

WTIO30 FMEE 251841

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 25/5/20222023

1.A TROPICAL CYCLONE 5 (CHENESO)

2.A POSITION 2023/01/25 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 19.5 S / 43.2 E

(NINETEEN DECIMAL FIVE DEGREES SOUTH AND  
FORTY THREE DECIMAL TWO DEGREES EAST)

MOVEMENT: NORTH-EAST 3 KT

3.A DVORAK ANALYSIS: 4.5/4.5/D 0.5/12 H

4.A CENTRAL PRESSURE: 967 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 70 KT

RADIUS OF MAXIMUM WINDS (RMW): 46 KM

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

28 KT NE: 240 SE: 175 SW: 205 NW: 240

34 KT NE: 140 SE: 130 SW: 140 NW: 150

48 KT NE: 95 SE: 85 SW: 80 NW: 95

64 KT NE: 55 SE: 55 SW: 55 NW: 55

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 1100 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/01/26 06 UTC: 20.1 S / 43.1 E, VENT MAX= 075 KT, TROPICAL CYCLONE

28 KT NE: 260 SE: 185 SW: 360 NW: 195

34 KT NE: 150 SE: 120 SW: 150 NW: 100

48 KT NE: 85 SE: 75 SW: 75 NW: 65

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

24H: 2023/01/26 18 UTC: 20.8 S / 42.6 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 270 SE: 345 SW: 470 NW: 205

34 KT NE: 155 SE: 230 SW: 240 NW: 100

48 KT NE: 85 SE: 85 SW: 85 NW: 65

64 KT NE: 65 SE: 55 SW: 55 NW: 45

36H: 2023/01/27 06 UTC: 22.0 S / 41.6 E, VENT MAX= 095 KT, INTENSE TROPICAL  
CYCLONE

28 KT NE: 305 SE: 435 SW: 425 NW: 240

34 KT NE: 175 SE: 280 SW: 240 NW: 120

48 KT NE: 95 SE: 95 SW: 95 NW: 75

64 KT NE: 65 SE: 65 SW: 65 NW: 65

48H: 2023/01/27 18 UTC: 23.2 S / 40.6 E, VENT MAX= 100 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 360 SE: 480 SW: 390 NW: 295

34 KT NE: 205 SE: 305 SW: 260 NW: 175

48 KT NE: 95 SE: 100 SW: 100 NW: 85

64 KT NE: 75 SE: 75 SW: 65 NW: 65

60H: 2023/01/28 06 UTC: 24.4 S / 40.7 E, VENT MAX= 095 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 400 SE: 380 SW: 305 NW: 280

34 KT NE: 220 SE: 250 SW: 215 NW: 165

48 KT NE: 100 SE: 100 SW: 100 NW: 95

64 KT NE: 75 SE: 75 SW: 75 NW: 75

72H: 2023/01/28 18 UTC: 26.0 S / 41.6 E, VENT MAX= 090 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 400 SE: 455 SW: 305 NW: 260

34 KT NE: 215 SE: 295 SW: 205 NW: 175

48 KT NE: 110 SE: 110 SW: 100 NW: 85

64 KT NE: 85 SE: 75 SW: 75 NW: 75

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

96H: 2023/01/29 18 UTC: 29.5 S / 44.9 E, VENT MAX= 070 KT, TROPICAL CYCLONE

28 KT NE: 435 SE: 370 SW: 295 NW: 295

34 KT NE: 220 SE: 270 SW: 195 NW: 195

48 KT NE: 110 SE: 100 SW: 100 NW: 100

64 KT NE: 85 SE: 65 SW: 65 NW: 75

120H: 2023/01/30 18 UTC: 34.1 S / 53.6 E, VENT MAX= 055 KT, POST-TROPICAL DEPRESSION

28 KT NE: 520 SE: 380 SW: 345 NW: 390

34 KT NE: 270 SE: 285 SW: 205 NW: 220

48 KT NE: 120 SE: 100 SW: 110 NW: 100

#### 2.C ADDITIONAL INFORMATION:

T=CI=4.5+

DURING THE LAST 6 HOURS, THE CHENESO EYE CLOUD PATTERN HAS CONSOLIDATED BUT CONTINUES TO PRESENT A RATHER LARGE AND RAGGED EYE. THE DVORAK ANALYSIS OF 4.5+ CAN BE DONE TO ESTIMATE AVERAGE WINDS OVER 10MIN AT 70KT, SLIGHTLY INCREASING. DURING THE 6H, CHENESO TOOK A NORTHEAST DIRECTION THEN SEEMS TO SLOW DOWN AGAIN ITS TRACK BY STARTING A TURN TOWARDS THE EAST. CHENESO IS STILL MOVING SLOWLY AND IS LOCATED LESS THAN 120KM FROM THE MALAGASY COAST OFF THE MORONDAVA AREA.

