

WTIO30 FMEE 020644

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 4/2/20242025

1.A MODERATE TROPICAL STORM 2 (ANCHA)

2.A POSITION 2024/10/02 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 10.5 S / 75.2 E

(TEN DECIMAL FIVE DEGREES SOUTH AND
SEVENTY FIVE DECIMAL TWO DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 6 KT

3.A DVORAK ANALYSIS: 3.5/3.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 994 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 45 KT

RADIUS OF MAXIMUM WINDS (RMW): 33 KM

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

28 KT NE: 150 SE: 240 SW: 205 NW: 95

34 KT NE: 75 SE: 120 SW: 100 NW: 0

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

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/10/02 18 UTC: 11.7 S / 74.0 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 130 SE: 240 SW: 205 NW: 95

34 KT NE: 0 SE: 130 SW: 120 NW: 0

24H: 2024/10/03 06 UTC: 12.9 S / 72.5 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 110 SE: 240 SW: 205 NW: 75

34 KT NE: 0 SE: 120 SW: 110 NW: 0

36H: 2024/10/03 18 UTC: 13.9 S / 70.9 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 0 SE: 220 SW: 185 NW: 0

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

48H: 2024/10/04 06 UTC: 14.8 S / 69.7 E, VENT MAX= 025 KT, FILLING UP

60H: 2024/10/04 18 UTC: 15.9 S / 68.9 E, VENT MAX= 025 KT, FILLING UP

72H: 2024/10/05 06 UTC: 17.0 S / 68.3 E, VENT MAX= 025 KT, FILLING UP

2.B LONGER-RANGE OUTLOOK:

96H: 2024/10/06 06 UTC: 16.9 S / 66.8 E, VENT MAX= 020 KT, FILLING UP

2.C ADDITIONAL INFORMATION:

FT=CI=3.5-

OVER THE LAST 6 HOURS, ANCHA'S CLOUD PATTERN HAS IMPROVED A BIT WITH A CURVED BAND WRAPPING 0.7 TO 0.8 AT TIMES AND A SUBJECTIVE DVORAK ANALYSIS FLUCTUATING BETWEEN 3.0 AND 3.5. RECENT MICROWAVE IMAGES SHOW A PARTIAL CONVECTIVE CORE IN 89GHZ THAT HAS BECOME MORE COMPACT THAN LAST NIGHT. THIS TREND TOWARDS INTENSIFICATION AND CONTRACTION OF THE SYSTEM'S CORE IS CONFIRMED BY A 0404Z ASCAT-C PASS INDICATING WINDS OF 40-43 KT WITH A RADIUS OF MAXIMUM WINDS DOWN TO ONLY 12 NM. TAKING INTO ACCOUNT THE UNDERESTIMATION OF THE ASCAT MEASUREMENT, THIS SUGGESTS AN ACTUAL INTENSITY BETWEEN 45 AND 50KT. OBJECTIVE CIMSS ESTIMATES ARE BETWEEN 45 AND 50KT (1MIN WINDS). THESE VARIOUS DATA INPUTS ENABLE TO ESTIMATE ANCHA'S INTENSITY AT 45 KT AT 06UTC.

THE SYSTEM'S TRACK IS FORECAST TO HEAD SOUTH-WEST ALONG THE EDGE OF A SUBTROPICAL RIDGE CENTERED TO THE SOUTH-EAST. A MID-TROPOSPHERE TROUGH FURTHER SOUTH COULD MORE OR LESS ATTRACT THE SYSTEM SOUTHWARDS, LEADING TO INCREASING SPREAD AMONG NWP FORECASTS FROM THURSDAY ONWARDS. THE RSMC TRACK REMAINS CLOSE TO THE LATEST RUNS OF THE EUROPEAN MODEL. UNCERTAINTY BECOMES EVEN GREATER FROM FRIDAY AS THE SYSTEM WEAKENS AND ENCOUNTERS CONTRADICTORY STEERING FLOWS.

IN TERMS OF INTENSITY, CONDITIONS REMAIN FAVORABLE THIS WEDNESDAY : WEAK DEEP AND MID-TROPOSPHERE SHEAR, VERY GOOD UPPER DIVERGENCE WITH AN OUTFLOW CHANNEL TO THE SOUTH OF THE SYSTEM, SURFACE WATERS AT 27-28C AND FAIRLY GOOD LOW-LEVEL CONVERGENCE. ANCHA SHOULD THEREFORE GENERALLY REMAIN AT ITS CURRENT INTENSITY TODAY. FROM TONIGHT AND THURSDAY ONWARDS, ITS INTENSIFICATION WINDOW SHOULD GRADUALLY CLOSE, AS SOUTH TO SOUTH-WESTERLY MID-LEVEL SHEAR INCREASES, BRINGING DRY AIR ALONG THE WESTERN EDGE OF THE SYSTEM AND WEAKENING LOW-LEVEL CONVERGENCE. THE RESISTANCE OF THE VORTEX TO THESE DRY AIR INTRUSIONS AND INCREASING SHEAR REMAINS UNCERTAIN, BUT MODELS AGREE ON A FINAL WEAKENING TREND FROM FRIDAY ONWARDS, CAUSING THE SYSTEM TO BECOME A FILLING REMNANT LOW BY THE END OF THE WEEK.

NO IMPACT EXPECTED ON INHABITED LANDS.