

WTIO30 FMEE 260647

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

0.A WARNING NUMBER: 27/5/20222023

1.A TROPICAL CYCLONE 5 (CHENESO)

2.A POSITION 2023/01/26 AT 0600 UTC:
WITHIN 30 NM RADIUS OF POINT 20.0 S / 42.9 E
(TWENTY DECIMAL ZERO DEGREES SOUTH AND
FORTY TWO DECIMAL NINE DEGREES EAST)
MOVEMENT: SOUTH-WEST 4 KT

3.A DVORAK ANALYSIS: 3.5/4.0/W 1.0/6 H

4.A CENTRAL PRESSURE: 970 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 65 KT
RADIUS OF MAXIMUM WINDS (RMW): 46 KM

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

28 KT NE: 260 SE: 220 SW: 280 NW: 260
34 KT NE: 150 SE: 165 SW: 165 NW: 150
48 KT NE: 100 SE: 100 SW: 100 NW: 100
64 KT NE: 55 SE: 55 SW: 55 NW: 55

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 1500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/01/26 18 UTC: 20.8 S / 42.3 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM
28 KT NE: 250 SE: 250 SW: 435 NW: 195
34 KT NE: 140 SE: 165 SW: 215 NW: 110
48 KT NE: 75 SE: 75 SW: 85 NW: 65

24H: 2023/01/27 06 UTC: 22.0 S / 41.5 E, VENT MAX= 080 KT, TROPICAL CYCLONE
28 KT NE: 305 SE: 455 SW: 445 NW: 250
34 KT NE: 165 SE: 285 SW: 260 NW: 140
48 KT NE: 85 SE: 85 SW: 100 NW: 65
64 KT NE: 55 SE: 55 SW: 45 NW: 55

36H: 2023/01/27 18 UTC: 23.3 S / 41.0 E, VENT MAX= 090 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 325 SE: 520 SW: 400 NW: 240
34 KT NE: 185 SE: 335 SW: 270 NW: 140
48 KT NE: 85 SE: 95 SW: 110 NW: 75
64 KT NE: 65 SE: 65 SW: 65 NW: 65

48H: 2023/01/28 06 UTC: 24.7 S / 41.1 E, VENT MAX= 085 KT, TROPICAL CYCLONE
28 KT NE: 360 SE: 390 SW: 325 NW: 260
34 KT NE: 195 SE: 250 SW: 205 NW: 155
48 KT NE: 100 SE: 95 SW: 110 NW: 75
64 KT NE: 75 SE: 65 SW: 65 NW: 65

60H: 2023/01/28 18 UTC: 26.8 S / 42.3 E, VENT MAX= 080 KT, TROPICAL CYCLONE
28 KT NE: 360 SE: 545 SW: 350 NW: 250
34 KT NE: 195 SE: 350 SW: 220 NW: 155
48 KT NE: 100 SE: 100 SW: 130 NW: 75
64 KT NE: 65 SE: 75 SW: 65 NW: 65

72H: 2023/01/29 06 UTC: 29.1 S / 44.4 E, VENT MAX= 075 KT, TROPICAL CYCLONE
28 KT NE: 415 SE: 380 SW: 305 NW: 315
34 KT NE: 220 SE: 270 SW: 195 NW: 195
48 KT NE: 100 SE: 100 SW: 110 NW: 75
64 KT NE: 65 SE: 65 SW: 55 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2023/01/30 06 UTC: 33.2 S / 52.5 E, VENT MAX= 060 KT, POST-TROPICAL
DEPRESSION
28 KT NE: 445 SE: 360 SW: 650 NW: 360
34 KT NE: 230 SE: 280 SW: 305 NW: 220
48 KT NE: 100 SE: 100 SW: 85 NW: 85

120H: 2023/01/31 06 UTC: 40.9 S / 64.2 E, VENT MAX= 050 KT, EXTRATROPICAL
DEPRESSION
28 KT NE: 600 SE: 445 SW: 400 NW: 390
34 KT NE: 295 SE: 350 SW: 230 NW: 240
48 KT NE: 100 SE: 60 SW: 90 NW: 50

2.C ADDITIONAL INFORMATION:

T=3.5+ CI=4.0+

DURING THE LAST 6 HOURS, CHENESO'S CLOUD PATTERN HAS COLLAPSED, WITH THE DISAPPEARANCE OF THE EYE AND A STRONG WARMING OF THE CLOUD TOPS. THIS WEAKENING IS RELATED TO THE STATIONARITY OF THE SYSTEM AND TO THE COOLING OF THE UNDERLYING WATERS. THE INTENSITY ANALYSIS IS BASED ON A CONSENSUS OF THE LAST OBSERVATIONS WHILE TAKING INTO ACCOUNT A DELAY DUE TO INERTIA.

WITH THE SHIFT OF THE SUBTROPICAL RIDGE FROM THE SOUTHWEST OF CHENESO TO ITS SOUTHEAST, THE SYSTEM SHOULD REGAIN A WEAK STEERING FLOW SUPPORTING A SOUTHWESTWARD TRACK. ON THIS TRACK, IT SHOULD STAY MORE THAN 100KM 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,

AS THE SYSTEM MOVES AWAY FROM THE AREA IT HAS COOLED, IT SHOULD REGAIN 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.