

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

DATE: 2018/04/20 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2 :

TROPICAL WEATHER DISCUSSION:

The Westerly flow is well established at the equator. Within the near equatorial area, convection is strong and concentrated around two main synoptic structures : a wide clockwise circulation in the North-North-East of Madagascar and a branch of Near Equatorial Trough (NET) East of 60E. Thunderstorms are also strong and frequent off the coasts of Zanzibar, favored by a strong low level convergence.

North-North-East of Madagascar :

This morning 06Z ASCAT swath showed a closed but still elongated clockwise circulation near 6.5S/56E with winds of 10/15kt. Ground observation of atmospheric pressure do not show any significant decreasing trend. Convection is favored by a good poleward upper divergence but the low level convergence remains weak. Over the next days, this weak system should track Southward and then along the Eastern coasts of Madagascar. Although the circulation could become better organised thanks to an increased convergence caused by the high pressure cell in the South-East, the appearance of a strong Northerly wind shear ahead of a deep upper trough during the beginning of next week should prevent any significant deepening. The deterministic models are in good agreement over this scenario while the ensemble prediction still suggest a low cyclogenesis risk.

For the next 5 days, the risk of formation of a moderate tropical storm is very low East of Madagascar.

East of Diego Garcia :

No closed circulation is currently located within the NET. In the beginning of next week, within rather conducive environmental conditions for cyclogenesis, a system could begin to develop East of the Chagos. However, mid-tropospheric dry air could slow down or even prevent the development of the low. Although a few deterministic model runs suggest the development of a strong system for the second half of next week, the ensemble data do not give much credit to this scenario yet. The last GFS and ECMWF runs are not in agreement, thus the possibility of a cyclogenesis remains unclear at the moment.

From Tuesday, the risk of formation of a moderate tropical storm becomes very low East of Diego Garcia.

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.