

WTIO30 FMEE 061245

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 46/2/20212022

1.A OVERLAND DEPRESSION 2 (BATSIRAI)

2.A POSITION 2022/02/06 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 22.9 S / 44.4 E

(TWENTY TWO DECIMAL NINE DEGREES SOUTH AND  
FORTY FOUR DECIMAL FOUR DEGREES EAST)

MOVEMENT: SOUTH-WEST 13 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 990 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: 445 SE: 555 SW: 555 NW: 295

34 KT NE: 0 SE: 0 SW: 390 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 1000 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/02/07 00 UTC: 23.7 S / 42.2 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 240 SE: 435 SW: 445 NW: 215

34 KT NE: 0 SE: 250 SW: 250 NW: 120

24H: 2022/02/07 12 UTC: 24.3 S / 41.4 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 305 SE: 370 SW: 445 NW: 295

34 KT NE: 85 SE: 230 SW: 215 NW: 165

36H: 2022/02/08 00 UTC: 25.7 S / 41.0 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 400 SE: 500 SW: 445 NW: 295

34 KT NE: 140 SE: 305 SW: 280 NW: 175

48H: 2022/02/08 12 UTC: 27.0 S / 41.2 E, VENT MAX= 040 KT, MODERATE TROPICAL  
STORM

28 KT NE: 425 SE: 510 SW: 425 NW: 315

34 KT NE: 155 SE: 325 SW: 250 NW: 185

60H: 2022/02/09 00 UTC: 28.6 S / 41.6 E, VENT MAX= 040 KT, POST-TROPICAL

## DEPRESSION

28 KT NE: 455 SE: 470 SW: 405 NW: 270

34 KT NE: 175 SE: 325 SW: 270 NW: 155

72H: 2022/02/09 12 UTC: 31.5 S / 42.2 E, VENT MAX= 040 KT, POST-TROPICAL DEPRESSION

28 KT NE: 490 SE: 510 SW: 390 NW: 280

34 KT NE: 195 SE: 350 SW: 270 NW: 155

## 2.B LONGER-RANGE OUTLOOK:

96H: 2022/02/10 12 UTC: 34.2 S / 45.4 E, VENT MAX= 030 KT, POST-TROPICAL DEPRESSION

28 KT NE: 445 SE: 220 SW: 260 NW: 325

120H: 2022/02/11 12 UTC: 36.1 S / 52.4 E, VENT MAX= 025 KT, FILLING UP

## 2.C ADDITIONAL INFORMATION:

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THE OVERLAND DEPRESSION BATSARAI IS CURRENTLY CENTERED OVER THE PROVINCE OF ATSIMO-ANDREFANA (MADAGASCAR) AND CONTINUES ITS SOUTHWESTWARD TRACK AT A GOOD PACE. AS SUGGESTED BY THE PARTIAL 0630Z ASCAT-C, THE SYSTEM IS STILL GENERATING GALE FORCE WIND OVER THE EASTERN SIDE OF MADAGASCAR. THE WIND EXTENSIONS HAVE BEEN UPDATED IN CONSEQUENCE. THE SATELLITE ANIMATIONS SHOW THAT AS THE SYSTEM WEAKENS OVER MADAGASCAR, THE INFLUENCE OF BATSARAI HAS WIDENED AND THE PERIPHERAL BANDS CAN BE SEEN OVER A LARGE PART OF SOUTHERN MADAGASCAR.

THE SYSTEM IS PLANNED TO EMERGE IN THE MOZAMBIQUE CHANNEL TONIGHT, IN THE SAINT-AUGUSTIN BAY, NEAR THE CITY OF TULEAR. ONCE BACK AT SEA, BATSIRAI SHOULD BEGIN A GRADUAL TURN TO THE SOUTH AND THEN TO THE SOUTHEAST DUE TO THE WEAKNESS OF THE MID-TROPOSPHERE HIGH GEOPOTENTIAL BELT TO THE SOUTH AS THE SUBTROPICAL RIDGE GRADUALLY RETREATS TOWARD THE CENTER OF THE BASIN. BATSIRAI WILL THEN ACCELERATE MORE STRONGLY TOWARDS THE SOUTHEAST FROM TUESDAY, FOLLOWING THE APPROACH OF A MID-LATITUDE TROUGH FROM THE WEST.

