

WTIO30 FMEE 051752

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 43/2/20212022

1.A INTENSE TROPICAL CYCLONE 2 (BATSIRAI)

2.A POSITION 2022/02/05 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 20.9 S / 48.3 E  
(TWENTY DECIMAL NINE DEGREES SOUTH AND  
FORTY EIGHT DECIMAL THREE DEGREES EAST)  
MOVEMENT: WEST-SOUTH-WEST 11 KT

3.A DVORAK ANALYSIS: 5.0/5.5/D 0.5/12 H

4.A CENTRAL PRESSURE: 944 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 90 KT  
RADIUS OF MAXIMUM WINDS (RMW): 46 KM

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

28 KT NE: 335 SE: 665 SW: 405 NW: 205  
34 KT NE: 260 SE: 335 SW: 280 NW: 175  
48 KT NE: 130 SE: 165 SW: 160 NW: 130  
64 KT NE: 100 SE: 120 SW: 110 NW: 100

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1001 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/02/06 06 UTC: 21.9 S / 45.8 E, VENT MAX= 000 , OVERLAND DEPRESSION

24H: 2022/02/06 18 UTC: 23.0 S / 43.3 E, VENT MAX= 000 , TROPICAL DEPRESSION

36H: 2022/02/07 06 UTC: 23.9 S / 42.0 E, VENT MAX= 000 , MODERATE TROPICAL STORM

48H: 2022/02/07 18 UTC: 24.9 S / 41.6 E, VENT MAX= 000 , MODERATE TROPICAL STORM

60H: 2022/02/08 06 UTC: 26.0 S / 41.5 E, VENT MAX= 000 , MODERATE TROPICAL STORM

72H: 2022/02/08 18 UTC: 27.4 S / 41.7 E, VENT MAX= 000 , MODERATE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK:

96H: 2022/02/09 18 UTC: 31.5 S / 42.9 E, VENT MAX= 000 , POST-TROPICAL DEPRESSION

120H: 2022/02/10 18 UTC: 34.5 S / 46.5 E, VENT MAX= 000 , POST-TROPICAL DEPRESSION

2.C ADDITIONAL INFORMATION:

T=5.0+ CI=5.5

DURING THE LAST 6 HOURS, THE BATSIRAI EYE CONFIGURATION HAS CHANGED LITTLE, WITH STILL VERY COLD TOPS SURROUNDING AN EYE REMAINING WELL DEFINED IN VIS/IR IMAGERY. SSMIS IMAGERY CONFIRMS THE MAXIMUM WIND RADIUS. THE INTENSITY IS UNCHANGED IN COMPROMISE BETWEEN THE OBJECTIVE GUIDANCE (A BIT HIGHER), THE SMAP PASS AROUND 00Z THIS MORNING AT 94 KT AND THE SUBJECTIVE ESTIMATES.

BATSIRAI IS MOVING ON A WEST-SOUTHWEST TRAJECTORY TOWARD THE MADAGASCAR COAST AT A FASTER SPEED. THE LANDING ON MADAGASCAR IS IN PROGRESS WITH THE EYE ALMOST COMPLETELY ENTERED ON THE COAST NEAR THE NORTH OF MANANJARY.

ON SUNDAY EVENING, BATSIRAI WILL EMERGE, WEAKENED, IN THE SOUTH OF THE MOZAMBIQUE CHANNEL. IT WILL CURVE ITS TRACK TOWARDS THE SOUTH-WEST THEN SOUTH AT THE BEGINNING OF NEXT WEEK BECAUSE OF THE WEAKENING AND THE SHIFT TOWARDS THE EAST OF THE SUBTROPICAL RIDGE AND THE APPROACH OF A TROUGH BY THE SOUTH-WEST.

THE INTENSITY THUS REMAINED MORE OR LESS UNCHANGED BEFORE THE LANDING. IN THE MOZAMBIQUE CHANNEL, AFTER A SIGNIFICANT WEAKENING FOLLOWING ITS PASSAGE OVER LAND, THE SYSTEM SHOULD HAVE A RATHER LARGE STRUCTURE WHICH WILL NOT REALLY ALLOW IT TO TAKE ADVANTAGE OF THE FAIRLY GOOD ENVIRONMENTAL CONDITIONS AT FIRST. IN THE LONGER TERM, THE ENVIRONMENTAL CONDITIONS (SHEAR, PRESENCE OF DRY AIR IN THE NORTHWEST OF THE SYSTEM, DECREASING OCEANIC POTENTIAL) SHOULD LIMIT THE INTENSITY OF THE SYSTEM DURING ITS DIVE TOWARDS THE SOUTHERN LATITUDES WITH A PROBABLE POST-TROPICAL TRANSITION IN THE MIDDLE OF THE WEEK BY INTERACTION WITH A MID-LATITUDE TROUGH.

EXPECTED IMPACTS ON MADAGASCAR :

BATSIRAI IS A VERY DANGEROUS CYCLONE FOR THE EAST COAST OF MADAGASCAR, WITH A LANDFALL GOING ON BETWEEN NOSY VARIKA AND MANANJARY. EXTREME AND DESTRUCTIVE GUSTS UP TO 200 KM/H OR MORE ARE LIKELY IN THE IMPACT AREA. WAVES RELATED TO THE CYCLONIC SWELL ARE EXPECTED TO REACH HEIGHTS OF 10 TO 15 METERS AND A SURGE OF MORE THAN 1 METER IS LIKELY NEAR AND SOUTH OF THE LANDING AREA WITH SIGNIFICANT COASTAL FLOODING IN THE MANANJARY AREA AND SOUTH OF THE IMPACT ZONE. THE RAINFALL EXPECTED DURING THE CROSSING OF THE ISLAND COULD BE OF THE ORDER OF 100 MM IN 24 HOURS IN GENERAL OVER PART OF THE SOUTHERN HALF OF MADAGASCAR BUT WITH AMOUNTS OF THE ORDER OF 300/500 MM ON THE HIGHLANDS LOCATED NEAR THE IMPACT POINT. THE POPULATIONS CONCERNED ARE INVITED TO BE VERY CAREFUL AND TO FOLLOW THE INSTRUCTIONS OF THE LOCAL AUTHORITIES.