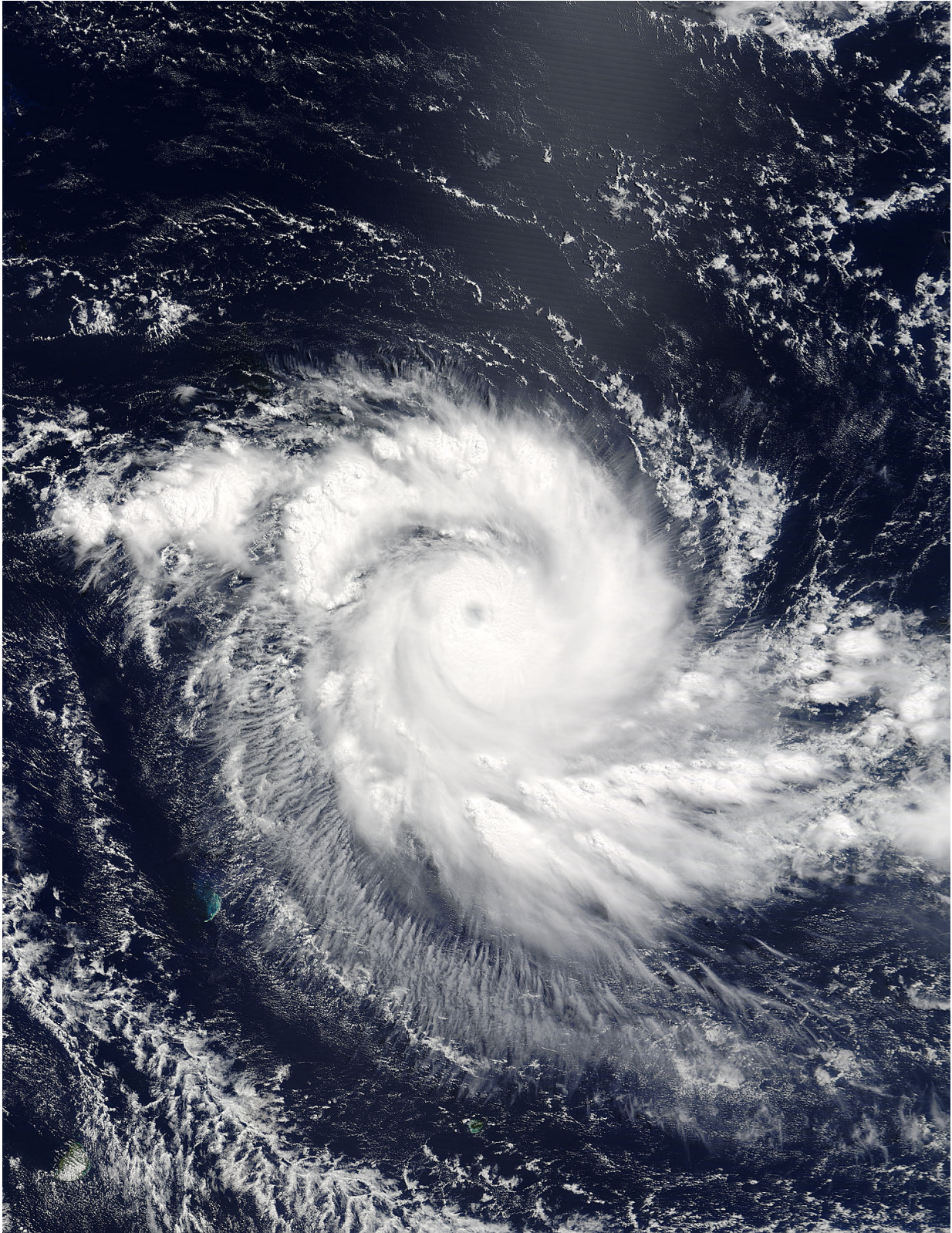


NASA's satellites see Fantala intensifying as it moves west

April 14 2016



This natural-color satellite image was collected by the Moderate Resolution

Imaging Spectroradiometer (MODIS) aboard the Terra satellite on April 14, 2016. Credit: Jeff Schmaltz, MODIS Rapid Response Team.

