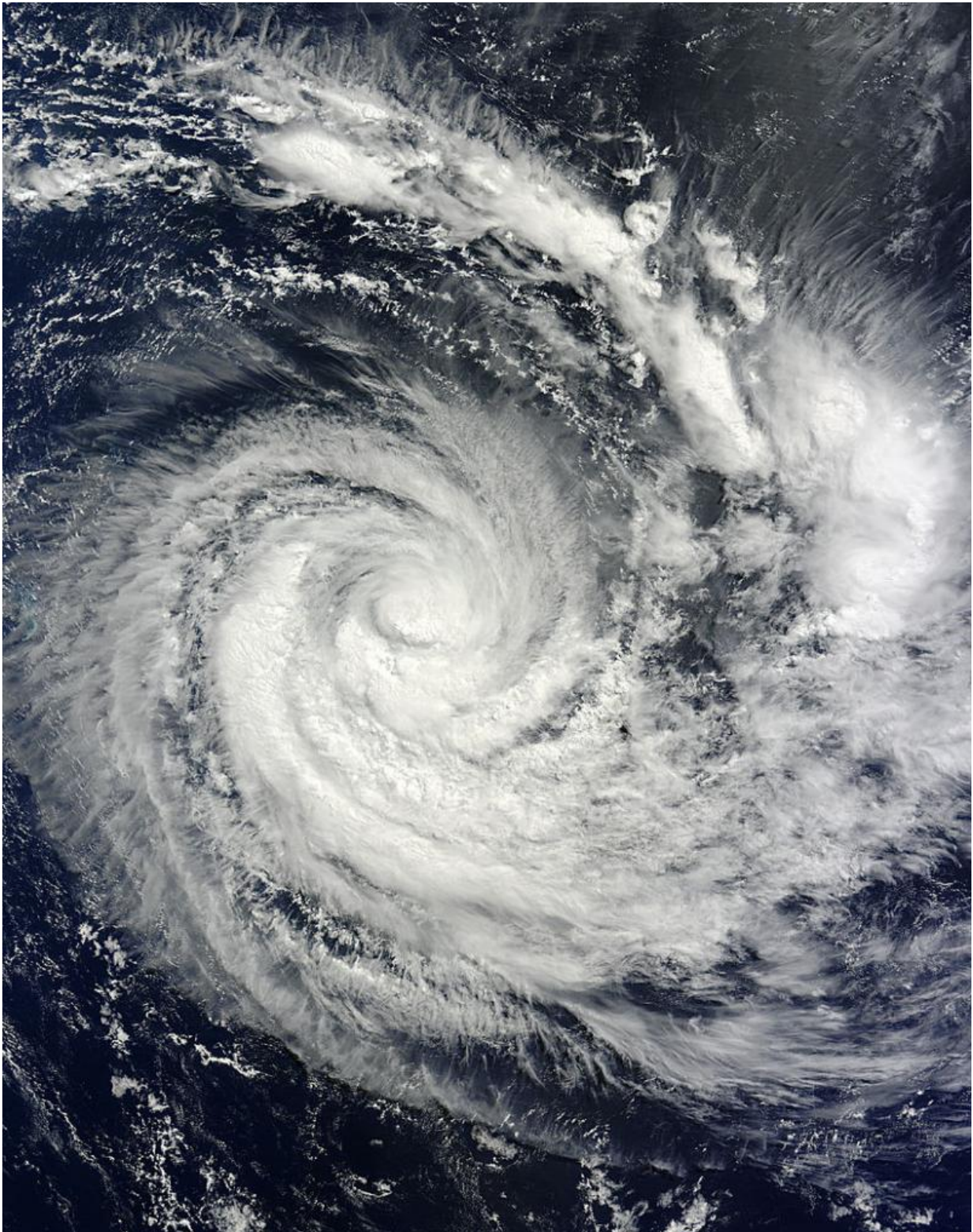


NASA sees Tropical Cyclone Joalane's winds consolidate around its eye

April 9 2015, by Rob Gutro



On April 9 at 5:50 UTC (1:50 a.m. EDT) the MODIS instrument aboard NASA's Terra satellite captured this visible-light image of Tropical Cyclone Joalane.

Credit: NASA Goddard MODIS Rapid Response Team

The RapidScat instrument that flies aboard the International Space Station (ISS) provided data about Tropical Cyclone Joalane's surface winds that showed how the strongest sustained winds consolidated as the tropical cyclone intensified and developed an eye. As of April 9, warnings were in effect at Rodrigues Island in the Southern Indian Ocean as Joalane approached.

