

AWIO20 FMEE 131204

TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2013/12/13 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2 :

TROPICAL WEATHER DISCUSSION:

The transequatorial monsoon inflow is established on all the width of the basin. It is strong from 60E to 85E.

As it converges with trade winds inflow, Monsoon Inflow feeds a Monsoon Trough stretching along 7.5S/61.3E - 8.0S/78.4E - 12.5S/86.6E - 10.6S/97.6E axis.

The convective activity is strong in the northern part of the monsoon trough, East of 70E, within lines of convergence supplied by the strong monsoon inflow.

**Zone of Disturbed Weather in the South-East of Diego-Garcia :**

Within the Monsoon Trough, satellite animations show a low to mid levels clockwise circulation centred near 08S/79E.

Last 0635Z Ocat swath doesn't reveal an obvious close circulation near the surface but a broad and elongated clockwise circulation West/East axed near 10S from 80E to 85E.

53005 and 53006 buoys reveal sea level pressures lowering from 0.8 to 1.9 hPa compare to 24 hours before.

MSLP of this disturbed weather area is estimated at 1002 hPa with winds at about 10/15kt reaching 20/25 kt and locally 30 kt in the Monsoon flow.

This low is located on the north of the axis of the Upper Level Ridge in an moderate to rather strong easterly sheared environment.

It is expected to globally drift south-east-wards and to deepen very slowly within the next 24 to 36 hours then to re-curve west-south-westwards undergoing the steering influence of the subtropical low level ridge as the low shifts southern than 12S.

Over this expected track, vertical windshear is expected to weaken next week allowing the low to deepen more significantly.

Available NWP models analyse one or more low level clockwise circulations within the Monsoon Trough and deepen one of them at medium range.

According to the ECMWF ensemble prediction forecast, the likelihood of TC genesis becomes more significant on the beginning of the next week.

On the eastern edge of the Monsoon Trough between 90E and 95E, in the Australian AoR, another cyclogenesis should occur in the middle of next week.

Until Saturday, potential for the development of a tropical depression is low.

It becomes moderate from Sunday to Monday, and high from Tuesday.

*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:*

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.*