

NASA's GPM sees some intense areas in Tropical Storm Koppu

October 14 2015, by Harold F. Pierce

The Global Precipitation Measurement (GPM) mission core satellite analyzed rainfall within Tropical Storm Koppu and identified areas of some intense thunderstorms.

The GPM core observatory satellite is managed by both NASA and the Japan Aerospace Exploration Agency. GPM flew over Tropical Storm Koppu on October 13, 2015 at 0316 UTC (Oct. 12 at 11:16 p.m. EDT). Data collected with GPM's Microwave Imager (GMI) and Dual-Frequency Precipitation Radar (DPR) instruments showed that numerous intense thunderstorms near the tropical storm's center of circulation were dropping rain at a rate of over 88 mm (3.5 inches) per hour.

A simulated 3-D view from the west was constructed at NASA's Goddard Space Flight Center in Greenbelt, Maryland. The 3-D image was created using GPM's Ku Band radar data. Some thunderstorm cloud-top heights reached altitudes above 17.8 km (11 miles). This release of energy by precipitation in the tropical cyclone's core often provides fuel for future intensification.

At 1500 UTC (11 a.m. EDT) on October 14, 2015, Tropical Storm Koppu's maximum sustained winds were near 45 knots (51.7 mph/83.3 kph). It was centered near 15.7 North latitude and 133.1 East longitude, about 727 nautical miles (836.6 miles/1,346 km) south-southeast of Kadena Air Base, Okinawa, Japan. Koppu was moving to the west at 13 knots (15 mph/24 kph).



The Joint Typhoon Warning Center forecast projects Koppu to move in a westerly direction over the next couple of days and curve to the west-northwest and intensify. The Philippine Atmospheric, Geophysical and Astronomical Services Administration or PAGASA noted that Koppu is locally known as "Lando" and stated on their website (https://kidlat.pagasa.dost.gov.ph) "Fisher folk are advised not to venture out over the seaboards of Northern Luzon and over the eastern seaboard of Central Luzon."

The extended forecast calls for Koppu to make a brief landfall over northeastern Luzon, Philippines on October 18 and 19.

Provided by NASA's Goddard Space Flight Center

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