

WTIO30 FMEE 021913

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 31/2/20212022

1.A INTENSE TROPICAL CYCLONE 2 (BATSIRAI)

2.A POSITION 2022/02/02 AT 1800 UTC:

WITHIN 5 NM RADIUS OF POINT 18.9 S / 56.1 E

(EIGHTEEN DECIMAL NINE DEGREES SOUTH AND
FIFTY SIX DECIMAL ONE DEGREES EAST)

MOVEMENT: WEST 5 KT

3.A DVORAK ANALYSIS: 6.0/6.0/W 0.5/6 H

4.A CENTRAL PRESSURE: 940 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 100 KT

RADIUS OF MAXIMUM WINDS (RMW): 15 KM

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

28 KT NE: 295 SE: 350 SW: 425 NW: 335

34 KT NE: 280 SE: 260 SW: 335 NW: 280

48 KT NE: 140 SE: 150 SW: 140 NW: 140

64 KT NE: 65 SE: 65 SW: 65 NW: 65

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 1400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/02/03 06 UTC: 19.4 S / 54.7 E, VENT MAX= 090 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 315 SE: 345 SW: 425 NW: 325

34 KT NE: 205 SE: 185 SW: 240 NW: 185

48 KT NE: 110 SE: 110 SW: 130 NW: 75

64 KT NE: 65 SE: 55 SW: 65 NW: 65

24H: 2022/02/03 18 UTC: 19.5 S / 53.7 E, VENT MAX= 095 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 325 SE: 435 SW: 455 NW: 335

34 KT NE: 215 SE: 240 SW: 285 NW: 195

48 KT NE: 120 SE: 120 SW: 140 NW: 85

64 KT NE: 75 SE: 65 SW: 75 NW: 75

36H: 2022/02/04 06 UTC: 19.6 S / 52.4 E, VENT MAX= 095 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 345 SE: 480 SW: 455 NW: 285

34 KT NE: 230 SE: 280 SW: 305 NW: 155

48 KT NE: 120 SE: 130 SW: 150 NW: 95
64 KT NE: 75 SE: 75 SW: 75 NW: 65

48H: 2022/02/04 18 UTC: 20.0 S / 50.6 E, VENT MAX= 100 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 325 SE: 500 SW: 390 NW: 230
34 KT NE: 220 SE: 295 SW: 280 NW: 130
48 KT NE: 100 SE: 120 SW: 130 NW: 85
64 KT NE: 75 SE: 85 SW: 75 NW: 65

60H: 2022/02/05 06 UTC: 20.2 S / 48.6 E, VENT MAX= 100 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 325 SE: 545 SW: 335 NW: 0
34 KT NE: 220 SE: 325 SW: 260 NW: 0
48 KT NE: 95 SE: 120 SW: 120 NW: 0
64 KT NE: 65 SE: 85 SW: 65 NW: 0

72H: 2022/02/05 18 UTC: 20.6 S / 46.6 E, VENT MAX= 040 KT, OVERLAND DEPRESSION

28 KT NE: 0 SE: 0 SW: 195 NW: 0
34 KT NE: 0 SE: 0 SW: 150 NW: 0

2.B LONGER-RANGE OUTLOOK:

96H: 2022/02/06 18 UTC: 21.9 S / 40.8 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM

28 KT NE: 305 SE: 400 SW: 490 NW: 280
34 KT NE: 230 SE: 280 SW: 315 NW: 155

120H: 2022/02/07 18 UTC: 22.8 S / 38.5 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 315 SE: 520 SW: 425 NW: 270
34 KT NE: 240 SE: 360 SW: 305 NW: 150
48 KT NE: 110 SE: 150 SW: 140 NW: 70

2.C ADDITIONAL INFORMATION:

T=CI=6.0

OVER THE LAST HOURS, THE EYE PATTERN HAS BEEN MAINTAINED, AND WE HAVE STARTED TO SEE THE BEGINNING OF ERC ON THE RADAR AND INFRARED IMAGES. THE LAST OBJECTIVE AND SUBJECTIVE DVORAK ANALYSES ARE STILL BETWEEN 6.0 AND 6.5. THE 1511Z SSMIS MICROWAVE IMAGE AND THE RADAR IMAGE DEPICT CONCENTRIC RINGS AROUND THE EYE WALL. THE CIMSS MPERC PROBABILITIES ARE CLEARLY INCREASING, PRESAGING A ERC IN PROGRESS, WEAKENING SLIGHTLY THE INNER EYEWALL. AS A CONSEQUENCE THE INTENSITY IS ESTIMATED AT 100 KT.

