## AWIO20 FMEE 111029 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2022/02/11 AT 1200 UTC

PART 1: WARNING SUMMARY:

Nil.

## PART 2 : TROPICAL WEATHER DISCUSSION:

The basin has a monsoon trough (MT) configuration undulating between 9 and 13°S east of 55E. The convective activity was moderate to strong on the equatorial side of this MT. Over the Comoros archipelago, the convergence of the monsoon flow and the upstream flow of the Mozambique Channel defines an area where convective activity is also present.

Further south, the remnant low CLIFF continues its transit towards the West passing near Reunion Island during the night from Friday to Saturday, without remarkable effect.

## **Remnant low CLIFF :**

Position at 1000UTC: 23.8°S / 58.9°E Movement : West at 10 kt Maximum wind averaged over 10 min: 20 kt in the southern semicircle. Minimum central pressure : 1006 hPa

In a large scale equatorial wave activity and in the presence of a weak vertical wind shear, the MT is a favorable area for the development of low level vorticity zones. Deterministic and assembly models continue to suggest two suspect areas of cyclogenesis.

- The first one, in the northeast of the Mascarene Islands, has a low-level clockwise circulation that can still be detected by the ASCAT swath at 0537UTC around 12.1S/62.8E. The low-level vorticity is not yet well established (as suggested by the microwave data of 0230UTC) but some models see a cyclogenesis during the next 48h. The risk of formation of a moderate tropical storm is important in less than 48h.

- The second one located around 12.7S/85E is difficult to detect with the ASCAT swath of 0356UTC defining a wide clockwise circulation. The risk of formation of a moderate tropical storm associated with this area is low for more than 2 days.

Note the risk of a circulation coming from the Australian basin entering our area within 96 hours. The risk is moderate that this circulation reaches the threshold of a moderate tropical storm.

In summary, the risk of formation of a moderate tropical storm in the northeast of the Mascarene Islands during the weekend become high, a moderate risk of entering our area by the eastern end of a moderate tropical storm from Tuesday and a low risk of formation of a moderate tropical storm over the eastern basin from Monday.

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%

 Low:
 10% to 30%

Moderate: High: 30% to 60% 60% to 90% *Very high:* over 90%

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