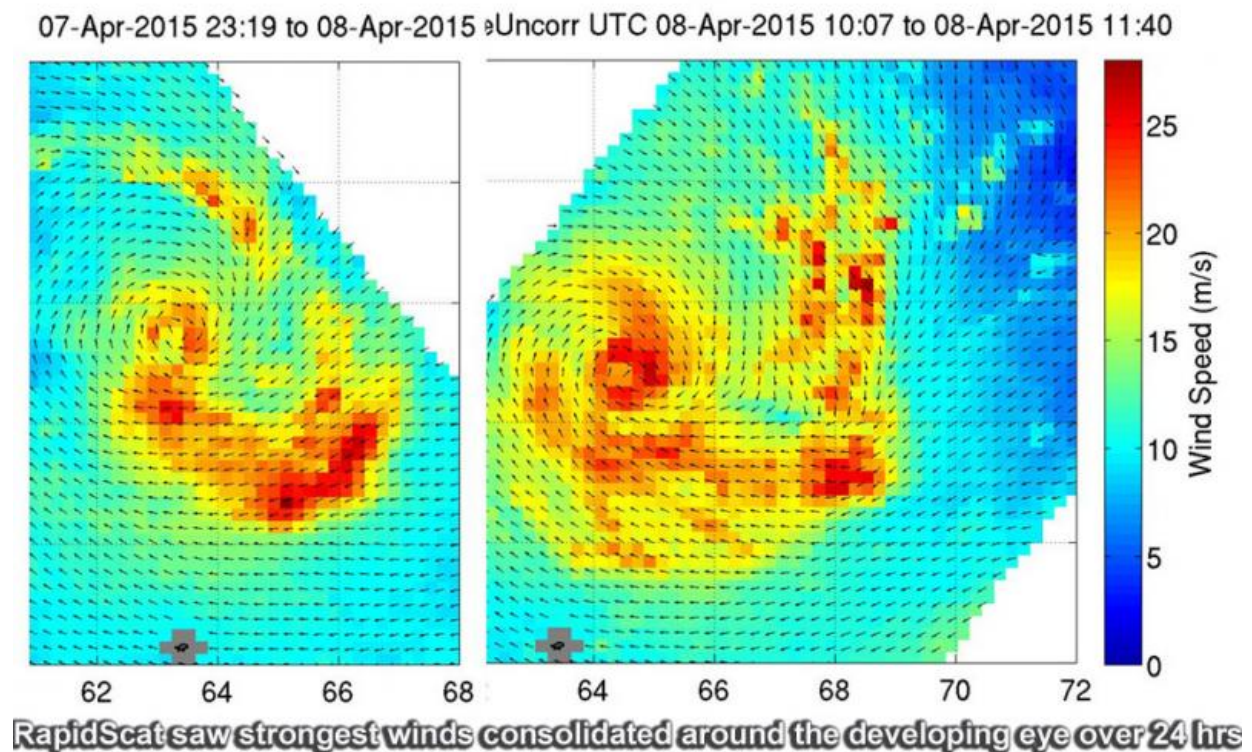
RapidScat measured the [surface winds](#) within Tropical Cyclone Joalane late on April 7 and on April 8, revealing that the strongest winds consolidated over a 24 hour period. RapidScat measured Joalane's winds on April 7 from 23:19 to 00:52 (7:19 p.m. to 8:52 p.m. EDT) and April 8 from 10:07 to 11:40 UTC (6:07 p.m. to 11:40 p.m. EDT).

The strongest sustained winds up reached up to 30 meters per second (67.1 mph/108 kph). During the earlier pass on April 7, those strongest wind speeds were north and east of the developing eye, and extending south and east in a wide band of thunderstorms. On April 8, the strongest surface winds became more concentrated and circled the entire center (which was an eye at that time). Sustained winds of 30 meters per second (67.1 mph/108 kph) were also seen in occurring bands of thunderstorms south and east of the center. The data was generated into images at NASA's Jet Propulsion Laboratory in Pasadena, California.

On April 9 at 05:50 UTC (1:50 a.m. EDT), the Moderate Resolution Imaging Spectroradiometer or MODIS instrument aboard NASA's Aqua Satellite captured visible-light data of Tropical Cyclone Joalane. That data was made into an image by the MODIS Rapid Response Team at NASA's Goddard Space Flight Center in Greenbelt, Maryland. The image showed banding of thunderstorms in the southwestern and

northeastern quadrants of the storm, wrapping into the storm's center. The eye of the storm now just 7 nautical miles (8.0 miles/12.9 km) wide according to microwave data was obscured by clouds in the visible MODIS imagery.

A Class I tropical cyclone warning was posted on April 9 at Rodrigues. For updated forecasts for Rodrigues Island, visit the Mauritius Meteorological Services website at: <http://metservice.intnet.mu/>.



ISS-RapidScat saw Joalane's strongest winds (red) on April 7 from 23:19 to 00:52 and April 8 from 10:07 to 11:40 UTC as they consolidated around the eye. Credit: NASA JPL, Doug Tyler

By 1500 UTC (11 a.m. EDT), Joalane's [maximum sustained winds](#) were still at 80 knots (92 mph/148.2 kph), just where they were 24 hours before. Joalane is still a strong Category 1 hurricane on the Saffir-Simpson hurricane wind scale. Joalane's center was near 17.0 south latitude and 65.7 east longitude, about 513 nautical miles (590.3 miles/950.1 km) east-northeast of Port Louis, Mauritius. As it was 24 hours before, Joalane was still moving at 6 knots (6.9 mph/11.1 kph) but shifted its path from the south-southeast to due south.

Joalane is moving south into an area of cooler sea surface temperatures and increased vertical wind shear. It is expected to start weakening in a day while transitioning into an extra-tropical storm.

Provided by NASA's Goddard Space Flight Center

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