

WTIO30 FMEE 111915 RSMC / TROPICAL CYCLONE CENTER / LA REUNION TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 11/4/20242025

1.A INTENSE TROPICAL CYCLONE 4 (CHIDO)

2.A POSITION 2024/12/11 AT 1800 UTC:

WITHIN 10 NM RADIUS OF POINT 10.4 S / 56.7 E (TEN DECIMAL FOUR DEGREES SOUTH AND FIFTY SIX DECIMAL SEVEN DEGREES EAST)

MOVEMENT: WEST 8 KT

3.A DVORAK ANALYSIS: 5.5/5.5/D 0.5/12 H

4.A CENTRAL PRESSURE: 952 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 95 KT RADIUS OF MAXIMUM WINDS (RMW): 19 KM

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

28 KT NE: 110 SE: 215 SW: 215 NW: 110 34 KT NE: 75 SE: 75 SW: 75 NW: 75 48 KT NE: 45 SE: 45 SW: 50 NW: 45

CALCE NE. 20 CE. 20 CM, 20 NM, 20

64 KT NE: 30 SE: 30 SW: 30 NW: 30

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 700 KM 8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/12/12 06 UTC: 10.5 S / 54.7 E, VENT MAX= 110 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 120 SE: 195 SW: 195 NW: 110 34 KT NE: 95 SE: 95 SW: 120 NW: 85 48 KT NE: 55 SE: 55 SW: 55 NW: 55 64 KT NE: 35 SE: 45 SW: 45 NW: 45

24H: 2024/12/12 18 UTC: 10.8 S / 52.7 E, VENT MAX= 100 KT, INTENSE TROPICAL

CYCLONE

28 KT NE: 110 SE: 195 SW: 195 NW: 130 34 KT NE: 85 SE: 95 SW: 120 NW: 100 48 KT NE: 55 SE: 55 SW: 55 NW: 55 64 KT NE: 45 SE: 45 SW: 45 NW: 35

36H: 2024/12/13 06 UTC: 11.2 S / 50.7 E, VENT MAX= 095 KT, INTENSE TROPICAL

CYCLONE

28 KT NE: 120 SE: 185 SW: 185 NW: 130 34 KT NE: 95 SE: 85 SW: 120 NW: 95

48 KT NE: 55 SE: 55 SW: 55 NW: 55 64 KT NE: 45 SE: 35 SW: 35 NW: 35

48H: 2024/12/13 18 UTC: 11.8 S / 48.9 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 110 SE: 165 SW: 130 NW: 100 34 KT NE: 85 SE: 75 SW: 100 NW: 75 48 KT NE: 45 SE: 45 SW: 55 NW: 45 64 KT NE: 35 SE: 35 SW: 45 NW: 35

60H: 2024/12/14 06 UTC: 12.6 S / 46.7 E, VENT MAX= 075 KT, TROPICAL CYCLONE

28 KT NE: 100 SE: 150 SW: 130 NW: 95 34 KT NE: 75 SE: 75 SW: 95 NW: 65 48 KT NE: 45 SE: 55 SW: 45 NW: 45 64 KT NE: 35 SE: 35 SW: 35 NW: 35

72H: 2024/12/14 18 UTC: 13.3 S / 44.4 E, VENT MAX= 075 KT, TROPICAL CYCLONE

28 KT NE: 100 SE: 175 SW: 150 NW: 95 34 KT NE: 75 SE: 85 SW: 100 NW: 65 48 KT NE: 45 SE: 55 SW: 45 NW: 45 64 KT NE: 35 SE: 35 SW: 35 NW: 35

2.B LONGER-RANGE OUTLOOK:

96H: 2024/12/15 18 UTC: 14.4 S / 39.3 E, VENT MAX= 040 KT, MODERATE TROPICAL

STORM

28 KT NE: 0 SE: 195 SW: 150 NW: 0 34 KT NE: 0 SE: 100 SW: 0 NW: 0

120H: 2024/12/16 18 UTC: 16.2 S / 34.7 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=5.5+

OVER THE PAST 6 HOURS, CHIDO'S EYE CONFIGURATION HAS NOT CHANGED MUCH. IN THE LAST FEW MOMENTS, THE EYE SEEMS TO HAVE COMPACTED A LITTLE MORE, AND A DETAILED DVORAK ANALYSIS GIVES A CI OF 5.5+, CLASSIFYING CHIDO AS AN INTENSE TROPICAL CYCLONE WITH MAXIMUM WINDS AVERAGING 95KT OVER 10 MINUTES. CHIDO'S EYE IS CURRENTLY PASSING OVER AGALEGA, DEFINING EXTREME CONDITIONS ON THE ISLAND. THE LATEST DATA FROM AGALEGA AT 18UTC PROVIDE A MINIMUM PRESSURE OF 980HPA, WHICH DOES NOT REFLECT THE EXTREME VALUES. THE ABSENCE OF FREQUENTLY TRANSMITTED DATA MAKES IT IMPOSSIBLE TO TRACK THE PASSAGE OF THE METEOR EFFECTIVELY.

