

WTIO30 FMEE 241252

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 41/7/20222023

1.A MODERATE TROPICAL STORM 7 (FREDDY)

2.A POSITION 2023/02/24 AT 1200 UTC:

WITHIN 30 NM RADIUS OF POINT 22.5 S / 35.5 E

(TWENTY TWO DECIMAL FIVE DEGREES SOUTH AND

THIRTY FIVE DECIMAL FIVE DEGREES EAST)

MOVEMENT: WEST 9 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 986 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 45 KT

RADIUS OF MAXIMUM WINDS (RMW): 65 KM

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

28 KT NE: 205 SE: 220 SW: 220 NW: 220

34 KT NE: 130 SE: 165 SW: 150 NW: 130

48 KT NE: 0 SE: 0 SW: 0 NW: 0

64 KT NE: 0 SE: 0 SW: 0 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/02/25 00 UTC: 22.4 S / 33.8 E, VENT MAX= 035 KT, OVERLAND DEPRESSION

28 KT NE: 130 SE: 155 SW: 155 NW: 100

34 KT NE: 85 SE: 100 SW: 85 NW: 55

24H: 2023/02/25 12 UTC: 22.7 S / 32.9 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

36H: 2023/02/26 00 UTC: 21.4 S / 32.9 E, VENT MAX= 025 KT, FILLING UP

48H: 2023/02/26 12 UTC: 20.8 S / 32.7 E, VENT MAX= 025 KT, FILLING UP

60H: 2023/02/27 00 UTC: 19.9 S / 32.0 E, VENT MAX= 025 KT, FILLING UP

72H: 2023/02/27 12 UTC: 19.8 S / 30.7 E, VENT MAX= 020 KT, FILLING UP

2.B LONGER-RANGE OUTLOOK:

96H: 2023/02/28 12 UTC: 19.2 S / 27.5 E, VENT MAX= 020 KT, DISSIPATING

2.C ADDITIONAL INFORMATION:

T=CI=/

FREDDY HAS CONTINUED TO MOVE WESTWARD, WEAKENING SIGNIFICANTLY AS IT APPROACHES THE COAST OF MOZAMBIQUE. FREDDY LANDED AS A MODERATE TROPICAL STORM, IMMEDIATELY SOUTH OF THE CITY OF VILANCULOS (INHAMBANE PROVINCE) AT 12 UTC. LIKE THIS MORNING, THE CONVECTION BECAME MORE SPARSE AND SCATTERED, AND THE CLOUD TOPS CONTINUED TO WARM UP. IN THE ABSENCE OF RECENT MICROWAVE IMAGES, IT IS DIFFICULT TO ESTIMATE THE STRENGTH OF THE INNER CORE O, AS WELL AS THE PRECISE LOCATION OF THE LOW LEVEL CENTER. GIVEN THESE RECENT ELEMENTS PUT FORWARD ABOVE, AND OF THE AVERAGE WIND SPEED PROVIDED BY THE STATION OF VILANCULOS, PRESENTING AN AVERAGE WIND OF 30KT AT 12 UTC FROM NORTH-WEST, THE INTENSITY OF THE SYSTEM IS ASSESSED AT 45KT.

FREDDY SHOULD CONTINUE WESTWARD, GUIDED BY THE PRESENCE OF A RIDGE OF HIGH PRESSURE TO THE SOUTH, UNTIL THE BEGINNING OF THE WEEKEND. THEN UNDER THE EFFECT OF THE PASSAGE OF A UPPER TROUGH IN THE SOUTH-WEST THEN OF THE REINFORCEMENT OF HIGH GEOPOTENTIALS IN THE SOUTH-WEST, FREDDY SHOULD CURVE ITS MOVEMENT TO THE NORTH-NORTH-WEST UNTIL MONDAY, BY GOING INTO THE AFRICAN LANDS WHILE FILLING UP DURABLY.

FROM NOW FREDDY SHOULD KNOW A PERIOD OF NOTABLE AND INCREASING WEAKENING, DURING ITS PASSAGE ON LAND. THE MINIMUM OF PRESSURE LINKED TO THE SYSTEM SHOULD BE FILLED PROGRESSIVELY FROM THIS WEEKEND TO DISSIPATE AT THE BEGINNING OF NEXT WEEK.

IMPACTS ON INHABITED LANDS OVER THE NEXT 72 HOURS:

- MOZAMBIQUE :

* GALE FORCE WINDS UNTIL EVENING, ON THE MARITIME COAST OF THE PROVINCE OF 'INHAMBANE.

* VERY ROUGH SEA (4-6M) UNTIL EVENING, ON THE MARITIME COAST OF THE PROVINCE OF 'INHAMBANE.

* INTENSE RAINFALL BETWEEN BEIRA AND INHAMBANE, SPREADING INLAND (GAZA PROVINCE / SOUTH MANICA / SOUTH SOFALA) WITH CUMULATIVE RAINFALL EXCEEDING 200 TO 300 MM AND LOCALLY 500 MM IN 72H, IN THE BORDER BETWEEN ZIMBABWE AND MOZAMBIQUE. SIGNIFICANT RISK OF FLOODS AND LANDSLIDES.

- ZIMBABWE:

* INTENSE RAINFALL IN THE SOUTHEAST OF THE COUNTRY, WITH ACCUMULATIONS OF 400 TO 500 MM IN 72 HOURS.