

NASA sees Hurricane Leslie's eye close

September 7 2012



This visible image of Hurricane Leslie was taken by the MODIS instrument aboard NASA's Terra satellite on Sept. 6 at 10:45 a.m. EDT. Leslie's eye appears cloud covered and the storm weakened to a tropical storm on Sept. 7. Credit: NASA Goddard/MODIS Rapid Response Team

Hurricane Leslie appeared to "close its eye" on NASA satellite imagery as the storm heads east of Bermuda, like a little girl shutting her eyes tight on a wild amusement ride. Often when an eye becomes cloud-

filled, its a sign that the storm is weakening, and Leslie did drop from a hurricane to a tropical storm on Sept. 7.

The Moderate Resolution Imaging Spectroradiometer (MODIS) instrument aboard NASA's [Terra satellite](#) captured a [visible image](#) of Hurricane Leslie on Sept. 6 at 10:45 a.m. EDT and Leslie's eye appeared cloud covered. Leslie went on to weaken to tropical storm on Sept. 7.

At 11 a.m. EDT on Sept. 7, Tropical Storm Leslie's [maximum sustained winds](#) were just under hurricane strength, near 70 mph (110 kmh), and the [forecasters](#) at the National Hurricane Center expect no change in intensity today, however, Leslie could regain hurricane status over the weekend of Sept. 8 and 9. Leslie was located about 410 miles (660 km) south-southeast of Bermuda near latitude 26.8 north and longitude 62.2 west.

Leslie was sitting still and the NHC doesn't expect much movement on Sept. 7, but expects Leslie to start moving northward on Sat. Sept. 8. The Atmospheric Infrared Sounder (AIRS) instrument that flies aboard NASA's Aqua satellite noticed earlier this week that Leslie's slow movement was causing cooler waters to upwell from below the surface of the ocean, up to the ocean's surface. The waters were cooler than 26.6 degrees Celsius (80 degrees Fahrenheit), which is the threshold needed to maintain a tropical cyclone. When water temperatures drop below that threshold a tropical cyclone weakens, because evaporation (that adds fuel to a storm) cannot happen as much and as quickly.

On Sept. 7 a NOAA aircraft dropped a dropsonde (instrument that measures temperature and other factors) through Leslie, and found that the [sea surface temperature](#) was near 24.5 Celsius (76.1 Fahrenheit). NOAA NHC forecaster Lixion Avila noted that "once Leslie moves away from the cool pool it has created for itself the cyclone will have the opportunity to regain hurricane status since the shear is expected to be

low."

Leslie is a good-sized storm with tropical storm force winds extending out to 185 miles (295 km) from the center. A tropical storm watch is in effect for Bermuda on Sept. 7, and will become a warning later. Leslie is expected to pass closest to Bermuda on Sunday, Sept. 8.

Even though Leslie isn't close to the U.S. mainland, it is causing rough surf to the U.S. east coast and Bermuda. The NHC noted that ocean swells will affect the U.S. from central Florida all the way north to the Canadian Maritimes, and south to the Northern Leeward Islands and Puerto Rico and the Virgin Islands over the next several days.

Provided by NASA's Goddard Space Flight Center

Citation: NASA sees Hurricane Leslie's eye close (2012, September 7) retrieved 23 April 2024 from <https://phys.org/news/2012-09-nasa-hurricane-leslie-eye.html>

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