

WTIO30 FMEE 121324

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 1/3/20242025

1.A ZONE OF DISTURBED WEATHER 3

2.A POSITION 2024/11/12 AT 1200 UTC:

WITHIN 30 NM RADIUS OF POINT 9.8 S / 77.5 E

(NINE DECIMAL EIGHT DEGREES SOUTH AND  
SEVENTY SEVEN DECIMAL FIVE DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 7 KT

3.A DVORAK ANALYSIS: 1.5/1.5/D 1.0/24 H

4.A CENTRAL PRESSURE: 1004 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): 1006 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/11/13 00 UTC: 10.3 S / 75.7 E, VENT MAX= 025 KT, TROPICAL DISTURBANCE

24H: 2024/11/13 12 UTC: 10.4 S / 74.7 E, VENT MAX= 030 KT, TROPICAL DEPRESSION  
28 KT NE: 140 SE: 195 SW: 220 NW: 95

36H: 2024/11/14 00 UTC: 10.5 S / 74.3 E, VENT MAX= 040 KT, MODERATE TROPICAL  
STORM

28 KT NE: 150 SE: 215 SW: 220 NW: 100

34 KT NE: 75 SE: 120 SW: 140 NW: 75

48H: 2024/11/14 12 UTC: 10.7 S / 73.9 E, VENT MAX= 045 KT, MODERATE TROPICAL  
STORM

28 KT NE: 155 SE: 230 SW: 220 NW: 110

34 KT NE: 85 SE: 130 SW: 140 NW: 75

60H: 2024/11/15 00 UTC: 11.0 S / 73.5 E, VENT MAX= 045 KT, MODERATE TROPICAL  
STORM

28 KT NE: 155 SE: 260 SW: 220 NW: 120

34 KT NE: 95 SE: 130 SW: 140 NW: 75

72H: 2024/11/15 12 UTC: 11.5 S / 72.7 E, VENT MAX= 040 KT, MODERATE TROPICAL

STORM

28 KT NE: 165 SE: 280 SW: 220 NW: 130

34 KT NE: 95 SE: 140 SW: 140 NW: 85

2.B LONGER-RANGE OUTLOOK:

96H: 2024/11/16 12 UTC: 13.4 S / 69.3 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM

28 KT NE: 185 SE: 325 SW: 220 NW: 140

34 KT NE: 110 SE: 150 SW: 140 NW: 85

120H: 2024/11/17 12 UTC: 14.2 S / 67.2 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM

28 KT NE: 195 SE: 370 SW: 220 NW: 155

34 KT NE: 120 SE: 155 SW: 140 NW: 95

2.C ADDITIONAL INFORMATION:

T=CI=1.5

A LOW-PRESSURE CIRCULATION FORMED AT THE END OF LAST WEEK TO THE EAST OF DIEGO-GARCIA. CONVECTION BECAME PROGRESSIVELY MORE ORGANIZED ON MONDAY NIGHT AND, ABOVE ALL, MORE PERSISTENT OVER THE PAST 12 HOURS IN THE VICINITY OF A CENTER WHICH, ACCORDING TO SATELLITE IMAGERY, IS STILL RELATIVELY ELONGATED. AN INITIAL DVORAK CLASSIFICATION OF 1.5 CAN THUS BE ESTABLISHED AS OF THIS TUESDAY NOVEMBER 12 AT 12UTC.

OVER THE LAST 6 HOURS, CONVECTIVE ACTIVITY MAINTAINED NEAR THE CENTER, WITH AN ACCENTUATION OF THE CURVATURE. INTENSITY IS ESTIMATED AT 20 KT USING THE SUBJECTIVE DVORAK TECHNIQUE.

THE SYSTEM'S TRACK IS FORECAST TO BE WEST-SOUTH-WEST ALONG THE EDGE OF A SUBTROPICAL RIDGE CENTERED TO THE SOUTH AT 700 HPA. AS THE SYSTEM INTENSIFIES, THE STEERING FLOW AT 500 HPA WILL TAKE OVER, PLACING THE SYSTEM IN A BAROMETRIC NECK, WHICH EXPLAINS THE SYSTEM'S SHARP SLOWDOWN AND SIGNIFICANT UNCERTAINTY IN TERMS OF TRAJECTORY BEYOND THURSDAY.

THE INTENSITY OF THE SYSTEM IS ON THE RISE THIS TUESDAY EVENING IN A FAVORABLE ENVIRONMENTAL CONTEXT OVER THE NEXT 48 HOURS: REDUCED DEEP SHEAR, HIGH OCEANIC POTENTIAL FOR THE SEASON AND STRENGTHENED LOW-LEVEL CONVERGENCE, PARTICULARLY ON THE EQUATORIAL SIDE. THIS SHOULD LEAD TO INTENSIFICATION INTO A TROPICAL STORM BETWEEN WEDNESDAY EVENING AND THURSDAY MORNING. IN THE LONGER TERM, THE TENDENCY IS FOR THE INTENSITY TO STAGNATE IN CONDITIONS THAT ARE LIKELY TO BE MORE SEVERE.

IN THE LONGER TERM, THE TENDENCY IS FOR INTENSITY TO STAGNATE UNDER MIXED ENVIRONMENTAL CONDITIONS, ALTHOUGH MODEL DISPERSION IS STRONG.

OVER THE NEXT 5 DAYS, THE SYSTEM POSES NO THREAT TO INHABITED LAND.