



WTIO30 FMEE 120745 CCA

\*\*\*\*\*CORRECTIVE\*\*\*\*\*

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

0.A WARNING NUMBER: 13/4/20242025

1.A INTENSE TROPICAL CYCLONE 4 (CHIDO)

2.A POSITION 2024/12/12 AT 0600 UTC:  
WITHIN 20 NM RADIUS OF POINT 10.6 S / 54.5 E  
(TEN DECIMAL SIX DEGREES SOUTH AND  
FIFTY FOUR DECIMAL FIVE DEGREES EAST)  
MOVEMENT: WEST 10 KT

3.A DVORAK ANALYSIS: 6.5/6.5/D 1.0/6 H

4.A CENTRAL PRESSURE: 935 HPA  
5.A MAX AVERAGE WIND SPEED (10 MN): 115 KT  
RADIUS OF MAXIMUM WINDS (RMW): 17 KM

6.A EXTENSION OF WIND BY QUADRANTS (KM):  
28 KT NE: 130 SE: 165 SW: 175 NW: 120  
34 KT NE: 100 SE: 100 SW: 110 NW: 75  
48 KT NE: 65 SE: 65 SW: 60 NW: 55  
64 KT NE: 45 SE: 45 SW: 35 NW: 35

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: 2024/12/12 18 UTC: 10.9 S / 52.4 E, VENT MAX= 110 KT, INTENSE TROPICAL  
CYCLONE  
28 KT NE: 110 SE: 175 SW: 185 NW: 110  
34 KT NE: 85 SE: 95 SW: 130 NW: 85  
48 KT NE: 55 SE: 65 SW: 55 NW: 55  
64 KT NE: 45 SE: 35 SW: 45 NW: 35

24H: 2024/12/13 06 UTC: 11.0 S / 50.4 E, VENT MAX= 110 KT, INTENSE TROPICAL  
CYCLONE  
28 KT NE: 120 SE: 155 SW: 175 NW: 120  
34 KT NE: 95 SE: 85 SW: 120 NW: 95  
48 KT NE: 65 SE: 65 SW: 55 NW: 55  
64 KT NE: 45 SE: 35 SW: 35 NW: 35

36H: 2024/12/13 18 UTC: 11.7 S / 48.4 E, VENT MAX= 100 KT, INTENSE TROPICAL  
CYCLONE  
28 KT NE: 110 SE: 120 SW: 130 NW: 100

34 KT NE: 85 SE: 75 SW: 100 NW: 75  
48 KT NE: 55 SE: 55 SW: 45 NW: 45  
64 KT NE: 45 SE: 35 SW: 35 NW: 30

48H: 2024/12/14 06 UTC: 12.4 S / 46.2 E, VENT MAX= 080 KT, TROPICAL CYCLONE  
28 KT NE: 110 SE: 150 SW: 130 NW: 95  
34 KT NE: 85 SE: 85 SW: 100 NW: 65  
48 KT NE: 45 SE: 65 SW: 55 NW: 45  
64 KT NE: 35 SE: 35 SW: 35 NW: 35

60H: 2024/12/14 18 UTC: 13.1 S / 43.9 E, VENT MAX= 080 KT, TROPICAL CYCLONE  
28 KT NE: 100 SE: 140 SW: 130 NW: 100  
34 KT NE: 75 SE: 85 SW: 100 NW: 75  
48 KT NE: 45 SE: 65 SW: 55 NW: 55  
64 KT NE: 35 SE: 35 SW: 35 NW: 35

72H: 2024/12/15 06 UTC: 13.6 S / 41.8 E, VENT MAX= 090 KT, INTENSE TROPICAL  
CYCLONE  
28 KT NE: 120 SE: 175 SW: 150 NW: 95  
34 KT NE: 95 SE: 100 SW: 120 NW: 65  
48 KT NE: 55 SE: 65 SW: 55 NW: 45  
64 KT NE: 45 SE: 35 SW: 45 NW: 35

#### 2.B LONGER-RANGE OUTLOOK:

96H: 2024/12/16 06 UTC: 15.1 S / 36.7 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

120H: 2024/12/17 06 UTC: 17.2 S / 32.8 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

#### 2.C ADDITIONAL INFORMATION:

T=6.5+ CI=6.5+

INTENSE TROPICAL CYCLONE CHIDO MAINTAINS ITS SMALL SIZE AND MOVES WESTWARDS. OVER THE LAST 6 HOURS, THE EYE PATTERN HAS FURTHER IMPROVED, AS SHOWN BY IR AND VISIBLE SATELLITE PICTURES AND THE GPM MICROWAVE IMAGE FROM 0333Z. THE ASCAT SWATH AT 0517Z MEASURES 64KT NEAR THE CORE, CORRECTED TO 85KT; THIS MEASUREMENT SEEMS A LITTLE WEAK COMPARED WITH THE SUBJECTIVE EYE ANALYSIS (CI = 6.5+), THE SAR AT 0156Z AND THE OBJECTIVE ANALYSES, WHICH TEND TOWARDS 115KT. THIS VALUE HAS THEREFORE BEEN SELECTED.

