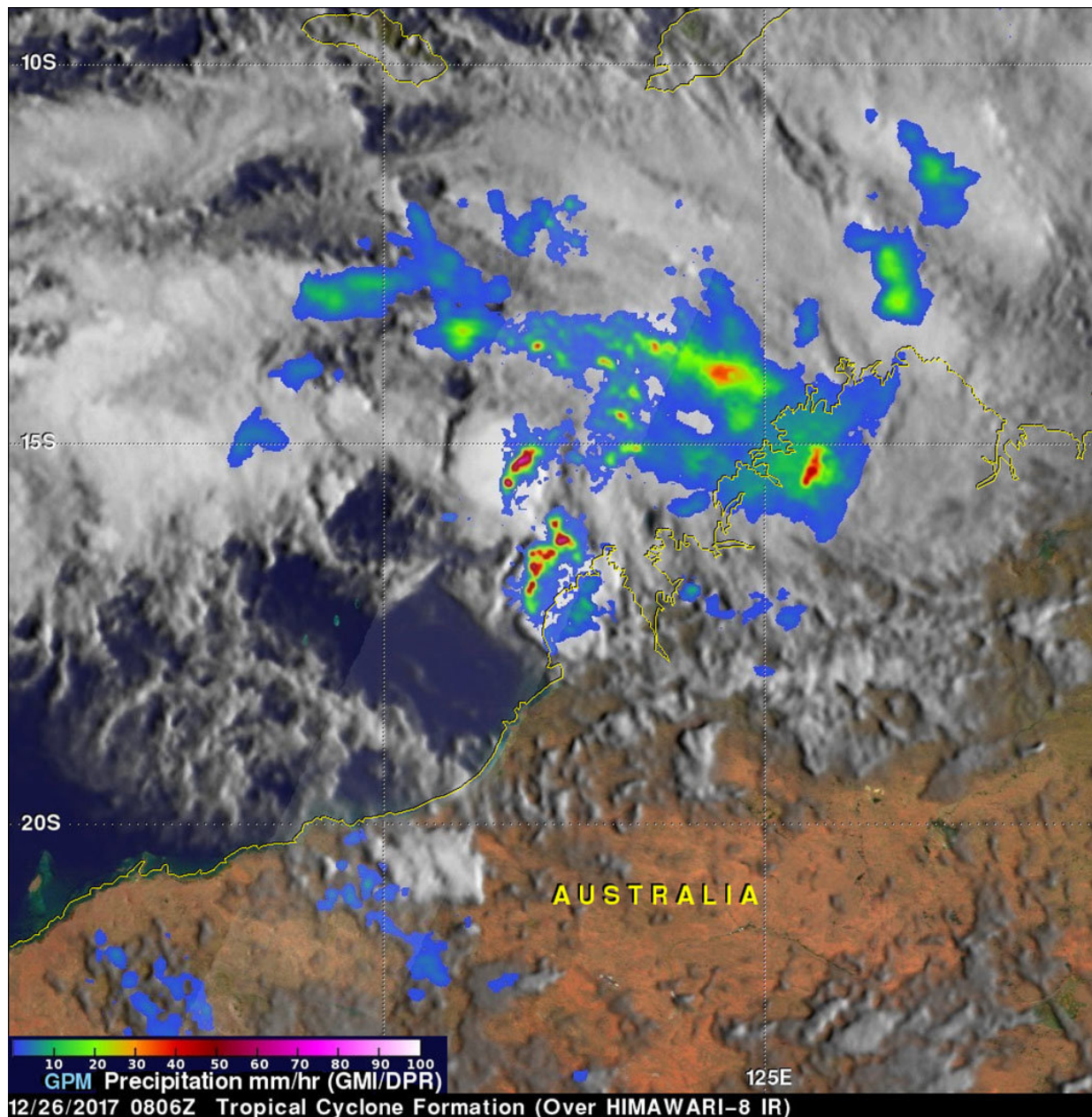


NASA finds heavy rain in new Tropical Cyclone Hilda

December 28 2017



A GPM rainfall analysis of Hilda on Dec. 26 showed a few extremely powerful convective storms northwest of the Dampier Land coast were dropping precipitation at a rate of greater than 130 mm (5.1 inches) per hour. Credit: NASA/JAXA, Hal Pierce

As Tropical Cyclone Hilda was coming together in the Southern Indian Ocean the GPM satellite analyzed its rainfall from space.

