

NASA satellites Hurricane Irene almost one-third the size of US east coast

August 25 2011



The GOES-13 satellite saw Hurricane Irene moving through the Bahamas on Aug. 25, 2011 at 1402 UTC (10:02 a.m. EDT) and far to the east was newly born Tropical Depression 10 (far left). Irene dwarfs Tropical Depression 10, and Irene is about 1/3 the size of the entire US East coast. Credit: NASA/NOAA GOES Project

Hurricane Irene is a major hurricane, and NASA satellite data shows its diameter is now about one-third the length of the U.S. Atlantic coastline. Meanwhile, far in the eastern Atlantic Ocean a tenth tropical depression formed. One satellite image captured both storms and shows the tremendous difference in their size.

NOAA's GOES-13 satellite saw [Hurricane](#) Irene moving through the Bahamas on August 25, 2011 at 10:02 a.m. EDT and far to the east off the African coast was newly born Tropical Depression 10. The GOES-13

image shows Irene to be almost one third of the size of the U.S. east coast. The distance from Augusta, Maine to Miami, Florida is 1662.55 miles. Hurricane Irene's [tropical storm-force winds](#) extend 255 miles from the center making Irene 510 miles in diameter, almost one-third the size of the U.S. Hurricane-force winds extend 70 miles from the center, or 140 miles in diameter.

GOES-13 images and animations are created at NASA's GOES Project at the NASA Goddard Space Flight Center, Greenbelt, Md.

NASA satellites are providing valuable data to forecasters to assist them in the forecasts for Irene's track and power. As of this morning, a Hurricane Watch is now in effect for the coastal U.S.

On Thursday morning, August 24, a hurricane warning is in effect for the central and northwestern Bahamas. The National Hurricane Center (NHC) has also issued the first watch for the U.S. east coast. A hurricane watch is in effect for north of Surf City, North Carolina to the North Carolina-Virginia border including the Pamlico, Albemarle, and Currituck Sounds. A [tropical storm](#) watch is in effect for north of Edisto Beach, South Carolina to Surf City North Carolina.

NASA satellites are flying above Hurricane Irene, providing forecasters at NHC with temperature, pressure, wind, and cloud and [sea surface temperature](#) data. All of those things are critical in helping forecasters determine how Irene will behave and track.



NASA's Terra satellite captured a visible image of Hurricane Irene's eye directly over Crooked Island in the southern Bahamas on Aug. 24, 2011 at 12:15 p.m. EDT. Credit: NASA Goddard MODIS Rapid Response

The Moderate Resolution Imaging Spectroradiometer (MODIS) Instrument aboard NASA's Terra satellite captured a visible image of Hurricane Irene's eye directly over Crooked Island in the southern Bahamas on August 24, 2011 at 18:15 UTC (2:15 p.m. EDT).

By 11 a.m. EDT on August 25, Irene had moved north and was 75 miles (105 km) east-northeast of Nassau near 25.9 North latitude and 76.8 West longitude. Irene's winds dropped slightly from 120 mph (195 kmh) to 115 mph (kmh) and it was moving to the north-northwest near 13 mph (20 kmh). The NHC, however, noted that some further strengthening is possible today and tonight.

Irene's minimum central pressure has fallen from 954 to 951 millibars since the day before, indicating the storm is still intensifying despite the slight temporary drop in maximum sustained winds.

Hurricane-force wind gusts were already reaching Nassau at 8 a.m. EDT. Hurricane force winds are spreading over the northwestern Bahamas this morning and the central Bahamas are still being battered by hurricane or tropical storm force winds, which will diminish later today as Irene moves away.

Residents in South Florida are also under warnings for dangerous rip currents and high surf along the eastern shores through Friday, August 26. A tropical storm warning in effect for the offshore marine waters of Palm Beach County, Florida beyond 20 nautical miles, and at 5:30 a.m. EDT this morning, rainbands spreading west over the adjacent Atlantic waters. Numerous showers and thunderstorms are expected along the south Florida coast today and tonight.

Far in the eastern Atlantic, Tropical Depression 10 formed about 435 miles (700 km) west-southwest of the southernmost Cape Verde Islands. It was centered near 12.4 North and 30.4 West, and moving to the west-northwest near 13 mph (20 kmh). [Tropical Depression](#) 10 (TD10) has maximum sustained winds near 35 mph (55 kmh) and may become a tropical storm in the next day or two. It is not expected to be a threat to the U.S. and is expected to remain at sea.

In the meantime, evacuation plans are already under way in North Carolina for the massive Hurricane Irene.

Provided by NASA's Goddard Space Flight Center

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