AWIO20 FMEE 281235 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2019/02/28 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2:

TROPICAL WEATHER DISCUSSION:

Enhanced equatorial wave activity (involving a large set of equatorial waves) is gradually strengthening low level vorticity within the Monsoon Trough (MT). This Monsoon Trough (MT) pattern is located with an axis still near 12°S North of Madagascar and now near 07-08°S East of 60°E. Three weak circulations are still located today within the MT.

North-East of Madagascar:

As expected, the low previously located near the north-eastern coasts of Madagascar has not intensified today due to poor environmental conditions (vicinity of landmass and moderate to strong east-southeasterly shear). Within the next 48 hours, the low level vorticity will shift west-southwestwards towards the Mozambique coastlines (near the coastal city of Angoche) that should be reached friday night. Thunderstorm and heavy rainfall associated with this area will gradually abate over the northern part of Madagascar and the Comoros archipelago but will spread over part of Mozambique regions on Friday and Saturday.

Over the next 5 days, there is no risk of development of a moderate tropical storm over the Northern half of the Mozambique Channel.

Suspect area East of Agalega:

An area of low level enhanced vorticity still exist midway between Agalega and the Chagos archipelago with a rotation axis near 7.5°S and 64°E. The associated convective activity remains minimal at this time. Due to the development of the area located further east, the environment (mainly in the low levels) will gradually become not conducive for tropical development.

Over the next 5 days, there is no more risk of development of a moderate tropical storm East of Agalega.

Suspect area East of Diego-Garcia:

This area start to present some signs of organization (building deep convection, early signs of curvature) within a still broad low pressure area. The partial ascat data of this morning locate approximately a vorticity center near 8°S / 81°E. MSLP is estimated at 1005 hPa according to nearby buoys. Environmental conditions are already rather supportive for some development. They are expected to further improve tomorrow with increasing low level cross equatorial inflow likely due to combined mixed Rossby and equatorial Rossby wave contribution. Therefore within a very favorable environment, the development of a tropical storm is expected by the week-end. The expected track brings rapidly the system on a polewards forward motion away from the inhabited areas.

Over the next 5 days, the risk of development of a moderate tropical storm becomes high from Saturday South-East of Diego Garcia.

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 l coastlines to 90E.	Indian Ocean basi	in extends from	the equator to 4	40S and from t	he african