## Cyclone Imelda turned the corner on NASA satellite imagery

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NASA's Aqua satellite passed over Tropical Cyclone Imelda on April 11 at 0925 UTC (5:25 a.m. EDT). The Moderate Resolution Imaging Spectroradiometer (MODIS) instrument aboard Aqua captured this visible image that showed a welldeveloped Tropical Cyclone Imelda in the Southern Indian Ocean. Credit: NASA Goddard MODIS Rapid Response Team

An area of low pressure moving toward Cyclone Imelda from the west has turned the storm to the south from its westward track, as NASA's Aqua satellite passed overhead and captured a visible and an infrared image of the powerful storm that showed the effects of wind shear.

NASA's Aqua satellite passed over Tropical Cyclone Imelda on April 11 at 0925 UTC (5:25 a.m. EDT). The Moderate Resolution Imaging Spectroradiometer (MODIS) instrument aboard Aqua captured a visible image that showed a well-developed Tropical Cyclone Imelda in the Southern Indian Ocean that has now turned to the south. The MODIS image shows tightly-curved, powerful bands of thunderstorms stretching from the north to the east and south of the center of circulation, all wrapping into the center. MODIS imagery was created by the MODIS Rapid Response Team at NASA's Goddard Space Flight Center in Greenbelt, Md.

At the same time, the Atmospheric Infrared Sounder (AIRS) instrument that flies with MODIS aboard Aqua, captured an infrared image of Imelda. The image showed that the strongest convection and thunderstorms had been pushed east of center from wind shear. Those powerful thunderstorms had cloud top temperatures colder than -63 Fahrenheit (-52 Celsius), and were dropping heavy rainfall. The AIRS image was created at NASA's Jet Propulsion Laboratory in Pasadena, Calif.

Microwave satellite imagery indicated that the strongest convection and most powerful thunderstorms are occurring in the storm's eastern quadrants as a result of an increase in wind shear. Powerful thunderstorms are also occurring over the center of circulation.

On April 11 at 0900 UTC ( 5 a.m. EDT), Cyclone Imelda had maximum sustained winds near 75 knots ( $80.5 \mathrm{mph} / 129.6 \mathrm{kph}$ ). Imelda is located near 13.1 south latitude and 57.9 east longitude, about 515 nautical miles
(593 miles/954 km) north-northeast of La Reunion. Since interacting with the approaching area of low pressure from the west and then turning south, Imelda has slowed down, and is moving at just 2 knots ( $2.3 \mathrm{mph} / 3.7 \mathrm{kph}$ ).

The Joint Typhoon Warning Center forecasters expect Imelda to continue tracking generally southward over the next two days and then shift to the southeast as it starts moving around the edge of a ridge of high pressure.

The sea surface temperatures in the vicinity are still quite warm, between 28 and 29 Celsius (82.4 and 84.2 Fahrenheit) which forecasters believe may help Imelda strengthen a little more over the next two days. After that time, wind shear is expected to increase and quickly weaken the storm.

## Provided by NASA's Goddard Space Flight Center

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