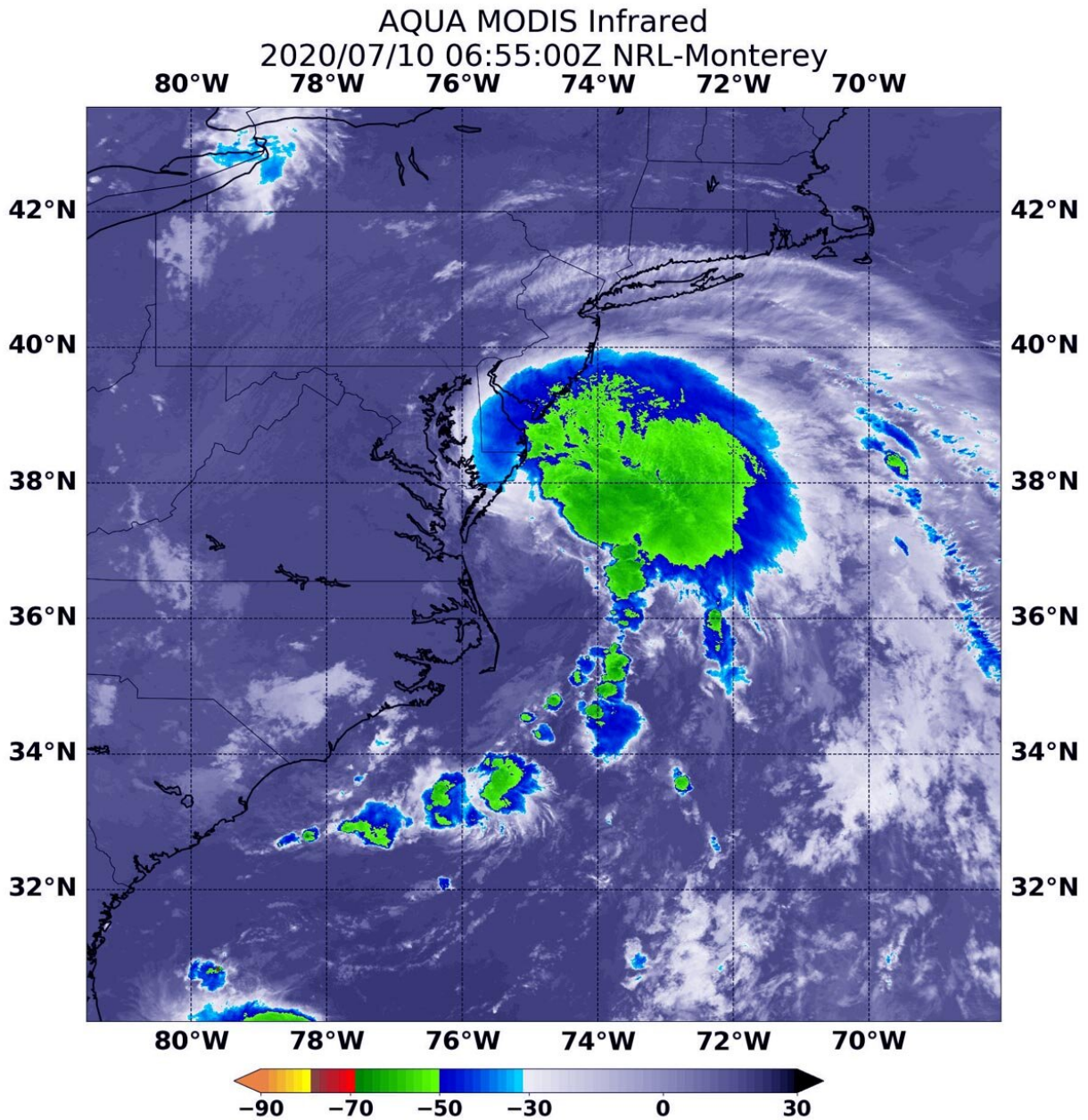


# NASA tracks tropical storm Fay's development and strongest side

July 10 2020



On July 10 at 2:55 a.m. EDT (0655 UTC), the MODIS instrument aboard NASA's Aqua satellite gathered temperature information about Tropical Storm Fay's cloud tops. MODIS found powerful thunderstorms where temperatures were as cold as or colder than minus 63 degrees Fahrenheit (minus 53 Celsius) mostly over the western Atlantic Ocean and over parts of coastal Delaware and southern New Jersey. Credit: NASA/NRL

NASA used satellite data to create an animation of Fay's development and progression over the past few days, showing how the storm organized into a tropical storm. Additionally, NASA's Aqua satellite used infrared light to find the location of the strongest storms in Tropical Storm Fay occurring in the northeastern quadrant of the storm, mostly over the Atlantic Ocean.

