

WTIO30 FMEE 241858

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 21/5/20222023

1.A SEVERE TROPICAL STORM 5 (CHENESO)

2.A POSITION 2023/01/24 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 20.0 S / 43.0 E  
(TWENTY DECIMAL ZERO DEGREES SOUTH AND  
FORTY THREE DECIMAL ZERO DEGREES EAST)  
MOVEMENT: QUASI-STATIONARY.

3.A DVORAK ANALYSIS: 4.0/4.0/D 0.5/6 H

4.A CENTRAL PRESSURE: 982 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 55 KT  
RADIUS OF MAXIMUM WINDS (RMW): 33 KM

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

28 KT NE: 205 SE: 155 SW: 175 NW: 130  
34 KT NE: 165 SE: 130 SW: 130 NW: 95  
48 KT NE: 55 SE: 0 SW: 60 NW: 55

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 1600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/01/25 06 UTC: 20.1 S / 43.1 E, VENT MAX= 070 KT, TROPICAL CYCLONE  
28 KT NE: 240 SE: 140 SW: 195 NW: 185  
34 KT NE: 150 SE: 95 SW: 120 NW: 110  
48 KT NE: 55 SE: 65 SW: 55 NW: 45  
64 KT NE: 35 SE: 45 SW: 45 NW: 35

24H: 2023/01/25 18 UTC: 20.2 S / 43.1 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 215 SE: 150 SW: 370 NW: 185  
34 KT NE: 130 SE: 95 SW: 140 NW: 110  
48 KT NE: 65 SE: 55 SW: 55 NW: 65  
64 KT NE: 45 SE: 45 SW: 45 NW: 35

36H: 2023/01/26 06 UTC: 20.3 S / 42.9 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 240 SE: 215 SW: 445 NW: 175  
34 KT NE: 150 SE: 140 SW: 155 NW: 100  
48 KT NE: 65 SE: 85 SW: 65 NW: 45  
64 KT NE: 45 SE: 45 SW: 45 NW: 35

48H: 2023/01/26 18 UTC: 20.8 S / 42.3 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 260 SE: 295 SW: 455 NW: 195  
34 KT NE: 155 SE: 195 SW: 205 NW: 110  
48 KT NE: 85 SE: 85 SW: 65 NW: 65  
64 KT NE: 45 SE: 45 SW: 45 NW: 45

60H: 2023/01/27 06 UTC: 22.0 S / 41.2 E, VENT MAX= 090 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 295 SE: 400 SW: 415 NW: 220  
34 KT NE: 175 SE: 270 SW: 220 NW: 130  
48 KT NE: 95 SE: 95 SW: 75 NW: 75  
64 KT NE: 65 SE: 65 SW: 65 NW: 55

72H: 2023/01/27 18 UTC: 23.1 S / 40.3 E, VENT MAX= 100 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 315 SE: 360 SW: 380 NW: 230  
34 KT NE: 185 SE: 240 SW: 205 NW: 155  
48 KT NE: 100 SE: 100 SW: 85 NW: 95  
64 KT NE: 75 SE: 65 SW: 65 NW: 65

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

96H: 2023/01/28 18 UTC: 25.6 S / 40.7 E, VENT MAX= 095 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 335 SE: 415 SW: 270 NW: 220  
34 KT NE: 185 SE: 280 SW: 155 NW: 150  
48 KT NE: 100 SE: 110 SW: 95 NW: 95  
64 KT NE: 65 SE: 75 SW: 65 NW: 65

120H: 2023/01/29 18 UTC: 28.5 S / 44.4 E, VENT MAX= 070 KT, TROPICAL CYCLONE

28 KT NE: 400 SE: 305 SW: 360 NW: 305  
34 KT NE: 220 SE: 230 SW: 175 NW: 215  
48 KT NE: 110 SE: 90 SW: 80 NW: 100  
64 KT NE: 80 SE: 60 SW: 60 NW: 70

#### 2.C ADDITIONAL INFORMATION:

T=CI=4.0

THE BRIEF EYE PATTERN OF THE AFTERNOON WAS NOT MAINTAINED ON THE CLASSICAL SATELLITE IMAGERY. IT HAS EVOLVED INTO A WELL PRONOUNCED BUT SOMEWHAT FRAGMENTED CURVED BAND PATTERN. THE INTENSITY IS ESTIMATED AT 55 KT IN AGREEMENT WITH SOME SUBJECTIVE ESTIMATES AT 4.0 AND SOME OBJECTIVE ESTIMATES (AIDT).

