

NASA and NOAA satellite data see North Atlantic system more concentrated

January 12 2016, by Rob Gutro



This visible image of the low pressure area in the Central North Atlantic Ocean was taken from NOAA's GOES-East satellite on Jan. 12 at 1445 UTC (9:45 a.m.) EST. Africa is seen to the right. Credit: NASA/NOAA GOES Project



NASA and NOAA satellites continue to monitor the North Atlantic Ocean's non-tropical low pressure system for hints of development into a subtropical storm. NASA's Aqua satellite provided cloud top temperatures that show where strongest storms are within the larger system, and the storm appeared more consolidated on NOAA's GOES-East satellite imagery.

NOAA's National Hurricane Center (NHC) noted the development of the extra-tropical low pressure area on Sunday, January 10 at 1:50 p.m. EST.

The Atmospheric Infrared Sounder known as the AIRS instrument aboard NASA's Aqua satellite measured temperatures in the system's cloud tops on Jan. 11 at 0435 (Jan. 10 at 11:35 p.m. EST) and later at 1541 UTC (10:41 a.m. EST). AIRS provides valuable temperature data such as cloud top and <u>sea surface temperatures</u>. AIRS saw the coldest cloud top temperatures near -63F/-53C and strongest storms expanded from east of center to around the center of this out-of-season extratropical low pressure area.

NOAA's GOES-East satellite captured a visible image of the low pressure area on Jan. 12 at 1445 UTC (9:45 a.m.) EST. Clouds and storms surrounded the center of circulation and in a band east of the center. The low pressure area has been designated "System 90L."

On Jan. 12 at 2 p.m. EST, the low was centered 1,100 miles southwest of the Azores, an archipelago in the mid-Atlantic. The National Hurricane Center noted that cloudiness and thunderstorms have become a little more concentrated and organized near the center of the storm's circulation. The low was producing winds to near 60 mph over the southern and eastern quadrants of its circulation. The cyclone is expected to move eastward to northeastward over the eastern subtropical Atlantic over the next couple of days.





On Jan. 11 at 1541 UTC, the AIRS instrument aboard NASA's Aqua satellite saw coldest cloud top temperatures near -63F/-53C and strongest storms now circling the center in this out-of-season extra-tropical low pressure area. Credit: NASA JPL, Ed Olsen

NHC said "Although environmental conditions are only marginally conducive for development, this system could become a subtropical or tropical storm within the next day or so. Regardless of subtropical or



tropical cyclone formation, this system is expected to produce hazardous marine conditions over portions of the eastern Atlantic for the next few days."

The National Hurricane Center gives this system a medium chance to develop into a depression over the next five days.

For updated forecasts, visit NHC at <u>http://www.nhc.noaa.gov</u> or the National Weather Service High Seas Forecast at <u>http://www.opc.ncep.noaa.gov/shtml/NFDHSFAT1.shtml</u>.

Provided by NASA's Goddard Space Flight Center

Citation: NASA and NOAA satellite data see North Atlantic system more concentrated (2016, January 12) retrieved 27 April 2024 from <u>https://phys.org/news/2016-01-nasa-noaa-satellite-north-atlantic.html</u>

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.