

WTIO30 FMEE 231242 RSMC / TROPICAL CYCLONE CENTER / LA REUNION TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 16/5/20222023 1.A TROPICAL DISTURBANCE 5 (CHENESO)

2.A POSITION 2023/01/23 AT 1200 UTC: WITHIN 20 NM RADIUS OF POINT 20.5 S / 43.7 E (TWENTY DECIMAL FIVE DEGREES SOUTH AND FORTY THREE DECIMAL SEVEN DEGREES EAST) MOVEMENT: WEST-SOUTH-WEST 6 KT

3.A DVORAK ANALYSIS: NIL 4.A CENTRAL PRESSURE: 1000 HPA 5.A MAX AVERAGE WIND SPEED (1

5.A MAX AVERAGE WIND SPEED (10 MN): 25 KT RADIUS OF MAXIMUM WINDS (RMW): NIL

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 1300 KM 8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/01/24 00 UTC: 20.3 S / 43.2 E, VENT MAX= 030 KT, TROPICAL DEPRESSION 28 KT NE: 140 SE: 220 SW: 150 NW: 0

24H: 2023/01/24 12 UTC: 20.0 S / 43.1 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM

28 KT NE: 205 SE: 220 SW: 150 NW: 0 34 KT NE: 95 SE: 130 SW: 95 NW: 0

36H: 2023/01/25 00 UTC: 19.9 S / 43.2 E, VENT MAX= 045 KT, MODERATE TROPICAL

28 KT NE: 195 SE: 185 SW: 0 NW: 110 34 KT NE: 85 SE: 120 SW: 0 NW: 75

STORM

48H: 2023/01/25 12 UTC: 19.8 S / 43.3 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 205 SE: 510 SW: 465 NW: 130 34 KT NE: 95 SE: 305 SW: 280 NW: 85 48 KT NE: 45 SE: 75 SW: 95 NW: 65

60H: 2023/01/26 00 UTC: 19.7 S / 43.2 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 215 SE: 250 SW: 205 NW: 140 34 KT NE: 100 SE: 155 SW: 130 NW: 95 48 KT NE: 45 SE: 75 SW: 65 NW: 65

72H: 2023/01/26 12 UTC: 19.7 S / 42.8 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

28 KT NE: 230 SE: 270 SW: 215 NW: 165 34 KT NE: 110 SE: 165 SW: 130 NW: 110 48 KT NE: 65 SE: 85 SW: 75 NW: 75

2.B LONGER-RANGE OUTLOOK:

96H: 2023/01/27 12 UTC: 21.7 S / 41.2 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 280 SE: 325 SW: 270 NW: 215 34 KT NE: 140 SE: 205 SW: 165 NW: 140 48 KT NE: 75 SE: 95 SW: 85 NW: 85 64 KT NE: 35 SE: 45 SW: 45 NW: 45

120H: 2023/01/28 12 UTC: 24.0 S / 40.9 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 325 SE: 360 SW: 270 NW: 230 34 KT NE: 165 SE: 230 SW: 175 NW: 155 48 KT NE: 80 SE: 90 SW: 90 NW: 90 64 KT NE: 50 SE: 60 SW: 60 NW: 50

2.C ADDITIONAL INFORMATION:

THE LOW ASSOCIATED WITH CHENESO MOVED INTO THE MOZAMBIQUE CHANNEL THIS AFTERNOON JUST SOUTH OF THE CITY OF MORONDAVA. THERE IS STILL A LACK OF DEEP CONVECTION NEAR THE CENTER BUT THUNDERTORM ACTIVITY IS EXPECTED TO STRENGTHEN IN THE NEXT FEW HOURS. WINDS ARE STILL ESTIMATED TO BE WEAK FROM THE FEW SURFACE OBSERVATIONS AVAILABLE.

CHENESO SHOULD BE DRIVEN BY AN EASTERLY TO SOUTHEASTERLY LOW TO MID-TROPOSPHERE FLOW GENERATED BY A SUBTROPICAL RIDGE LOCATED SOUTH AND SOUTHWEST OF THE SYSTEM. HOWEVER, THE ACTION OF THIS RIDGE WILL BE COUNTERACTED BY THE PRESENCE OF A NEAR EQUATORIAL RIDGE TO THE NORTH, WHICH WILL PRODUCE A CONTRADICTORY WEST TO NORTHWEST FLOW. AS A RESULT, DURING THE NEXT THREE DAYS, THE SYSTEM SHOULD MOVE SLOWLY IN A GENERAL NORTH-WESTERLY DIRECTION. AN ERRATIC TRAJECTORY, WITH POSSIBLE MOMENTS OF QUASI-STATIONARITY, ARE POSSIBLE DURING THIS PERIOD. IN THE SECOND PART OF THE WEEK, A BENDING OF THE TRACK TOWARDS THE SOUTH-WEST AND THEN THE SOUTH IS POSSIBLE BUT THE TIMING AND THE DEGREE OF BENDING IS STILL VERY UNCERTAIN AT THIS STAGE. THE GFS AND IFS MODELS LACK STABILITY IN THEIR SCENARIO AND THE PRESENT FORECAST IS MAINLY BASED ON A TREND OF THE LAST TWO RUNS WITH ONLY MINOR ADJUSTMENTS FOR THE MOMENT OF THE PREVIOUS FORECAST.

THE SYSTEM SHOULD BE IN A GLOBALLY FAVORABLE ENVIRONMENT FROM THE ATMOSPHERIC AND OCEANIC POINT OF VIEW, EXCEPT FOR THE VERY END OF THE TIME FRAME WHERE THE MID-TROPOSPHERE SHEAR COULD BE INCREASING. A GRADUAL INTENSIFICATION IS EXPECTED UNTIL FRIDAY AT A CLIMATOLOGICAL RATE.

IMPACTS ON INHABITED LANDS DURING THE NEXT 72 HOURS.

MADAGASCAR:

- IN ADDITION TO THE HEAVY RAINS THAT HAVE ALREADY FALLEN, THE RAINS

WILL CONTINUE OVER THE NORTHWEST AND CENTRAL WEST WITH RAINFALL EXCEEDING 150 MM OVER THE PERIOD AND REACHING 200 MM LOCALLY.

- STRONG WINDS (GALE FORCE WINDS) IS POSSIBLE ON PORTIONS OF THE COAST BETWEEN CAPE SAINT-ANDRE AND MORONDAVA FROM WEDNESDAY, ACCOMPANIED BY A DANGEROUS SEA STATE (AVERAGE WAVES OF 4M).