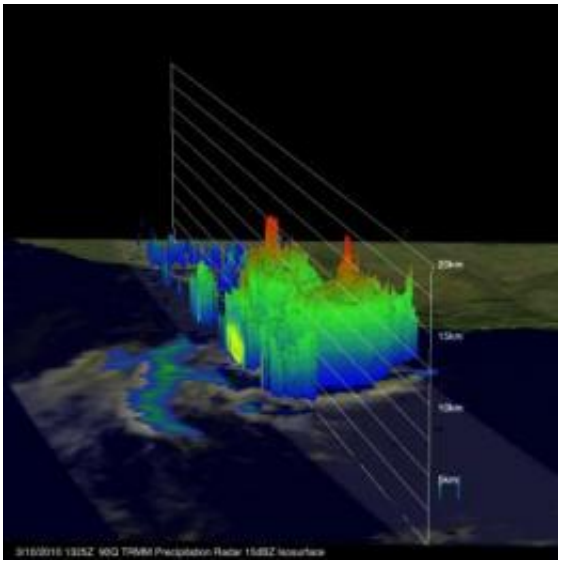
Second only south Atlantic tropical storm: 90Q, moving away from Brazil

March 11 2010



The Tropical Rainfall Measuring Mission, or TRMM satellite data was used to create a 3-D image of 90Q. The image showed some fairly high thunderstorm tops near the center of the storm reaching to heights above 12.5 km (over 41,010 feet). Credit: SSAI/NASA Goddard, Hal Pierce

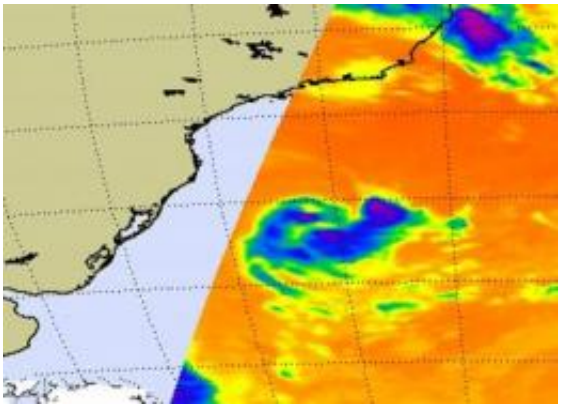
Tropical Storm 90Q is the second known tropical cyclone to form in the cooler South Atlantic Ocean, and two NASA satellites confirm it is now moving away from Brazil's coast. The first tropical cyclone ever seen in recorded history in the Southern Atlantic was called "Catarina" in 2004.

The Naval Research Laboratory has provided information on the system, although they will not issue a formal tropical cyclone declaration because

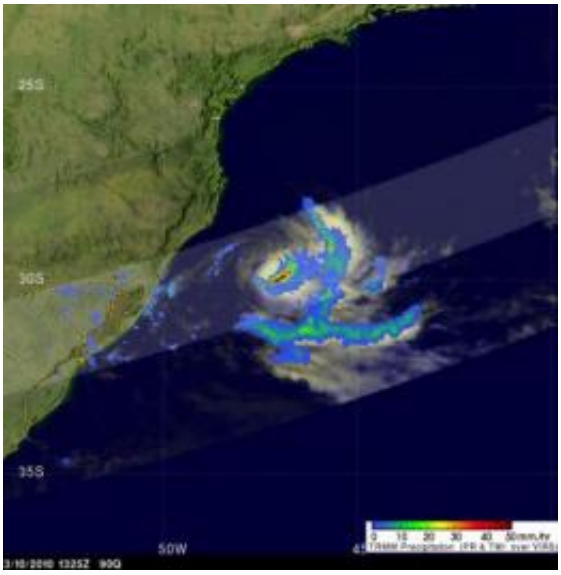
the Southern Atlantic is not currently covered by a Regional Specialist Meteorological Center (because tropical cyclones typically don't appear there), however, that may change in the future.

At 0845 UTC (3:45 a.m. ET) today, March 11, Tropical Storm 90Q had maximum sustained winds near 46 mph (40 knots). It was located about 325 miles east of Puerto Alegre, Brazil in the waters of the South Atlantic Ocean near 30.0 South latitude and 45.8 West longitude.

On Wednesday, March 10, the Tropical Rainfall Measuring Mission, or TRMM satellite had a fairly good pass this over Tropical Storm 90Q in the morning hours and showed some heavy rainfall, falling at a rate as much as 2 inches per hour on the storm's southeastern side. TRMM satellite data was used at NASA's Goddard Space Flight Center in Greenbelt, Md. to create a 3-D image of 90Q. The image showed some fairly high thunderstorm tops near the center of the storm reaching to heights above 12.5 km (over 41,010 feet), which corresponds with the areas of heavy rain. The TRMM satellite is managed by both NASA and the Japanese Space Agency, JAXA.



This infrared image of 90Q from NASA's Aqua satellite was captured on March 11 at 0341 UTC (March 10 at 10:41 p.m. ET) and shows some high, cold thunderstorms in the center of the storm. Credit: NASA/JPL, Ed Olsen



On Wednesday, March 10, the Tropical Rainfall Measuring Mission, or TRMM satellite had a fairly good pass this over Tropical Storm 90Q in the morning hours and showed some heavy rainfall (~2 inches/hr in red) on the storm's southeastern side. Credit: SSAI/NASA Goddard, Hal Pierce

Early today, March 11, the Atmospheric Infrared Sounder (AIRS) instrument that flies aboard NASA's Aqua satellite captured an infrared image of 90Q. The infrared image showed some high, cold thunderstorms in the center of the storm, confirming strong convection in the storm.

"The only other tropical cyclone known to have occurred in the Southern Atlantic Ocean developed in March, 2004," said Hal Pierce, meteorologist on the TRMM satellite team at NASA Goddard. "That's when a hurricane called "Catarina" made landfall on March 28, 2004 near the town of Torres in the southern Brazilian state of Santa Catarina (thus, the storm's name). It was the first "hurricane" ever observed by

satellite in the south Atlantic." One agency in Brazil also issued warnings on the storm calling it "1-T Alfa."

Tropical Storm 90Q will continue moving in a general easterly direction away from the Brazilian coast and weaken before being absorbed by a mid-latitude cold front this weekend.

Provided by NASA's Goddard Space Flight Center