

## Major Tropical Cyclone Funso analyzed by two NASA satellites

January 25 2012



This visible image of Tropical Cyclone Funso was captured by the MODIS instrument on NASA's Aqua satellite on Jan. 25 at 7:40 UTC (2:40 a.m. EST). Tropical Cyclone Funso is still over the Mozambique Channel and its 11 mile-wide eye is clearly visible. Credit: NASA Goddard MODIS Rapid Response Team

Tropical Cyclone Funso is now a dangerous Category 4 cyclone in the Mozambique Channel, moving southward between Mozambique on the African mainland and the island nation of Madagascar. As Funso became a major cyclone two NASA satellites were providing forecasters with valuable storm information.



Two instruments aboard NASA's Aqua satellite and instruments aboard NASA and JAXA's <u>Tropical Rainfall</u> Measuring Mission (TRMM) satellite provided cloud extent, cloud temperature, rainfall rates, and a look at the eye of the storm.

On Jan. 25 at 7:40 UTC (2:40 a.m. EST), the Moderate Resolution Imaging Spectroradiometer (MODIS) instrument on NASA's Aqua satellite captured a visible image of Tropical Cyclone Funso. The image revealed the cloud cover extends from Mozambique on the African mainland, east to the coast of the island nation of Madagascar. MODIS imagery also revealed a clear 11 mile-wide eye.



When NASA's Aqua satellite passed over Cyclone Funso on January 24 at 11:17 UTC (6:17 a.m. EST) the AIRS instrument measured the cloud top temperatures. Thunderstorm cloud tops around the entire center of circulation colder than -63 Fahrenheit (-52.7 Celsius) indicating strong storms, dropping heavy rainfall. Credit: Credit: NASA/JPL, Ed Olsen

When NASA's Aqua satellite passed over Cyclone Funso the day before, January 24 at 11:17 UTC (6:17 a.m. EST) the Atmospheric Infrared Sounder (AIRS) instrument measured the cloud top temperatures.



<u>Thunderstorm cloud</u> tops around the entire center of circulation colder than -63 Fahrenheit (-52.7 Celsius) indicating strong storms, dropping heavy rainfall.

The TRMM satellite also had a good view of powerful tropical cyclone Funso battering the Mozambique coast when it flew over on January 24, 2012 at 2204 UTC (5:04 p.m. EST). <u>TRMM data</u> showed that Funso was dropping moderate to heavy rainfall in bands covering the Mozambique Channel from eastern Mozambique to western Madagascar.



The TRMM satellite had a good view of powerful tropical cyclone Funso battering the Mozambique coast when it flew over on January 24, 2012 at 2204 UTC (5:04 p.m. EST). TRMM data showed that Funso was dropping moderate to heavy rainfall in bands covering the Mozambique Channel from eastern Mozambique to western Madagascar. Light to moderate rainfall is depicted in blue and green (falling at a rate between .78 to 1.57 inches (20 to 40 mm) per hour). Heavy rainfall appears in red, falling at 2 inches/50 mm per hour. The TRMM satellite is managed by NASA and JAXA, the Japanese Space Agency. Credit: Credit: SSAI/NASA, Hal Pierce

On January 25, 2012 at 0900 UTC (4 a.m. EST), Major Tropical



Cyclone Funso had <u>maximum sustained winds</u> of 120 knots (138 mph/222 kph). Hurricane-force winds extend out 40 miles (64 km) from the center. It was located near 22.7 South and 38.7 East, about 400 nautical miles (460 miles/741 kmh) northeast of Maputo, Mozambique. It was moving to the south-southwest at 4 knots (~4.6 mph/7.4 kph). Funso is generating maximum significant waves 32 feet (9.7 meters) high.

Cyclone Funso continues to track the over open waters of the southern Mozambique Channel and forecasts take it out into the Southern Indian Ocean over the next three days without any danger of a direct landfall.

Provided by NASA's Goddard Space Flight Center

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