

AWIO20 FMEE 121112

TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2023/05/12 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2 :

TROPICAL WEATHER DISCUSSION:

The basin is in a Near Equatorial Trough (NET) pattern which extends over most of the basin, between 2 and 6°S. Convective activity is moderate to strong in the eastern part of the NET, especially around a low-pressure system that was previously in the Indonesian area but which entered this Friday in the northeast of our basin. In a favourable large scale context (trailing the wet phase of the MJO, presence of MRG/Rossby waves and westerly wind burst linked to a Kelvin wave), a cyclogenesis is expected.

Over the east of the basin :

A clockwise circulation is currently present around 2.5°S/87.5°E. A center of circulation can begin to be guessed, even if the circulation remains elongated for the moment. The deep convection has strengthened since yesterday on the southwestern edge of the center where it has been persistent since then. The area is subject to moderate northeasterly shear. CIMSS MIMIC-TPW imagery confirms the presence of very moist air in the surrounding environment.

Over the next few days, the environmental conditions will improve with in particular the strengthening of convergence on the equatorial side as cyclone MOCHA moves northward in the other hemisphere from Saturday. To a lesser extent, the polar trade winds should also strengthen over the weekend. Although currently subject to northeasterly upper shear, this system could move into a more weakly sheared area between 5 and 10 S by early next week, thus favoring development.

The deterministic and ensemblist models have increased the risk of cyclogenesis. The 00Z runs of GFS and IFS form a tropical storm on Sunday and suggest further development early next week, some scenarios suggest the possibility of reaching tropical cyclone stage with a track passing near the east of the Chagos Archipelago, the only territory potentially affected by its track. No other inhabited land in the basin is threatened.

The risk of a tropical storm forming over the eastern part of the basin is moderate from Sunday and then becomes strong 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.