

WTIO30 FMEE 080710

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 9/2/20222023

1.A MODERATE TROPICAL STORM 2 (BALITA)

2.A POSITION 2022/10/08 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 12.2 S / 85.6 E

(TWELVE DECIMAL TWO DEGREES SOUTH AND
EIGHTY FIVE DECIMAL SIX DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-EAST 7 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 0.5/12 H

4.A CENTRAL PRESSURE: 997 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 35 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

34 KT NE: 0 SE: 75 SW: 110 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 800 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/10/08 18 UTC: 13.7 S / 86.0 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 0 SE: 230 SW: 260 NW: 0

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

24H: 2022/10/09 06 UTC: 14.9 S / 86.5 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 0 SE: 280 SW: 250 NW: 0

34 KT NE: 0 SE: 130 SW: 110 NW: 0

36H: 2022/10/09 18 UTC: 15.9 S / 86.8 E, VENT MAX= 040 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 0 SE: 295 SW: 305 NW: 230

34 KT NE: 0 SE: 155 SW: 165 NW: 195

48H: 2022/10/10 06 UTC: 16.2 S / 86.3 E, VENT MAX= 035 KT, FILLING UP

28 KT NE: 0 SE: 295 SW: 195 NW: 165

34 KT NE: 0 SE: 150 SW: 95 NW: 140

60H: 2022/10/10 18 UTC: 16.1 S / 85.3 E, VENT MAX= 035 KT, FILLING UP

28 KT NE: 0 SE: 315 SW: 280 NW: 0
34 KT NE: 0 SE: 155 SW: 0 NW: 0

72H: 2022/10/11 06 UTC: 15.7 S / 83.8 E, VENT MAX= 030 KT, REMNANT LOW
28 KT NE: 0 SE: 150 SW: 0 NW: 0

2.B LONGER-RANGE OUTLOOK:

96H: 2022/10/12 06 UTC: 15.4 S / 81.0 E, VENT MAX= 020 KT, REMNANT LOW

2.C ADDITIONAL INFORMATION:

THE SHEARED CLOUD STRUCTURE IS PROGRESSIVELY EVOLVING TOWARDS A CURVED BAND PATTERN OR CDO, WITH AN ESTIMATED CENTER UNDER AT THE NORTHEASTERN EDGE OF THE MOST MARKED CONVECTIVE ZONE (ASCAT B AND C OF 0330 AND 0430UTC). THE CLOUD TOPS REMAIN QUITE COLD, REFLECTING MORE FAVORABLE CONDITIONS FOR AN INTENSIFICATION OF THE SYSTEM. THE LAST SATELLITE IMAGES SHOW A CLEAR STRENGTHENING OF THE DEEP CONVECTION, CONFIRMING THE INTENSIFICATION NOTED LAST NIGHT

NO CHANGE IN THE TRACK : THE SYSTEM KEEPS ITS SOUTHWARD MOVEMENT, SUBJECT TO A NORTH-NORTH-EAST COMPONENT STEERING FLOW BETWEEN A BAROMETRIC COL AT THE SOUTH-WEST OF THE SYSTEM AND THE NEAR EQUATORIAL RIDGE LOCATED AT THE EAST. THE SYSTEM WILL PROGRESSIVELY TAKE A SLIGHTLY FASTER SOUTH-SOUTHEAST DIRECTION UNTIL SUNDAY MORNING. THEN FROM SUNDAY EVENING, A NEW SUBTROPICAL HIGH PRESSURE CELL LOCATED SOUTHWEST OF THE TROPICAL SYSTEM SHOULD SLIDE TO THE SOUTH-SOUTHEAST OF THE SYSTEM AND DIRECT THE SYSTEM'S TRACK TOWARDS THE WEST. THERE IS STILL SIGNIFICANT UNCERTAINTY ABOUT THE SPEED OF MOVEMENT AND THE EXACT TIMING OF THIS TURN TO THE WEST, IN 48 HOURS AND MORE. HOWEVER THE OVERALL SHAPE OF THE TRACK REMAINS QUITE SIMILAR.

THE ATMOSPHERIC CONDITIONS WITH NOTABLY THE DECREASE OF THE WIND SHEAR (THANKS TO THE DISPLACEMENT OF THE SYSTEM TOWARDS THE SOUTH) OFFER TO THE SYSTEM A SHORT WINDOW OF INTENSIFICATION UNTIL THE MAXIMUM STAGE OF MODERATE TROPICAL STORM DURING THE NEXT 24 HOURS. THIS FAVORABLE WINDOW SHOULD NOT LAST HOWEVER. INDEED, ON SUNDAY, AHEAD OF A MID-TROPOSPHERE TROUGH, THE NORTHWESTERLY SHEAR SHOULD STRENGTHEN AND INJECT DRY AIR OVER THE CIRCULATION CENTER. AT THE SAME TIME, THE OCEANIC POTENTIAL SHOULD DRY UP DEFINITELY. THE SYSTEM COULD THEN PROGRESSIVELY LOSE ITS TROPICAL CHARACTERISTICS AT THE END OF THE WEEKEND TO WEAKEN PROGRESSIVELY INTO A REMNANT LOW TRANSITING IN THE TRADE WINDS FLOW.