

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

DATE: 12/12/2025 AT 1200 UTC

PART 1: WARNING SUMMARY

Nil.

PART 2 : TROPICAL WEATHER DISCUSSION

The basin is in a Near-Equatorial Trough (NET) configuration East of 80E. A trough in the Northern Hemisphere drives a trans-equatorial monsoon flow west of 80E, which disrupts the NET. Convective activity is weak to moderate near the Maldives but locally strong further east, particularly near of the low-pressure system, now located around 88°E, which has formed in recent days.

The NET branch is actually becoming more convergent and moist due to more favorable wave activity : strengthening of equatorial westerlies associated with a powerful Kelvin wave until mid-December adding to a trans-equatorial wind component favored by Rossby waves (ER and MRG).

Entry of a tropical low-pressure system from the Indonesian region:

Moderate Tropical Storm (MTS) BAKUNG was named by the BMKG this morning and is being monitored by the center (IDJ21020). The GCOM AMSR2 microwave satellite image from 0722UTC shows the presence of a closed ring in the lower layers via 37GHz. In visible imagery, BAKUNG presents a configuration with a embedded center with convection now established and sustained.

In the short term, deterministic and ensemble models agree on a west-southwest direction linked to a ridge between the system and the Australian continent. Its movement becomes more uncertain from Sunday onwards, once it reaches the western edge of this mid-tropospheric ridge. Environmental conditions are favorable for its development: the surrounding shear is weak and the acceleration of the trade winds guarantees good vorticity. Over the next two days, the approach from the northwest of the low-pressure system mentioned below will increase convergence on the equatorial side and may reinforce BAKUNG in a Fujiwhara-like interaction. Some models suggest that this system could enter our area of responsibility from Sunday, December 14th, or Monday, December 15th. Most deterministic models and ensemble model members predict a quasi-stationary position or a progression towards the southeast.

There is a low risk of the storm entering our area of responsibility from Sunday, December 14th.

Over the eastern part of the basin :

The low-pressure circulation observed yesterday has now filled in. Convection has been partially absorbed by the circulation induced by BAKUNG. Convective clusters are still observed over the western part of the low-pressure system, largely modulated by diurnal evolution. The ASCAT-C pass at 0300 UTC still showed an average wind speed of around 25 kt outside the convection in the equatorial part. All deterministic and ensemble models predict that it will exit the eastern part of the basin tonight, followed by the merging of this area with BAKUNG.

For the next days, there is no potential for this suspect area to develop into a moderate tropical storm.

10-day outlook : Cyclogenesis conditions remain rather unfavorable over most of the basin until the last ten days of thh year. The arrival of an equatorial Rossby wave from the east in the middle of next week will maintain an anomaly of westerly winds in the NET branch over the far east of the basin and over the Indonesian area of responsibility.

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.