AWIO20 FMEE 031204 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2018/11/03 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2:

TROPICAL WEATHER DISCUSSION:

The basin remains in a Near Equatorial Trough (NET) pattern East of 50°E, axed between 3S and 5S. East of 75°E, a low level trough over the southern Bay of Bengale, defines a Double Near Equatorial Trough pattern (DNET). Over the last 24h, the thunderstorm activity has strengthened and tend to concentrate within two privileged areas. The western one lies between the Chagos and Seychelles archipelago. The second one lies over the far north-eastern basin close to the border with the Jakarta area of responsibility.

Suspect area over the far North-astern basin:

Over the last 24 hours, the thunderstorm activity has strengthened markedly near a surface circulation depicted by various scatt pass this morning (Ascat-A and B, Scatsat). At 09 UTC, this low is centered near 4.6°S / 89.9°E and quasi-stat. Scatt pass this morning show 15/20 kt winds reaching locally 25 kt. MSLP is estimated at 1008 hPa. Within globally favorable environmental conditions, with improving low level convergence that is currently poor, some slow development appear possible within the next few days as the system should start a slow westwards drift.

Within the next 5 days, the likelihood that this system become a tropical storm becomes low from Tuesday.

Suspect area between the Chagos and Seychelles archipelago:

The NET is still as a broad and elongated area of relative low pressure without any defined surface circulation. Recent imagery however suggest that enhanced low level vorticity is located near 6.5°S / 71°E. Environmental conditions appear also favorable for some slow development although some mixed signal may interfere from Tuesday with an increase in east-north-easterly shear and a dryer mid-level environment close to the center. The system is expected to generally move west-south-westwards or south-westwards coming nearer the Agalega islands.

Within the next 5 days, the likelihood that this system become a tropical storm becomes low from Tuesday.

Long range outlook of large scale conditions over the basin:

Deep convective activity is expecting to remain strong within the NET, during the first half of November. A negative anomaly of velocity potential at the upper levels (VP200) is forecasting to cross from west to east the basin favoring upper level divergence associated to the arrival of an active phase of MJO. Furthermore, within the MJO envelope, several equatorial waves are expected to transit modulating low level convergence and cyclonism within the TPE. The current suspect areas illustrate this conducive large scale conditions for cyclogenesis.

From mid-November, negative VP200 anomaly should move over Pacific ocean with a positive anomaly over Indian ocean. The risk of cyclogenesis should decrease with the associated large scale subsidence and low level eastward anomaly winds less conducive for cyclogenesis.

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.