

GPM satellite sees heavy rain around Loke's center

August 26 2015

The Global Precipitation Measurement or GPM mission core satellite can measure rainfall from space, and saw heavy rainfall in the Central Pacific's Loke when it was a hurricane.

Hurricane Loke formed southwest of the Hawaiian Islands on August 21, 2015 but Loke has not been a threat to Hawaii because it intensified to [hurricane](#) strength while moving well west of Hawaii over the open waters of the Pacific Ocean.

The GPM core observatory satellite measured precipitation within the hurricane as it flew above the most powerful thunderstorms in the hurricane on August 25, 2015 at 0116 UTC. At the time GPM passed over Loke it had maximum sustained winds near 75 mph (120 kph).

GPM's Dual-Frequency Precipitation Radar (DPR) measured rain falling at over 160 mm (6.3 inches) per hour in intense rainfall near the center of hurricane Loke. GPM DPR data also showed that storm top heights in that area reached to above 15.3 km (9.5 miles). GPM is co-managed by NASA and the Japan Aerospace Exploration Agency.

At 5 a.m. EDT (0900 UTC) the center of Tropical Storm Loke was located near latitude 33.2 north and longitude 175.1 west. That puts the center about 370 miles (595 km) north-northeast of Midway Island. Loke is moving toward the northwest near 21 mph (33 kph). An acceleration toward the northwest will occur during the next 36 hours as Loke undergoes transition to an extra-tropical low.

Maximum sustained winds are near 50 mph (85 kph) and weakening is expected as the storm becomes extra-tropical today. The estimated minimum central pressure is 992 millibars.

Ocean swells and rough surf across reefs and shorelines over the western portions of the Papahānaumokuākea Marine National Monument were easing from Loke, but swells from former Typhoon Atsani will start to affect the area, according to NOAA's Central Pacific Hurricane Center.

Loke is forecast to continue to accelerate toward the northwest and begin to undergo transition to an extra-tropical low today, August 26, 2015 as it becomes drawn into the circulation of a larger low associated with former Typhoon Atsani.

Provided by NASA's Goddard Space Flight Center

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