IN THE MOZAMBIQUE CHANNEL, AFTER A SIGNIFICANT WEAKENING FOLLOWING ITS PASSAGE OVER THE LAND, THE RATHER LARGE STRUCTURE OF THE SYSTEM WILL NOT REALLY ALLOW TO TAKE ADVANTAGE OF THE CONDUCIVE ENVIRONMENTAL CONDITIONS AT FIRST. QUICKLY AT THE BEGINNING OF NEXT WEEK, BATSIRAI SHOULD ENCOUNTER UNFAVOURABLE ENVIRONMENTAL CONDITIONS DURING ITS DIVE TOWARDS THE MID-LATITUDES: WINDSHEAR ALOFT, PROGRESSIVELY INJECTING DRY AIR IN THE NORTHERN SEMICIRCLE OF THE SYSTEM, THEN INSUFFICIENT OCEANIC POTENTIAL IN THE MIDDLE OF THE WEEK. AFTER THE 30TH PARALLEL, BATSARAI SHOULD START A POST-TROPICAL TRANSITION PROBABLY IN THE MIDDLE OF THE WEEK BY INTERACTION WITH A MID-LATITUDE TROUGH.

EXPECTED IMPACTS ON MADAGASCAR AND THE SOUTHERN CHANNEL:

- DEGRADED CONDITIONS WILL PERSIST OVER A LARGE SOUTHERN PART OF

MADAGASCAR, BETWEEN MAINTIRANO AND CAP SAINTE-MARIE, WITH 24-HOUR RAINFALL TOTALS IN THE RANGE OF 200 TO 400 MM OVER THE EASTERN PLATEAUS, AND IN THE RANGE OF 100 MM ELSEWHERE.

- GALE FORCE WINDS CONTINUED ALONG THE EAST COAST, AND AS THE SYSTEM SHIFTED, THE WINDS QUICKLY BECAME ESTABLISHED TO THE SOUTHWEST OF THE ISLAND, BETWEEN CAP SAINTE-MARIE AND CAP SAINT-VINCENT. THESE WINDS ARE ASSOCIATED WITH GUSTS CLOSE TO 100 KM/H ON THE EAST COAST AND THE FOOTHILLS OF THE HIGHLANDS, QUICKLY FADING TO APPEAR ON THE SOUTH-WESTERN SIDE OF THE ISLAND AT THE END OF THE DAY, TO BLOW BETWEEN 80 AND 100 KM/H.

- THE SOUTH-SOUTHEAST SWELL WILL STILL CONCERN THE EAST COAST OF MADAGASCAR FOR A HEIGHT EVOLVING BETWEEN 3 AND 4 METERS, WITH A PROGRESSIVE WEAKENING AT THE BEGINNING OF NEXT WEEK. WITH THE RETURN OF BATSIRAI IN THE EVENING IN THE MOZAMBIQUE CHANNEL, THE WIND WAVE WILL STRENGTHEN ON THE SOUTH-WESTERN COAST OF THE ISLAND BETWEEN 5 AND 6 METERS, FOLLOWED BY A BIG SOUTH-EAST SWELL WHICH WILL PEAK BETWEEN 3 AND 4 METERS HIGH DURING THE DAY ON MONDAY BEFORE DECREASING. THE TOTAL SEA BETWEEN CAPE ST-VINCENT AND CAPE ST-VINCENT WILL EVOLVE BETWEEN 4 AND 6 METERS UNTIL WEDNESDAY, THEN IT WILL PROGRESSIVELY DECREASE BEYOND THAT.