

WTIO30 FMEE 261250

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 28/5/20222023

1.A SEVERE TROPICAL STORM 5 (CHENESO)

2.A POSITION 2023/01/26 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 20.3 S / 42.7 E

(TWENTY DECIMAL THREE DEGREES SOUTH AND
FORTY TWO DECIMAL SEVEN DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 4 KT

3.A DVORAK ANALYSIS: 3.5/3.5/W 0.5/6 H

4.A CENTRAL PRESSURE: 975 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 60 KT

RADIUS OF MAXIMUM WINDS (RMW): 46 KM

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

28 KT NE: 185 SE: 220 SW: 280 NW: 185

34 KT NE: 110 SE: 150 SW: 150 NW: 110

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 1500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/01/27 00 UTC: 21.2 S / 41.8 E, VENT MAX= 065 KT, TROPICAL CYCLONE

28 KT NE: 270 SE: 295 SW: 370 NW: 230

34 KT NE: 150 SE: 195 SW: 205 NW: 110

48 KT NE: 75 SE: 85 SW: 95 NW: 65

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

24H: 2023/01/27 12 UTC: 22.5 S / 41.1 E, VENT MAX= 070 KT, TROPICAL CYCLONE

28 KT NE: 315 SE: 400 SW: 405 NW: 285

34 KT NE: 175 SE: 270 SW: 240 NW: 140

48 KT NE: 85 SE: 85 SW: 100 NW: 65

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

36H: 2023/01/28 00 UTC: 23.7 S / 40.8 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 345 SE: 360 SW: 335 NW: 270

34 KT NE: 185 SE: 230 SW: 205 NW: 140

48 KT NE: 95 SE: 95 SW: 100 NW: 75

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

48H: 2023/01/28 12 UTC: 25.5 S / 41.4 E, VENT MAX= 090 KT, INTENSE TROPICAL

CYCLONE

28 KT NE: 390 SE: 380 SW: 305 NW: 250
34 KT NE: 205 SE: 250 SW: 195 NW: 155
48 KT NE: 95 SE: 95 SW: 100 NW: 85
64 KT NE: 75 SE: 65 SW: 65 NW: 75

60H: 2023/01/29 00 UTC: 27.4 S / 42.9 E, VENT MAX= 080 KT, TROPICAL CYCLONE
28 KT NE: 400 SE: 400 SW: 260 NW: 285
34 KT NE: 215 SE: 270 SW: 185 NW: 165
48 KT NE: 110 SE: 100 SW: 110 NW: 85
64 KT NE: 75 SE: 75 SW: 65 NW: 75

72H: 2023/01/29 12 UTC: 29.7 S / 45.6 E, VENT MAX= 070 KT, TROPICAL CYCLONE
28 KT NE: 445 SE: 380 SW: 285 NW: 350
34 KT NE: 230 SE: 270 SW: 150 NW: 205
48 KT NE: 100 SE: 95 SW: 110 NW: 85
64 KT NE: 75 SE: 55 SW: 55 NW: 75

2.B LONGER-RANGE OUTLOOK:

96H: 2023/01/30 12 UTC: 34.6 S / 55.0 E, VENT MAX= 060 KT, POST-TROPICAL
DEPRESSION
28 KT NE: 520 SE: 380 SW: 380 NW: 490
34 KT NE: 260 SE: 295 SW: 205 NW: 270
48 KT NE: 120 SE: 100 SW: 120 NW: 85

120H: 2023/01/31 12 UTC: 43.9 S / 68.8 E, VENT MAX= 050 KT, EXTRATROPICAL
DEPRESSION
28 KT NE: 730 SE: 325 SW: 295 NW: 565
34 KT NE: 360 SE: 295 SW: 240 NW: 345
48 KT NE: 100 SE: 60 SW: 100 NW: 50

2.C ADDITIONAL INFORMATION:

T=CI=3.5+

THE 1051Z AMSR2 MICROWAVE PASS CONFIRMED THAT THE CORE OF CHENESO HAD COLLAPSED EARLY TODAY DUE TO COOLING OF THE UNDERLYING WATER. SINCE THEN, IT HAS RESUMED A SOUTH-EASTWARD MOVEMENT WHICH FAVORS SINCE MIDDAY THE STRENGTHENING OF THE CONVECTIVE ACTIVITY. THE INTENSITY HAS BEEN SET AT 60KT IN AGREEMENT WITH THE CIMSS SATCON.

WITH THE SHIFT OF THE SUBTROPICAL RIDGE FROM THE SOUTHWEST OF CHENESO TO ITS SOUTHEAST, THE SYSTEM REGAINED A WEAK STEERING FLOW SUPPORTING A SOUTHWESTWARD TRACK. ON THIS TRACK, IT SHOULD STAY MORE THAN 150KM FROM THE COAST OF MADAGASCAR. FROM SATURDAY UNDER THE INFLUENCE OF THE NEAR EQUATORIAL RIDGE TO THE NORTHEAST AND AHEAD OF A MID-LATITUDE TROUGH, CHENESO SHOULD MOVE MORE FIRMLY TOWARDS THE SOUTHEAST AND ACCELERATE TOWARDS THE MID-LATITUDES. THIS SCENARIO IS SUPPORTED BY ALL THE NUMERICAL MODELS, EVEN IF THERE IS SOME SPREAD IN THE MOVEMENT SPEED AT LONGER RANGE.

CHENESO'S STATIONARITY HAS LED TO ITS TEMPORARY WEAKENING. HOWEVER, WHILE MOVING AWAY FROM THE COOLED WATERS, IT SHOULD RETURN TO

FAVORABLE CONDITIONS FOR ITS INTENSIFICATION. IT COULD THEREFORE REACH THE INTENSE TROPICAL CYCLONE STAGE BY SATURDAY NIGHT. THIS PREDICTION REMAINS HOWEVER UNCERTAIN BECAUSE IT DEPENDS STRONGLY ON THE SYSTEM'S TRACK. THIS FORECAST DOES NOT TAKE INTO ACCOUNT POSSIBLE EYEWALL REPLACEMENT CYCLES. FROM SATURDAY ONWARDS, AHEAD OF THE UPPER TROUGH, THE NORTH-WESTERLY SHEAR SHOULD START TO STRENGTHEN, WHILE ON SUNDAY, THE OCEANIC POTENTIAL SHOULD SIGNIFICANTLY DECREASE. THIS HOSTILE ENVIRONMENT SHOULD THEREFORE LEAD TO A SLOW WEAKENING OF THE SYSTEM AND TO ITS EXTRATROPICALISATION.

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 WESTERN AND SOUTH-WESTERN REGIONS, WITH RAINFALL EXCEEDING 150 MM OVER THE PERIOD, ESPECIALLY WELL TO THE NORTH OF THE SYSTEM.

- GUSTS CLOSE TO 100KM/H AND DANGEROUS SEA (4 TO 6M WAVES) ARE EXPECTED ALONG THE MALAGASY COAST NEAR MORONDOVA UNTIL TOMORROW AND FROM CAPE SAINT VINCENT TO CAPE SAINTE MARIE FROM FRIDAY EVENING UNTIL SUNDAY.

MOZAMBIQUE :

- A DANGEROUS SEA (WAVES CLOSE TO 4M) IS EXPECTED IN THE AREA OF INHHAMBANE UNTIL SATURDAY.