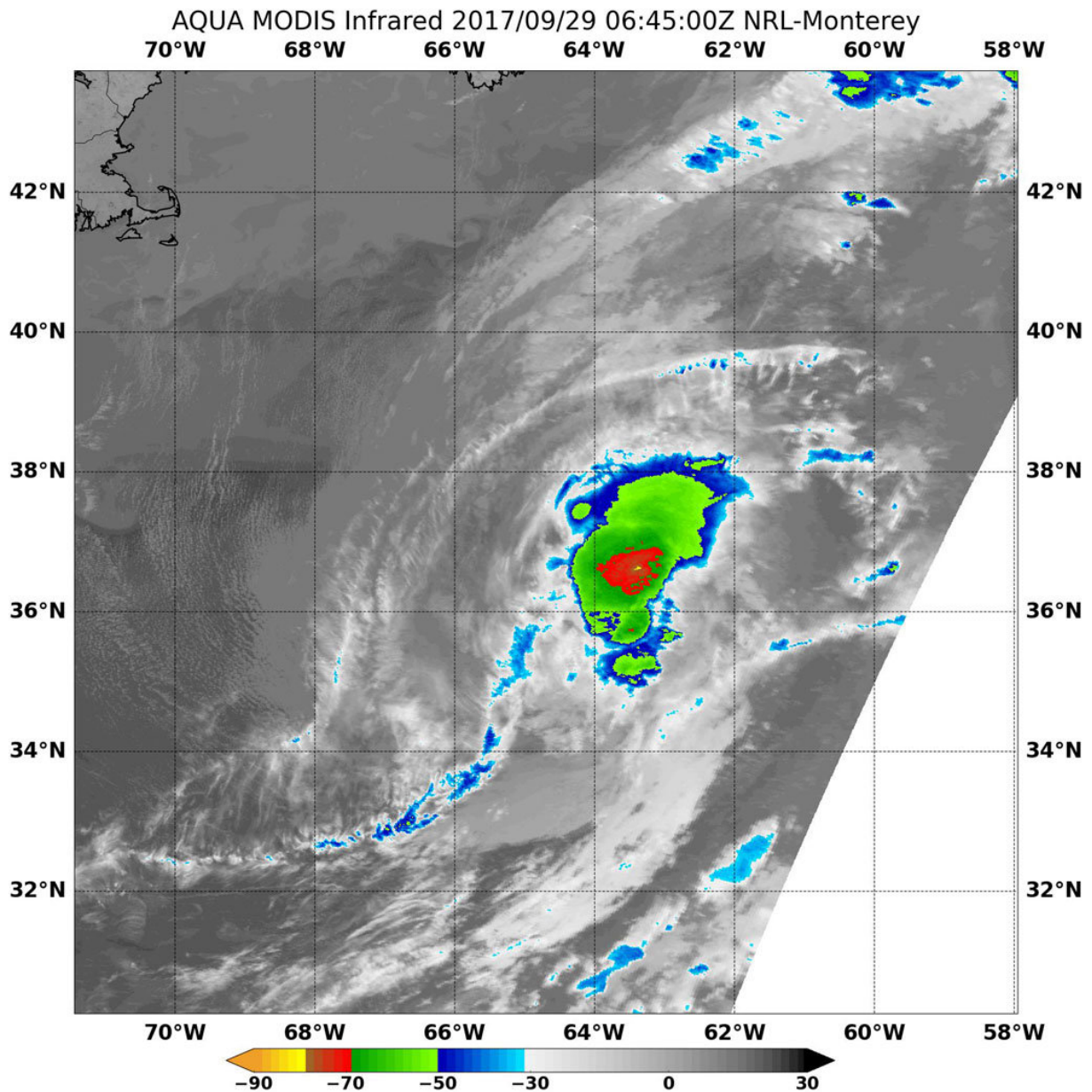


NASA infrared imagery shows wind shear affecting Tropical Storm Maria

September 29 2017



On Sept. 29 at 02:45 UTC (6:45 a.m. EST) NASA's Terra satellite measured temperatures of Maria's cloud top temperatures as cold as minus 70 degrees Fahrenheit (minus 56.6 degrees Celsius) (in red) east of the center. Credit: NASA/NRL

Tropical Storm Maria is now caught up in the Westerlies and is being affected by wind shear that is elongating the storm. Infrared imagery from NASA's Aqua satellite revealed that Maria's strongest storms were east of the tropical cyclone's center because of westerly wind shear.

The prevailing Westerlies are the winds in the middle latitudes between 35 and 65 degrees latitude. They blow from the west to the east and steer storms in that general direction. Maria is now embedded in those winds and they are guiding the tropical [storm](#) across the Atlantic Ocean.

On Sept. 29 at 02:45 UTC (6:45 a.m. EST) the Moderate Resolution Imaging Spectroradiometer or MODIS instrument aboard NASA's Terra satellite measured temperatures of Maria's cloud tops. MODIS data was false-colored at the U.S. Naval Research Laboratory in Washington, D.C. and showed powerful thunderstorms with cloud top temperatures as cold as minus 70 degrees Fahrenheit (minus 56.6 degrees Celsius) east of the center.

National Hurricane Center forecaster Lixion Avila noted "satellite images indicate that cold air is already beginning to entrain into the circulation of the tropical cyclone. Most of deep convection is limited to a curved band to the east of the center."

At 11 a.m. EDT (1500 UTC) on Sept.29 the center of Tropical Storm Maria was located near 37.5 degrees north latitude and 60.1 degrees west

longitude. That's about 525 miles (840 km) south-southeast of Halifax, Nova Scotia, Canada.

Maria was moving toward the east-northeast near 31 mph (50 kph), and this motion is expected to continue during the weekend. Maximum sustained winds are near 60 mph (95 kph) with higher gusts. The estimated minimum central pressure is 988 millibars.

Swells generated by Maria are affecting much of the east coast of the United States, Atlantic Canada, and Bermuda. These swells are likely to cause life-threatening surf and rip current conditions.

The NHC said that Maria should become post-tropical late on Saturday, Sept. 30 and then dissipate or be absorbed by a larger cyclone on Oct. 1 or 2. Maria is already embedded in the mid-latitude westerlies (winds).

Provided by NASA's Goddard Space Flight Center

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