

WTIO30 FMEE 231228

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 6/12/20212022

1.A OVERLAND DEPRESSION 12

2.A POSITION 2022/04/23 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 16.0 S / 40.0 E

(SIXTEEN DECIMAL ZERO DEGREES SOUTH AND  
FORTY DECIMAL ZERO DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 9 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 1003 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 30 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 260 SE: 280 SW: 185 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/04/24 00 UTC: 17.0 S / 39.8 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 280 SE: 350 SW: 250 NW: 0

34 KT NE: 100 SE: 175 SW: 175 NW: 0

24H: 2022/04/24 12 UTC: 18.2 S / 39.8 E, VENT MAX= 045 KT, MODERATE TROPICAL  
STORM

28 KT NE: 295 SE: 370 SW: 260 NW: 140

34 KT NE: 110 SE: 185 SW: 185 NW: 95

36H: 2022/04/25 00 UTC: 19.3 S / 39.9 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

28 KT NE: 315 SE: 380 SW: 280 NW: 140

34 KT NE: 120 SE: 205 SW: 195 NW: 95

48 KT NE: 75 SE: 85 SW: 75 NW: 55

48H: 2022/04/25 12 UTC: 20.1 S / 40.1 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 325 SE: 400 SW: 285 NW: 140

34 KT NE: 130 SE: 215 SW: 205 NW: 95

48 KT NE: 75 SE: 85 SW: 75 NW: 55

60H: 2022/04/26 00 UTC: 20.8 S / 40.5 E, VENT MAX= 045 KT, MODERATE TROPICAL  
STORM

28 KT NE: 345 SE: 405 SW: 295 NW: 140  
34 KT NE: 140 SE: 220 SW: 215 NW: 95

72H: 2022/04/26 12 UTC: 20.8 S / 41.0 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM

28 KT NE: 350 SE: 425 SW: 315 NW: 140  
34 KT NE: 150 SE: 230 SW: 220 NW: 95

#### 2.B LONGER-RANGE OUTLOOK:

96H: 2022/04/27 12 UTC: 18.7 S / 41.8 E, VENT MAX= 030 KT, REMNANT LOW  
28 KT NE: 390 SE: 455 SW: 335 NW: 140

120H: 2022/04/28 12 UTC: 16.0 S / 42.2 E, VENT MAX= 020 KT, DISSIPATING

#### 2.C ADDITIONAL INFORMATION:

T=CI=/

THE SYSTEM'S CENTER MADE LANDFALL OVER MOZAMBIQUE'S PROVINCE OF NAMPULA THIS MORNING JUST BEFORE 06Z AND HAS SINCE BEEN MOVING PARALLEL TO THE COAST VERY NEAR TO THE SEABOARD IN A SOUTHWESTWARD THEN SOUTH-SOUTHWESTWARD DIRECTION. CONVECTION HAS REMAINED ACTIVE OVER THE MOZAMBIQUE CHANNEL IN THE SOUTHEASTERN SEMI-CIRCLE BUT NATURALLY MUCH WEAKER OVERLAND, LEAVING THE LOW-LEVEL VORTEX TEMPORARILY EXPOSED THIS AFTERNOON. FOLLOWING THIS MORNING'S ASCAT DATA, THE SYSTEM'S INTENSITY IS LEFT AT 30KT, WITH A VERY ASYMMETRICAL STRUCTURE DUE TO ITS POSITION HALF OVER LAND AND HALF OVER SEA.

THE SYSTEM KEEPS MOVING ON A SOUTHWESTWARD TRACK THIS SATURDAY NIGHT, GUIDED ALONG THE NORTH-WESTERN EDGE OF A LOW-LEVEL SUBTROPICAL RIDGE LOCATED OFF THE SOUTH-EAST OF MADAGASCAR. AN APPROACHING TROUGH OVER SOUTHERN AFRICA SHOULD GRADUALLY ATTRACT THE SYSTEM ON A MORE SOUTHWARD DIRECTION FROM SUNDAY, THEN SOUTHEASTWARD ON MONDAY. THE STEERING FLOW WILL THEN HAVE SHIFTED TO THE MID-LEVELS AS THE SYSTEM INTENSIFIES, CHANNELING IT BETWEEN THE TROUGH LOCATED TO ITS SOUTH-WEST AND THE RIDGE REMAINING TO ITS EAST AND SOUTH-EAST. ON TUESDAY, WHILE THE TROUGH SLIDES EASTWARDS TO THE SOUTH OF THE MOZAMBIQUE CHANNEL AND THEN A NEW RIDGE BUILDS UP OVER SOUTHERN AFRICA AROUND MID-WEEK, COMBINED WITH THE SYSTEM'S WEAKENING, THE TRACK SHOULD TURN BACK NORTHWARDS FROM WEDNESDAY ONWARDS. THERE STILL IS STRONG DISPERSION AMONG AVAILABLE GUIDANCE, WHICH MAKE THE SYSTEM TRACK MORE OR LESS NEAR THE COASTS OF MADAGASCAR OR MOZAMBIQUE. THE RSMC'S TRACK IS FAIRLY CLOSE TO THE LATEST EUROPEAN ENSEMBLIST AND DETERMINISTIC RUNS, LEAVING THE SYSTEM AT SEA IN THE MOZAMBIQUE CHANNEL UNTIL ITS DISSIPATION.

IN TERMS OF INTENSITY, ENVIRONMENTAL CONDITIONS SHOULD BE RATHER CONDUCIVE UNTIL MONDAY. THUS, ONCE THE LOW MOVES BACK TO SEA OVER THE MOZAMBIQUE CHANNEL FROM TONIGHT AND SUNDAY, INTENSIFICATION SHOULD RESUME THANKS TO VERY GOOD OCEANIC HEAT CONTENT, LOW TO MODERATE WIND SHEAR AND VERY GOOD UPPER DIVERGENCE WITH AN OUTFLOW CHANNEL TO THE SOUTH OF THE SYSTEM. THUS, INTENSIFICATION TO THE STAGE OF MODERATE TROPICAL STORM THEN SEVERE TROPICAL STORM IS FORECAST BY

SUNDAY NIGHT AND MONDAY. IT COULD EVEN POSSIBLY TRY TO BRIEFLY REACH TROPICAL CYCLONE STAGE. FROM TUESDAY, INCREASING WESTERLY SHEAR COMBINED WITH MID-LEVEL DRY AIR INTRUSION SHOULD GRADUALLY WEAKEN THE SYSTEM BEFORE EXPECTED DISSIPATION BY THE MIDDLE OR END OF THE WEEK.

IMPACTS ON INHABITED LANDS:

- GUSTS OF 70-90 OR EVEN 100 KM/H ALONG THE COASTS OF NAMPULA PROVINCE (MOZAMBIQUE), UP TO 120 KM/H OFFSHORE THIS WEEKEND.
- RAINFALL NEAR 100 MM IN 24H NEAR THE COAST OF NAMPULA AND ZAMBEZIA PROVINCES UNTIL SUNDAY.
- ROUGH TO LOCALLY VERY ROUGH SEAS THIS WEEKEND OFF THE MOZAMBIKAN COASTS WITH WAVES OF ABOUT 4 TO 5 METERS, GRADUALLY EASING BY THE END OF THE WEEKEND AS THE SYSTEM MOVES AWAY.