

WTIO30 FMEE 130659

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 17/4/20242025

1.A INTENSE TROPICAL CYCLONE 4 (CHIDO)

2.A POSITION 2024/12/13 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 11.2 S / 49.9 E
(ELEVEN DECIMAL TWO DEGREES SOUTH AND
FORTY NINE DECIMAL NINE DEGREES EAST)
MOVEMENT: WEST 12 KT

3.A DVORAK ANALYSIS: 5.0/6.0/W 0.5/6 H

4.A CENTRAL PRESSURE: 960 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 95 KT
RADIUS OF MAXIMUM WINDS (RMW): 26 KM

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

28 KT NE: 150 SE: 165 SW: 195 NW: 185
34 KT NE: 110 SE: 130 SW: 130 NW: 110
48 KT NE: 85 SE: 85 SW: 80 NW: 85
64 KT NE: 60 SE: 60 SW: 60 NW: 60

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/12/13 18 UTC: 11.8 S / 47.6 E, VENT MAX= 085 KT, TROPICAL CYCLONE
28 KT NE: 110 SE: 150 SW: 155 NW: 110
34 KT NE: 85 SE: 95 SW: 85 NW: 85
48 KT NE: 55 SE: 65 SW: 65 NW: 55
64 KT NE: 45 SE: 35 SW: 45 NW: 35

24H: 2024/12/14 06 UTC: 12.6 S / 45.2 E, VENT MAX= 090 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 110 SE: 185 SW: 155 NW: 100
34 KT NE: 85 SE: 110 SW: 100 NW: 75
48 KT NE: 55 SE: 65 SW: 75 NW: 55
64 KT NE: 35 SE: 45 SW: 35 NW: 35

36H: 2024/12/14 18 UTC: 13.0 S / 42.9 E, VENT MAX= 095 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 110 SE: 155 SW: 155 NW: 110
34 KT NE: 85 SE: 95 SW: 95 NW: 85
48 KT NE: 55 SE: 65 SW: 65 NW: 55

64 KT NE: 45 SE: 35 SW: 45 NW: 35

48H: 2024/12/15 06 UTC: 13.1 S / 40.4 E, VENT MAX= 065 KT, TROPICAL CYCLONE
28 KT NE: 110 SE: 130 SW: 130 NW: 95
34 KT NE: 75 SE: 75 SW: 75 NW: 65
48 KT NE: 55 SE: 55 SW: 55 NW: 45
64 KT NE: 35 SE: 35 SW: 30 NW: 30

60H: 2024/12/15 18 UTC: 13.3 S / 38.1 E, VENT MAX= 030 KT, TROPICAL DEPRESSION
28 KT NE: 0 SE: 0 SW: 110 NW: 0

72H: 2024/12/16 06 UTC: 14.6 S / 35.4 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK:
NIL

2.C ADDITIONAL INFORMATION:
T=5.0+ CI=5.5

OVER THE PAST 6 HOURS, CHIDO HAS COMPLETED AN EYEWALL REPLACEMENT CYCLE. THE SAR PASS AT 0209Z GAVE AN ESTIMATED INTENSITY OF 95KT AND A MAXIMUM WIND RADIUS OF 14 NM.

REGARDING THE TRACK, LITTLE HAS CHANGED. THERE IS FAIRLY GOOD AGREEMENT BETWEEN MODELS ON A WEST-SOUTH-WEST TRAJECTORY UNDER THE EFFECT OF A POWERFUL SUBTROPICAL RIDGE TO THE SOUTH-EAST. THIS FORECAST IS BASED ON THE BEST SHORT-RANGE SIMULATIONS (AROME 18Z AND IFS 00Z). ON THIS TRACK, CHIDO SHOULD PASS LESS THAN 70KM NORTH OF CAPE D'AMBRE. BEYOND THAT, CHIDO SHOULD PASS CLOSE TO GLORIEUSES, MAYOTTE, ANJOUAN AND MOHELI, BUT THE DISTANCES INVOLVED ARE STILL UNCERTAIN.

INTENSITY-WISE, OVER THE NEXT FEW HOURS CHIDO SHOULD EXPERIENCE A SLIGHT WEAKENING OF THE SYSTEM DUE TO THE CLEARING OF THE MIDDLE TROPOSPHERE. IT COULD THEN UNDERGO A NEW PHASE OF INTENSIFICATION, BENEFITING FROM SIGNIFICANT OCEANIC POTENTIAL IN THE MOZAMBIQUE CHANNEL AND DECREASING DEEP SHEAR, BEFORE MAKING LANDFALL OVER MOZAMBIQUE.

IMPACTS ON INHABITED LAND IN THE NEXT 72 HOURS (DUE TO THE SMALL SIZE OF THE SYSTEM, THERE IS A HIGH DEGREE OF UNCERTAINTY ABOUT THE IMPACTS, ESPECIALLY AS MOST OF THESE TERRITORIES ARE SMALL):

MADAGASCAR (NORTH OF ANTSIRANANA PROVINCE) :

- GALE VERY LIKELY AND STORM POSSIBLE
- RAINFALL TOTALS OF 50 TO 100 AND LOCALLY 150MM IN 12H
- VERY ROUGH (WAVES AROUND 4 TO 6M)
- 50 CM SURGE POSSIBLE
- RAPID IMPROVEMENT OVERNIGHT

GLORIEUSES, FROM FRIDAY EVENING TO MIDDAY SATURDAY :

- GALE FORCE AND STORM FORCE WINDS VERY LIKELY. POSSIBLE HURRICANE

FORCE.

- 150-250MM IN 12H POSSIBLE
- VERY ROUGH SEAS (WAVES AROUND 4 TO 6M)

MAYOTTE (SATURDAY) AND COMOROS (SATURDAY AND FOLLOWING NIGHT) :

- GALE AND STORM VERY LIKELY AND HURRICANE LIKELY
- GALE VERY LIKELY, STORM FORCE LIKELY AND POSSIBLE HURRICANE FORCE
- RAINFALL TOTALS OF 150 TO 200MM LOCALLY 300MM IN 12H POSSIBLE.
- VERY ROUGH TO HIGH SEAS (WAVES AROUND 4 TO 8M)
- 50 CM POSSIBLE STORM SURGE

MOZAMBIQUE (NAMPULA AND CABO DELGADO):

- DETERIORATION FROM SATURDAY TO SUNDAY NIGHT.
- GALE VERY LIKELY, STORM AND HURRICANE FORCE POSSIBLE
- RAINFALLS OF 50 TO 100MM UP TO 150-300MM LOCALLY
- ROUGH TO VERY ROUGH SEAS (WAVES AROUND 4 TO 6M), LOCALLY HIGH
- POSSIBLE STORM SURGE OF 50CM TO 1M.