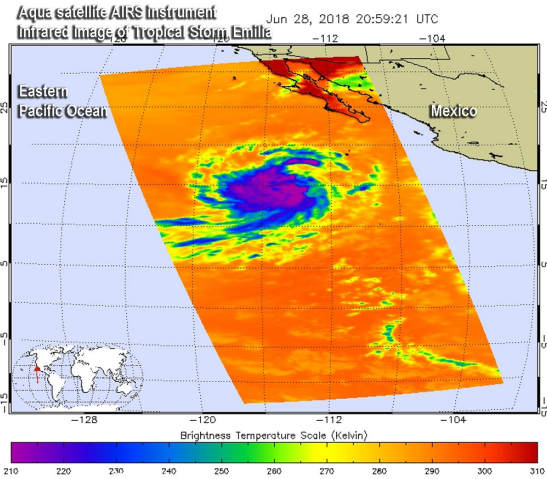


NASA infrared data reveals Tropical Storm Emilia is strengthening

29 June 2018



On June 28 at 4:59 p.m. EDT (2059 UTC) the AIRS instrument aboard NASA's Aqua satellite showed powerful storms with very cold cloud top temperatures (purple) in excess of minus 63 degrees Fahrenheit. Credit: NASA JPL, Heidar Thrastarson

Infrared NASA satellite imagery provided cloud top temperatures of thunderstorms that make up Tropical Storm Emilia. Comparing those NASA temperature readings with another satellite's data obtained the following day, forecasters determined that Emilia had strengthened.

At NASA's Jet Propulsion Laboratory in Pasadena, California, infrared data taken of Emilia by the Atmospheric Infrared Sounder or AIRS instrument that flies aboard NASA's Aqua satellite was made into a false-colored infrared image. That data from June 28 at 4:59 p.m. EDT (2059 UTC) revealed powerful storms with very cold cloud top temperatures in excess of minus 63 degrees Fahrenheit (minus 53 degrees Celsius) around the [center](#).

By Friday, June 29, 2018 the National Hurricane

Center noted that those cloud tops had cooled, indicating the uplift in the storm was stronger, and the cloud tops were higher. That means the storm was intensifying. NHC said "Shortwave infrared imagery and an earlier [4:55 a.m. EDT] 0855 UTC polar orbiter (satellite) pass show deep convective bursts, with associated minus 78 degree Celsius [minus 108.4 degrees Fahrenheit] [cloud tops](#), developing near the surface center."

Emilia is far enough away from land so that there are no coastal watches or warnings in effect.

At 11 a.m. EDT (1500 UTC) on June 29, the center of Tropical Storm Emilia was located near latitude 16.2 degrees north and longitude 116.3 degrees west. That's about 620 miles (1,000 km) southwest of the southern tip of Baja California, Mexico.

The National Hurricane Center (NHC) said that Emilia is moving toward the west-northwest near 12 mph (19 kph), and this general motion is expected to continue for the next few days. Maximum sustained winds have increased to near 60 mph (95 kph) with higher gusts. Tropical-[storm](#)-force winds extend outward up to 80 miles (130 km) from the center. The estimated minimum central pressure is 997 millibars.

NHC said "Some additional strengthening is possible during the next 24 hours before Emilia moves over cool waters and begins to weaken over the weekend."

Provided by NASA's Goddard Space Flight Center

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