AWIO20 FMEE 031055
TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2019/02/03 AT 1200 UTC

PART 1:
WARNING SUMMARY:

Nil.

PART 2 :
TROPICAL WEATHER DISCUSSION:

The monsoon flow remains well established west of 75E. It feeds a Monsoon Trough (MT) axed near 11S between 50 and 75E. Over the southern edge of the MT, the low level convergence remains weak disturbed by an inverted trough located south of Mascarenes islands. Deep convective activity is mainly located over the northern edg of the TM within the monsoon feeding.

Since few days, model guidance deepen one or more clockwise circulations within the TM but with a strong uncertainty. Today, GFS and ECMWF begin to agree. They favor a deepenning over the far eastern of the MT. In this area, low level convergence is more established thanks to a ridge between the Ex-Riley circulation and the inverted trough.

The scenario of cyclogenesis is supported by the equatorial wave activity. First, Kelvin wave crosses over the basin and has accelerated westerlies north of the MT since Friday. Then, a Rossby wave moves westward in the center of the basin and should increase the low level vorticity within the TM. In upper level, equatorwad easterlies strengthened by the ER should supply a good equatorward divergence.

On this scenario, a closed clockwise circulation should appear in the beginning of the weak and the deepen in the middle of the week. The circulation should drift southward and the accelerate southeastward at the end of the week transiting in the vicinity of Rodrigues island. This track appears very likely according with the arrival of a deep and wide trough both upper and low level south of Mascarenes islands. But as it moves southward, the circulation should quickly undergo a westward to northwestward vertical windshear ahead the aforementioned upper level trough that could affect its intensity.

Within the next 5 days, the development of a tropical storm becomes high on Wednesday.

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.