

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

DATE: 21/12/2025 AT 1200 UTC

PART 1: WARNING SUMMARY

Nil.

PART 2 : TROPICAL WEATHER DISCUSSION

The southwestern Indian Ocean basin features a hybrid pattern with a central Near Equatorial Trough (NET) between 62°E and 78°E, around 8°S, extending eastward with a Monsoon Trough (MT) extending westward. There is another MT from northern Madagascar to the Seychelles, also around 8°S. Convective activity is weak to moderate, mainly on the northern side of these troughs and south of the NET.

The wave pattern will gradually become favorable for cyclogenesis over the next five days with the resurgence of an active phase of the MJO over the western basin and a weak equatorial Rossby wave entering the basin from the east early next week.

Risk of a tropical low-pressure system entering from the Australian area of responsibility :

A tropical depression has formed south of Christmas Island. It is being monitored by the BOM and is currently located at 12.2°S and 104.4°E. Depending on wave activity, it is expected to continue its path towards the eastern borders of our basin in the middle or end of next week.

The overwhelming majority of deterministic models and ensemble model members forecast that the system will enter the basin after December 26. However, a few isolated members of the European ensemble model an entry as early as December 26.

For the next five days, there is a very low risk of a tropical storm forming in the far east of the basin starting on Friday.

Suspect area off the coast of Mozambique :

The monsoon flow runs along the African coast and takes a cyclonic curve in the middle of the Mozambique Channel under the effect of the trade winds passing south of Madagascar. At the same time, a wide low-pressure area is forming over the continent.

GFS model, as well as the AIFS and AIGFS models, simulate a low-pressure trough in this part of the Mozambique Channel starting in the middle of next week. The European and, above all, American ensemble models predict a trough in this area either in the middle or at the end of next week.

Nevertheless, environmental conditions still include a fairly significant deep shear, limiting the intensification of the system over the next 5 days.

For the next 5 days, there is a low risk of a tropical storm forming in the middle of the Mozambique Channel.

10-day outlook :

Starting next weekend and continuing thereafter, a wet phase of the MJO will settle over the western half of the basin, likely accompanied by a Kelvin wave, maintaining vorticity in the Mozambique Channel. In the eastern half of the basin, we are tracking the westward progression of the equatorial Rossby wave.

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.