

WTIO30 FMEE 161242

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 6/5/20212022

1.A TROPICAL DEPRESSION 5

2.A POSITION 2022/02/16 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 14.1 S / 69.2 E

(FOURTEEN DECIMAL ONE DEGREES SOUTH AND
SIXTY NINE DECIMAL TWO DEGREES EAST)

MOVEMENT: WEST 9 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 993 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 30 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 0 SE: 130 SW: 130 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1002 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/02/17 00 UTC: 14.2 S / 67.0 E, VENT MAX= 030 KT, TROPICAL DEPRESSION
28 KT NE: 130 SE: 185 SW: 205 NW: 110

24H: 2022/02/17 12 UTC: 14.2 S / 64.9 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 150 SE: 220 SW: 240 NW: 120

34 KT NE: 0 SE: 110 SW: 110 NW: 0

36H: 2022/02/18 00 UTC: 14.2 S / 63.1 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 150 SE: 240 SW: 260 NW: 130

34 KT NE: 75 SE: 120 SW: 110 NW: 75

48H: 2022/02/18 12 UTC: 14.9 S / 61.6 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 140 SE: 260 SW: 285 NW: 155

34 KT NE: 130 SE: 165 SW: 165 NW: 130

60H: 2022/02/19 00 UTC: 15.7 S / 60.1 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 205 SE: 305 SW: 325 NW: 175

34 KT NE: 140 SE: 175 SW: 175 NW: 140

48 KT NE: 0 SE: 75 SW: 75 NW: 0

72H: 2022/02/19 12 UTC: 16.5 S / 58.8 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM
28 KT NE: 205 SE: 295 SW: 280 NW: 205
34 KT NE: 150 SE: 205 SW: 185 NW: 140
48 KT NE: 55 SE: 85 SW: 85 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2022/02/20 12 UTC: 17.7 S / 56.5 E, VENT MAX= 070 KT, TROPICAL CYCLONE
28 KT NE: 240 SE: 405 SW: 405 NW: 240
34 KT NE: 175 SE: 260 SW: 240 NW: 175
48 KT NE: 95 SE: 110 SW: 110 NW: 95
64 KT NE: 65 SE: 75 SW: 75 NW: 75

120H: 2022/02/21 12 UTC: 18.2 S / 54.0 E, VENT MAX= 080 KT, TROPICAL CYCLONE
28 KT NE: 315 SE: 500 SW: 480 NW: 315
34 KT NE: 185 SE: 280 SW: 260 NW: 185
48 KT NE: 100 SE: 120 SW: 120 NW: 100
64 KT NE: 70 SE: 80 SW: 80 NW: 70

2.C ADDITIONAL INFORMATION:

T=CI=2.5-

SYSTEM 05-20212022 REMAINS IN A SHEARED PATTERN BUT CONVECTION HAS SIGNIFICANTLY INCREASED THESE LAST HOURS ON THE WESTERN SIDE OF THE LOW WITH SOME THUNDERSTORM ACTIVITY DETECTED. THE INITIALLY EXPOSED LOW LEVEL CENTER HAS MOVED BACK UNDER THE EASTERN EDGE OF CDO, THUS INCREASING SUBJECTIVE DVORAK ANALYSIS UP TO 2.5- AND SUGGESTING TROPICAL DEPRESSION STAGE.

DURING THE NEXT DAY OR TWO, THE SYSTEM SHOULD TRACK WESTWARDS ALONG THE NORTHERN EDGE OF THE LOW-TROPOSPHERE SUBTROPICAL RIDGE LOCATED TO ITS SOUTH AND SOUTHWEST. AS FROM FRIDAY, A SOUTHWESTWARD TURN SHOULD OCCUR WITH THE STRENGTHENING OF GEOPOTENTIALS TO THE SOUTH-EAST THEN TO THE NORTH-EAST, MAKING IT TRACK NEAR SAINT-BRANDON. BUT THE GENERAL MOVEMENT WILL REMAIN PRIMARILY DRIVEN BY A WELL-ESTABLISHED MID-TROPOSPHERE SUBTROPICAL RIDGE, WITH AN UPWARD SHIFT OF THE STEERING FLOW AS THE SYSTEM GRADUALLY INTENSIFIES. THE FORECAST TRACK IS BASED ON A MEDIAN SCENARIO AND FAVOURS A PASSAGE OFF THE NORTH OF MAURITIUS AND REUNION ISLANDS, AT A STILL UNCERTAIN DISTANCE.

IN TERMS OF INTENSITY, ENVIRONMENTAL CONDITIONS REMAIN marginally FAVORABLE IN THE SHORT TERM DUE TO MODERATE TO STRONG EAST-NORTHEASTERLY SHEAR. THE FAIRLY RAPID MOVEMENT IN THE DIRECTION OF WIND SHEAR, GOOD LOW LEVEL CONVERGENCE AND OCEANIC POTENTIAL, THEN THE GRADUAL APPROACH OF THE RIDGE'S AXIS WITH VERY FAVORABLE UPPER DIVERGENCE BY THE END OF THE WEEK, SHOULD ALLOW GRADUAL INTENSIFICATION BECOMING MORE ENHANCED AS IT APPROACHES THE NORTH OF MASCARENE ISLANDS, POTENTIALLY UP TO THE STAGE OF TROPICAL CYCLONE THIS WEEKEND. HOWEVER, GUIDANCE IS STILL DISPERSED ON THE INTENSITY FORECAST, WHICH IS STILL UNCERTAIN.

GIVEN THE UNCERTAINTY ON TRACK AND INTENSITY OF THIS SYSTEM, IT IS TOO EARLY TO QUANTIFY POSSIBLE THREATS TO INHABITED LANDS. INHABITANTS OF MAURITIUS AND REUNION ARE INVITED TO CLOSELY FOLLOW THE EVOLUTION OF THIS SYSTEM.