

WTIO30 FMEE 011258

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 11/5/20232024

1.A REMNANT LOW 5

2.A POSITION 2024/02/01 AT 1200 UTC:

WITHIN 10 NM RADIUS OF POINT 18.5 S / 66.2 E

(EIGHTEEN DECIMAL FIVE DEGREES SOUTH AND
SIXTY SIX DECIMAL TWO DEGREES EAST)

MOVEMENT: NORTH-EAST 4 KT

3.A DVORAK ANALYSIS: 1.5/2.0/S 0.0/0 H

4.A CENTRAL PRESSURE: 1002 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: 0 SW: 260 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/02/02 00 UTC: 19.0 S / 67.3 E, VENT MAX= 025 KT, REMNANT LOW

24H: 2024/02/02 12 UTC: 20.2 S / 68.4 E, VENT MAX= 030 KT, REMNANT LOW

28 KT NE: 0 SE: 0 SW: 195 NW: 0

36H: 2024/02/03 00 UTC: 22.1 S / 70.0 E, VENT MAX= 035 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 0 SE: 100 SW: 185 NW: 0

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

48H: 2024/02/03 12 UTC: 24.3 S / 72.5 E, VENT MAX= 035 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 0 SE: 140 SW: 150 NW: 0

34 KT NE: 0 SE: 85 SW: 0 NW: 0

60H: 2024/02/04 00 UTC: 28.4 S / 75.2 E, VENT MAX= 040 KT, EXTRATROPICAL
DEPRESSION

28 KT NE: 285 SE: 285 SW: 185 NW: 0

34 KT NE: 150 SE: 155 SW: 0 NW: 0

72H: 2024/02/04 12 UTC: 34.3 S / 77.5 E, VENT MAX= 045 KT, EXTRATROPICAL

DEPRESSION

28 KT NE: 150 SE: 305 SW: 250 NW: 165

34 KT NE: 0 SE: 165 SW: 0 NW: 75

2.B LONGER-RANGE OUTLOOK:

96H: 2024/02/05 12 UTC: 41.4 S / 86.5 E, VENT MAX= 035 KT, EXTRATROPICAL DEPRESSION

28 KT NE: 250 SE: 155 SW: 280 NW: 230

34 KT NE: 110 SE: 95 SW: 120 NW: 100

2.C ADDITIONAL INFORMATION:

T=1.5+ CI=2.0+

OVER THE PAST 6 HOURS, CONVECTIVE ACTIVITY HAS INTENSIFIED SLIGHTLY, THROWN FAR TO THE EAST OF THE LOW-LEVEL CENTER BY A 15-20KT WEST-NORTHWEST SHEAR ACCORDING TO CIMSS. THIS CENTER IS CLEARLY DISCERNIBLE ON VISIBLE AND MICROWAVE AMSR2 SATELLITE PICTURES (SWATH 0948Z) AT THE NORTH-WESTERN EDGE OF THE MAIN CONVECTION, AND IS MOVING TOWARDS THE NORTH-NORTH-EAST. THE SUBJECTIVE DVORAK ANALYSIS OF RSMC DE LA REUNION IS A LITTLE LOWER THAN THOSE OF THE OTHER CENTERS, BUT THE MAXIMUM WIND INTENSITY IS MAINTAINED AT 30KT DUE TO INERTIA, WHICH IS IN AGREEMENT WITH THE OBJECTIVE ANALYSES. THE SYSTEM THEREFORE REMAINS AT THE REMNANT LOW STAGE.

TRACK FORECAST IS SUBJECT TO SHORT-TERM UNCERTAINTY. IN FACT, AT PRESENT, BETWEEN TWO RIDGES, THERE ARE NO REALLY ESTABLISHED DIRECTING FLOWS. HOWEVER, A MID-TROPOSPHERE TROUGH IS BEGINNING TO STEER THE SYSTEM TOWARDS THE NORTH-NORTHEAST. FROM TONIGHT ONWARDS, IFS, WHICH IS THE MOST ACCURATE MODEL, SUGGESTS A CLEAR SOUTHEASTWARD TRACK IN CONJUNCTION WITH THE TROUGH, WHICH WILL TAKE IT OUT OF THE TROPICAL DOMAIN OVER THE WEEKEND. THE RSMC TRACK IS THEREFORE A COMPROMISE BETWEEN THE VARIOUS AVAILABLE GUIDELINES, WHICH ARE CURRENTLY HIGHLY DISPERSED IN TERMS OF ALONG TRACK, WITH A HIGH DEGREE OF UNCERTAINTY OVER THE NEXT 12-24H, AS IT CURVES TOWARDS THE SOUTHEAST. HOWEVER, A SIGNAL PERSISTS CONCERNING THE LOCATION OF THE TRACK WELL TO THE EAST OF RODRIGUES ISLAND, BUT PASSING CLOSE TO AMSTERDAM THIS WEEKEND.

IN TERMS OF INTENSITY, THE SYSTEM IS STRUGGLING TO ESTABLISH A CLOSED, COMPACT CIRCULATION IN THE LOWER LAYERS, CAUSED BY WIND SHEAR ALOFT, WHICH IS SET TO INCREASE. THE CENTER IS LIKELY TO REMAIN BEHIND THE CONVECTION, DUE TO AN INCREASE IN UPPER-LEVEL WIND SHEAR. ITS SLOW MOVEMENT SHOULD GRADUALLY REDUCE THE OCEAN POTENTIAL IN THE AREA. THE PRESENT RSMC FORECAST THEREFORE ASSUMES THAT THE REMNANT LOW STAGE WILL BE MAINTAINED FOR A FEW MORE HOURS. FROM FRIDAY ONWARDS, THE SYSTEM WILL CONTINUE TO ENCOUNTER UNFAVORABLE CONDITIONS AS IT MOVES BACK SOUTHEASTWARDS, WITH INCREASED SHEAR ALOFT, INTRUSIONS OF DRY AIR AND DECREASING OCEAN HEAT CONTENT, AND WILL GRADUALLY LOSE ITS TROPICAL CHARACTERISTICS (DESPITE AN INTENSIFICATION DUE TO THE INTERACTION WITH THE MID-TROPOSPHERE TROUGH). IT SHOULD BECOME AN EXTRA-TROPICAL DEPRESSION OVER THE WEEKEND.

IMPACTS ON INHABITED LAND OVER THE NEXT 72 HOURS :

- RODRIGUES: VERY ROUGH SEA WITH WAVES CLOSE TO 4M ON THURSDAY AND FRIDAY.
- NO IMPACT ON MAURITIUS AND REUNION.
- POSSIBLE GALE OVER AMSTERDAM THIS

LAST BULLETIN UNLESS RE-INTENSIFICATION ISSUED BY RSMC LA REUNION REGARDS THIS SYSTEM. FURTHER INFORMATION ON THIS SYSTEM WILL BE AVAILABLE IN THE DAILY BULLETIN ON TROPICAL WEATHER CONDITIONS OVER THE SOUTHWEST INDIAN OCEAN ISSUED AT 12Z (AWIO20 FMEE).