

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

DATE: 2018/03/10 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2 :

TROPICAL WEATHER DISCUSSION:

Monsoon flow is well established over the whole width of the basin. Convection is strong within its buffer area, North of the Mozambique Channel and over the equatorial side of the monsoon trough (MT) axed between 10S and 15S, between 50E and 90E. Within the MT, convergence is strong in the low levels. Thus, the available guidance suggest the development of two suspect areas. The large scale context is also conducive for cyclogenesis with a strong Equatorial Rossby wave crossing the basin from East to West over the next days. Furthermore, an active MJO phase is still located over the Western half of our basin.

**Suspect area in the South-East of the Chagos archipelago :**

This morning sat images showed a small low-level cloud vortex suggesting a rather ill-defined clockwise circulation, located near 12S/75E. No significant decreasing trend is found in the pressure observations from the surrounding buoys. From tomorrow, an upper trough coming from the South-West drives the emergence of a nice poleward upper outflow channel over the area. The available guidance thus suggest the development of a significant system by the beginning of next week. However, mid-tropospheric dry air and a rapidly increasing Northerly windshear should limit the intensity of this system (at least for the next 5 days).

**For the next 5 days, the risk of development of a moderate tropical storm in the South-East of the Chagos becomes low Monday then moderate Tuesday.**

**Suspect area in the North-East of Madagascar :**

Available observation data still do not suggest any closed clockwise circulation in this area. Despite very conducive low level conditions, no significant deepening is really expected until Tuesday because of an Easterly shear in the upper levels. Wednesday, as the upper environment becomes more conducive, available models are more willing to forecast a significant deepening, but without a clear agreement over this timing. Furthermore, the exact localisation of the cyclogenesis and the future track of this system are still subject to a remarkably high uncertainty.

**For the next 5 days, the risk of development of a moderate tropical storm in the North-East of Madagascar becomes low Monday then moderate Wednesday.**

*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 50%	Very high:	over 90%
Low:	10% to 30%	High:	50% to 90%		

*The Southwestern Indian Ocean basin extends from the equator to 40S and from the african coastlines to 90E.*