

WTIO30 FMEE 020026

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 3/2/20242025

1.A MODERATE TROPICAL STORM 2 (ANCHA)

2.A POSITION 2024/10/02 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 10.0 S / 75.4 E

(TEN DECIMAL ZERO DEGREES SOUTH AND

SEVENTY FIVE DECIMAL FOUR DEGREES EAST)

MOVEMENT: WEST 5 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 0.5/6 H

4.A CENTRAL PRESSURE: 998 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 40 KT

RADIUS OF MAXIMUM WINDS (RMW): 41 KM

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

28 KT NE: 65 SE: 240 SW: 240 NW: 130

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1011 HPA / 1100 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/10/02 12 UTC: 11.1 S / 74.4 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM

28 KT NE: 100 SE: 250 SW: 240 NW: 110

34 KT NE: 75 SE: 110 SW: 140 NW: 85

24H: 2024/10/03 00 UTC: 12.2 S / 72.9 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM

28 KT NE: 110 SE: 260 SW: 250 NW: 120

34 KT NE: 85 SE: 120 SW: 150 NW: 95

36H: 2024/10/03 12 UTC: 13.3 S / 71.2 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM

28 KT NE: 110 SE: 270 SW: 250 NW: 120

34 KT NE: 85 SE: 120 SW: 150 NW: 95

48H: 2024/10/04 00 UTC: 14.3 S / 69.9 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 110 SE: 280 SW: 250 NW: 110

60H: 2024/10/04 12 UTC: 15.2 S / 68.3 E, VENT MAX= 025 KT, FILLING UP

72H: 2024/10/05 00 UTC: 16.0 S / 66.7 E, VENT MAX= 020 KT, FILLING UP

2.B LONGER-RANGE OUTLOOK:
NIL

2.C ADDITIONAL INFORMATION:
FT=CI=3.0-

JUST BEFORE 18Z, THE STRUCTURE OF SYSTEM N°02-20242025 BEGAN TO FORM A CURVED BAND. IN ADDITION, THE ASCAT PASS OF 17Z (AVAILABLE AFTER 18Z) SHOWED THAT THE SYSTEM HAD REACHED THE MODERATE TROPICAL STORM STAGE OF 17Z, WITH MAXIMUM WINDS OF 35 IN THE SOUTHWEST QUADRANT OF THE SYSTEM. THE MAURITIAN METEOROLOGICAL SERVICES THEREFORE NAMED THE MODERATE TROPICAL STORM ANCHA AT 2330Z. THE BEST-TRACK WAS ADJUSTED WITH THE CHANGE TO MODERATE TROPICAL STORM STATUS AT 18Z.

OVER THE LAST 6 HOURS, THE CLOUD PATTERN HAS CONTINUED TO IMPROVE, WITH A CURVED BAND STRUCTURE OF MORE THAN HALF A TURN AND A T OF 3.0 IN DVORAK CLASSIFICATION. THE CENTER IS UNDER THE MAIN CONVECTION, AND ESTIMATED SLIGHTLY TO THE NORTHEAST. IN ADDITION, THE 2210Z GMI MICROWAVE SHOWS A CLEARLY VISIBLE EYE AT 37GHZ AND AN ALMOST FIRM EYE AT 89 GHZ. THE SYSTEM IS THEREFORE MAINTAINED AS A MODERATE TROPICAL STORM, WITH MAXIMUM WINDS ESTIMATED AT 40KT.

LITTLE CHANGE IN TERMS OF TRACK. THE SYSTEM'S TRACK IS FORECAST TO HEAD SOUTH-WEST ALONG THE EDGE OF A SUBTROPICAL RIDGE CENTERED TO THE SOUTH AND SOUTH-EAST. THE PASSAGE OF A MID-TROPOSPHERE TROUGH FURTHER SOUTH COULD MORE OR LESS PULL THE TRACK SOUTHWARDS, LEADING TO DISPERSION IN THE NUMERICAL FORECASTS FROM THURSDAY ONWARDS. THE LATEST GFS AND IFS RUNS ARE GRADUALLY SHIFTING TOWARDS MORE SOUTHERLY SCENARIOS. THE RSMC TRACK IS ALSO REVISED SLIGHTLY SOUTHERN THAN THE PREVIOUS FORECAST AND IS A COMPRESSION BETWEEN IFS AND GFS. UNCERTAINTY OVER THE TRACK BECOMES EVEN GREATER FROM FRIDAY AS THE SYSTEM WEAKENS.

IN TERMS OF INTENSITY, ANCHA IS CURRENTLY ENCOUNTERING CONDITIONS FAVORABLE TO ITS INTENSIFICATION. WEAK DEEP AND MID-TROPOSPHERE SHEAR (LESS THAN 10-15KT ANALYZED BY CIMSS FOR DEEP SHEAR AND 5-10KT FOR MID SHEAR), VERY GOOD UPPER-LEVEL DIVERGENCE BELOW THE RIDGE, HIGH OCEAN POTENTIAL FOR THE SEASON AND FAIRLY GOOD LOW-LEVEL CONVERGENCE. IT SHOULD THEREFORE REMAIN A TROPICAL STORM OVER THE NEXT 24 HOURS, WITH AN ESTIMATED PEAK IN INTENSITY LATE NEXT DAY AND NIGHT. FROM THURSDAY ONWARDS, THE WINDOW OF INTENSIFICATION SHOULD GRADUALLY CLOSE, AS SOUTH TO SOUTH-WESTERLY SHEAR INCREASES IN THE MID-TROPOSPHERE, BRINGING DRY AIR TO THE WESTERN EDGE OF THE SYSTEM AND WEAKENING LOW-LEVEL CONVERGENCE. THE RESISTANCE OF THE VORTEX TO THESE INTRUSIONS OF DRY AIR REMAINS UNCERTAIN, BUT MOST MODELS AGREE ON A LASTING WEAKENING FROM FRIDAY ONWARDS, CAUSING THE SYSTEM TO EVOLVE INTO A DEPRESSION GRADUALLY FILLING IN FROM FRIDAY ONWARDS.

NO IMPACT EXPECTED ON INHABITED LANDS.

