AWIO20 FMEE 151120 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2021/04/15 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2:

TROPICAL WEATHER DISCUSSION:

The basin remains in a Near Equatorial Trough pattern (NET) between 50°E-80°E and 05°S-10°S. The convective activity within this NET is mainly located around the same area of vorticity already monitored for several days now near 9.8°S and 76.8°E, at the eastern end of the NET.

The latest satellite images show convective puffs only in the southern part of this low and a slight upper-level divergence circulation, also confirmed by the CIMMS data. The 0444Z scatterometric swath depicts a lower level circulation center (LLCC), rather wide and elongated from west to east, with winds around 20 kt maximum in the southwest quadrant.

This vortex will experience unconducive environmental conditions for its development during the next few days. Indeed, given the current bassin's pattern and the unfavorable tropical wave activity (dry phase of the MJO), the convergence on the equatorial side will struggle to impose itself, despite a satisfactory polar trade wind flow. In addition to this constraint, there is also a deficit of humidity in the middle troposphere and a deep shear that will tend to increase as the days go by. The latest guidance are rare to suggest a significant deepening for the next few days, with the exception of the GFS model of 00Z and its ensemble version (the run of 06Z is even less dynamic). The other guidance do not propose any potential for cyclogenesis.

Thus, during the next 5 days, the risk of development of a moderate tropical storm forming over the basin is considered very low from Monday onwards.

Elsewhere in the basin, convective activity remains moderate to strong over the northern part of the Mozambique Channel (including the Tanzanian and northern Mozambican coasts, the Comoros archipelago and the north-western region of Madagascar) as well as between the north-eastern coasts of Madagascar and the Mascareignes archipelago. These regions are subject to persistent rainy-stormy developments that will continue over the next few days, but without forming a suspicious area.

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.