

WTIO30 FMEE 280053

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 34/5/20222023

1.A TROPICAL CYCLONE 5 (CHENESO)

2.A POSITION 2023/01/28 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 24.2 S / 41.2 E

(TWENTY FOUR DECIMAL TWO DEGREES SOUTH AND
FORTY ONE DECIMAL TWO DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 8 KT

3.A DVORAK ANALYSIS: 4.5/4.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 970 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 65 KT

RADIUS OF MAXIMUM WINDS (RMW): 31 KM

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

28 KT NE: 315 SE: 315 SW: 315 NW: 230

34 KT NE: 220 SE: 220 SW: 220 NW: 150

48 KT NE: 110 SE: 110 SW: 110 NW: 95

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 1300 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/01/28 12 UTC: 25.8 S / 42.1 E, VENT MAX= 070 KT, TROPICAL CYCLONE

28 KT NE: 400 SE: 535 SW: 270 NW: 230

34 KT NE: 220 SE: 345 SW: 230 NW: 130

48 KT NE: 75 SE: 85 SW: 110 NW: 65

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

24H: 2023/01/29 00 UTC: 27.5 S / 43.8 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

28 KT NE: 415 SE: 530 SW: 345 NW: 280

34 KT NE: 230 SE: 350 SW: 260 NW: 175

48 KT NE: 110 SE: 85 SW: 110 NW: 95

36H: 2023/01/29 12 UTC: 29.9 S / 46.7 E, VENT MAX= 050 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 465 SE: 445 SW: 295 NW: 350

34 KT NE: 250 SE: 315 SW: 220 NW: 220

48 KT NE: 85 SE: 75 SW: 100 NW: 45

48H: 2023/01/30 00 UTC: 31.8 S / 51.2 E, VENT MAX= 045 KT, POST-TROPICAL

DEPRESSION

28 KT NE: 470 SE: 345 SW: 390 NW: 400

34 KT NE: 250 SE: 250 SW: 205 NW: 270

60H: 2023/01/30 12 UTC: 34.0 S / 56.5 E, VENT MAX= 045 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 480 SE: 325 SW: 610 NW: 500

34 KT NE: 250 SE: 250 SW: 270 NW: 285

72H: 2023/01/31 00 UTC: 37.7 S / 62.5 E, VENT MAX= 040 KT, EXTRATROPICAL
DEPRESSION

28 KT NE: 535 SE: 335 SW: 345 NW: 405

34 KT NE: 280 SE: 270 SW: 175 NW: 205

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=4.5-

DURING THE LAST 6 HOURS, CHENESO'S PATTERN HAS CONTINUED TO IMPROVE WITH A CDO ASSOCIATED WITH A HOT SPOT IN IR IMAGERY. ACCORDING TO THE LATEST SUBJECTIVE DORAK ANALYSIS (AROUND 4.5) AND TO THE 2229Z AMSR2 MICROWAVE IMAGE WHICH SHOWS A CLEAR EYE IN 89GHZ, THE TROPICAL CYCLONE STAGE IS CONSIDERED TO BE REACHED. THE INTENSITY IS FOR THE MOMENT SET AT 65KT. MOREOVER, AN ARC OF CIRRUS CLOUDS IS VISIBLE IN THE NORTHWESTERLY QUADRANT AND SEEMS TO CONFIRM THE INCREASE OF THE DEEP SHEAR (15KT ACCORDING TO THE CIMSS)

WITH THE SHIFT OF THE SUBTROPICAL RIDGE TO THE SOUTH-EAST OF CHENESO, THE SYSTEM UNDERGO A WEAK STEERING FLOW FAVORING A SOUTHWARD TRACK. FROM TODAY ONWARDS, UNDER THE INFLUENCE OF THE NEAR EQUATORIAL RIDGE TO ITS NORTH-EAST AND AHEAD OF AN UPPER TROUGH, CHENESO SHOULD MAKE A PROGRESSIVE TURN TOWARDS THE SOUTHEAST, ACCELERATING TOWARDS THE MID-LATITUDES. THERE IS A CONSENSUS AMONG THE NUMERICAL GUIDANCE ON THIS SCENARIO WITH LITTLE SPREAD.

BY RESUMING A SOUTHWARD MOVEMENT, CHENESO FOUND A FAVORABLE ENVIRONMENT TO INTENSIFY WITH THE VERY GOOD UPPER DIVERGENCE ON THE SOUTHERN SIDE. HOWEVER IN THE NEXT HOURS, AHEAD OF THE UPPER TROUGH, THE NORTHWESTERLY SHEAR SHOULD TEMPORARILY STRENGTHEN FAVORING DRY AIR INTRUSION. EVEN IF THE ACCELERATION SHOULD LIMIT THE CONSEQUENCES THE DECREASE OF THE OCEANIC POTENTIAL SHOULD LEAD TO A SLOW WEAKENING AND ITS EXTRATROPICALIZATION EARLY NEXT WEEK.

IMPACTS ON INHABITED LANDS DURING THE NEXT 72H.

MADAGASCAR:

- HEAVY RAINFALL WILL MAINLY IMPACT THE REGIONS SOUTH OF A MORONDAVA-VANGAINDRANO LINE, ESPECIALLY NORTH OF TULEAR WHERE

RAINFALL COULD EXCEED 100 MM TO 150 MM UP TO SUNDAY.

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

MOZAMBIQUE :

- DANGEROUS SEAS (WAVES CLOSE TO 4M) ARE EXPECTED IN THE AREA OF INHHAMBANE TODAY.