

WTIO30 FMEE 120637

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

0.A WARNING NUMBER: 83/7/20222023

1.A SEVERE TROPICAL STORM 7 (FREDDY)

2.A POSITION 2023/03/12 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 17.3 S / 36.8 E

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

MOVEMENT: NORTH-WEST 3 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 992 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 50 KT

RADIUS OF MAXIMUM WINDS (RMW): 37 KM

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

28 KT NE: 260 SE: 260 SW: 285 NW: 110

34 KT NE: 130 SE: 195 SW: 215 NW: 75

48 KT NE: 45 SE: 45 SW: 50 NW: 45

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: 2023/03/12 18 UTC: 17.1 S / 35.9 E, VENT MAX= 030 KT, OVERLAND DEPRESSION

28 KT NE: 100 SE: 270 SW: 220 NW: 0

24H: 2023/03/13 06 UTC: 16.7 S / 35.1 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

36H: 2023/03/13 18 UTC: 16.4 S / 34.8 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

48H: 2023/03/14 06 UTC: 16.5 S / 35.2 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

60H: 2023/03/14 18 UTC: 17.0 S / 36.2 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

72H: 2023/03/15 06 UTC: 18.0 S / 37.8 E, VENT MAX= 020 KT, ZONE OF DISTURBED
WEATHER

2.B LONGER-RANGE OUTLOOK:

96H: 2023/03/16 06 UTC: 19.4 S / 40.4 E, VENT MAX= 025 KT, ZONE OF DISTURBED
WEATHER

2.C ADDITIONAL INFORMATION:

THE EYE CONFIGURATION HAS DISAPPEARED SINCE MORE THAN 2 HOURS, BUT THE CONVECTIVE ACTIVITY AND THE CIRCULATION ARE STILL VERY PRESENT, CLOSE TO THE CENTER. IN THE ABSENCE OF DATA MEASURED ON THE GROUND, IT IS DIFFICULT TO ESTIMATE THE INTENSITY OF THE WINDS BUT CONSIDERING THE SATELLITE ANIMATIONS AND GIVEN THE CONFIGURATION OF THE LANDSCAPE (PLAIN) THE CIRCULATION STILL SEEMS WELL MARKED. WITH THE MICROWAVE PASS OF 0137UTC, WE CAN NOTE HOWEVER A NOTABLE DECREASE OF THE LOW LAYER CIRCULATION AND AN ESTIMATE OF 50KT IS THUS MADE AT THE PRESENT TIME AND THE DENOMINATION OF STRONG TROPICAL STORM IS STILL KEPT FOR FREDDY WHEREAS IT IS ON GROUND SINCE 12 HOURS.

NO CHANGE IN FORECAST, FREDDY WILL CONTINUE ITS SLOW NORTHWESTERLY MOVEMENT DRIVEN BY THE SUBTROPICAL RIDGE TO THE SOUTHWEST OF THE SYSTEM. THIS TRACK SHOULD CONTINUE UNTIL MONDAY BEFORE SLOWING DOWN. FROM TUESDAY ONWARDS, THE RIDGE IN THE SOUTH-WEST IS MOVING AWAY AND A NORTH-WESTERLY FLOW IN THE LOW TROPOSPHERE SHOULD REDIRECT THE RESIDUAL MINIMUM TOWARDS THE SOUTH-EAST WITH A POSSIBLE EXIT INTO THE SEA AROUND 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 OFFSHORE.

FREDDY CONTINUES TO WEAKEN ON LAND, ALTHOUGH RESISTING SIGNIFICANTLY DUE TO THE RELIEF NEAR ITS CENTER. IF THE HYPOTHESIS OF AN OUTBURST AT SEA IS CONFIRMED, THE ATMOSPHERIC CONDITIONS DO NOT SEEM TO BE FAVORABLE TO A RE-INTENSIFICATION ACCORDING TO THE EVOLUTION ENVISAGED. INDEED, FROM TUESDAY, THE VERTICAL SHEAR (DEEP AND MEDIUM) FROM WEST TO NORTH-WEST IS INCREASING SIGNIFICANTLY, ACCOMPANIED BY INTRUSION OF DRY AIR IN THE MIDDLE TROPOSPHERE. THE OCEANIC POTENTIAL HAVING ALSO DECREASED (ALTHOUGH POCKETS OF SUFFICIENT ENERGETIC 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 ZONE 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 :

* STORM CONDITIONS NEAR THE CENTER AND ON THE COASTAL AREA PERSIST THIS MORNING BEFORE FADING THIS AFTERNOON. GALE CONDITIONS PERSIST THROUGHOUT THE DAY ALONG THE NEAREST COASTLINE BEFORE FADING OVERNIGHT. TODAY AND TOMORROW STRONG WIND GUSTS (UP TO 100 KM/H) WILL PERSIST NEAR THE CENTER AND IN THE SOUTHERN SEMICIRCLE OF FREDDY.

* THE VERY STRONG SEA (WAVES OF 4M TO 5M) IN THE MORNING DAMPING DOWN AT THE END OF THE DAY.

* CONTINUATION OF THE EPISODE OF HEAVY RAINS OVER THE PROVINCE OF ZAMBEZIE. IN THE NEXT 24 HOURS, BETWEEN 100 AND 150 MM ARE EXPECTED ON THE IMPACTED COAST AND BETWEEN 200 AND 300 MM IN THE INTERIOR (ZAMBEZIE AND NORTHERN SOFALA PROVINCES). WITHIN 72 HOURS, BETWEEN 400 AND 500 MM EXPECTED OVER THE INTERIOR OF ZAMBEZIA PROVINCE MAINLY.

-MALAWI:

THE RAINY EPISODE STARTS TODAY WITH ACCUMULATIONS OVER 72 HOURS THAT COULD REACH 400 TO 500 MM OVER THE SOUTH OF THE COUNTRY, LOCALLY MORE OVER THE RELIEF (ACCUMULATIONS OVER THE NEXT 24 HOURS, IN THE ORDER OF 100 TO 200 MM). THE RAINIEST DAY SHOULD BE MONDAY.