

WTIO30 FMEE 261233

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 1/1/20222023

1.A TROPICAL DEPRESSION 1

2.A POSITION 2022/09/26 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 13.0 S / 83.4 E

(THIRTEEN DECIMAL ZERO DEGREES SOUTH AND
EIGHTY THREE DECIMAL FOUR DEGREES EAST)

MOVEMENT: SOUTH-WEST 8 KT

3.A DVORAK ANALYSIS: 2.5/2.5/S 0.0/6 H

4.A CENTRAL PRESSURE: 1000 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: 75 SE: 185 SW: 185 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1011 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/09/27 00 UTC: 13.6 S / 81.8 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 75 SE: 185 SW: 185 NW: 0

34 KT NE: 0 SE: 55 SW: 55 NW: 0

24H: 2022/09/27 12 UTC: 13.7 S / 79.8 E, VENT MAX= 025 KT, FILLING UP

36H: 2022/09/28 00 UTC: 14.1 S / 77.3 E, VENT MAX= 025 KT, DISSIPATING

48H: 2022/09/28 12 UTC: 15.2 S / 75.4 E, VENT MAX= 025 KT, DISSIPATING

60H: 2022/09/29 00 UTC: 15.8 S / 72.6 E, VENT MAX= 025 KT, DISSIPATING

72H: 2022/09/29 12 UTC: 16.2 S / 70.4 E, VENT MAX= 025 KT, DISSIPATING

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=2.5

FOLLOWED BY THE BULLETIN FOR CYCLONIC ACTIVITY SINCE A FEW DAYS, THE SYSTEM 01-20222023 HAS INTENSIFIED DURING THE PREVIOUS NIGHT AND DURING THIS DAY. THE CLOUD STRUCTURE HAS THUS EVOLVED TO DEFINE A CURVED BAND PATTERN WITH A MAIN CONVECTIVE ACTIVITY IN THE SOUTHERN SEMICIRCLE. THE PARTIAL ASCAT SWATH OF 0359UTC ALLOWS TO VALIDATE VALUES OF 30KT IN THE SOUTHEAST SEMICIRCLE. SOME VALUES AT 35KT ARE ALSO NOTABLE BUT ON A PORTION OF THE CIRCULATION NOT SIGNIFICANT. BY TAKING AGAIN THE SATELLITE IMAGES ON MORE THAN 24H, WE CAN DETERMINE A DVORAK ANALYSIS OF 2.5 TO 12UTC, VALIDATING THE THRESHOLD OF TROPICAL DEPRESSION FOR THIS SYSTEM. THE LAST IMAGES SUGGEST THE PRESENCE OF DRY AIR IN THE NORTHERN PART OF THE CIRCULATION WHICH WILL CONTRIBUTE TO LIMIT THE POTENTIAL OF INTENSIFICATION.

PLACED ON THE EQUATORIAL SIDE OF THE SUBTROPICAL RIDGE, THE TROPICAL DEPRESSION WILL FOLLOW A GENERALLY WEST-SOUTHWESTWARD TRACK AT A FAIRLY CONSTANT SPEED. IN THE LONGER TERM, THE SYSTEM IS EXPECTED TO MOVE FURTHER SOUTH AS IT DISSIPATES.

THE ENVIRONMENTAL CONDITIONS RAPIDLY EVOLVE TOWARDS CONDITIONS UNFAVORABLE TO THE MAINTENANCE OF THE INTENSITY OF THE SYSTEM. THERE IS ONLY A SHORT WINDOW OF INTENSIFICATION TO THE MODERATE TROPICAL STORM STAGE OVERNIGHT. THEREAFTER, THE INTRUSION OF DRY AIR FROM THE NORTH COAST AND INCREASING WIND SHEAR WILL STOP ANY INTENSIFICATION. THE SYSTEM WILL THEREFORE QUICKLY END UP AS A RESIDUAL DEPRESSION BEFORE DISAPPEARING WITHOUT REACHING THE MASCARENE ISLANDS.

THIS SYSTEM DOES NOT PRESENT ANY DANGER FOR THE INHABITED LANDS.