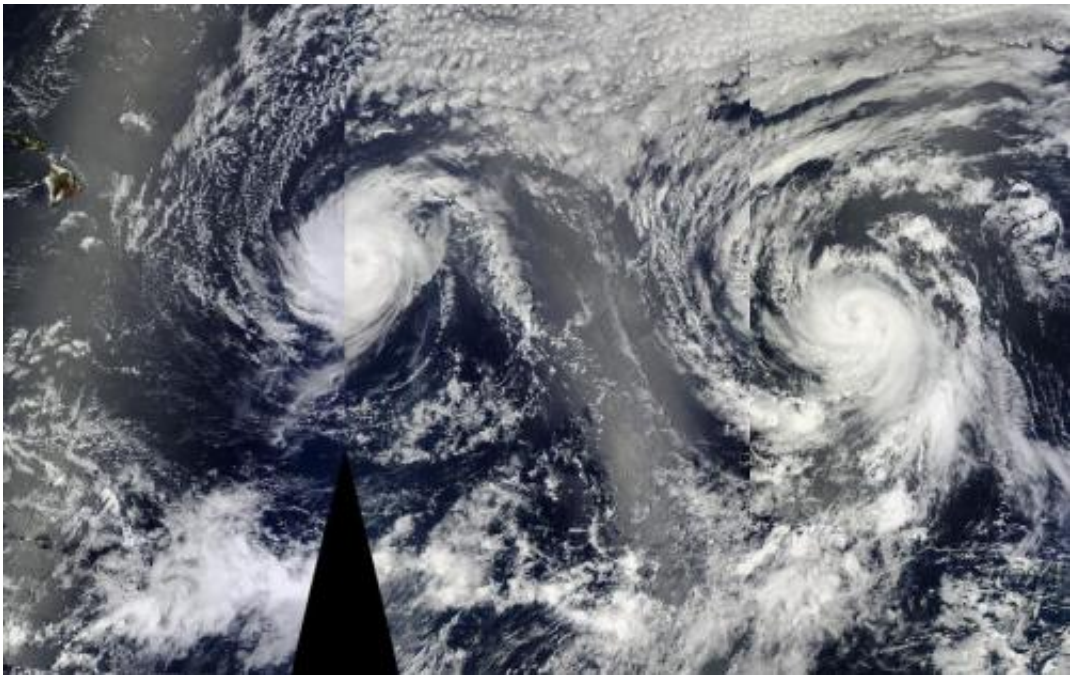
NASA sees heavy rainfall in Iselle as the hurricane nears Hawaii

August 7 2014



On Aug. 6 at 22:30 UTC (6:30 p.m. EDT) NASA's Aqua satellite passed over Hurricanes Iselle and Julio approaching Hawaii. This image was created using three satellite passes. Credit: NASA Goddard MODIS Rapid Response Team

A NASA satellite has observed heavy rainfall in Hurricane Iselle on its approach to Hawaii. NASA's TRMM Satellite captured rainfall rates within the storm as it passed overhead. In addition, NASA's Aqua satellite provided a larger view of the Central Pacific Ocean and revealed an image of Hurricane Iselle being chased by Hurricane Julio to

the east.

A tropical storm warning has been issued for Kauai County. NOAA's Central Pacific Hurricane Center provided an overview of the storm: Iselle is expected to bring heavy rains, high surf and damaging winds. Hurricane conditions are expected to develop on the Big Island of Hawaii today, August 7. Tropical storm conditions are expected to spread to Maui County tonight and to Oahu and Kauai on Friday, August 8.

Hurricane Iselle has weakened from a very dangerous category four hurricane on August 4 to a category one hurricane when NASA-JAXA's Tropical Rainfall Measuring Mission (TRMM) satellite passed over on August 6, 2014 at 1020 UTC (6:20 a.m. EDT).

At NASA's Goddard Space Flight Center in Greenbelt, Maryland, rainfall data from TRMM's Microwave Imager (TMI) and Precipitation Radar (PR) were overlaid on an enhanced infrared image from the NOAA's GOES-West satellite to show the distribution of rainfall within the storm. TRMM TMI showed that heavy rainfall was occurring around the filling eye. TRMM TMI indicated that the most intense rain was falling at a rate of over 43.5 mm (about 1.7 inches) in a band southwest of the eye.

The Central Pacific Hurricane Center noted that that heavy rainfall is expected to affect Hawaii as Iselle moves through. Rainfall totals of 5 to 8 inches, with isolated maximum amounts to 12 inches, are expected along the track of Iselle. Other conditions expected include very large and damaging surf is expected to rapidly build along east and south facing shores today and tonight, especially on the Big Island. The Big Island windward and Kau are expected to experience storm surge between 1 to 3 feet.

CPHC said the onset of tropical storm conditions is expected on the Big Island of Hawaii this afternoon (August 7), with hurricane conditions expected tonight. Tropical storm conditions are expected over Maui County Tonight (August 7), over Oahu on Friday (August 8) and over Kauai county on Friday afternoon.

On August 6 at 22:30 UTC (6:30 p.m. EDT) NASA's Aqua satellite passed over Hurricanes Iselle and Julio approaching Hawaii. The Moderate Resolution Imaging Spectroradiometer (MODIS) instrument captured a visible image of both storms as the march in a line across the Central and Eastern Pacific.

At 5 a.m. HST (11 a.m. EDT)/1500 UTC) the center of Hurricane Iselle was located near latitude 18.5 north and longitude 150.6 west, about 305 miles (490 km) east-southeast of Hilo, Hawaii. Iselle was moving toward the west-northwest near 17 mph (28 kph) and this motion is expected to continue through Friday, with some slowing in forward speed on Friday night. On the forecast track, the center of Iselle is expected to pass over the Big Island tonight, and pass just south of the smaller islands Friday.

Maximum sustained winds are near 80 mph (130 kph). Some weakening is forecast during the next 48 hours, but Iselle is expected to be near hurricane strength as it makes landfall on the Big Island tonight, August 7. The estimated minimum central pressure is 986 millibars. For updates from the CPHC, visit: http://www.prh.noaa.gov/.

Hurricane Iselle is predicted to cause tropical storm conditions with potential flash floods in the Hawaiian Islands on Thursday and Friday. Tropical storm Julio is expected to also affect the island chain over the weekend.

Provided by NASA's Goddard Space Flight Center