AWIO20 FMEE 131135 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2018/12/13 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2:

TROPICAL WEATHER DISCUSSION:

The pattern of the basin is beginning to migrate to a monsoon trough (MT) pattern to the east 55°E, oriented towards 8°S. Convective activity is moderate in its central part and strong at the eastern edge of the basin.

Suspect area east of the basin:

During the last 24h, deep convective activity has remained strong over far eastern part of the basin but it doesn't show any signs of organization. The center of the elongated clockwise circulation seems located east of 90E within the Indonesian AoR. Models favor a deepening in the northern hemisphere and delay the development of the southern clockwise circulation. The circulation is expected to deepen more significantly from Sunday associated to the improvement of the low level equatorial feeding. At this term, the center should be located near 10S/90E and encounter upper level conditions more favorable near the upper level ridge.

For the next 5 days, the risk of formation of a tropical storm remains moderate from Saturday on in the eastern part of the basin.

West of Diego-Garcia:

Animated TPW from CIMSS shows a cyclonic gyre located within the far western part of the MT centered approximately near 8S/60E. Associated deep convection is strong but very fluctuating. ECMWF ensemble forecast suggests a slow deepening of this clockwise circulation the next week. The interaction between the MT and the equatorial Rossby wave that moves over the center of the basin accredits the scenario of a cyclogenesis in this area at medium range.

For the next 5 days, there is no risk of formation of a tropical storm west 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.