

# Satellite eyes first major Atlantic Hurricane in 3 years: Gonzalo

October 16 2014

---



On Oct. 15 at 11:15 a.m. EDT NOAA's GOES-East satellite saw Gonzalo had tightly wrapped bands of thunderstorms spiraling into the center of its circulation. Credit: NASA/NOAA GOES Project

Hurricane Gonzalo has made the jump to major hurricane status and on Oct. 15 was a Category 4 storm on the Saffir-Simpson Hurricane Scale.

NOAA's GOES-East satellite provided imagery of the storm. According to the National Hurricane Center, Gonzalo is the first category 4 hurricane in the Atlantic basin since Ophelia in 2011.

NOAA's GOES-East satellite provides visible and infrared images of weather from its orbit in a fixed position over the Earth. On Oct. 15 at 15:15 UTC (11:15 a.m. EDT) GOES saw Gonzalo had tightly wrapped bands of thunderstorms spiraling into the center of its circulation. The eye of the [storm](#) was obscured by high clouds in the image. NOAA aircraft data and microwave images clearly show concentric eyewalls, with the inner radius of maximum winds now only about 4-5 nautical miles from the center.

NOAA manages the GOES satellites, while NASA/NOAA's GOES Project at NASA's Goddard Space Flight Center in Greenbelt, Maryland created the image. The NASA/NOAA GOES Project creates images and animations from GOES data.

At 11 a.m. EDT on Oct. 15, Gonzalo's maximum sustained winds increased to near 130 mph (215 kph) and the National Hurricane Center (NHC) noted that fluctuations in intensity are expected over the next couple of days. Gonzalo's cloud-covered eye was located near latitude 23.5 north and longitude 68.0 west, about 640 miles (1,025 km) south-southwest of Bermuda. Gonzalo is moving toward the northwest near 12 mph (19 kph). The minimum central pressure recently reported by an air force reconnaissance aircraft was 949 millibars.

Tropical storm conditions are possible in Bermuda by late Thursday night, Oct. 16, and [hurricane](#) conditions are possible over Bermuda on Friday Oct. 16.

Ocean swells however, will be felt over a much larger area, reached the U.S. east coast on Oct. 16. Large swells generated by Gonzalo are

affecting portions of the Virgin Islands, the northern coasts of Puerto Rico and the Dominican Republic and portions of the Bahamas. Swells will reach much of the east coast of the United States and Bermuda on Thursday.

By late Oct. 16, Gonzalo is expected to turn to the northeast and the center is expected to approach Bermuda sometime on Oct. 17.

Provided by NASA's Goddard Space Flight Center

Citation: Satellite eyes first major Atlantic Hurricane in 3 years: Gonzalo (2014, October 16)  
retrieved 19 April 2024 from  
<https://phys.org/news/2014-10-satellite-eyes-major-atlantic-hurricane.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.