

WTIO30 FMEE 230650 RSMC / TROPICAL CYCLONE CENTER / LA REUNION TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 15/5/20222023 1.A OVERLAND DEPRESSION 5 (CHENESO)

2.A POSITION 2023/01/23 AT 0600 UTC: WITHIN 20 NM RADIUS OF POINT 20.4 S / 44.4 E (TWENTY DECIMAL FOUR DEGREES SOUTH AND FORTY FOUR DECIMAL FOUR DEGREES EAST) MOVEMENT: SOUTH-WEST 4 KT

3.A DVORAK ANALYSIS: NIL 4.A CENTRAL PRESSURE: 1001 HPA 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: 2023/01/23 18 UTC: 20.0 S / 43.4 E, VENT MAX= 025 KT, TROPICAL DISTURBANCE

24H: 2023/01/24 06 UTC: 19.7 S / 43.1 E, VENT MAX= 030 KT, TROPICAL DEPRESSION 28 KT NE: 140 SE: 220 SW: 150 NW: 0

36H: 2023/01/24 18 UTC: 19.6 S / 43.2 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM

28 KT NE: 140 SE: 220 SW: 150 NW: 0 34 KT NE: 0 SE: 130 SW: 95 NW: 0

48H: 2023/01/25 06 UTC: 19.5 S / 43.2 E, VENT MAX= 040 KT, MODERATE TROPICAL

STORM

28 KT NE: 140 SE: 220 SW: 150 NW: 110 34 KT NE: 0 SE: 130 SW: 120 NW: 75

60H: 2023/01/25 18 UTC: 19.3 S / 43.2 E, VENT MAX= 045 KT, MODERATE TROPICAL

STORM

28 KT NE: 175 SE: 175 SW: 155 NW: 110 34 KT NE: 75 SE: 110 SW: 95 NW: 75

72H: 2023/01/26 06 UTC: 19.4 S / 42.9 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 205 SE: 205 SW: 155 NW: 130

34 KT NE: 95 SE: 130 SW: 100 NW: 85 48 KT NE: 45 SE: 65 SW: 55 NW: 65

2.B LONGER-RANGE OUTLOOK:

96H: 2023/01/27 06 UTC: 21.1 S / 41.8 E, VENT MAX= 075 KT, TROPICAL CYCLONE

28 KT NE: 230 SE: 260 SW: 205 NW: 155 34 KT NE: 110 SE: 155 SW: 130 NW: 100 48 KT NE: 65 SE: 75 SW: 65 NW: 75 64 KT NE: 35 SE: 35 SW: 35 NW: 35

120H: 2023/01/28 06 UTC: 23.6 S / 41.1 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 280 SE: 295 SW: 230 NW: 195 34 KT NE: 130 SE: 185 SW: 150 NW: 130 48 KT NE: 70 SE: 80 SW: 70 NW: 80 64 KT NE: 40 SE: 40 SW: 50 NW: 50

2.C ADDITIONAL INFORMATION:

AFTER NEARLY 4 DAYS OVER MADAGASCAR, THE CENTER OF CHENESO IS LOCATED, THANKS TO HIGH RESOLUTION VISIBLE IMAGERY, OVERLAND AND NEAR THE CITY OF MORONDAVA. IT IS MOVING SLOWLY SOUTHWESTWARD AND IS EXPECTED TO REACH THE WATERS OF THE MOZAMBIQUE CHANNEL DURING THE DAY. THE INITIAL INTENSITY IS ESSENTIALLY BASED ON EXTRAPOLATION OF LAST NIGHT'S ASCAT DATA.

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 IMPARTS A CONTRADICTORY WEST-NORTHWEST STEERING FLOW. AS A RESULT, DURING THE NEXT THREE DAYS, THE SYSTEM SHOULD MOVE SLOWLY IN A GENERAL NORTH-WESTERLY DIRECTION. AN ERRATIC TRACK 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. A SLIGHTLY MORE ZONAL OPTION THAN SUGGESTED IN THE PRESENT FORECAST IS POSSIBLE AND MAY BE READJUSTED DURING THE NEXT FORECAST.

ONCE AT SEA, THE SYSTEM SHOULD BE IN A GLOBALLY FAVORABLE ENVIRONMENT FROM THE ATMOSPHERIC AND OCEANIC POINT OF VIEW. THE INTENSIFICATION IS EXPECTED TO BE SLOW DURING THE FIRST 24 HOURS (INFLUENCE OF THE LAND, HUMIDIFICATION OF THE DRY AIR OF THE MIDDLE TROPOSPHERE DRIVEN IN THE SOUTH-WEST QUADRANT), THEN MORE CLIMATOLOGICAL LATER.

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 NORTHWEST AND CENTRAL WEST WITH RAINFALL EXCEEDING 150 MM OVER THE PERIOD AND REACHING 200 MM LOCALLY.
- AN EPISODE OF STRONG WINDS (IN THE RANGE OF GALE FORCE WINDS) IS

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