

AWIO20 FMEE 251156

TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2022/09/25 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2 :

TROPICAL WEATHER DISCUSSION:

The basin depict a Near Equatorial Trough (NET) pattern, better defined compared to the last 24 hours, East of 62°E towards 3-5°S.

Convective activity is moderate at the northern and southern edges of this NET, as well as the vicinity of a tropical low located around 86°E / 11°S according to the latest satellite images and the CIMSS MIMIC TPW product. The microwave data at 24-hour intervals shows a less clear and more fragmented convective activity.

The 0530 UTC HY-2C swath show a closed clockwise circulation center with mean winds of about 30kt maximum in the southwest quadrant of the system. However, this data is potentially contaminated because it is present within an important convective activity area. The partial ASCAT B and C swaths, respectively 0430 UTC and 0330 UTC, show maximum winds speed of about 25kt. The central pressure is estimated at 1005 hPa.

Currently, the tropical low is experiencing good environmental conditions: a satisfactory ocean heat content (OHC), a good upper level divergence and a good low level convergence on the polar side, but counterbalanced by a low level convergence to the north which is still not very effective, in a context of a North-Easterly constraint considered weak to moderate.

Over the next 24 hours, as it moves west-southwestwards at 7kt, this minimum should gradually encounter environmental conditions that are much less favorable for its development: by Monday, the OHC should gradually become less generous and the mid-level moist should begin to surround the low-level center in the northwest quadrant. However, near gale force winds could be reached in the southern semicircle of the system, by acceleration of the trade wind.

The dry air aloft should cover the LLC from Tuesday and thus annihilate thereafter, any desire to deepen.

The deterministic models, European (IFS) and American (GFS) diverge in terms of intensification. IFS remains globally more dynamic for the next 24 hours, without going frankly to the gale force wind. The central European ensemble model (EPS) shows an increased signal compared to yesterday with potentially some members of the ensemble digging into the gale force wind. GEFS shows a more important dispersion beyond 72 hours.

Thus, for the next 5 days, the risk of formation of a tropical storm over the extreme Northeast of the basin becomes low until Monday then very low Tuesday, then can be considered as zero beyond.

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:

<i>Very low:</i>	<i>less than 10%</i>	<i>Moderate:</i>	<i>30% to 60%</i>	<i>Very high:</i>	<i>over 90%</i>
<i>Low:</i>	<i>10% to 30%</i>	<i>High:</i>	<i>60% to 90%</i>		

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