AWIO20 FMEE 311240
TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 31/08/2025 AT 1200 UTC

PART 1: WARNING SUMMARY

Nil.

PART 2 : TROPICAL WEATHER DISCUSSION

The basin is mostly in a winter configuration. However, equatorial winds are locally westerly between 68E and 80E, suggesting an ill-defined weakly converging Near-Equatorial Trough (NET). Convection is locally moderate along the southern edge of this pseudo-NET in the trade wind slowdown area and along the equator in the eastern part of the basin.

This weak equatorial westerly wind anomaly can currently be explained both by the passage of an equatorial Rossby wave and by a low-frequency background resembling an Indian Ocean Dipole (IOD) in negative phase but shifted further west than the standard pattern.
During this first week of September, the succession of two Kelvin waves (particularly the one at the end of the week), combined with a MJO that should become slightly more favourable (neutral or even weakly active over the Indian Ocean, depending on NWP output), should help strengthen this equatorial westerly flow. This adds to a new equatorial Rossby wave cyclonic gyre expected to enter the far east of the basin over the weekend. These various overlapping waves should enable a more efficient NET to set up over the north-east of the basin at the very end of the week.

Until Friday September 5th, the improving NET configuration over the north-east of the basin could enable the formation of a closed low-pressure circulation between 75E and 90E. However, low-level convergence should not be sufficient for the moment and some moderate wind shear remains over the area, which should hamper short-term cyclogenesis potential.
In addition, deterministic models do not forecast the formation of a tropical storm by D+5 and ensemble models are not much reactive either.

Development of a tropical storm is not expected for the next 5 days.

Extended outlook : From the weekend of September 6th and the following week, low-level convergence within the NET over the east of the basin could strengthen, due to the progression of the Rossby wave and the strengthening of the equatorial westerlies in the lee of the Kelvin wave. Some scenarios from the EPS and GEFS ensemble models suggest an increase in cyclogenesis potential between the Chagos area and the eastern edge of our basin, which will need to be monitored in the coming days.

NOTA BENE: The likelihood is an estimate of the chance of genesis of a moderate tropical storm over the basin 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.