

WTIO30 FMEE 121205

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 84/7/20222023

1.A MODERATE TROPICAL STORM 7 (FREDDY)

2.A POSITION 2023/03/12 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 17.2 S / 36.3 E

(SEVENTEEN DECIMAL TWO DEGREES SOUTH AND  
THIRTY SIX DECIMAL THREE DEGREES EAST)

MOVEMENT: WEST-NORTH-WEST 5 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 996 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: 220 SW: 95 NW: 0

34 KT NE: 0 SE: 130 SW: 55 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/03/13 00 UTC: 16.9 S / 35.4 E, VENT MAX= 030 KT, OVERLAND DEPRESSION  
28 KT NE: 0 SE: 280 SW: 195 NW: 0

24H: 2023/03/13 12 UTC: 16.6 S / 34.9 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

36H: 2023/03/14 00 UTC: 16.4 S / 35.0 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

48H: 2023/03/14 12 UTC: 16.6 S / 35.5 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

60H: 2023/03/15 00 UTC: 17.5 S / 37.0 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

72H: 2023/03/15 12 UTC: 18.5 S / 38.5 E, VENT MAX= 025 KT, ZONE OF DISTURBED  
WEATHER

2.B LONGER-RANGE OUTLOOK:

96H: 2023/03/16 12 UTC: 20.1 S / 40.9 E, VENT MAX= 025 KT, ZONE OF DISTURBED  
WEATHER

2.C ADDITIONAL INFORMATION:

T=CI=NIL

THE CLOUD PATTERN HAS WEAKENED A LOT DURING THE LAST 6 HOURS, BUT THE CONVECTIVE ACTIVITY IS STILL PRESENT NEAR THE CENTER. IN THE ABSENCE OF DATA MEASURED ON LAND, IT REMAINS DIFFICULT TO ESTIMATE THE INTENSITY OF THE WINDS BUT THE PARTIAL ASCENDING PASS OF 0721UTC ALLOWS TO NOTE THE END OF THE GALE ON SEA AT THE END OF THIS BULLETIN. THE SATELLITE ANIMATIONS ALSO ALLOW TO NOTE THAT THE CIRCULATION IS STILL DEEP. AN ESTIMATE OF 35KT IS MADE AT THE MOMENT FOR FREDDY WHICH IS STILL DESIGNATED AS A MODERATE TROPICAL STORM BECAUSE OF THE CONVECTIVE ACTIVITY STILL NOTABLE NEAR ITS CENTER, ALTHOUGH WEAKENING.

LITTLE CHANGE IN TERMS OF FORECAST, THE SUBTROPICAL RIDGE PRESENT IN THE SOUTHWEST OF THE SYSTEM CONTINUES TO DIRECT FREDDY A LITTLE MORE WEST-NORTHWEST UNTIL MONDAY DURING THE DAY BEFORE A SLOWDOWN OF THE MOVEMENT UNDER THE CONTRADICTION EFFECT OF THE NEAR EQUATORIAL RIDGE FURTHER NORTH. FROM TUESDAY ONWARDS, A NORTH-WESTERLY FLOW IN THE LOW TROPOSPHERE SHOULD REDIRECT THE RESIDUAL MINIMUM TOWARDS THE SOUTH-EAST WITH A POSSIBLE EXIT INTO THE SEA BY THE MIDDLE OF NEXT WEEK. THE RSMC FORECAST REMAINS BASED ON A COMPROMISE BETWEEN THE BEST GUIDANCE ON THE CURRENT SITUATION, EXCLUDING GUIDANCE THAT IS TOO FAST OR REMAINS TOO MUCH ON THE SEA.

FREDDY WILL CONTINUE TO WEAKEN DURING ITS TRACK OVERLAND. IF THE HYPOTHESIS OF AN OUTBURST AT SEA IS CONFIRMED, THE ATMOSPHERIC CONDITIONS DO NOT SEEM TO BE FAVORABLE FOR A RE-INTENSIFICATION ACCORDING TO THE EVOLUTION ENVISAGED. INDEED, FROM TUESDAY, THE VERTICAL SHEAR (DEEP AND MEDIUM) FROM WEST TO NORTH-WEST INCREASES SIGNIFICANTLY, ACCOMPANIED BY INTRUSION OF DRY AIR IN THE MIDDLE TROPOSPHERE. THE OCEANIC POTENTIAL HAVING ALSO DECREASED (ALTHOUGH POCKETS OF SUFFICIENT ENERGY POTENTIAL ARE STILL PRESENT IN THE CHANNEL), NO SIGNIFICANT RE-INTENSIFICATION IS SUGGESTED FOR THE MOMENT AND IT IS THE SCENARIO OF AN OUTFLOW OF A DISTURBED AREA NOT ACCOMPANIED BY STRONG WINDS THAT IS FAVORED.

IMPACTS ON INHABITED LANDS DURING THE NEXT 72 HOURS:

THE CURRENT AND FORECAST SLOW MOVEMENT OF FREDDY REMAINS AN AGGRAVATING FACTOR ON THE EXPECTED IMPACTS.

- MOZAMBIQUE :

\* GALE CONDITIONS PERSIST INTO LATE SUNDAY. STRONG WIND GUSTS WILL STILL BE PRESENT TODAY AND TOMORROW NEAR THE CENTER AND IN THE SOUTHERN SEMICIRCLE OF FREDDY.

\* CONTINUATION OF THE EPISODE OF HEAVY RAINS OVER THE PROVINCE OF ZAMBEZIE AND NORTHERN SOFALA. IN THE NEXT 48 HOURS, BETWEEN 200 AND 350 MM ARE EXPECTED ON THE AREA.

-MALAWI:

THE RAINY EPISODE STARTS TODAY WITH ACCUMULATIONS OVER 48 HOURS THAT COULD REACH 200 TO 300 MM OVER THE SOUTH OF THE COUNTRY, LOCALLY MORE OVER THE RELIEF. THE RAINIEST DAY SHOULD BE MONDAY.