

WTIO30 FMEE 271329 CCA

\*\*\*\*\*CORRECTIVE\*\*\*\*\*

RSMC / TROPICAL CYCLONE CENTER / LA REUNION  
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 6/2/20212022

1.A INTENSE TROPICAL CYCLONE 2 (BATSIRAI)

2.A POSITION 2022/01/27 AT 1200 UTC:  
WITHIN 15 NM RADIUS OF POINT 17.9 S / 79.7 E  
(SEVENTEEN DECIMAL NINE DEGREES SOUTH AND  
SEVENTY NINE DECIMAL SEVEN DEGREES EAST)  
MOVEMENT: WEST-SOUTH-WEST 22 KT

3.A DVORAK ANALYSIS: 5.5/5.5/D 2.5/6 H

4.A CENTRAL PRESSURE: 968 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 90 KT  
RADIUS OF MAXIMUM WINDS (RMW): 9 KM

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

28 KT NE: 75 SE: 155 SW: 185 NW: 75

34 KT NE: 45 SE: 45 SW: 45 NW: 45

48 KT NE: 30 SE: 30 SW: 30 NW: 30

64 KT NE: 20 SE: 20 SW: 20 NW: 20

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1003 HPA / 200 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/01/28 00 UTC: 19.1 S / 76.6 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 100 SE: 205 SW: 195 NW: 100

34 KT NE: 75 SE: 85 SW: 100 NW: 75

48 KT NE: 55 SE: 55 SW: 55 NW: 55

64 KT NE: 35 SE: 45 SW: 35 NW: 35

24H: 2022/01/28 12 UTC: 20.0 S / 74.0 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 110 SE: 205 SW: 195 NW: 100

34 KT NE: 85 SE: 85 SW: 100 NW: 75

48 KT NE: 55 SE: 45 SW: 55 NW: 55

36H: 2022/01/29 00 UTC: 20.5 S / 72.4 E, VENT MAX= 040 KT, MODERATE TROPICAL  
STORM

28 KT NE: 130 SE: 205 SW: 195 NW: 100

34 KT NE: 95 SE: 95 SW: 100 NW: 75

48H: 2022/01/29 12 UTC: 20.5 S / 70.4 E, VENT MAX= 040 KT, MODERATE TROPICAL

STORM

28 KT NE: 140 SE: 205 SW: 195 NW: 100

34 KT NE: 100 SE: 95 SW: 100 NW: 75

60H: 2022/01/30 00 UTC: 19.9 S / 68.7 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM

28 KT NE: 155 SE: 205 SW: 195 NW: 100

34 KT NE: 110 SE: 95 SW: 110 NW: 75

72H: 2022/01/30 12 UTC: 19.1 S / 67.2 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM

28 KT NE: 155 SE: 195 SW: 185 NW: 130

34 KT NE: 120 SE: 100 SW: 110 NW: 75

2.B LONGER-RANGE OUTLOOK:

96H: 2022/01/31 12 UTC: 18.8 S / 64.1 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

28 KT NE: 195 SE: 195 SW: 185 NW: 185

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

48 KT NE: 75 SE: 65 SW: 65 NW: 55

120H: 2022/02/01 12 UTC: 18.9 S / 60.2 E, VENT MAX= 070 KT, TROPICAL CYCLONE

28 KT NE: 195 SE: 195 SW: 185 NW: 185

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

48 KT NE: 80 SE: 70 SW: 80 NW: 60

64 KT NE: 60 SE: 60 SW: 70 NW: 60

2.C ADDITIONAL INFORMATION:

T=CI=5.5-

DURING THE LAST 6 HOURS, BATSIRAI HAS UNDERGONE A DRAMATIC CHANGE WITH THE APPEARANCE OF AN EYE AND A COLD RING. THE SUBJECTIVE DVORAK ANALYSES REACHED 5.5 FOR MORE THAN 2 HOURS. THIS RAPID INTENSIFICATION WAS MOST PROBABLY FAVORED BY THE VERY SMALL SIZE OF THE SYSTEM AND ITS VERY FAST MOTION (MORE THAN 20KT). THE 0605Z GMI SWATH OF 0605Z AND ESPECIALLY THE 1102Z SSMIS SHOW AN INNER CORE OF ONLY 75 TO 90 KM IN DIAMETER. THE SMALL SIZE OF THE SYSTEM IS ALSO CONFIRMED BY THE MINIMUM PRESSURE OF 1000.5 HPA OBSERVED BY THE BUOY 5601653 AT ABOUT 60KM NORTH OF THE CENTER AT 09UTC. THE SMALL SIZE OF THE SYSTEM COULD HAVE LIMITED THE ANALYZED DVORAK INTENSITY. CONSEQUENTLY, BATSIRAI IS CONSIDERED AS AN INTENSE TROPICAL CYCLONE AT 12Z.

LITTLE CHANGE IN TERMS OF TRACK. BATSIRAI MOVES WEST-SOUTHWESTWARDS DRIVEN BY THE SUBTROPICAL RIDGE TO THE SOUTH. ITS MOVEMENT SHOULD SLOW DOWN A BIT FROM FRIDAY IN RELATION WITH THE RELATIVE WEAKENING OF THE SUBTROPICAL RIDGE. FROM SUNDAY, THE STRENGTHENING OF THE SUBTROPICAL RIDGE SOUTH OF MADAGASCAR SHOULD BEND THE TRACK TOWARDS THE WEST-NORTHWEST WHILE THE SYSTEM WILL TRANSIT EAST OF THE MASCAREIGNES (NEAR RODRIGUES ISLAND). AT THIS RANGE, AND GIVEN THE SPREAD IN THE NUMERICAL GUIDANCE, THERE IS A LARGE UNCERTAINTY ON THE TIMING AND DISTANCE OF PASSAGE TO THE INHABITED ISLANDS.

THE WINDOW OF FAVORABLE CONDITIONS SEEMS TO START CLOSING. THE NORTH

VERTICAL SHEAR IN THE MID-TROPOSPHERE IS INCREASING IN THE CIMSS DATA AND SEEMS TO BE CONFIRMED BY THE LATEST SATELLITE IMAGES. DUE TO ITS SMALL SIZE, BATSIRAI COULD EXPERIENCE A RAPID WEAKENING IN THE NEXT 24 HOURS. THE PRESENT SHORT TERM INTENSITY FORECAST COULD UNDERESTIMATE THE WEAKENING.

AFTERWARDS, CONDITIONS COULD PROGRESSIVELY BECOME FAVORABLE AGAIN BY THE BEGINNING OF NEXT WEEK, UNDER THE UPPER RIDGE WITH A GOOD DIVERGENCE IN THE NORTHWEST QUADRANT. THE SYSTEM COULD THEN REGAIN THE TROPICAL CYCLONE INTENSITY. THE PRESENT INTENSITY FORECAST IS STILL VERY UNCERTAIN AND COULD CHANGE SIGNIFICANTLY IN THE NEXT FEW DAYS.

**POSSIBLE IMPACTS ON INHABITED LANDS:**

THIS SYSTEM WILL STAY FAR FROM INHABITED LANDS UNTIL SATURDAY INCLUDED. FROM SUNDAY OR MONDAY, IT COULD APPROACH THE EAST OF THE MASCARENE ARCHIPELAGO ESPECIALLY RODRIGUES ISLAND IN THE FIRST PLACE) BEING INTENSIFIED. IT IS STILL TOO EARLY TO ASSESS RELIABLY THE POSSIBLE IMPACTS. NEVERTHELESS, MASCARENE INHABITANTS ARE INVITED TO MONITOR CLOSELY THE EVOLUTION OF BATSIRAI.