AWIO20 FMEE 041056
TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 04/09/2025 AT 1200 UTC

PART 1: WARNING SUMMARY

Nil.

PART 2 : TROPICAL WEATHER DISCUSSION

The basin remains in a winter pattern. Convection is moderate near the equator and in the trade wind slowing area near broad low-pressure circulations west of Diego-Garcia and in the Indonesian area.

Westerly wind surge over the eastern part of the basin might favor a near equatorial through configuration this week end. This might be triggered an equatorial Rossby wave in the Northern Hemisphere, combined with a wet MJO phase, in a low-frequency context evoking a negative Indian Ocean Dipole (IOD).

Within this NET, some members of the GEFS and EPS suggest the formation of a closed circulation or even a storm from Sunday. However, most of deterministic models (IFS, GFS00TU, AIFS) struggle to produce a closed circulation, and even less a significant deepening, notably because of a sheared environment.

For the next 5 days, for now, there is no potential for the development of a moderate tropical storm, for this area.

Extended outlook :
At the beginning and middle of next week, under the influence of the Equatorial Rossby wave and a new Kelvin wave, the vorticity within this closed circulation could increase and lead to a risk of cyclogenesis. In addition, the passage of this second Kelvin wave along the TPE could lead to a second core of vorticity over the very east of the basin.

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.