CHENESO SHOULD BE DRIVEN BY AN EASTERLY TO SOUTHEASTERLY MID-TROPOSPHERE STEERING FLOW GENERATED BY A SUBTROPICAL RIDGE LOCATED SOUTH OF THE SYSTEM. THE ACTION OF THIS RIDGE WILL HOWEVER BE COUNTERACTED BY THE PRESENCE OF A NEAR EQUATORIAL RIDGE TO THE NORTH IMPARTING A CONTRADICTORY WEST TO NORTH-WEST STEERING FLOW. AS A RESULT, DURING THE NEXT 24 TO 36 HOURS, THE SYSTEM SHOULD CONTINUE TO MOVE LITTLE. FROM THURSDAY ONWARDS, A CLEARER TRACK IN A GENERAL SOUTH-WESTERLY DIRECTION AND THEN SOUTH IS PROPOSED BY A LARGE MAJORITY OF THE ENSEMBLE AND DETERMINIST MODELS BUT THE TIMING AND DEGREE OF CURVATURE IS STILL VERY UNCERTAIN AT THIS STAGE.

THE PRESENT FORECAST IS BASED ON AN AVERAGE OF SEVERAL RUNS OF THE MOST RELIABLE MODELS (GFS / IFS).

THE SYSTEM SHOULD BE IN A GLOBALLY FAVORABLE ENVIRONMENT FROM THE ATMOSPHERIC AND OCEANIC POINT OF VIEW AND IT IS NOW VERY LIKELY THAT CHENESO WILL BECOME A TROPICAL CYCLONE IN THE NEAR FUTURE. NEVERTHELESS, ITS LASTING STATIONARITY ON THE SAME WATERS IS LIKELY TO LIMIT ITS DEVELOPMENT FROM TOMORROW EVENING. A PAUSE IN THE INTENSIFICATION IS THEREFORE SUGGESTED BEFORE A RESUMPTION OF THE INTENSIFICATION WHEN THE SYSTEM RESUMES ITS MOVEMENT. INTERNAL MECHANISMS, LIKE EYEWALL REPLACEMENT CYCLE, COULD ALSO TEMPER THE INTENSIFICATION OF THE SYSTEM.

IMPACTS ON INHABITED LANDS DURING THE NEXT 72H.

MADAGASCAR:

- IN ADDITION TO THE HEAVY RAINS THAT HAVE ALREADY FALLEN, THE RAINS WILL CONTINUE OVER THE NORTHWESTERLY AND CENTRAL WESTERN REGIONS WITH RAINFALL EXCEEDING 150 MM OVER THE PERIOD. THE CENTRAL WEST REGION WILL BE MORE CONCERNED FROM WEDNESDAY WITH ACCUMULATIONS OVER THE PERIOD THAT MAY EXCEED 300 MM.

- AN EPISODE OF STRONG WINDS (IN THE GALE RANGE) IS POSSIBLE ON PARTS OF THE COAST BETWEEN MONRONDAVA AND CAPE SAINT-VINCENT FROM THIS EVENING AND FOR THE DAYS OF WEDNESDAY AND THURSDAY.

- DANGEROUS SEAS (WAVES OVER 4M) COULD AFFECT THE AREAS BETWEEN MAINTIRANO AND CAPE SAINT-VINCENT FROM WEDNESDAY, EXTENDING TO CAPE SAINT-ANDRE IN THE NORTH ON THURSDAY.

MOZAMBIQUE :

- DANGEROUS SEA (WAVES CLOSE TO 4M) IS EXPECTED ON THURSDAY FROM INHAMBANE TO MOZAMBIQUE ISLAND.