Tropical Storm Fay was officially named as the sixth tropical storm the Atlantic Ocean Hurricane Season by 5 p.m. EDT on July 9. The storm formed just off the North Carolina coast. For several days before that, forecasters were using [satellite data](#) to track the storm as it developed.

## **Animating the Development of Fay**

Previously designated as System 98L, the low-pressure area formed off the Georgia coast and moved north. At NASA's Goddard Space Flight Center in Greenbelt, Md. NASA Worldview was used to create an animation of visible imagery of the storm using data from NASA-NOAA Suomi NPP satellite. The animation showed the development and progression of System 98L into Tropical Storm Fay from July 6 to July 9.

NASA's Earth Observing System Data and Information System

(EOSDIS) Worldview application provides the capability to interactively browse over 700 global, full-resolution satellite imagery layers and then download the underlying data. Many of the available imagery layers are updated within three hours of observation, essentially showing the entire Earth as it looks "right now." Worldview is a tool that can be used to generate satellite imagery and animations.

## **NASA Analyzing Fay in Infrared Light**

On July 10 at 2:55 a.m. EDT (0655 UTC), the Moderate Resolution Imaging Spectroradiometer or MODIS instrument aboard NASA's Aqua satellite gathered temperature information about Tropical Storm Fay's cloud tops. MODIS found powerful thunderstorms where temperatures were as cold as or colder than minus 63 degrees Fahrenheit (minus 53 Celsius) mostly over the western Atlantic Ocean and along coastal areas of Delaware and southern New Jersey. Cloud top temperatures that cold indicate strong storms with the potential to generate heavy rainfall.

## **Warnings and Watches on July 9**

At 8 a.m. EDT (1200 UTC), the National Hurricane Center (NHC) noted a Tropical Storm Warning is in effect for Fenwick Island, Delaware to Watch Hill, Rhode Island including Long Island and Long Island Sound, as well as Southern Delaware Bay. A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area.

## **What to Expect from Fay**

The National Hurricane Center noted that in addition to [tropical-storm](#) force winds, [storm](#) surge and a possibility for isolated tornadoes, Fay is expected to produce heavy rainfall. "Fay is forecast to generate 2 to 4

inches of rain with isolated maxima of 7 inches along and near the track from the lower Maryland Eastern Shore and Delaware northward into New Jersey, eastern Pennsylvania, southeast New York, and southern New England. These rains may result in flash flooding where the heaviest amounts occur."

## **Fay's Status on July 9**

At that time the NHC reported the center of Tropical Storm Fay was located by an Air Force Reserve Hurricane Hunter aircraft near latitude 37.6 degrees north and longitude 74.7 degrees west. Fay was centered about 55 miles (85 km) south-southeast of Ocean City, Md. Fay is moving toward the north near 10 mph (17 kph). A northward to north-northeastward motion at a faster forward speed is expected over the next couple of days.

Maximum sustained winds are near 50 mph (85 kph) with higher gusts. Little change in strength is forecast today and tonight while the center remains over water. Weakening should begin after the center moves inland. The estimated minimum central pressure based on aircraft data is 999 millibars.

A Weatherflow station at Lewes, Delaware recently reported a sustained wind of 33 mph (54 kph) and a wind gust of 39 mph (63 kph).

## **Fay's Forecast Track**

NHC forecasters expect the center of Fay to move near the mid-Atlantic coast today and move inland over the mid-Atlantic or the northeast United States late tonight or on Saturday.

Typhoons/hurricanes are the most powerful weather events on Earth.

NASA's expertise in space and scientific exploration contributes to essential services provided to the American people by other federal agencies, such as hurricane weather forecasting.

Provided by NASA's Goddard Space Flight Center

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