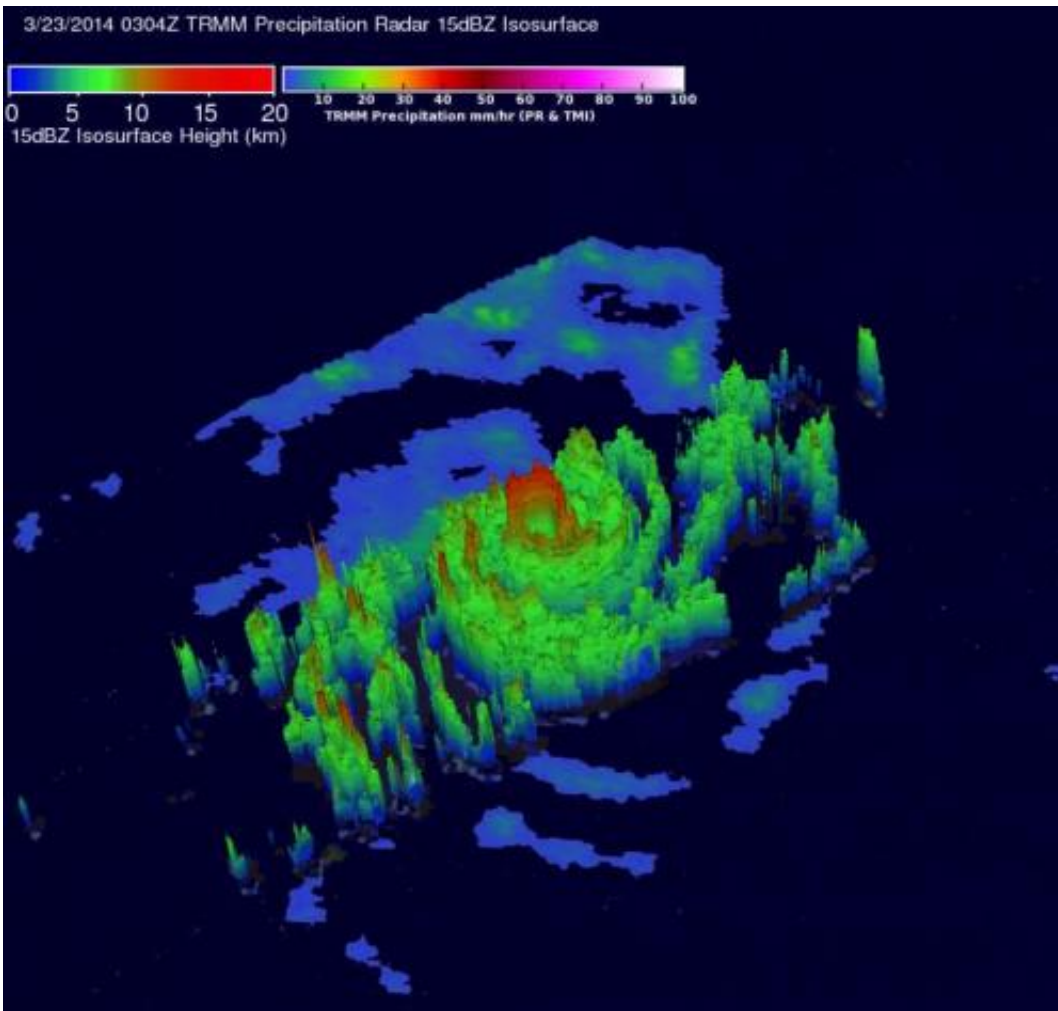


NASA catches Gillian as a super-cyclone before quickly dissipating

March 26 2014, by Hal Pierce / Rob Gutro



On March 23 when the TRMM satellite passed over Gillian, it was at hurricane-force. TRMM revealed intense storms in a well-defined eye wall producing rain at a rate of over 100mm/3.9 inches per hour. Credit: SSAI/NASA, Hal Pierce

Tropical Cyclone Gillian was near peak intensity when the Tropical Rainfall Measuring Mission or TRMM satellite passed overhead and saw towering thunderstorms and very heavy rainfall in the storm on March 23. By March 26, Gillian had weakened to a tropical storm and was quickly dissipating.

On March 23, Tropical Cyclone Gillian was a Category 5 hurricane on the Saffir-Simpson scale when NASA-JAXA's Tropical Rainfall Measuring Mission or TRMM satellite passed overhead. TRMM flew over Gillian during its peak wind speed near 140 knots/161.1 mph/259.3 kph on March 23 at 03:04 UTC.

Data from TRMM's Microwave Imager (TMI) and Precipitation Radar (PR) instruments were used to create a rainfall analysis. TRMM PR revealed that Gillian had very intense storms in a well defined eye wall producing rain at a rate of over 100mm/3.9 inches per hour. TRMM PR showed that some of the tall storms on the southwestern side of Gillian's eye were reaching heights of about 14 km/8.7 miles.

On March 25 at 2100 UTC/5 p.m. EDT, Tropical Cyclone Gillian's maximum sustained winds were down to 40 knots, but strong [vertical wind shear](#) was pounding the storm and severely affecting the structure of the storm. At that time it was centered near 21.0 south latitude and 103.5 east longitude, about 596 nautical miles/685.9 miles/1,104 km west of Learmonth, Australia. At that time, Gillian was moving over the open waters of the Southern Indian Ocean in a south-southwesterly direction and was quickly dissipating.

Provided by NASA's Goddard Space Flight Center

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