IN TERMS OF TRACK, 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, GRADUALLY SLIDING TOWARDS THE SOUTHEAST. ON THIS TRACK, CHIDO SHOULD PASS AROUND 100 KM SOUTH OF FARQUHAR. FROM FRIDAY ONWARDS, THE DIFFERENCES BETWEEN THE GUIDANCES ARE MORE MARKED, PARTICULARLY 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, DUE TO ITS SMALL SIZE. THE RSMC FORECAST IS A

COMPROMISE BETWEEN THESE DIFFERENT SCENARIOS, WHICH ARE FAIRLY CLOSE, BEARING IN MIND THAT THE LATEST RSMC FORECAST SLOWS DOWN CHIDO'S MOVEMENT BY ALMOST 3 HOURS COMPARED WITH THE PREVIOUS FORECAST. THERE IS STILL A GREAT DEAL OF UNCERTAINTY AS TO THE DISTANCE AND TIMING OF THE PASSAGE IN RELATION TO THE ISLANDS TO THE NORTH OF THE CHANNEL AND TO MOZAMBIQUE.

REGARDING THE TRACK, THERE IS FAIRLY GOOD AGREEMENT BETWEEN THE MODELS UNTIL FRIDAY MORNING ON A WESTWARD THEN WEST-SOUTHWESTWARD TRACK DRIVEN BY A POWERFUL SUBTROPICAL RIDGE TO THE SOUTH, SLIDING PROGRESSIVELY TO THE SOUTHEAST. ON THIS TRACK, CHIDO SHOULD PASS CLOSE TO AGALEGA THIS EVENING, SOME 100 KM SOUTH OF FARQUHAR. FROM FRIDAY ONWARDS, THE DIFFERENCES BETWEEN THE GUIDANCE ARE A MORE MARKED, NOTABLY IN TERMS OF SPEED. AMONG THE DETERMINISTS GFS AND HAFS ARE FASTER THAN IFS. THE RSMC FORECAST IS A BLEND OF THESE DIFFERENT SCENARIOS, CLOSE TO AROME 00Z. THERE IS STILL CONSIDERABLE UNCERTAINTY REGARDING THE DISTANCES AND TIMING OF PASSAGE TO THE NORTHERN ISLANDS OF THE CHANNEL AND TO MOZAMBIQUE.

IN TERMS OF INTENSITY, AGAINST A BACKDROP OF STRONG OCEAN POTENTIAL AND REDUCED SHEAR, CHIDO COULD CONTINUE TO INTENSIFY OVER THE NEXT 12 HOURS, THEN SHOW SLIGHT WEAKNESS DUE TO INTERNAL STRUCTURAL FLUCTUATIONS LINKED TO ITS SMALL SIZE. THEREAFTER, A MORE NOTICEABLE WEAKENING SHOULD OCCUR AS THE SHEAR STRENGTHENS AGAIN. FROM SATURDAY ONWARDS, INTENSITY IN THE CHANNEL WILL BE HIGHLY DEPENDENT ON WHETHER OR NOT IT PASSES CLOSE TO MADAGASCAR. A DECREASE IN SHEAR COULD IN THE LONG TERM FAVOR A NEW PHASE OF INTENSIFICATION, BEFORE A POSSIBLE 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): AGALEGA:

- EYE CURRENTLY PASSING OVER AGALEGA INDUCING HURRICANE FORCE WINDS.
- RAINFALL TOTALS OF 150 TO 250 MM IN 12H LIKELY.
- VERY ROUGH TO HEAVY SEAS (4 TO 8 M WAVES) UNTIL TOMORROW.
- SURGE OF AROUND 50CM.
- 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.

MADAGASCAR (NORTHERN ANTSIRANANA PROVINCE):

- GALE FORCE WINDS VERY LIKELY AND STORM OR HURRICANE 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

GLORIEUSES:

- GALE FORCE WINDS POSSIBLE OVERNIGHT FRIDAY TO SATURDAY OR EVEN SATURDAY MORNING
- RAINFALL TOTALS OF 50 TO 150MM IN 12 HOURS POSSIBLE ON SATURDAY
- HEAVY SEAS OVERNIGHT FRIDAY TO SATURDAY AND THE FOLLOWING MORNING

MAYOTTE:

- GALE VERY LIKELY AND STORM OR EVEN HURRICANE POSSIBLE DURING THE DAY ON SATURDAY
- RAINFALL TOTALS OF 100 TO 200MM IN 12H POSSIBLE ON SATURDAY AND FOLLOWING NIGHT
- HEAVY SEAS (WAVES APPROACHING 4M) SATURDAY AND FOLLOWING NIGHT