AWIO20 FMEE 101135 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2018/01/10 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Warnings WTIO20 FMEE $n^{\circ}16/2$ and WTIO30 FMEE $n^{\circ}16/2/20172018$ issued at 06UTC on Post-Tropical Depression EX-IRVING. Next warnings at 12UTC.

PART 2:

TROPICAL WEATHER DISCUSSION:

The monsoon flow is well established over the whole basin. Deep convection activity is strong east of 60E within the deceleration of the trans-equatorial flow and north of the Mozambique Channel.

Extra-Tropical Depression EX-AVA:

Estimated position at 10UTC: 38.4S/57.4E

Movement : South-East at 30 kt. Max 10 min mean wind : 40 kt.

MSLP: 984 hPa

EX-AVA started its transition toward a baroclinic low and will leave our AoR in the next hours. For further information about this system, please refer to FQIO20 bulletin.

Post-Tropical Depression EX-IRVING:

Estimated position at 10UTC: 29.0S/68.2E

Movement : South at 20 kt.

Max 10 min mean wind : 50 kt.

MSLP: 980 hPa

For further information about this system, please refer to WTIO20 and WTIO30 warnings issued at 06UTC and following.

Suspect Area, South-West of the Chagos Archipelago:

Last ASCAT swaths particularly last night ones, show the existence of a weak closed circulation within the monsoon trough. Maximal winds reach 20kt in the equatorial feeding far from the center. Deep convection is locally severe and a mid-tropospheric vortex can be seen on the latest imagery. However, the system appears to be undergoing a moderate North-Easterly upper constraint. The center is approximatively located at 10Z near 11S 68.5E and MSLP is around 1007hPa.

Over the following days, this circulation is expected to move under the upper ridge where it will be protected from the vertical wind shear. The lower polar convergence is also forecast to increase with the evacuation of EX-IRVING. Numerical guidance is so in a good agreement to suggest the start of a new cyclogenesis. However it may be hindered by the presence of dry air mass and the arrival of a new constraint by the end of the week-end

In the Mozambique Channel, European deterministic and ensemble model propose a chance of cyclogenesis. But for now, this scenario is not preferred.

For the next 5 days, the risk that an other moderate tropical storm develop over the basin becomes moderate from Sunday South-West of Diego Garcia and weak from Monday in the Mozambique Channel.

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.