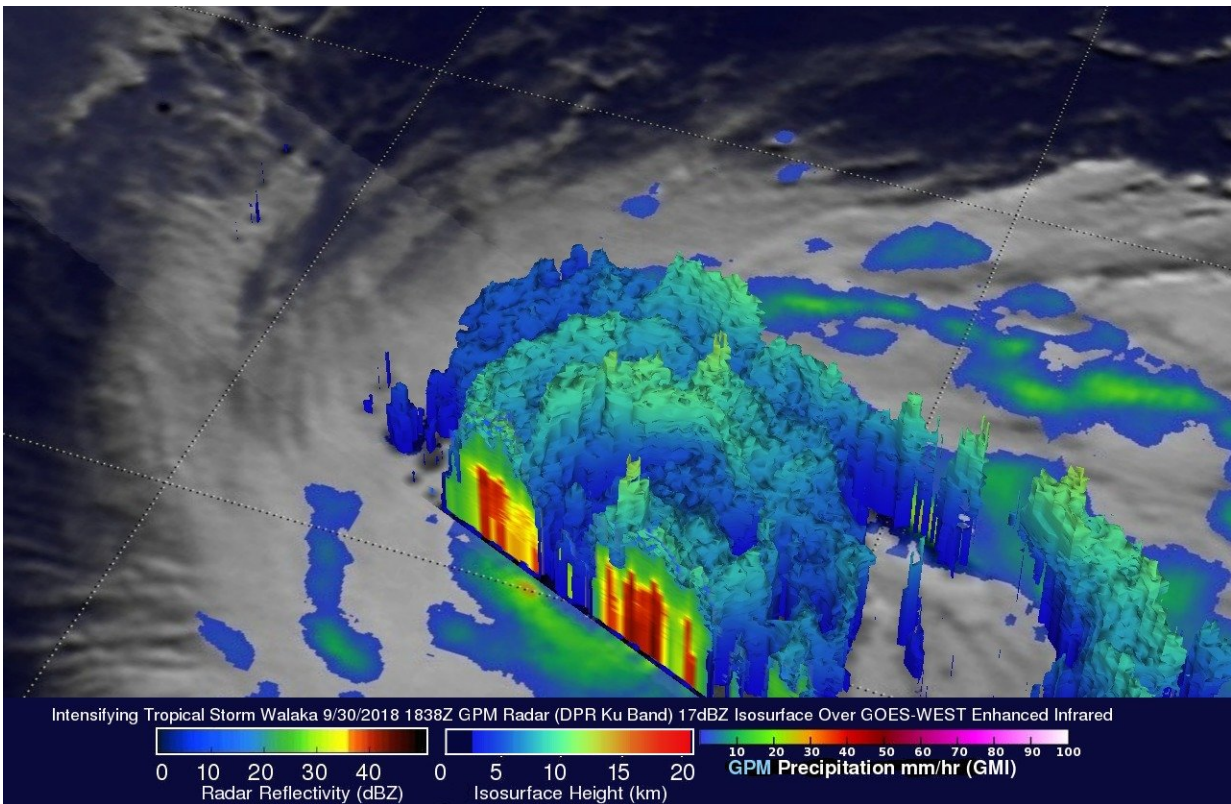


# NASA sees Walaka becoming a powerful Hurricane

October 2 2018



On Sept. 30, GPM data revealed intense convective storms in a large feeder band wrapping around the Tropical Storm Wakala's northeastern side where rain was falling at a rate of almost 6.5 inches (165 mm) per hour in the intense storms in the feeder band northeast of Walaka's center of circulation. . A tall convective storm was located in a line northwest of Walaka's center. It was found by DPR to reach heights above 8.5 miles (13.7 km). Credit: NASA/JAXA, Hal Pierce

The Global Precipitation Measurement mission or GPM core satellite passed over the Central Pacific Hurricane Center and analyzed Walaka's rainfall and cloud structure as it was strengthening into a hurricane.

Walaka formed southwest of the Hawaiian Islands on Saturday, Sept. 29. At 5 p.m. HST on Sunday, Sept. 30, Walaka strengthened to a [hurricane](#).

The GPM core observatory recently had a couple good looks at [tropical storm](#) Walaka as it was intensifying into a powerful hurricane. GPM passed directly over tropical [storm](#) Walaka when it was located south of the Hawaiian islands on September 30, 2018 at 8:38 a.m. HST (1838 UTC).

Data collected by GPM's Microwave Imager (GMI) and Dual-Frequency Precipitation Radar (DPR) instruments showed that Walaka was well organized and very close to [hurricane intensity](#). GPM's Radar (DPR Ku Band) data revealed intense convective storms in a large feeder band that was wrapping around the tropical storm's northeastern side and storms wrapping around a forming eye wall. GPM's DPR found rain falling at a rate of almost 6.5 inches (165 mm) per hour in the intense storms in the feeder band northeast of Walaka's center of circulation.

Walaka had strengthened to hurricane intensity when GPM flew above about twelve hours later at 8:07 p.m. HST (Oct. 1, 2018 at 0607 UTC). Walaka had developed an eye and was undergoing rapid intensification. The intensifying hurricane is passing well to the south of the Hawaiian Islands.

The GPM satellite's Dual-Frequency Precipitation Radar (DPR) data were used to show the structure of precipitation within intensifying tropical storm Walaka. The simulated 3-D view of Walaka, looking from the southwest, showed storm tops of powerful storms wrapping into the center of the tropical storm. A tall convective storm was located in a line

northwest of Walaka's center. It was found by DPR to reach heights above 8.5 miles (13.7 km). GPM is a joint mission between NASA and the Japanese space agency JAXA.

On Monday, October 1, 2018, NOAA's Central Pacific Hurricane Center or CPHC noted that a Hurricane Warning is in effect for Johnston Atoll. Also, interests in the Papahānaumokuākea Marine National Monument should monitor the progress of Walaka.

At 5 p.m. HST/11 p.m. EDT (0300 UTC, Oct. 1) on Sept. 30 or , the center of Hurricane Walaka was located near latitude 11.9 degrees north and longitude 166.4 degrees west. Walaka is moving toward the west near 12 mph (19 kph) and this motion is expected to slow and become northwest on Monday, then north on Tuesday. Maximum sustained winds are near 75 mph (120 kph) with higher gusts. Rapid intensification is forecast through Tuesday.

The Joint Typhoon Warning Center (JTWC) predicts that Hurricane Walaka will continue to strengthen and re-curve to the north later today. Walaka is expected to be a powerful category four hurricane on the Saffir-Simpson wind scale when it passes just to the west of Johnson Atoll in a couple days. Walaka is not expected to have a significant effect on the Hawaiian Islands.

Provided by NASA's Goddard Space Flight Center

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