IN TERMS OF TRACK, NO CHANGE IN THE SHORT TERM: THERE IS FAIRLY GOOD AGREEMENT BETWEEN THE MODELS UNTIL FRIDAY MORNING ON A TRACK TOWARDS THE WEST, THEN WEST-SOUTHWEST, UNDER THE EFFECT OF A POWERFUL SUBTROPICAL RIDGE TO THE SOUTH, SLIDING PROGRESSIVELY TOWARDS THE SOUTHEAST. ON THIS TRACK, CHIDO SHOULD PASS LESS THAN A HUNDRED KILOMETERS SOUTH OF FARQUHAR. FROM FRIDAY ONWARDS, THE DIFFERENCES BETWEEN THE GUIDANCES CONTINUE TO BE MORE MARKED, NOTABLY IN TERMS OF SPEED. THE NORTH/SOUTH UNCERTAINTIES ON THE TRACK ARE SMALLER, BUT HAVE A MAJOR IMPACT ON THE TERRITORIES AFFECTED OR NOT BY THE SYSTEM, GIVEN ITS SMALL SIZE. ON THIS POINT, CMRS FORECAST CHANGES LITTLE ON THE LATEST FORECAST, BUT THERE IS STILL A GREAT DEAL OF UNCERTAINTY AS TO THE DISTANCES AND TIMES OF PASSAGE IN RELATION TO THE ISLANDS TO THE NORTH

OF THE CHANNEL AND TO MOZAMBIQUE.

IN TERMS OF INTENSITY, AGAINST A BACKDROP OF STRONG OCEAN POTENTIAL AND REDUCED SHEAR, CHIDO SHOULD MAINTAIN ITS INTENSITY OVER THE NEXT 12-24H, THEN SHOW SLIGHT WEAKNESS DUE TO INTERNAL STRUCTURAL FLUCTUATIONS LINKED TO ITS SMALL SIZE. THEREAFTER, A MORE NOTICEABLE WEAKENING SHOULD TAKE PLACE AS THE SHEAR STRENGTHENS AGAIN. FORECASTING INTENSITY REMAINS A DELICATE TASK, GIVEN THE RAPID RESPONSE OF SUCH A SMALL SYSTEM TO ANY CHANGE IN ITS ENVIRONMENT. FROM SATURDAY ONWARDS, INTENSITY IN THE CHANNEL WILL BE HEAVILY DEPENDENT ON WHETHER OR NOT IT PASSES CLOSE TO MADAGASCAR. IN THE LONG TERM, A DECREASE IN SHEAR COULD FAVOR A NEW PHASE OF INTENSIFICATION, BEFORE A POSSIBLE LANDING 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):

AGALEGA :

- THE EYE PASSED OVER AGALEGA YESTERDAY AT 1830UTC
- RAPID IMPROVEMENT ON THURSDAY

FARQUHAR:

- STRONG GALE FORCE WINDS POSSIBLE BETWEEN THURSDAY EVENING AND FRIDAY MORNING.
- CUMULUS OF 50 TO 100MM POSSIBLE BETWEEN THURSDAY EVENING AND FRIDAY MORNING.
- VERY ROUGH SEAS (WAVES AROUND 4 TO 6M) BETWEEN THURSDAY EVENING AND FRIDAY MORNING.
- 40 CM SURGE POSSIBLE

MADAGASCAR (NORTHERN ANTSIRANANA PROVINCE) :

- GALE VERY LIKELY AND STORM POSSIBLE ON FRIDAY
- RAINFALL TOTALS OF 50 TO 100 AND LOCALLY 150-300 MM IN 12H POSSIBLE ON FRIDAY
- VERY ROUGH, LOCALLY HEAVY SEAS (WAVES AROUND 4 TO 6M OR MORE) ON FRIDAY
- 50 CM SURGE POSSIBLE

GLORIOUS :

- ON FRIDAY NIGHT AND SATURDAY MORNING, GALE FORCE WINDS LIKELY AND STORM OR HURRICANE POSSIBLE.
- RAINFALL TOTALS OF 50 TO 150MM IN 12H POSSIBLE ON SATURDAY
- HEAVY SEAS OVERNIGHT FRIDAY TO SATURDAY AND THE FOLLOWING MORNING

MAYOTTE :

- TEMPETE TRES PROBABLE ET HURAGAN POSSIBLE SAMEDI EN JOURNEE
- RAINFALL TOTALS 150 TO 300MM IN 12H POSSIBLE SATURDAY AND FOLLOWING NIGHT
- HEAVY TO VERY HEAVY SEAS (WAVES AROUND 4 TO 6M) SATURDAY AND FOLLOWING NIGHT
- SURGE OF 40CM POSSIBLE

COMOROS :

- STORM VERY LIKELY AND HURRICANE POSSIBLE LATE SATURDAY
- RAINFALL TOTALS 150 TO 300MM IN 12H POSSIBLE SATURDAY AND FOLLOWING NIGHT
- HEAVY TO VERY HEAVY SEAS (WAVES AROUND 4 TO 6M) SATURDAY AND FOLLOWING NIGHT
- SURGE OF 30CM POSSIBLE