

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

DATE: 15/10/2025 AT 1200 UTC

PART 1: WARNING SUMMARY

Nil.

PART 2 : TROPICAL WEATHER DISCUSSION

The Near Equatorial Trough (NET) now extends from 55°E to 85°E, undulating between 2°S and 8°S. There is moderate to strong convective activity along this NET within 2 circulations located to the east of Diego Garcia.

A well-established Rossby wave is currently crossing the basin: the near-equatorial westerly wind anomaly is very marked. Its interaction with a Kelvin wave ahead of a wet MJO will strengthen this westerly anomaly over the next few days. The passage of a mixed Rossby-gravity wave at the very end of the week could strengthen it.

Circulations to the north-east of Diego Garcia:

At present, the 2 closed circulations located around 6°S 75°E and around 3°S 83°E remain poorly defined and elongated. The ASCAT passes at 0254Z and 0342Z show winds of around 15kt along the NET, outside the convective zone. The wave context is very favourable to an increase in low-level convergence and convective activity within the NET. Furthermore, at the end of the week, the deep vertical shear and the mid-tropospheric shear should weaken significantly, allowing one of the 2 circulations to gradually strengthen.

As far as the models are concerned, GFS proposes the earliest deepening among the deterministic models, with a process beginning as early as Friday. IFS and its counterpart AIFS are waiting until Saturday or even Sunday to propose a closed and symmetrical circulation. The ensemble models (EPS and GEFS) clearly reflect this uncertainty about the intensification window, which begins on Thursday evening at the earliest and runs until the middle of next week.

The likelihood of the formation of a moderate tropical storm becomes low from Friday 17 October and moderate from Saturday 19 near Diego Garcia.

10-day outlook :

Taking into account what has been described above, the risk of cyclogenesis will increase the following week in the center of the basin in a favorable context regarding the MJO.

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.