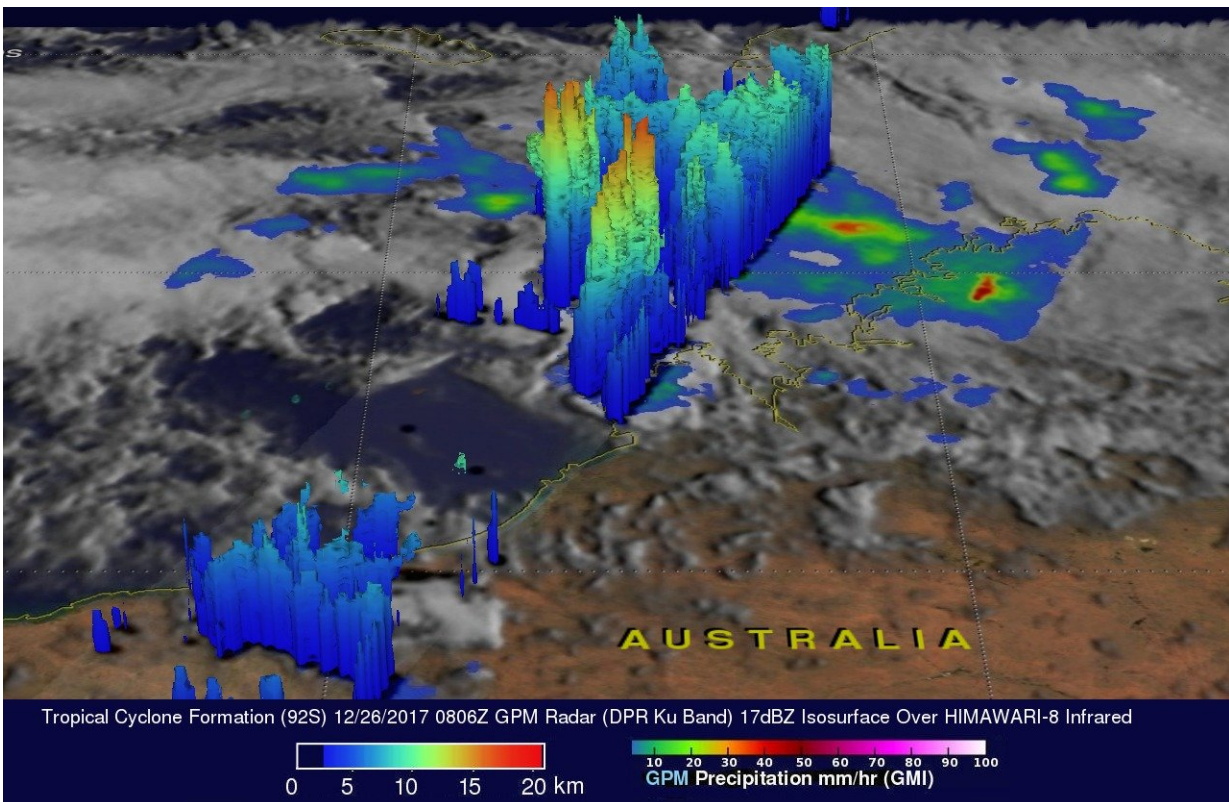
On December 26, 2017 at 3:06 a.m. EST (0806 UTC) the Global Precipitation Measurement mission or GPM core observatory satellite flew above northwestern Australia and measured rainfall as Tropical Cyclone Hilda was forming along the coast

GPM traveled over an area of convective thunderstorms in the Indian Ocean along Australia's northwestern coast. GPM's Microwave Imager (GMI) and Dual-Frequency Precipitation Radar (DPR) instruments collected data that showed heavy precipitation. GPM's radar (DPR Ku Band) showed that a few extremely powerful convective storms northwest of the Dampier Land coast were dropping [precipitation](#) at a rate of greater than 130 mm (5.1 inches) per hour.

A 3-D view of the rainfall was created at NASA's Goddard Space Flight Center in Greenbelt, Md. The 3-D data showed few storm tops in scattered convective thunderstorms were shown by GPM's radar to extend to heights above 17.5 km (10.9 miles).

Late on Dec. 27, the Joint Typhoon Warning Center (JTWC) noted that the storm had consolidated into a tropical [storm](#). Hours later on Dec. 28 at 0300 UTC (Dec. 27 at 10 p.m. EST), the JTWC issued their final advisory on the short-lived system. At that time, it was located near 19.4

degrees south latitude and 121.7 degrees east longitude, about 94 nautical miles south-southwest of Broome, Western Australia. Hilda was moving to the south at 5 knots and had maximum sustained winds near 35 knots (40 mph/62 kph).



A 3-D view of Hilda's rainfall on Dec. 26 showed few storm tops in scattered convective thunderstorms extended to heights above 17.5 km (10.9 miles).
Credit: NASA/JAXA, Hal Pierce

A Tropical Cyclone Warning was in effect from Bidyadanga to Wallal and adjacent inland parts of the east Pilbara, where a Yellow alert is also in effect.

The JTWC said that Hilda was weakening over land and is expected to dissipate later in the day.

Provided by NASA's Goddard Space Flight Center

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