

WTIO30 FMEE 170014

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 8/5/20212022

1.A MODERATE TROPICAL STORM 5 (EMNATI)

2.A POSITION 2022/02/17 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 14.0 S / 67.2 E

(FOURTEEN DECIMAL ZERO DEGREES SOUTH AND
SIXTY SEVEN DECIMAL TWO DEGREES EAST)

MOVEMENT: WEST 10 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D 0.5/18 H

4.A CENTRAL PRESSURE: 989 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 35 KT

RADIUS OF MAXIMUM WINDS (RMW): 37 KM

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

28 KT NE: 150 SE: 130 SW: 240 NW: 185

34 KT NE: 55 SE: 55 SW: 55 NW: 55

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

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/02/17 12 UTC: 14.0 S / 65.1 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 110 SE: 185 SW: 195 NW: 155

34 KT NE: 75 SE: 100 SW: 0 NW: 95

24H: 2022/02/18 00 UTC: 14.0 S / 63.6 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 205 SE: 285 SW: 230 NW: 250

34 KT NE: 130 SE: 165 SW: 95 NW: 165

36H: 2022/02/18 12 UTC: 14.8 S / 62.0 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 240 SE: 345 SW: 280 NW: 240

34 KT NE: 150 SE: 205 SW: 120 NW: 150

48H: 2022/02/19 00 UTC: 15.7 S / 60.5 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 270 SE: 345 SW: 305 NW: 250

34 KT NE: 165 SE: 205 SW: 140 NW: 155

48 KT NE: 65 SE: 65 SW: 65 NW: 85

60H: 2022/02/19 12 UTC: 16.6 S / 59.0 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM
28 KT NE: 230 SE: 435 SW: 315 NW: 305
34 KT NE: 150 SE: 270 SW: 130 NW: 185
48 KT NE: 75 SE: 55 SW: 75 NW: 85

72H: 2022/02/20 00 UTC: 17.2 S / 57.6 E, VENT MAX= 065 KT, TROPICAL CYCLONE
28 KT NE: 285 SE: 380 SW: 360 NW: 305
34 KT NE: 175 SE: 230 SW: 150 NW: 185
48 KT NE: 75 SE: 75 SW: 75 NW: 100
64 KT NE: 65 SE: 65 SW: 55 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2022/02/21 00 UTC: 17.9 S / 55.1 E, VENT MAX= 075 KT, TROPICAL CYCLONE
28 KT NE: 240 SE: 405 SW: 360 NW: 350
34 KT NE: 150 SE: 280 SW: 240 NW: 215
48 KT NE: 85 SE: 75 SW: 85 NW: 110
64 KT NE: 55 SE: 65 SW: 65 NW: 65

120H: 2022/02/22 00 UTC: 18.2 S / 52.9 E, VENT MAX= 085 KT, TROPICAL CYCLONE
28 KT NE: 305 SE: 425 SW: 325 NW: 280
34 KT NE: 185 SE: 280 SW: 240 NW: 175
48 KT NE: 90 SE: 80 SW: 80 NW: 110
64 KT NE: 70 SE: 70 SW: 70 NW: 60

2.C ADDITIONAL INFORMATION:

T=CI=2.5+

DURING THE LAST SIX HOURS, THE CONVECTION HAS IMPROVED SIGNIFICANTLY, WITH A DECREASE IN THE WAXING AND WANING OF THE WIND (20/25KT ACCORDING TO THE LATEST CIMMS DATA). THE LOW LEVEL CENTER IS NOW MORE INSIDE THE CONVECTION UNDER THE CDO, MAKING THE SUBJECTIVE DVORAK ANALYSIS RISE TO 2.5+, SO THE STORM HAS BEEN NAMED.

DURING THE NEXT 24 HOURS, THE SYSTEM SHOULD EVOLVE TOWARDS THE WEST, ON THE NORTHERN EDGE OF THE SUBTROPICAL RIDGE OF LOW TROPOSPHERE LOCATED ON THE SOUTH AND SOUTHWEST COAST. FROM FRIDAY ONWARDS, A TURN TOWARDS THE SOUTH-WEST SHOULD OCCUR WITH THE TEMPORARY STRENGTHENING OF THE GEOPOTENTIALS TO THE SOUTH-EAST AND THEN TO THE NORTH-EAST, MAKING THE SYSTEM PASS CLOSE TO SAINT-BRANDON. THE GENERAL MOVEMENT WILL NEVERTHELESS REMAIN DRIVEN PRIMARILY BY THE MID-TROPOSPHERIC RIDGE OF HIGH PRESSURE, WHICH REMAINS WELL IN PLACE, UNDER A STEERING FLOW THAT IS MOVING UPWARDS AS THE SYSTEM INTENSIFIES. THE FORECAST TRAJECTORY, BASED ON A MEDIAN SCENARIO, THUS FAVOURS A PASSAGE OF THE SYSTEM RELATIVELY FAR OFF THE NORTH OF THE SISTER ISLANDS, BUT AT A STILL UNCERTAIN DISTANCE.

IN TERMS OF INTENSITY, THE ENVIRONMENTAL CONDITIONS ARE MODERATELY FAVOURABLE IN THE VERY SHORT TERM DUE TO A SHEAR THAT REMAINS MODERATE FROM THE EAST-NORTH-EAST (THE FAIRLY RAPID MOVEMENT OF THE MINIMUM IN THE DIRECTION OF THE SHEAR ATTENUATING ITS INFLUENCE SOMEWHAT). A GOOD CONVERGENCE OF LOW LAYERS, A GOOD OCEANIC POTENTIAL, THEN THE GRADUAL APPROACH OF THE SYSTEM OF THE AXIS OF THE

RIDGE AT THE END OF THE WEEK WITH A VERY GOOD DIVERGENCE OF ALTITUDE, SHOULD ALLOW AN INTENSIFICATION AT FIRST SLOW THEN MORE FRANK WITH THE APPROACH OF THE NORTH OF THE MASCARENE ISLANDS, POTENTIALLY UNTIL THE STAGE OF TROPICAL CYCLONE FROM THIS WEEKEND. THE MODELINGS ARE STILL RELATIVELY DISPERSED ON THE FORECAST OF INTENSITY, WHICH IS STILL UNCERTAIN.

GIVEN THE UNCERTAINTY ON THE TRAJECTORY AND INTENSITY OF THIS SYSTEM, IT IS TOO EARLY TO QUANTIFY A POSSIBLE THREAT TO INHABITED LANDS. THE INHABITANTS OF MAURITIUS AND REUNION ARE INVITED TO FOLLOW THE EVOLUTION OF THIS SYSTEM WITH ATTENTION.