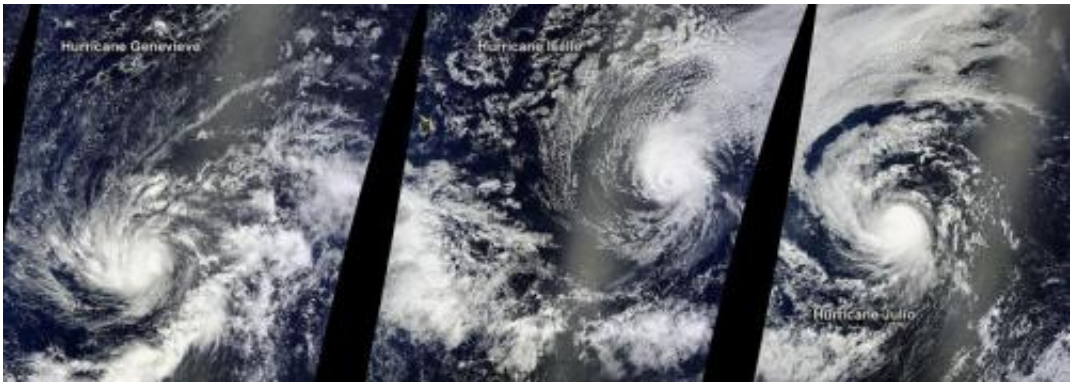
NASA satellite paints a triple hurricane Pacific panorama

August 6 2014, by Rob Gutro



On Aug. 5, at 22:05 UTC (6:55 p.m. EDT) NASA's Terra satellite passed over Hurricane Genevieve (left), Hurricane Iselle (center), and Hurricane Julio (right) in the Central and Eastern Pacific Oceans. Credit: NASA Goddard MODIS Rapid Response Team

In three passes over the Central and Eastern Pacific Ocean, NASA's Terra satellite took pictures of the three current tropical cyclones, painting a Pacific Tropical Panorama. Terra observed Hurricane Genevieve, Hurricane Iselle and Hurricane Julio in order from west to east. Iselle has now triggered a tropical storm watch in Hawaii.

The Moderate Resolution Imaging Spectroradiometer or MODIS instrument is a key instrument aboard NASA's Terra and Aqua satellites. Between the two satellites, MODIS instruments view the entire surface of the Earth every one to two days. When NASA's Terra passed over the

Central and Eastern Pacific in three swaths (or orbits), it captured images of each storm.

On Aug. 5, at 22:05 UTC (6:55 p.m. EDT) NASA's Terra satellite passed over Hurricane Genevieve and Hurricane Iselle in the Central Pacific Ocean, and Hurricane Julio in the Eastern Pacific Ocean.

Genevieve Revived and Strengthens into a Hurricane

Satellite data shows that the structure of Genevieve has improved rapidly into a hurricane. At 1500 UTC (11 a.m. EDT), the center of Tropical Storm Genevieve was located near latitude 12.8 north and longitude 176.8 west. That puts the center of Genevieve about 1,065 miles (1,710 km) south of Midway Island and about 555 miles (895 km) west-southwest of Johnston Island. NOAA's Central Pacific Hurricane Center (CPHC) noted that Genevieve is moving toward the west-northwest near 17 mph (28 kph) and this motion is expected to continue through Thursday. Maximum sustained winds are near 75 mph (120 kph) and Genevieve is expected to become a typhoon in the west Pacific in the next day or two.

There are no coastal watches or warnings in effect.

Hurricane Iselle Triggers Watches in Hawaii

NOAA's CPHC issued a Tropical Storm Watch on August 6 at 1200 UTC (8 a.m. EDT) for Hawaii and Maui Counties in Hawaii. A tropical storm watch means that tropical storm conditions are possible within the watch area within 48 hours.

At 8 a.m. EDT on August 6, Hurricane Iselle was centered near latitude 16.9 north and longitude 144.1 west, about 745 miles (1,200 km) east of

Hilo, Hawaii. NHC forecasters noted that maximum sustained winds are near 90 mph (145 kph) and gradual weakening is forecast during the next day or two. Iselle is moving toward the west near 13 mph (20 kph) and is expected to continue in that general direction for the next day. The estimated minimum central pressure is 989 millibars.

CPHC expects the outer winds of Iselle may reach the easternmost Hawaiian Islands early Thursday afternoon. Heavy rains may bring flash floods and mudslides as Iselle approaches. CPHC noted that large and dangerous swells from Iselle are expected to reach the main Hawaiian Islands today, while winds of tropical storm strength are possible on the Big Island Thursday, August 7.

Julio Now a Hurricane

At 5 a.m. EDT on August 6, Tropical Storm Julio strengthened into the fifth hurricane of the Eastern Pacific Ocean hurricane season. By 11 a.m. EDT it was centered near latitude 15.2 north and longitude 130.5 west, about 1,650 miles (2,655 km) east of Hilo, Hawaii. NHC forecasters noted that maximum sustained winds were near 75 mph (120 kph) and some strengthening is forecast during the next day or two. Julio is moving toward the west-northwest near 17 mph (28 kph) and is expected to continue in that general direction for the next two days. The estimated minimum central pressure is 989 millibars.

Infrared data from instruments such as the Atmospheric Infrared Sounder on NASA's Aqua satellite revealed a small burst of strong thunderstorms developed with cloud tops of -75C to -80C over Julio's the low-level center of circulation during the morning (of August 6). The created a central dense overcast in the center. In addition, passive microwave satellite imagery has been indicating a closed low-to mid-level eye feature, which indicates that the storm has strengthened.

A Very Slowly Developing System Behind Julio

Trailing to the southeast of Julio is another developing tropical low pressure area called System 98E. System 98E is actually a trough (elongated area) of low pressure located several hundred miles south-southwest of Acapulco, Mexico. The low is producing disorganized shower and thunderstorms. System 98E is expected to move to the west then west-northwest over the next couple of days and the National Hurricane Center gives it a very low (10 percent) chance of developing into a tropical depression over that time.

Provided by NASA's Goddard Space Flight Center