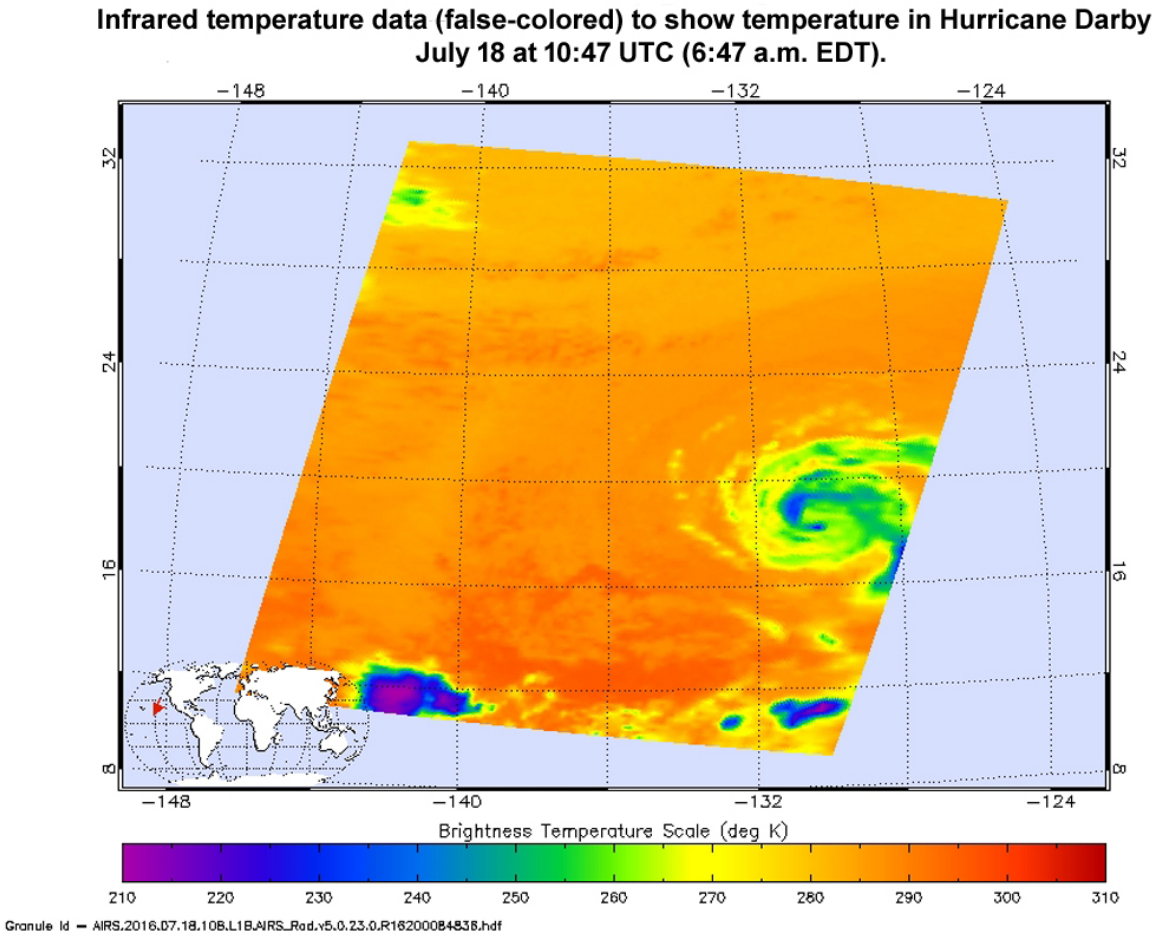
NASA sees a weaker Hurricane Darby in infrared light

July 19 2016



On July 18, AIRS data from NASA's Aqua satellite showed that strong convection had been decreasing as cloud top temperatures warmed in Hurricane Darby. Credit: NASA JPL/Ed Olsen

Infrared imagery from NASA's Aqua satellite shows that Hurricane Darby is losing its punch.

When NASA's Aqua satellite passed over Darby on July 18 at 1047 UTC (6:47 a.m. EDT), the Atmospheric Infrared Sounder known as the AIRS instrument looked at the storm in infrared light. Infrared light provides temperature data, which is important in seeing the height and power of the thunderstorms that make up a tropical cyclone. The colder the cloud tops, the higher they are in the atmosphere, and the stronger the convection or uplift of air (and evaporation, condensation and thunderstorm development).

AIRS data showed that strong convection had been decreasing as cloud top temperatures warmed. That strong convection continued to decrease during the early morning hours on July 19 according to the National Hurricane Center (NHC). However, NHC noted that Darby still has a well-defined and tight circulation.

NHC Forecaster Cangialosi said "Microwave [satellite] data indicates that the low-level center of Darby is located to the south of the eye feature seen in infrared satellite images, which is likely the result of southerly [vertical wind] shear."

At 5 a.m. PDT (0900 UTC) on July 19 the center of Hurricane Darby was located near 19.4 degrees north latitude and 134.4 degrees west longitude. That's about 1,345 miles (2,165 km) east of Hilo, Hawaii. The estimated minimum central pressure is 988 millibars.

Darby is moving toward the west-northwest near 13 mph (20 kph) and this motion is expected to continue today. A turn toward the west is forecast to occur tonight.

Maximum sustained winds remain near 75 mph (120 kph) and

weakening is forecast during the next 48 hours. Darby is likely to become a tropical storm later today.

There are no coastal watches or warnings in effect.

Provided by NASA's Goddard Space Flight Center