AWIO20 FMEE 211301 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2018/04/21 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2:

TROPICAL WEATHER DISCUSSION:

The thunderstorm activity within the near equatorial area is mainly gathering within two suspect areas.

North-North-East of Madagascar:

A surface clockwise circulation is now rather well defined with the low level clouds. It is centered near 8°S / 52.3°E at 10:30Z. The MSLP is estimated at 1007 hPa and the winds are weak at 15-20 kt according to this morning ascat pass. The associated thunderstorm activity is limited currently near the center and is more present within convergence lines located at the periphery, essentially within the south-eastern and north-eastern sectors (where it brings thunderstorm activity over the Seychelles main islands). The system is currently within marginal environmental conditions for further development, mainly due to a lack of low level convergence and a slight easterly constraint.

Within the next few days, the system should gradually move southwards then southeastwards within still marginal environmental conditions with still weak low level convergence and mixted upper level conditions (excellent divergence polewards but increasing northerly constraint starting from Monday). A small window of neutral to slightly favorable environmental conditions exists until Monday. Some NWP models (GFS) are aggressive to deepen this system but this scenario seems to excessive. However a low chance of development remains for this system, mainly within the next two days.

On the forecast track, the system is expected to near the Mascaregnes islands on Tuesday -Wednesday where a deterioration of the weather conditions is possible by that time.

For the next 2 days, the risk of formation of a moderate tropical storm is low East of Madagascar.

East of Diego Garcia:

An intense thunderstorm activity has taken place during the last 24 hours within the NET and south of the equatorial westerlies. Satellite imagery along with this morning scatt data allow to detect a surface low near 4S / 78.5E at 10:45Z with an estimated 6-8 kt eastwards motion. Within a generally favorable environment, this system should gradually develop within the next few days. NWP guidance are in increasing agreement for a development and a stronger signal is now seen on available ensemble forecast (GEFS, EPS).

This system is likely to gradually move southwards and then south-westwards to west-south-westwards. However not all the guidance are in agreement with this track (UKMO suggest a general south-eastwards track)

From Tuesday, the risk of formation of a moderate tropical storm becomes moderate 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 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.