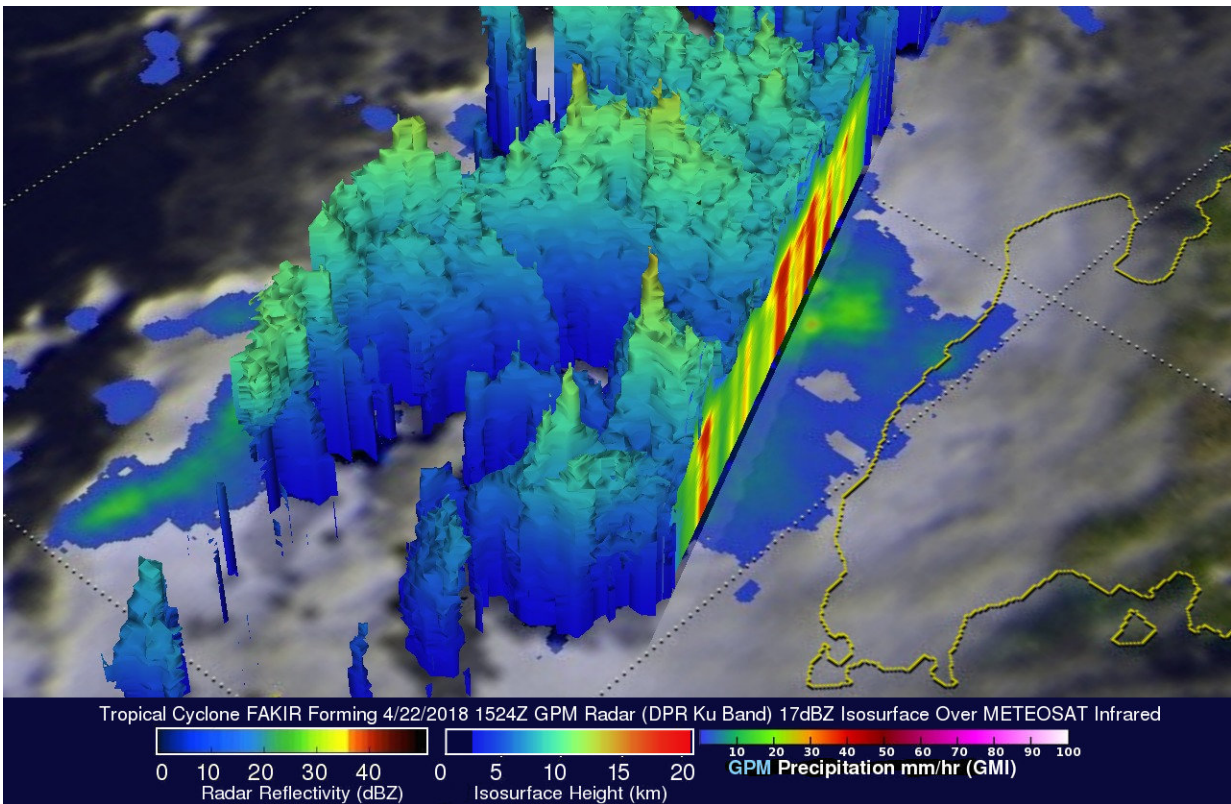


# GPM sees Tropical Cyclone Fakir forming near Madagascar

April 23 2018, by Hal Pierce



On April 22, GPM showed that bands of extremely heavy rainfall were spiraling into the tropical low's southeastern side. GPM's radar (DPR Ku Band) showed that precipitation was falling at a rate of over 219 mm (8.6 inches) per hour in some of the strong convective storms that were moving toward Madagascar. GPM's radar indicated that a few of the tallest intense convective storms were reaching heights of almost 16 km (9.9 miles). Credit: NASA/JAXA, Hal Pierce

The southwest Indian Ocean cyclone season started on November 15, 2017 and will officially end on April 30, 2018. A tropical cyclone called Fakir formed on April 23 near northeastern Madagascar and the Global Precipitation Measurement mission or GPM core satellite looked at the storm's rainfall rates.

Fakir is expected to intensify as it moves toward the southeast and could be a significant tropical cyclone tomorrow. This cyclone season has already seen Madagascar battered and drenched by [tropical cyclones](#) Ava, Dumazile, and Eliakim.

The GPM core observatory satellite flew above the forming late season tropical cyclone near northeastern Madagascar on April 22, 2018. The satellite's Microwave Imager (GMI) and Dual Frequency Precipitation Radar (DPR) instruments revealed the locations of heavy rainfall associated with the forming tropical cyclone. GPM showed that bands of extremely heavy rainfall were spiraling into the tropical low's southeastern side. GPM's [radar](#) (DPR Ku Band) showed that precipitation was falling at a rate of over 219 mm (8.6 inches) per hour in some of the strong convective storms that were moving toward Madagascar.

A 3-D view of precipitation in forming tropical cyclone Fakir was developed with data collected by GPM's radar (DPR Ku Band). A computer simulated 3-D cross section generated at NASA's Goddard Space Flight Center in Greenbelt, Maryland used GPM's radar scans to show the heights of cloud tops and radar reflectivity values within the forming tropical [cyclone](#). GPM's radar indicated that a few of the tallest intense convective storms were reaching heights of almost 16 km (9.9 miles). GPM is a joint mission between NASA and the Japan Aerospace Exploration Agency, JAXA.

On April 23, 2018 at 1500 UTC (11 a.m. EDT), Fakir had maximum

sustained winds near 40 knots (46 mph/74 kph). Fakir was centered near 6.5 degrees south latitude and 53.2 east longitude, about 313 nautical miles north-northwest of St Denis, la Reunion. Fakir was moving southeastward.

The Joint Typhoon Warning Center noted "Satellite imagery depicts a rapidly consolidating system with improved deep convective banding wrapping into a well-defined low-level circulation center. Another image showed tightly-curved banding wrapping into a microwave eye feature."

The system is forecast to continue tracking southeastward over the next two days, but is expected to peak in strength in one day, April 24.

Provided by NASA's Goddard Space Flight Center

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