NO CHANGE IN THE TRACK OF BATSIRAI : IT REMAINS UNDER THE INFLUENCE OF THE SUBTROPICAL RIDGE, BATSIRAI IS MOVING ON A TRAJECTORY IN A GENERAL WEST-SOUTHWEST DIRECTION. ON THIS TRAJECTORY IT IS CURRENTLY PASSING CLOSE TO MAURITIUS AT ABOUT 150KM. IT WILL PASS CLOSE TO THE REUNION, TOMORROW MORNING AT ABOUT 160KM FROM THE ISLAND WITH AN UNCERTAINTY OF 50KM. THE PRESENCE OF THE ISLANDS COULD ALSO MODIFY THE TRAJECTORY. FROM TOMORROW, THE SUBTROPICAL RIDGE STRENGTHENS BY THE SOUTH-WEST ALLOWING A RESUMPTION OF A TRAJECTORY IN GENERAL DIRECTION OF THE

WEST TOWARDS THE EAST COAST OF MADAGASCAR. IT COULD THEN LAND IN THE AREA OF MAHANORO ON SATURDAY EARLY IN THE DAY WITH AN UNCERTAINTY OF 150KM. ON SUNDAY AND MONDAY, BATSIRAI COULD EMERGE IN THE SOUTHERN MOZAMBIQUE CHANNEL, CLOSE TO EUROPA.

CURRENTLY, BATSIRAI IS IN A RATHER FAVORABLE ENVIRONMENT UNTIL FRIDAY WITH A VERY GOOD UPPER DIVERGENCE IN THE NORTHERN SEMICIRCLE. THE INTENSITY UP TO THE LANDING ON MADAGASCAR WILL BE MAINLY DRIVEN BY INTERNAL PHENOMENA. IN PARTICULAR, THE EYEWALL REPLACEMENT CYCLE IF CONFIRMED SHOULD WEAKEN IN THE NEXT 24 HOURS BATSIRAI, BEFORE A POSSIBLE NEW INTENSIFICATION BEFORE LANDING. IN THE MOZAMBIQUE CHANNEL, THE SYSTEM COULD DEVELOP AGAIN UNDER FAVORABLE CONDITIONS. THIS PREDICTION IS THEREFORE STILL RATHER UNCERTAIN.

IMPACTS ON INHABITED LANDS:

- MAURITIUS AND REUNION : THE DETERIORATION OF METEOROLOGICAL CONDITIONS CONTINUES ON MAURITIUS AND REUNION. EVEN IF THE CORE OF THE CYCLONE SHOULD PASS MORE THAN 100KM AWAY FROM THE ISLANDS, SIGNIFICANT IMPACTS ARE TO BE FEARED. HEAVY RAINS ARE EXPECTED ESPECIALLY ON THE HIGH GROUNDS OF THE TWO ISLANDS. BOTH SHOULD BE CONCERNED BY GALE FORCE WINDS, WITH GUSTS EXCEEDING 120KM/H ON THE COAST. THE CYCLONIC SWELL SHOULD ALSO BE SENSITIVE REACHING 5M. THE EXPECTED SURGE REMAINS LOW, OF THE ORDER OF A FEW TENS OF CENTIMETERS. THESE IMPACTS COULD BE REINFORCED BY THE PROBABLE EYEWALL REPLACEMENT CYCLE.

- MADAGASCAR : THE ARRIVAL OF THE CYCLONE IS EXPECTED ON SATURDAY ON THE EASTERN COAST, POTENTIALLY AT A TROPICAL CYCLONE OR INTENSE TROPICAL CYCLONE STAGE. HEAVY RAIN AND WIND IMPACTS IS POSSIBLE FROM FRIDAY. THE FIRST FORECASTS OF THE STORM SURGE SUGGEST A MAXIMUM SURGE AROUND 1M SOUTH OF THE LANDING AREA.

THE UNCERTAINTY THAT REMAINS ON THE FORECAST OF TRAJECTORY AND INTENSITY OF SUCH A DANGEROUS SYSTEM NEAR INHABITED LANDS REQUIRES THE UTMOST CAUTION. THE POPULATIONS CONCERNED ARE INVITED TO FOLLOW THE EVOLUTION OF THE SITUATION WITH ATTENTION.