#### AWIO20 FMEE 281246 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2017/12/28 AT 1200 UTC

PART 1: WARNING SUMMARY:

Nil.

### PART 2 : TROPICAL WEATHER DISCUSSION:

The South-West Indian Ocean basin remains in a Monsoon Trough (MT) pattern west of 80E axed between 09S and 11S. The associated convection is weak to moderate in the slowing area of the monsoon flow, north of the Mozambique Channel and in the trade wind one east of 80E. Meanwhile, it increased near the area of disturbed weather located within the MT, South-West of Diego Garcia.

### Area of Disturbed Weather to the South-West of Diego-Garcia:

During the past 24 hours, deep convection maintained near the circulation, thanks to good upper conditions (especially an excellent upper divergence in the western semi-circle). Still, last microwave data (SSMIS F18 0147Z and SSMI F15 1023Z) show a very elongated circulation, which is thus preventing the system from deepening at short range. Last model analysis in agreement with ground observations (ASCAT, buoys,..) suggest that maximal winds are ranging up to 15 kt and 20kt far from the center, with a MSLP of 1006hPa. Last satellite imagery seem to indicate, in this broad circulation, a center near 10S/68E at 1030Z. It is currently tracking southwestward at 5kt.

For the following hours, internal structure not yet efficient, is expected to keep the system from intensifying rapidly. Over the week-end, while moving south-westward, due to an increase of the polar low level convergence and upper divergence and the disappearing of a weak easterly upper constraint, the circulation is likely to get more symmetric and start a significant deepening. All numerical guidance is in agreement with this scenario up to Sunday but begin to differ afterwards. Among determinsitic, UKMO and IFS suggest a slower intensification than GFS. Consequently, two track scenarios exist for next week, due to the two deepening rate and so to the two steering flows, one more westward (Europeans) and the other more southward (American). Both EPS show these two scenarios, and so none are preferred for now.

# For the next 5 days, the potential of development of a moderate tropical storm over the basin becomes moderate on Saturday and then high on Sunday.

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.