

WTIO30 FMEE 191222

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 10/5/20222023

1.A OVERLAND DEPRESSION 5 (CHENESO)

2.A POSITION 2023/01/19 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 15.2 S / 49.4 E  
(FIFTEEN DECIMAL TWO DEGREES SOUTH AND  
FORTY NINE DECIMAL FOUR DEGREES EAST)  
MOVEMENT: WEST-SOUTH-WEST 10 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 996 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: 280 SE: 325 SW: 0 NW: 0

34 KT NE: 0 SE: 140 SW: 0 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/01/20 00 UTC: 16.3 S / 47.6 E, VENT MAX= 030 KT, OVERLAND DEPRESSION  
28 KT NE: 0 SE: 400 SW: 0 NW: 220

24H: 2023/01/20 12 UTC: 17.2 S / 46.6 E, VENT MAX= 025 KT, OVERLAND DEPRESSION  
28 KT NE: 0 SE: 0 SW: 0 NW: 250

36H: 2023/01/21 00 UTC: 18.3 S / 45.5 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

48H: 2023/01/21 12 UTC: 19.1 S / 44.7 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

60H: 2023/01/22 00 UTC: 19.3 S / 44.0 E, VENT MAX= 025 KT, TROPICAL DISTURBANCE

72H: 2023/01/22 12 UTC: 19.2 S / 43.7 E, VENT MAX= 025 KT, TROPICAL DISTURBANCE

2.B LONGER-RANGE OUTLOOK:

96H: 2023/01/23 12 UTC: 18.6 S / 43.0 E, VENT MAX= 030 KT, TROPICAL DEPRESSION  
28 KT NE: 55 SE: 55 SW: 55 NW: 55

120H: 2023/01/24 12 UTC: 17.6 S / 42.3 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 75 SE: 75 SW: 75 NW: 75

34 KT NE: 35 SE: 0 SW: 0 NW: 35

2.C ADDITIONAL INFORMATION:

CHENESO LANDED LATE THIS MORNING BETWEEN THE CITIES OF SAMBAVA AND ANTALAHA AS A STRONG TROPICAL STORM.

THE DEPRESSION ON LAND SHOULD CONTINUE IN SOUTH-WEST DIRECTION WHILE WEAKENING. THE STEERING FLOW OF THIS SYSTEM IS THEN DRIVEN AT 700 HPA BY CONTRADICTORY STEERING FLOWS BETWEEN A SUBTROPICAL RIDGE SOUTH OF MADAGASCAR AND A NEAR EQUATORIAL RIDGE THAT IS STRENGTHENING TO THE NORTH AND TENDING TO SHIFT SOUTHWARDS. THIS WILL FAVOUR A GENERAL SOUTH-WEST TO SOUTHWARD MOVEMENT.

FOR THE END OF THE PERIOD, THE ENSEMBLE MODELS STILL SUGGEST TWO SCENARIOS, BUT THE OPTION OF EXIT TOWARDS THE CHANNEL IS NOW CLEARLY FAVORED.

A REGENERATION OF THE MINIMUM IS THEREFORE POSSIBLE AT THE END OF THE PERIOD OFF THE CENTRAL WEST COAST.

IN ANY CASE, THE UNCERTAINTY REMAINS IMPORTANT REGARDING THE TRAJECTORY AND A POSSIBLE REDEVELOPMENT (WHICH IN ANY CASE SHOULD NOT OCCUR BEFORE THE END OF THE WEEK OR EVEN THE BEGINNING OF NEXT WEEK IF IT OCCURS).

IN TERMS OF INTENSITY, WITH THE INTERACTION WITH THE RELIEF OF MADAGASCAR, THE SYSTEM WEAKENS QUICKLY ONCE ON LAND. WHEN IT GOES OUT TO SEA, DURING SATURDAY, DETERMINIST MODELS DIVERGE, IFS KEEPS THE MINIMUM CLOSE TO MADAGASCAR IN A WESTERLY SHEAR ENVIRONMENT LIMITING ITS INTENSIFICATION, WHILE GFS MAKES IT GO UP MORE QUICKLY IN THE CHANNEL AND THEN TOWARDS THE COASTS OF MOZAMBIQUE WHERE MORE FAVORABLE CONDITIONS ALLOW IT TO REINTENSIFY MORE RAPIDLY. THE CURRENT FORECAST IS A COMPROMISE BETWEEN THESE TWO OPTIONS.

IMPACTS ON INHABITED LANDS DURING THE NEXT 72 HOURS.

MADAGASCAR:

HEAVY RAINS ARE PRESENT OVER THE NORTH OF THE ISLAND, AS WELL AS OVER THE EASTERN COASTAL AREAS AND THE RELIEF, FURTHER SOUTH TO MAHORO UNDER THE INFLUENCE OF A VERY ACTIVE PERIPHERAL BAND.

THESE RAINS WILL QUICKLY ATTENUATE NEXT NIGHT IN THE IMPACT AREA WITH THE WEAKENING OF THE SYSTEM ON THE GROUND.

ON THE OTHER HAND, HEAVY RAINS WILL LAST AT LEAST UNTIL SUNDAY CONCERNING ON THE ONE HAND THE COAST AND THE RELIEF OF THE CENTER EAST (IN THE MAXIMUM OF CONVERGENCE OF THE EAST WINDS) AND ON THE OTHER HAND ON A GOOD PART OF THE NORTH-WEST (STRONG PUSH OF THE MONSOON FLOW FEEDING THE NORTHERN PART OF THE DEPRESSIONARY CIRCULATION).

THE EXPECTED ACCUMULATIONS OVER THE NEXT 3 DAYS EXCEED 200 MM IN THE PLAIN OVER A LARGE PART OF THE INDICATED SECTORS WITH LOCALLY MORE THAN 300/400 MM ON THE RELIEF.

- STRONG WIND CONDITIONS (GALE) STILL CONCERN THE MASOALA PENINSULA AND THE BAY OF ANONGIL, BUT SHOULD DIMINISH DURING THE NEXT NIGHT.

