

NASA examines the soaking from ex-tropical Cyclone Enawo exiting Madagascar

March 9 2017





NASA's Aqua satellite captured this visible image of Tropical Cyclone Enawo on



March 9 at 1040 UTC (5:40 a.m. EST) as it was exiting Madagascar from the southeastern area of the island. Credit: NASA Goddard MODIS Rapid Response Team

NASA's Aqua satellite observed Ex-Tropical Cyclone Enawo leaving Madagascar, while rainfall data from the Global Precipitation Measurement mission or GPM satellite helped determine the amount of rainfall it brought to the country.

Tropical Cyclone Enawo hit Madagascar on Tuesday, March 7 with powerful winds and drenching rain. Tropical cyclones rotate in a clockwise direction in the southern hemisphere so the eastern side of Madagascar will have a strong onshore flow. The extreme amount of moisture flowing onto Madagascar from the Indian Ocean is expected to produced flooding and landslides.

NASA's Integrated Multi-satelliE Retrievals for GPM (IMERG) data are produced using data from the satellites in the GPM Constellation, and is calibrated with measurements from the GPM Core Observatory as well as rain gauge networks around the world. GPM is a joint mission between NASA and the Japanese space agency JAXA.

At NASA's Goddard Space Flight Center in Greenbelt, Maryland, the preliminary IMERG rainfall analysis was derived from IMERG data collected from March 3 to 8, 2017. Tropical Cyclone Enawo formed northeast of Madagascar on March 3, 2017. The tropical cyclone dropped the highest rainfall totals of over 500 mm (almost 20 inches) in the open waters of the Indian Ocean northeast of Madagascar. The approximate track and intensity of tropical cyclone Enawo is shown overlaid in white.





This image of rainfall from March 3 to 8, 2017 shows Enawo dropped the highest rainfall totals purple) of over 500 mm (almost 20 inches) in the open waters of the Indian Ocean northeast of Madagascar. Credit: NASA/JAXA, Hal Pierce

IMERG real-time data are generated by NASA's Precipitation Processing System every half hour and are normally available within six hours. This image shows IMERG <u>rainfall data</u> for March 7, 2017 at 0730 UTC when tropical cyclone Enawo was dropping extremely heavy precipitation over north-eastern Madagascar as it moved in from the Indian Ocean.

NASA's Aqua satellite passed over Tropical Cyclone Enawo on March 9 at 1040 UTC (5:40 a.m. EST) as it was exiting southeastern Madagascar. The Moderate Resolution Imaging Spectroradiometer or MODIS



instrument aboard Aqua captured a visible image of the storm as it was moving off the southeastern coast and back into the Southern Indian Ocean.

On March 9 at 8 a.m. EST (4 p.m. Madagascar local time), the Madagascar Meteorological Service (MMS) noted that Enawo is now a depression and was moving through the Betroka district in the Anosy region. A notice of imminent danger or Red Alert was in effect for: Ihorombe, Atsimo, Atsinanana, Anosy, Androy, The Atsimo Andrefana Region except from Morombe and Toliara I-Ii.

A Blue Alert notice was posted for: Alaotra Mangoro, Atsinanana, Province Of Antananarivo, Amoron'i Mania.

MMS said "The populations of the alert zones are requested to remain very vigilant and to be up to date of the evolution of the meteorological conditions. The sea trip is strongly discouraged on all the coasts of Madagascar because the sea remains very disturbed."

More information: For updated forecasts from MMS, visit: <u>http://www.meteomadagascar.mg/cyclone</u>.

Provided by NASA's Goddard Space Flight Center

Citation: NASA examines the soaking from ex-tropical Cyclone Enawo exiting Madagascar (2017, March 9) retrieved 28 June 2024 from <u>https://phys.org/news/2017-03-nasa-ex-tropical-cyclone-enawo-exiting.html</u>

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