

WTIO30 FMEE 031837

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 1/13/20202021

1.A ZONE OF DISTURBED WEATHER 13

2.A POSITION 2021/03/03 AT 1800 UTC:

WITHIN 25 NM RADIUS OF POINT 15.1 S / 66.8 E

(FIFTEEN DECIMAL ONE DEGREES SOUTH AND
SIXTY SIX DECIMAL EIGHT DEGREES EAST)

MOVEMENT: EAST-SOUTH-EAST 8 KT

3.A DVORAK ANALYSIS: 1.5/1.5/S 0.0/6 H

4.A CENTRAL PRESSURE: 1003 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 25 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

6.A EXTENSION OF WIND BY QUADRANTS (KM):

NIL

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/03/04 06 UTC: 16.2 S / 69.2 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 150 SE: 110 SW: 110 NW: 110

34 KT NE: 75 SE: 75 SW: 75 NW: 75

24H: 2021/03/04 18 UTC: 16.9 S / 71.4 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 150 SE: 110 SW: 110 NW: 110

34 KT NE: 75 SE: 75 SW: 75 NW: 75

36H: 2021/03/05 06 UTC: 17.0 S / 73.1 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 110 SE: 110 SW: 110 NW: 110

34 KT NE: 75 SE: 75 SW: 75 NW: 75

48H: 2021/03/05 18 UTC: 16.9 S / 74.6 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 110 SE: 110 SW: 110 NW: 110

34 KT NE: 75 SE: 75 SW: 75 NW: 75

60H: 2021/03/06 06 UTC: 16.9 S / 76.1 E, VENT MAX= 035 KT, MODERATE TROPICAL

STORM

28 KT NE: 110 SE: 110 SW: 110 NW: 110

34 KT NE: 75 SE: 75 SW: 75 NW: 75

72H: 2021/03/06 18 UTC: 17.2 S / 77.4 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM

28 KT NE: 110 SE: 150 SW: 150 NW: 110

34 KT NE: 75 SE: 75 SW: 75 NW: 75

2.B LONGER-RANGE OUTLOOK:

96H: 2021/03/07 18 UTC: 18.4 S / 79.2 E, VENT MAX= 025 KT, REMNANT LOW

120H: 2021/03/08 18 UTC: 19.7 S / 79.4 E, VENT MAX= 025 KT, REMNANT LOW

2.C ADDITIONAL INFORMATION:

T=CI=1.5

FOR 48 HOURS A LOW LEVEL CENTER CAN BE FOUND WITHIN A WIDE ELONGATED CIRCULATION MOVING EAST-SOUTH-EASTWARD. DURING THE LAST 12 HOURS, CONVECTIVE ACTIVITY WAS MAINLY LOCATED IN THE NORTHEASTERN QUADRANT, NEAR A MID LEVEL LOW. THESE CONVECTIVE BURSTS ASSOCIATED WITH THE APPARENT ACCELERATION OF THE SHIFT OF THE CIRCULATION CENTER SUGGESTS THAT A MORE SYMMETRICAL CIRCULATION COULD FORM IN THE EASTERN PART OF THE CIRCULATION IN THE NEXT HOURS. MAXIMUM WINDS ARE NEAR 25KT IN THE NORTHERN SEMICIRCLE REACHING LOCALLY NEAR GALE FORCE WIND.

DURING THE FOLLOWING DAYS, 13-202021 SHOULD MOVE EAST-SOUTHEASTWARD DRIVEN BY THE NEAR EQUATORIAL RIDGE MOVING WESTWARD TO THE NORTH. OVER THE WEEKEND, ITS TRAJECTORY BECOMES MORE UNCERTAIN. ITS TRACK COULD BE DISTURBED BY A WEAK RIDGE ON ITS EASTERN SIDE. THE LAST RUNS OF THE EUROPEAN MODEL ARE QUITE FLUCTUATING, ESPECIALLY WITH THE 12Z SIMULATION (ARRIVED AFTER THE BROADCAST) WHICH DOES NOT PROPOSE ANY MORE ITS INFLUENCE ON THE TRACK, IN THE LIKE OF THE GFS GUIDANCE. MOREOVER, THE EXACT INTENSITY OF THE SYSTEM AT THIS MOMENT WILL ALSO BE AN IMPORTANT FACTOR FOR THE MOVEMENT. GIVEN THIS CONTEXT, THE CURRENT FORECAST, BASED ON A CONSENSUS OF THE MAIN GUIDANCE AVAILABLE AT THE TIME, IS PARTICULARLY UNCERTAIN BEYOND 48 HOURS AND MAY CHANGE IN THE FOLLOWING FORECASTS.

ABOUT THE INTENSITY, ALTHOUGH SYSTEM 13 BENEFITS UP TO FRIDAY FROM FAVORABLE CONDITIONS FOR ITS DEVELOPMENT WITH AN EXCELLENT DIVERGENCE IN THE SOUTH-EASTERN QUADRANT AND A VERY GOOD FEEDING ON THE EQUATORIAL SIDE, ITS ELONGATED LOWER CIRCULATION IS CURRENTLY HINDERING ITS INTENSIFICATION. IF, AS EXPECTED, THE CENTER MOVES NEAR THE MAIN CONVECTIVE ACTIVITY OVER THE NEXT FEW HOURS, 13 SHOULD BECOME A MODERATE TROPICAL STORM TOMORROW. FRIDAY, ENVIRONMENTAL CONDITIONS MAY DETERIORATE WITH THE STRENGTHENING OF A WEST-NORTH-WESTERLY UPPER SHEAR AHEAD OF A DEEP UPPER TROUGH COMING FROM THE SOUTHWEST. THE POTENTIAL FOR REINTENSIFICATION WILL DEPEND ON HOW MUCH THE SYSTEM WILL HAVE WEAKENED THEN.

