

AWIO20 FMEE 011212

TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2016/02/01 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil

PART 2 :

TROPICAL WEATHER DISCUSSION:

The basin is in a Monsoon Trough (MT) pattern axed between 12S and 14S on the northern part of the Canal and West of 68E. East of 80E, an other MT branch has also emerged. The associated convective activity is strong on the Canal and very dependent on the diurnal cycle elsewhere. It is mainly located on the northern side of the MT, in the low level convergence area between the trade winds and the monsoon flow. Ex-Corentin is finally dragged out of the basin by a low level trough circulating between two vast high pressure areas. Thus, the trade winds are going to be well established again on the central part of the basin and this will strengthen the convergence with the monsoon flow.

**Over the Mozambique Channel :**

Convection is strong and located all over the Northern part of the Canal. A weak low has formed within this area, this has been confirmed by this morning satellites images and ground wind observation data. RAPIDSCAT 0254Z swath depicts a fairly well organized low level structure near 13.8S/42.5E. The ECMWF NWP model appears to analyse this situation well when compared to this data. The estimated MSLP is 1004 hPa. CIMSS satellite wind analysis show a conducive environment in both the low and the upper levels but the system is making landfall too quickly to really deepen significantly. The low is forecast to track globally South-Eastward and then land on the Malagasy coastline tonight, in the area of the Cape St André. The North-Western regions of Madagascar will be affected by severe rainfalls, beginning this evening and continuing Tuesday. At 06Z, 160mm have already been measured in 24 hours in Nossi-Be. Wednesday, the associated clockwise circulation could cross Madagascar and reach its Eastern coastline. For the next days, the ECMWF ensemble prediction suggest a low cyclogenesis risk once the remnant low reaches the open ocean again.

**Over the Indian Ocean :**

A deep convection area is located within the MT, between 54E and 68E. The 0457Z ASCAT swath does not really show a well organised low level circulation, but rather a few weak lows located in this vast area according to the available satellite images. CIMSS satellite analysis show a moderate low level vorticity. A better organised low is forecast to form in this area but not to deepen significantly, despite a rather conducive low level environment. A light Easterly wind shear could explain this behaviour. From Friday evening, the low might begin to come back Westward while deepening a little bit more significantly.

**For the next five days, the likelihood for the development of a tropical depression is moderate in the Mozambique channel and low to the north-east of the Mascareignes islands.**

*NOTA BENE: The likelihood is an estimate of the chance of the genesis of a tropical depression over the basin and within the next five days:*

<i>Very low:</i>	<i>less than 10%</i>	<i>Moderate:</i>	<i>30% to 50%</i>	<i>Very high:</i>	<i>over 90%</i>
<i>Low:</i>	<i>10% to 30%</i>	<i>High:</i>	<i>50% to 90%</i>		

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