## AWIO20 FMEE 151203 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

BULLETIN FOR CYCLONIC ACTIVITY AND SIGNIFICANT TROPICAL WEATHER IN THE SOUTHWEST INDIAN OCEAN

DATE: 2023/03/15 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2:

TROPICAL WEATHER DISCUSSION:

The basin adopts an atypical pattern for the season with trade winds from East to South-East all along the equator and a low-pressure corridor at the junction of the trade winds between two ridges present south of the 25th parallel. This large-scale low level convergences currently extends from 16.5S/63.5E to 25S/76E, east of Rodrigues Island.

A weak low is visible on conventional satellite images, north of the Great Mascarene Islands, near the island of Tromelin, and is currently benefiting from a relatively effective LLC giving moderate to strong convective activity in the eastern semicircle of this clockwise circulation. The convective activity is also present, in a more scattered way along the low-pressure corridor previously mentioned, as well as in the remnants low FREDDY, currently still generating moderate rainfall in the African lands.

## **Overland depression FREDDY:**

It is difficult at this time to locate a center of the remnants low FREDDY. It seems to have dissipated over Mozambique lands, but still producing some moderate and partly thundery showers. It thus seems that the main episode of rainfall has ended, with rainfall accumulations not exceeding 50 mm during the next 24 hours.

**END OF FREDDY REMNANTS \*** 

## North of the Greater Mascarene Islands (Reunion Island and Mauricius Island).

A weak low-pressure circulation is currently present northwest of Saint-Brandon at the tip of a low-pressure corridor atypical for our basin. On the last satellite images, the main convection is concentrated essentially to the east of the low-level circulation, whose center is located approximately at 13.9S/56.4E at 10UTC. The diffusiometric data remain partial, however the maximum mean winds can be estimated at 20kt. This minimum should not develop significantly during the next 5 days, due to an environment that should remain hostile: maintenance of an elongated LLC, within which struggles to converge the flow of low level flow, associated with dry air aloft, coupled with a vertical wind shear increasing over the days.

Nevertheless, this weak system, by moving south, should continue to generate / drain low-level convergences located in the Eastern semicircle, and thus give rise to heavy thundery rain from tomorrow Thursday until the beginning of the weekend over the Greater Mascarene Islands, and in particular Mauritius island.

On the other hand, over the near-equatorial area, the monsoon flow is missing with the installation of an Easterly wind anomaly linked to a very active MJO in the Western Hemisphere, spreading over Africa. The basin pattern should therefore evolve towards a pattern hostile to the formation or maintenance of low-level vorticity precursors.

## Consequently, there is no risk of another tropical storm forming over the basin during the next 5 days.

NOTA BENE: The likelihood is an estimate of the chance of the genesis of a moderate tropical storm over the basin and within the next five days:

Very low: less than 10% Moderate: 30% to 60% Very high: over 90%

Low: 10% to 30% High: 60% to 90%

The Southwestern Indian Ocean basin extends from the equator to 40S and from the african coastlines to 90E.