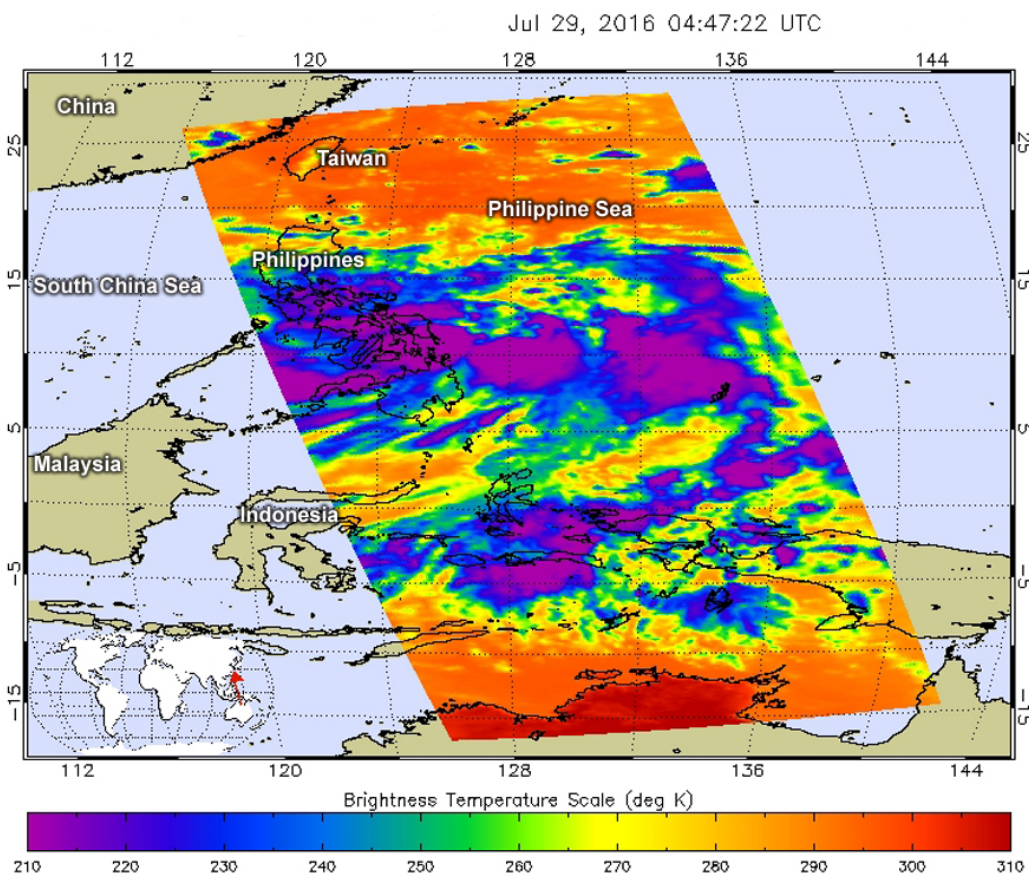


NASA infrared imagery shows new tropical depression coming together

July 29 2016

Tropical Depression 6W: Infrared imagery from the AIRS instrument aboard NASA's Aqua Satellite



On July 29 at 04:47 UTC (12:47 a.m. EDT) NASA's Aqua satellite looked at TD6W and the storm appeared somewhat fragmented, strong thunderstorms (purple) had formed around the center of circulation, and in fragmented bands east of the center. Credit: Credits: NASA JPL, Ed Olsen

Tropical Depression 06W appeared to be consolidating and coming together in infrared imagery from NASA's Aqua satellite. The storm formed east of the Philippines in the Philippine Sea on July 29, 2016.

The Philippine Atmospheric, Geophysical and Astronomical Services Administration known as PAGASA is issuing advisories on Tropical depression 6W (TD6W). PAGASA gave TD6W the local designation of "Carina." For the latest advisory from PAGASA on the movement of Carina, visit: [www.pagasa.dost.gov.ph/index.p ... es/weather-bulletins](http://www.pagasa.dost.gov.ph/index.php?option=com_content&view=article&id=1234&Itemid=1).

The Atmospheric Infrared Sounder or AIRS instrument that flies aboard NASA's Aqua satellite analyzed TD6W in infrared light on July 29 at 04:47 UTC (12:47 a.m. EDT) gathering temperature data of the system's clouds. Although the storm appeared somewhat fragmented, strong thunderstorms had formed around the center of circulation, and in fragmented bands northeast of the center. The storm also appears somewhat elongated.

Cloud top temperatures of the strongest storms exceeded minus 63 degrees Fahrenheit (minus 53 degrees Celsius). Storms with temperatures that cold are high in the troposphere and NASA research has shown they have the ability to generate heavy rain.

At 1500 UTC (11 a.m. EDT) on July 29, TD6W was located approximately 394 nautical miles east-southeast of Manila, Philippines. Maximum sustained winds were near 25 knots (28.7 mph/46.3 kph). TD6W has tracked northwestward at 5 knots (5.7 mph/9.2 kph).

AIRS data also showed the sea surface temperatures around TD6W were as warm as 30 Celsius (86 Fahrenheit), warm enough to allow further development. Tropical cyclones need [sea surface temperatures](#) of at least 26.6 degrees Celsius (80 degrees Fahrenheit) to maintain intensity. Warmer waters can help a [storm](#) intensify, if atmospheric conditions

allow.

The Joint Typhoon Warning Center (JTWC) forecast calls for TD6W to continue to track northward then northwestward under the influence of a sub-tropical ridge (elongated area) of high pressure, located to the east. JTWC also expects the depression to strengthen into a [tropical storm](#) rapidly.

JTWC noted that the cyclone will begin to interact with the mountainous terrain in Luzon on July 29 and turn north into the South China Sea.

Provided by NASA's Goddard Space Flight Center

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