

WTIO30 FMEE 131239

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 88/7/20222023

1.A OVERLAND DEPRESSION 7 (FREDDY)

2.A POSITION 2023/03/13 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 16.5 S / 34.5 E

(SIXTEEN DECIMAL FIVE DEGREES SOUTH AND

THIRTY FOUR DECIMAL FIVE DEGREES EAST)

MOVEMENT: NORTH-WEST 3 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 999 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 25 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 0 SE: 0 SW: 0 NW: 0

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

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): 1008 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/03/14 00 UTC: 16.0 S / 34.2 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

24H: 2023/03/14 12 UTC: 15.5 S / 34.5 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

36H: 2023/03/15 00 UTC: 15.8 S / 35.6 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

48H: 2023/03/15 12 UTC: 17.1 S / 37.2 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

60H: 2023/03/16 00 UTC: 18.0 S / 38.5 E, VENT MAX= 015 KT, ZONE OF DISTURBED  
WEATHER

72H: 2023/03/16 12 UTC: 19.4 S / 40.9 E, VENT MAX= 015 KT, DISSIPATING

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

DURING THE LAST 6 HOURS, THE OVERLAND DEPRESSION HAS SLOWED DOWN AND

HAS STARTED TO TURN NORTH-NORTHWESTWARD ALONG THE BORDER BETWEEN SOUTHERN MALAWI AND MOZAMBIQUE. CONVECTION IS LESS ORGANIZED THAN THIS MORNING (AMSR2 OF 1104Z) BUT REMAINS QUITE INTENSE (SLIGHT DECREASE IN THE SOUTHERN SEMI-CIRCLE AND STRENGTHENING IN THE NORTHERN ONE). THE INTENSITY ESTIMATE IS LOWERED TO 25KT.

IN TERMS OF TRACK FORECASTING, THE SUBTROPICAL RIDGE TO THE SOUTHWEST OF THE SYSTEM CONTINUES TO STEER FREDDY NORTHWESTWARD BUT THE SYSTEM'S FORWARD SPEED IS SLOWING DOWN UNDER THE CONTRADICTORY EFFECT OF THE NEAR-EQUATORIAL RIDGE FURTHER NORTH. FROM TUESDAY ONWARDS, A NORTH-WESTERLY FLOW IN THE LOWER TROPOSPHERE SHOULD TAKE OVER AND REDIRECT THE REMNANT LOW SOUTH-EASTWARD WITH A POSSIBLE EXIT AT SEA AROUND MID-WEEK. THE RSMC FORECAST IS MAINLY BASED ON THE EUROPEAN MODEL'S TRACK.

FREDDY WILL KEEP SLOWLY WEAKENING OVERLAND. IF THE HYPOTHESIS OF AN EXIT AT SEA IS FAVORED, ALTHOUGH NOT SURE, ATMOSPHERIC CONDITIONS DO NOT SEEM CONDUCIVE FOR RE-INTENSIFICATION. BY MID-WEEK, WEST TO NORTHWESTERLY VERTICAL WIND SHEAR (DEEP AND MID-LEVEL) WILL INCREASE SIGNIFICANTLY, ACCOMPANIED BY MID-LEVEL DRY AIR INTRUSIONS. NO SIGNIFICANT RE-INTENSIFICATION IS STILL SUGGESTED BY MOST MODELS. IT SHOULD THUS EMERGE OUT AT SEA IN THE FORM OF A WEAK DISTURBED ZONE FROM WEDNESDAY THEN GRADUALLY DISSIPATE FROM THURSDAY UNDER THE EFFECT OF THESE UNFAVORABLE ENVIRONMENTAL CONDITIONS.

IMPACTS ON INHABITED LANDS OVER THE NEXT 72 HOURS:

- MOZAMBIQUE :

\* WIND GUSTS UP TO 80 KM/H TODAY IN THE CLOSE PERIPHERY OF THE SYSTEM, MOSTLY OVER NORTHERN SOFALA AND MANICA DISTRICTS, GRADUALLY WEAKENING ON TUESDAY.

\* INTENSE RAINFALL WILL PERSIST OVER ZAMBEZIA, NORTHERN SOFALA, NORTHERN MANICA AND SOUTHEAST TETE DISTRICTS, EXTENDING TUESDAY ALSO ON THE SOUTH OF NIASA DISTRICT. IN THE NEXT 48 HOURS, UP TO 200-300 MM TOTALS ARE EXPECTED IN THESE AREAS, AND LOCALLY 400 MM IN THE HIGHLANDS. MOREOVER, AS IT MOVES OUT INTO THE MOZAMBIQUE CHANNEL, ADDITIONAL ACCUMULATIONS OF 100 MM ARE EXPECTED ON THE COAST OF ZAMBEZIA WHICH WAS ALREADY AFFECTED DURING FREDDY'S LANDFALL. THESE RAIN TOTALS, ADDING TO PREVIOUS TOTALS, ARE LIKELY TO GENERATE VERY SEVERE FLOODS. END OF HEAVY RAINS AROUND WEDNESDAY NIGHT.

- MALAWI:

\* STRONG WIND GUSTS TODAY IN THE SOUTH OF THE COUNTRY, CLOSE TO 80 KM/H, WEAKENING QUICKLY TONIGHT.

\* HEAVY RAINFALL WITH ACCUMULATIONS THAT COULD REACH BETWEEN 300 AND 400 MM IN 48H OVER THE SOUTHERN TIP OF MALAWI AND LOCALLY A LITTLE MORE OVER THE HIGHER GROUND. END OF HEAVY RAINS AROUND WEDNESDAY NIGHT.

THIS IS THE LAST REGULAR ADVISORY FOR FREDDY BY LA REUNION RSMC, EXCEPT IN CASE OF UNEXPECTED INTENSIFICATION. A DAILY MONITORING WILL BE DONE IN THE COMING DAYS VIA ITCZ BULLETINS OF THE RSMC.