

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

DATE: 14/10/2025 AT 1200 UTC

PART 1: WARNING SUMMARY

Nil.

PART 2 : TROPICAL WEATHER DISCUSSION

The Near-Equatorial Talweg (NET) now extends from 55°E to 85°E, undulating most often between 4°S and 7°S. Convective activity remains moderate in the area of trade wind slowdown at the southern edge of the NET, but it has intensified in the vicinity of a poorly defined, oblong low-level circulation that is difficult to discern on the 0401 UTC ASCAT-C image near 3°S/86°E, at the eastern end of the NET.

During the week, we are tracking the movement of a Rossby wave, type n=1, which is very pronounced over the basin : the near-equatorial westerly wind anomaly is very marked. Its interaction with a Kelvin wave ahead of a wet MJO reinforces this westerly anomaly in the second half of the week. However, there is a slight lack of convergence on the polar side in terms of wave activity, which constrains the overall vorticity around the Rossby wave. The passage of a mixed Rossby-gravity wave at the very end of the week could strengthen it, but this remains to be confirmed. In this context, one or two low-pressure systems could emerge from the NET between the center and east of the basin over the next five days.

As the wave context becomes favourable, environmental conditions are slowly improving in the east and centre of the basin. On Friday, to the east of Diego-Garcia, low-level convergence improves in a pretty humid troposphere around the ill-defined circulation northeast of our basin. While mid-tropospheric shear is expected to decrease significantly during the week, we will have to wait until the end of the week to see a decrease in eastern deep shear. The development of a tropical system is expected to take time.

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 extends from Thursday evening at the earliest to the beginning of next week at the latest.

The likelihood of the formation of a moderate tropical storm becomes low from Friday 17th of October and moderate from Saturday 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.*