

AWIO20 FMEE 181043

TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 18/10/2025 AT 1200 UTC

PART 1: WARNING SUMMARY

on Tropical Depression

PART 2 : TROPICAL WEATHER DISCUSSION

The Near Equatorial Trough (NET) now extends from 55°E to 80°E, undulating between 5°S and 7°S. There is moderate to strong convective activity along this NET within the tropical depression 04-20252026 located to the south-east of Diego Garcia.

A well-established Rossby wave is currently crossing the basin. The westerly thrust on its northern side is concomitant with that of a wet MJO. It should also be noted that these waves intersect with a Kelvin and a mixed Rossby-gravity wave, whose contribution is weaker. The result is a strengthening of the westerly wind anomaly, which then becomes very pronounced and makes conditions very favourable for cyclogenesis in the centre and east of the basin, favouring the transition of the tracked system to the stage of a moderate tropical storm in the next few hours. On the other hand, in the far east of the basin, a pair of anticyclonic Rossby waves are responsible for an easterly anomaly which is unfavourable for cyclogenesis in this area.

Tropical Depression 04-20252026 :

Information at 09 UTC :

Estimated position: 08S / 73.5E

Movement : OSO, 12 kt

Maximum wind speed (averaged over 10 minutes): 30 kt

Estimated central pressure: 1001 hPa

For further information, please refer to bulletins WTIO20/22/24/26 and WTIO30 issued at 06 UTC and following.

Apart from the tropical depression already tracked, another zone could appear between now and Wednesday, as suggested by some members of the ensemble models. But the convergence of the lower layers is struggling to develop, especially on the equatorial side due to the easterly anomaly. In addition, the deep wind shear is still very present in this zone. However, environmental conditions could improve, giving this area a chance to develop into a tropical system.

The likelihood of the formation of a moderate tropical storm becomes very low on Wednesday, October 22, then low from Thursday, October 23, in the far 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.