AWIO20 FMEE 111247 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2018/03/11 AT 1200 UTC

PART 1: WARNING SUMMARY:

Nil.

PART 2 : TROPICAL WEATHER DISCUSSION:

The basin remains in a Monsoon Trough (MT) pattern axed along 12-13°S between 55°E and 90°E. Enhanced equatorial waves activity seems to organize the deep convective activity over the tropical Indian ocean along with local enhancement of the monsoon flow. Within an active pulse of the MJO present since the beginning of March, one can suspect the presence of the mixed Rossby-gravity wave and the equatorial Rossby wave.

Two areas of privileged low level vorticity are still depicted:

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

Satellite imagery along with surface obs do not show any evidence of the low previously detected. The thunderstorm activity remains strong near the MT axis but still had an east-west elongated shape. A better defined low may form in this part of the MT within the next 48 hours but the chance of further intensification are deemed low within marginal environmental conditions (ingestion of dry air within the incipient circulation among other factors)

For the next 5 days, the risk of development of a moderate tropical storm in the South-East of the Chagos becomes low from Wednesday.

Suspect area in the North-East of Madagascar :

Available observation data this morning suggest that a 1006 hPa low is present within the MT near 12.5°S and 63.9°E (Ascat-B data of 0445Z). The system is within a moderate easterly constraint as it lies just north of the upper level ridge. From Monday to Wednesday, environmental conditions are gradually more conducive for development with a significant decrease of the shear along with an increase in upper level divergence and low level convergence (especially equatorwards). The potential for a new cyclogenesis is now deemed high from Wednesday and beyond to the north-east of Madagascar (an area between 10-15°S and 50-60°E)

For the next 5 days, the risk of development of a moderate tropical storm North-East of Madagascar becomes low on Tuesday, moderate on Wednesday and high from Thursday.

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.