

WTIO30 FMEE 080012

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 8/2/20222023

1.A MODERATE TROPICAL STORM 2 (BALITA)

2.A POSITION 2022/10/08 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 11.4 S / 84.9 E  
(ELEVEN DECIMAL FOUR DEGREES SOUTH AND  
EIGHTY FOUR DECIMAL NINE DEGREES EAST)  
MOVEMENT: SOUTH 6 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 999 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: 0 SE: 185 SW: 185 NW: 0  
34 KT NE: 0 SE: 95 SW: 95 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/10/08 12 UTC: 13.2 S / 85.2 E, VENT MAX= 040 KT, MODERATE TROPICAL  
STORM

28 KT NE: 0 SE: 185 SW: 165 NW: 0  
34 KT NE: 0 SE: 85 SW: 0 NW: 0

24H: 2022/10/09 00 UTC: 14.6 S / 85.8 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 0 SE: 305 SW: 230 NW: 0  
34 KT NE: 0 SE: 175 SW: 150 NW: 0

36H: 2022/10/09 12 UTC: 15.6 S / 86.0 E, VENT MAX= 040 KT, POST-TROPICAL  
DEPRESSION

28 KT NE: 0 SE: 400 SW: 305 NW: 215  
34 KT NE: 0 SE: 220 SW: 215 NW: 185

48H: 2022/10/10 00 UTC: 16.0 S / 85.4 E, VENT MAX= 040 KT, POST-TROPICAL  
DEPRESSION

28 KT NE: 0 SE: 295 SW: 350 NW: 220  
34 KT NE: 0 SE: 155 SW: 175 NW: 195

60H: 2022/10/10 12 UTC: 15.9 S / 84.3 E, VENT MAX= 035 KT, FILLING UP  
28 KT NE: 0 SE: 285 SW: 230 NW: 140  
34 KT NE: 0 SE: 155 SW: 130 NW: 110

72H: 2022/10/11 00 UTC: 15.5 S / 82.9 E, VENT MAX= 030 KT, FILLING UP  
28 KT NE: 0 SE: 250 SW: 220 NW: 0

#### 2.B LONGER-RANGE OUTLOOK:

96H: 2022/10/12 00 UTC: 15.0 S / 79.9 E, VENT MAX= 020 KT, REMNANT LOW

#### 2.C ADDITIONAL INFORMATION:

T=CI=2.5+

THE SHEARED CLOUD STRUCTURE IS PROGRESSIVELY EVOLVING TOWARDS A CURVED BAND PATTERN, WITH AN ESTIMATED CENTER AT THE NORTHEASTERN EDGE OF THE MOST MARKED CONVECTIVE ZONE. THE CLOUD TOPS REMAIN QUITE COLD, REFLECTING MORE FAVORABLE CONDITIONS FOR AN INTENSIFICATION OF THE SYSTEM. THE LAST MICROWAVE DATA FROM 2204UTC STILL SHOW A FAIRLY LARGE CIRCULATION AT THE NORTHEAST EDGE OF THE MAIN CONVECTIVE ACTIVITY. IN THE ABSENCE OF NEW DIFFUSIOMETRIC, THE DVORAK ANALYSIS ALLOWS A SLIGHTLY HIGHER ESTIMATE COMPARED TO THE PREVIOUS ANALYSIS, WITH A CURVED BAND REACHING MORE CLEARLY THE HALF-TURN. THE SYSTEM PASSES THE THRESHOLD OF MODERATE TROPICAL STORM WITH WINDS ESTIMATED AT 35KT MAINLY IN THE SOUTHERN SEMICIRCLE AND HAS BEEN NAMED BALITA BY THE MAURITIAN METEOROLOGICAL SERVICE AT 22UTC.

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.