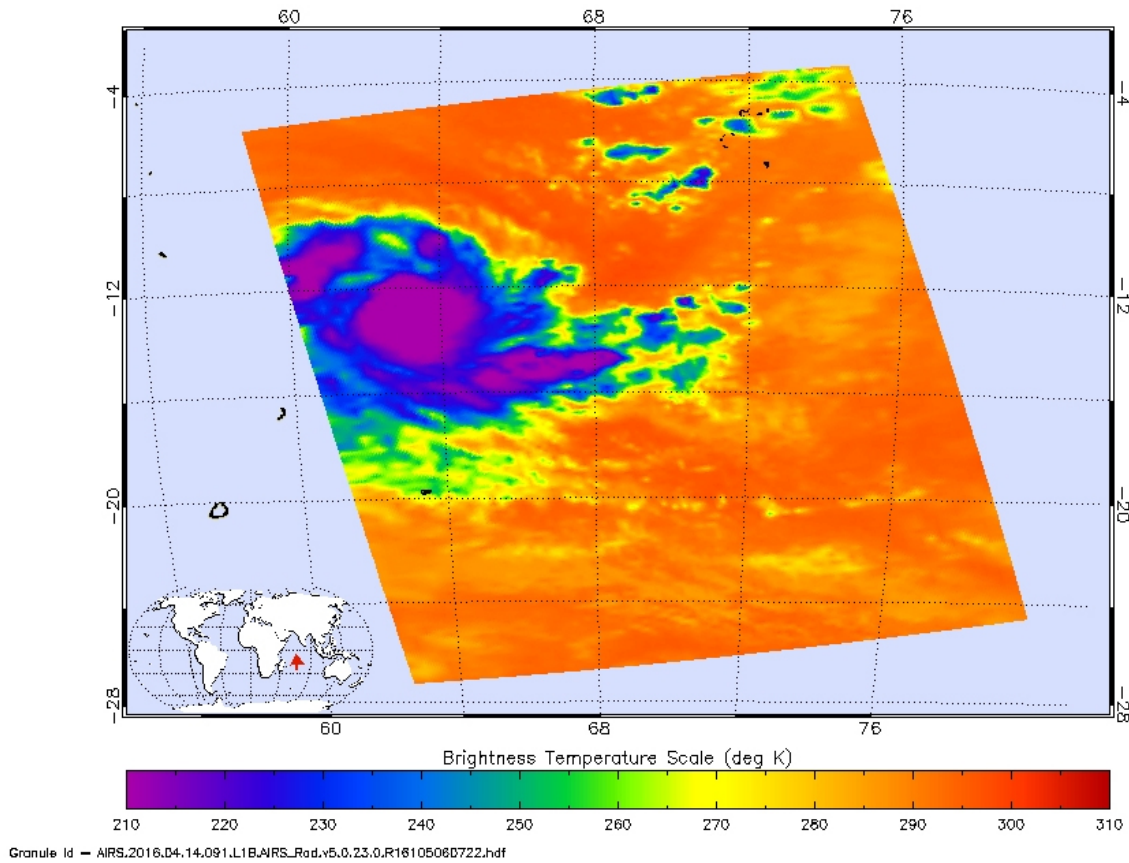
Three different NASA satellites caught images of the storm as it rapidly intensifies and moves west. Currently there are no threatened landmasses in its wake, but it this storm is packing quite a punch. The MODIS and AIRS instruments that fly aboard NASA's Aqua satellite provided visible and infrared data on the storm while the RapidScat instrument that flies aboard the International Space Station looked at the speeds of the surface winds.

Over the course of the last 12 hours before 0900 UTC (5 a.m. EDT) on April 14, Fantala, which is 575 nautical miles northeast of Port Louis, Mauritius, has increased 20 knots (23 mph/37 kph) in wind speed. Fantala is tightly wrapped at present with a very wide open eye of 13 nautical miles (14.9 miles/24 km). Wind speeds have been clocked at 105 to 130 knots (120 to 149 mph). On the Saffir-Simpson scale this cyclone would be on the high end of a Category 4 storm. Wave heights around the storm are reaching 30 feet (9.1 meters)

On April 14 at 0905 UTC (5:05 a.m. EDT) NASA's Aqua satellite gathered infrared temperature data on the clouds within the storm. The Atmospheric Infrared Sounder or AIRS instrument found powerful thunderstorms with very cold cloud tops near minus 80 degrees Fahrenheit (minus 62.2 Celsius).

