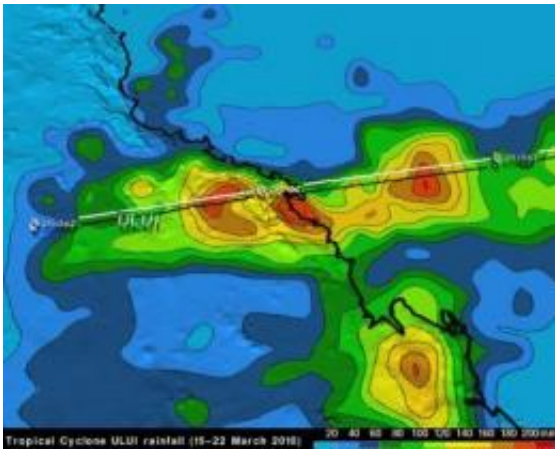


TRMM satellite rainfall map of Cyclone Ului's Queensland flooding

March 25 2010



TRMM's rainfall estimates for the one-week period March 15-22, 2010, for the central east coast of Queensland, Australia, show that Ului dumped upwards of 180 mm (~7", shown in orange) of rain along its path. Credit: SSAI/NASA, Hal Pierce

Queensland, Australia was recently hit by its second tropical cyclone of the season.

Tropical Cyclone Olga, which made landfall on the east coast of Queensland just south of Cairns back in late January, brought widespread rains to the region. The most recent cyclone to hit Queensland is Tropical Cyclone Ului, which also made landfall on the east coast of Queensland but much farther south near Airlie Beach south of Townsville.

Ului, which formed near Vanuatu in the South Pacific, was at one time a powerful Category 5 cyclone with winds estimated at 140 knots (~160 mph) as it passed well to the south of the Solomon Islands. The cyclone then weakened as it turned southwest and headed through the Coral Sea towards Australia. Ului hit the Whitsunday Islands, located just off the Australian mainland, early Sunday morning (about 1:30 am local time) on the 21st of March 2010 as a Category 3 cyclone with winds gusting to 200 kph (~125 mph, equivalent to a Category 2 hurricane on the US Saffir-Simpson scale).

The storm quickly weakened to Category 2 as it made landfall near Airlie Beach on the mainland. Proserpine, just south of where the center crossed the coast, reported a wind gust of 146 kph (~90 mph). In addition to the strong gusty winds, which resulted in widespread power outages, Ului dumped heavy rains over the area.

Launched back in November of 1997 and armed with an array of active and passive sensors, the primary objective of the [Tropical Rainfall Measuring Mission](#) satellite (better known as TRMM) is to measure rainfall from space. For increased coverage, TRMM can be used to calibrate rainfall estimates from other additional satellites. The TRMM-based, near-real time Multi-satellite Precipitation Analysis (TMPA) at the NASA Goddard Space Flight Center in Greenbelt, Md. is used to monitor rainfall over the global Tropics.

TMPA rainfall estimates for the 1-week period of March 15 to 22, 2010 for the central east coast of Queensland, Australia show that Ului dumped upwards of 180 mm (~7 inches, shown in orange) of rain along its path. Mackay airport, located about 100 km (~60 mi) south of Airlie Beach, reported 145 mm (~6 inches) of rain in 24 hours. Ului then quickly weakened as it moved westward and further inland and was downgraded to just a tropical low.

Provided by NASA's Goddard Space Flight Center

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