

AWIO20 FMEE 081146

TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2024/02/08 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2 :

TROPICAL WEATHER DISCUSSION:

The basin has an undulating monsoon trough pattern between 5° and 13°S, east of 57°E.

Convection is mainly within this monsoon trough, as well as in the Mozambique Channel south of the Comoros in the slowdown of the monsoon flow.

In the Monsoon Trough:

The monsoon trough should gradually strengthen and becomes more pronounced north of the Mascarene Islands around 10-15S. This evolution will be favored by the clear strengthening of the high-pressure belt to the South, and marked wave activity on the equatorial side, notably with Mixed Rossby Gravity / Equatorial Rossby, offsetting the dry MJO phase and boosting the monsoon flow.

In this context, several low-pressure circulations could form over the coming weekend.

Deterministic numerical models start building a low-pressure system to the northeast of the Mascarene Islands early next week, which according to GFS will develop into a moderate tropical storm (TTM) by Monday, while IFS remains less active. To a lesser degree, these same models are also deepening two other lows, one in the Mozambique Channel and the other to the northeast of Madagascar, but which will not evolve into a TTM next 5 days. The ensemblist models are also forecasting cyclogenesis over these three zones, with an earlier deepening of a TTM on Monday for GEFS. It is not excluded that 2 systems could form almost simultaneously, as envisaged by the GFS model and a number of GEFS members.

Over the next 5 days, there is a low risk of moderate tropical storm formation over the basin to the northeast of the Mascarenes from Monday onwards.

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.