

AWIO20 FMEE 311228

TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2019/01/31 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2 :

TROPICAL WEATHER DISCUSSION:

The trans-equatorial flow is well established between 50°E and 80°E. It feeds an area of strong thunderstorm activity that lies zonally between the same longitude and axed around 5-8°S. In this area, enhanced low level westerlies winds are observed in the wake of a Kelvin wave. Filtered total column water vapour data along with 850 hPa zonal winds data, show that an Equatorial Rossby wave (ER) will cross the basin from East to West within the next several 10 days.

Within this context (and despite an ongoing dry phasis of the MJO), this Kelvin / ER waves interaction should induce the development of two low level circulations next week: one North of the Mascareignes islands and one South of the Chagos archipelago. At this time, the latter one show the strongest potential for development within a conducive environment characterized by better low level convergence over the tradewinds side and enhanced upper level divergence equatorwards. Latest GFS and IFS outputs are in rather good agreement with this scenario.

The tropical development of the western low seems more uncertain at this time with no agreement between latest deterministic and ensemble forecast. The lack of low level convergence mainly over the tradewinds side appears as the more restricting environmental factor.

**Within the next 5 days, the development of a tropical storm becomes low on Monday south of the Chagos archipelago and very low on Tuesday north of the Mascareignes archipelago.**

*Information : Please take note that as of 29 January 2019, the boundary for the transition between the Moderate and High probabilities of cyclogenesis has been adjusted to 60% (instead of 50%).*

*NOTA BENE: The likelihood is an estimate of the chance of the genesis of a moderate tropical storm over the basin and 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.*