NO CHANGE IN TERMS OF FORECAST: DURING THE NEXT 12-18H UNDER THE INFLUENCE OF CONTRADICTORY STEERING FLOWS, CHENESO CONTINUES TO BE QUASI-STATIONARY WITH A SLIGHT TENDENCY TO MAKE A LOOP TOWARDS THE EAST APPROACHING THE MALAGASY COASTS MORE OR LESS. ALTHOUGH THE DISPERSION BETWEEN THE DIFFERENT GUIDELINES REMAINS MODEST, THE

PROXIMITY OF THE MALAGASY COASTS LEAVES AN INFLUENCE THAT CAN BE QUITE DIFFERENT. THE DISTANCE OF PASSAGE REMAINS RATHER UNCERTAIN: CLOSE TO 100 KM, BUT A MORE PESSIMISTIC SCENARIO IS NOT EXCLUDED. DURING THE DAY ON THURSDAY, THE SUBTROPICAL RIDGE WEAKENS IN THE SOUTHWEST AND THE RIDGE EAST OF THE SYSTEM TAKES A LITTLE MORE STRENGTH, DIRECTING THE TRACK MORE FRANKLY TOWARDS THE SOUTHWEST. THEN, FROM SATURDAY ONWARDS, AHEAD OF A MID-LATITUDE TROUGH, THE TRACK TURNS MORE SOUTHEASTWARD AND ACCELERATES TOWARDS THE SOUTHERN LATITUDES. AT THESE INTERVALS OF MORE THAN 72 HOURS, THE UNCERTAINTY ON THE SPEED OF MOVEMENT INCREASES ALTHOUGH THE ORIENTATION OF THE TRACK REMAINS FAIRLY WELL DEFINED.

THE SYSTEM REMAINS IN A FAVORABLE ENVIRONMENT FROM THE ATMOSPHERIC POINT OF VIEW, FAVORING A GENERAL TENDENCY TO INTENSIFY UNTIL SATURDAY. NEVERTHELESS, ITS STATIONARITY ON THE SAME WATERS IS LIKELY TO LIMIT ITS DEVELOPMENT IN THE SHORT TERM IN CONNECTION WITH AN UPWELLING PHENOMENON. A MORE DEFINITE RESUMPTION OF THE INTENSIFICATION IS EXPECTED WHEN THE SYSTEM RESUMES ITS MOVEMENT. THE STAGE OF INTENSE TROPICAL CYCLONE IS THUS ENVISAGED BETWEEN FRIDAY AND SATURDAY WITH A PERIOD OF RAPID INTENSIFICATION VERY LIKELY. NEVERTHELESS, INTERNAL MECHANISMS, SUCH AS A REPLACEMENT CYCLE OF THE EYEWALL, COULD ALSO INTERVENE TO MODULATE THE INTENSIFICATION OF THE SYSTEM. BETWEEN SUNDAY AND ESPECIALLY MONDAY, THE CIRCULATION OF THE SYSTEM OVER INCREASINGLY COOL WATERS AND THE INCREASE IN SHEAR COUPLED WITH AN INTRUSION OF DRY AIR LINKED TO A MID-LATITUDE TROUGH SHOULD INITIATE AN EXTRA-TROPICAL TRANSITION.

IMPACTS ON INHABITED LANDS DURING THE NEXT 72H.

MADAGASCAR:

- IN ADDITION TO THE RECENTLY OBSERVED RAIN TOTALS, HEAVY RAINFALL WILL CONTINUE MAINLY OVER THE COASTAL AREAS OF THE CENTRAL WEST, WITH RAINFALL EXCEEDING 150 MM OVER THE PERIOD.

- A SEVERE WINDS EPISODE (IN THE GALE RANGE) IS UNDERWAY ON PARTS OF THE COAST BETWEEN MORONDAVA AND CAPE SAINT-VINCENT AND IS EXPECTED TO CONTINUE UNTIL THURSDAY. LOCAL DESTRUCTIVE WINDS (STORM FORCE) CANNOT BE RULED OUT IN CASE OF A TRACK MOVING CLOSER TO THE COAST.

- DANGEROUS SEA (WAVES FROM 4 TO 6M) ARE EXPECTED BETWEEN MAINTIRANO AND CAPE SAINT-VINCENT UNTIL THURSDAY.

MOZAMBIQUE :

- DANGEROUS SEA (WAVE NEAR 4M) IS LIKELY ON THURSDAY FROM INHAMBANE TO MOZAMBIQUE ISLAND.