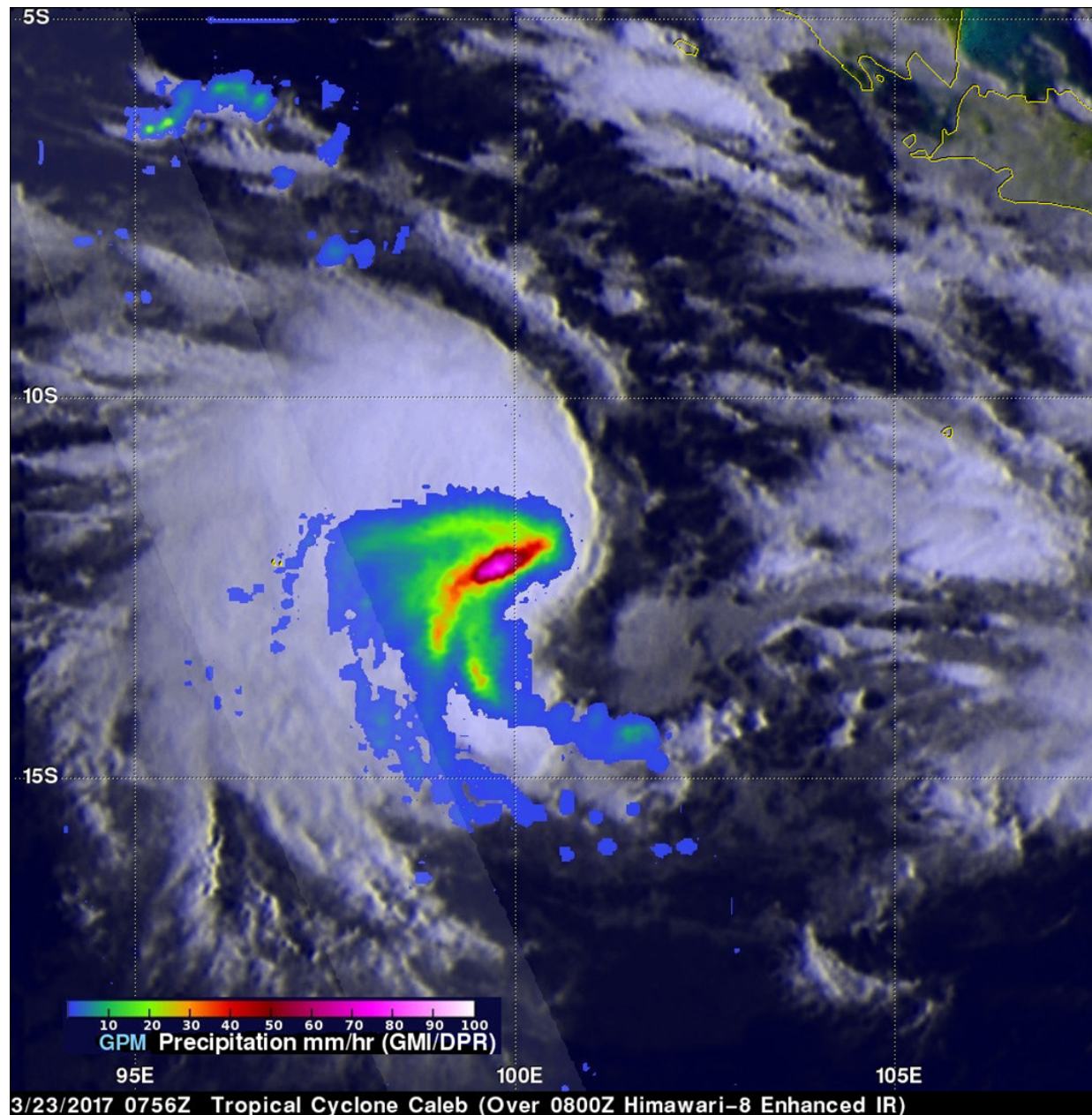


# NASA sees Tropical Cyclone Caleb's heaviest rainfall

March 24 2017

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On March 23, 2017, at 0756 UTC (3:56 a.m. EST) NASA/JAXA's GPM rainfall measurements showed that convective storms on tropical cyclone Caleb's western side were dropping rain at a rate of almost 84 mm (3.3 inches) per hour. Credit: NASA/JAXA, Hal Pierce

Tropical cyclone Caleb formed on March 23 in the South Indian Ocean southwest of the Indonesian Island of Sumatra. The GPM core observatory satellite had a fairly good view of the newly formed tropical cyclone when it flew overhead and analyzed its rainfall and found the heaviest precipitation was affected by westerly winds.

The Global Precipitation Measurement mission or GPM core satellite passed over the Southern Indian Ocean on March 23, 2017 at 0756 UTC (3:56 a.m. EST). The satellite's Microwave Imager (GMI) revealed the locations of rainfall within the tropical cyclone. Rainfall measurements derived from the GMI showed that convective storms were dropping rain at a rate of almost 84 mm (3.3 inches) per hour on Caleb's western side.

GPM is a joint mission between NASA and the Japan Aerospace Exploration Agency.

On March 24 at 0900 UTC (5 a.m. EST), Caleb had maximum sustained winds near 35 knots (40 mph/62 kph). It was centered near 14.6 degrees south latitude and 101.0 degrees east longitude, about 270 nautical miles (310.7 miles/500.4 km) east-southeast of Cocos Island. Caleb was moving to the south-southeastward at 4 knots (4.6 mph/7.4 kph).

Satellite imagery on March 24 revealed that Caleb was struggling, and the Joint Typhoon Warning Center (JTWC) said that "environmental conditions are not showing any signs of improvement as the easterly flow

aloft is still a dominant feature increasing the [vertical wind shear](#)."

The JTWC said that over the next 12 to 24 hours Caleb will slow as it encounters a building subtropical ridge (elongated area of high pressure) to the south. The system will assume a quasi-stationary track beyond 24 hours and weaken significantly due to increasing [wind](#) shear and cooler sea surface temperatures. Caleb is expected to dissipate in three days over the open waters of the Indian Ocean.

Provided by NASA's Goddard Space Flight Center

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