AIRS Level-1B Quick Browse Image

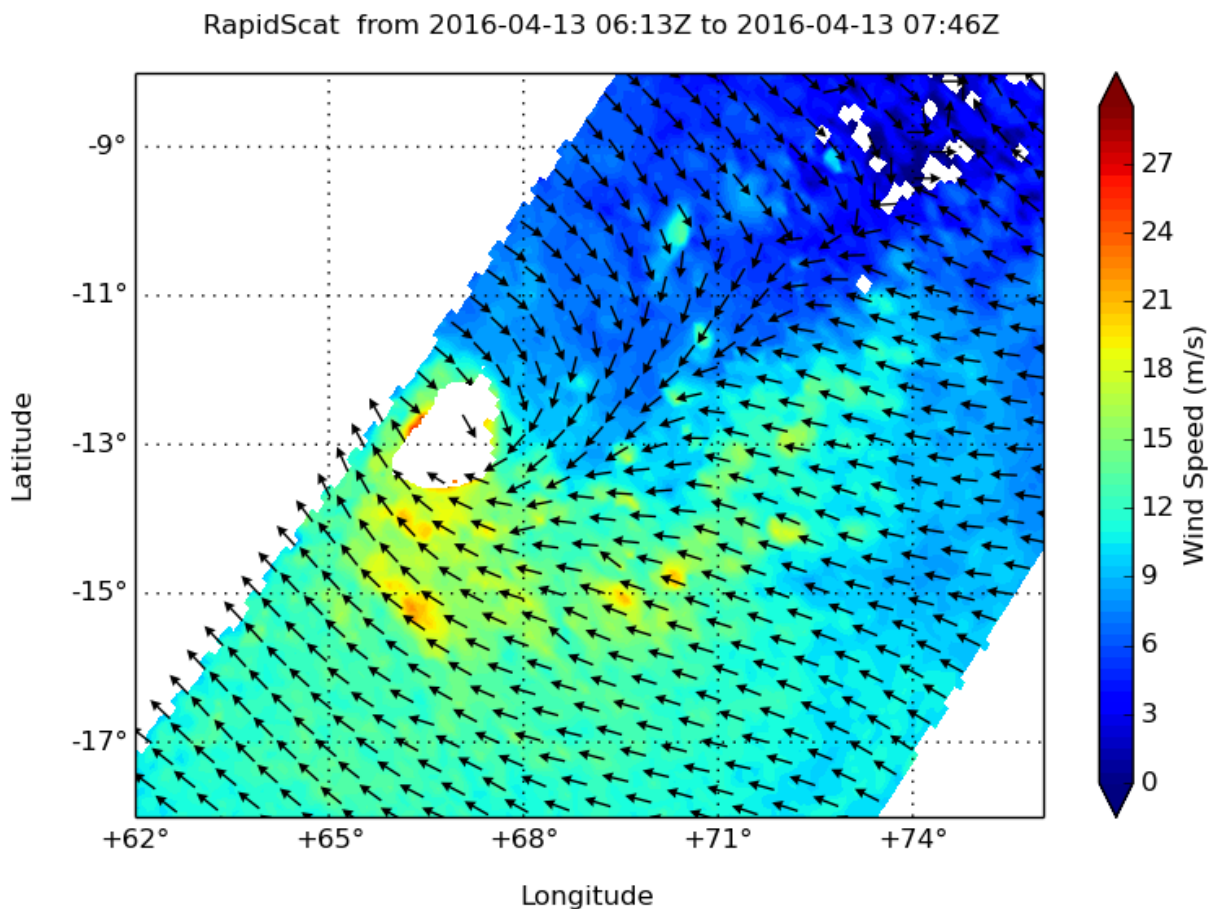
12.047 μm Brightness Temperature Apr 14, 2016 09:05:22 UTC Granule 091



This false-colored image created from infrared temperature data gathered by the AIRS instrument aboard NASA's Aqua satellite on April 14, 2016 at 09:05 UTC shows strongest storms in purple. Credits: NASA JPL Credit: NASA JPL/Ed Olsen

The RapidScat instrument that flies aboard the International Space Station measures Earth's ocean surface wind speed and direction over open waters. RapidScat measured the [wind speeds](#) of Fantala up to 24 meters per second. Surface wind speed is always lower than speeds at higher altitude.

Fantala could be a threat to Madagascar as it heads west towards the island before it turns east and beings moving away from the island nation sometime on April 19 as predicted by the Joint Typhoon Warning Center. The storm is moving at 8 knots (9.2 mph/14.8 kph). The storm is expected to peak at 120 sustained knots today and then adverse conditions at the near-equatorial ridge and midlatitude trough in the Madagascar region will weaken Fantala and the direction of the storm will become southeastward. An interesting note is that the change of the ridge position during El Nino cycles changes tracks of tropical cyclones that form in this area. After four days, the [storm](#) will veer southeast sharply as it continues to weaken.



RapidScat had ascending passes over Tropical Cyclone Fantala early this morning and also 23 hours earlier. Fantala formed south of the island of Diego Garcia and is expected to strengthen and move westward towards Madagascar over the next several days. The white regions near the center of the attached RapidScat wind maps are regions of heavy rainfall. Credit: NASA JPL, Doug Tyler

Provided by NASA's Goddard Space Flight Center

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