

WTIO30 FMEE 051825

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 1/3/20222023

1.A TROPICAL DEPRESSION 3

2.A POSITION 2022/11/05 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 11.8 S / 86.8 E

(ELEVEN DECIMAL EIGHT DEGREES SOUTH AND  
EIGHTY SIX DECIMAL EIGHT DEGREES EAST)

MOVEMENT: WEST 16 KT

3.A DVORAK ANALYSIS: 2.5/2.5/S 0.0/24 H

4.A CENTRAL PRESSURE: 1008 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: 0 SE: 130 SW: 95 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1011 HPA / 200 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/11/06 06 UTC: 12.6 S / 83.2 E, VENT MAX= 030 KT, TROPICAL DEPRESSION  
28 KT NE: 0 SE: 110 SW: 95 NW: 0

24H: 2022/11/06 18 UTC: 12.7 S / 79.5 E, VENT MAX= 025 KT, REMNANT LOW

36H: 2022/11/07 06 UTC: 12.3 S / 76.4 E, VENT MAX= 025 KT, REMNANT LOW

48H: 2022/11/07 18 UTC: 11.3 S / 74.0 E, VENT MAX= 020 KT, FILLING UP

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=2.5-

THE WEAK TROPICAL LOW WHICH HAS BEEN PRESENT SINCE MID-WEEK IN THE  
INDONESIAN AREA OF RESPONSIBILITY HAD PROBABLY REACHED THE STAGE OF  
TROPICAL DEPRESSION BETWEEN WEDNESDAY AND FRIDAY MORNING, WHILE

REMAINING EAST OF 90E. IT HAS NOW ENTERED THE SOUTHWEST INDIAN OCEAN BASIN SINCE THIS SATURDAY 03UTC, IN A WEAKENED STATE AND IN THE FORM OF A REMNANT LOW DISPLAYING A WELL-DEFINED LOW-LEVEL VORTEX BUT WITHOUT ANY DEEP CONVECTION AND WITH WINDS OF ONLY 25KT.

SINCE 08 OR 09UTC, ACTIVE DEEP CONVECTION HAS REFORMED IN THE VICINITY OF THIS VORTEX AND HAS GRADUALLY INTENSIFIED TONIGHT, ORGANIZING IN A SHORT CURVED BAND. 1517Z AND 1605Z ASCAT PASSES INDICATE THE PRESENCE OF 30KT WINDS IN THE SOUTHERN SEMI-CIRCLE, WHILE WINDS ARE MUCH WEAKER TO THE NORTH AND NORTHWEST OF THE CIRCULATION. THIS SYSTEM HAS THUS BEEN CLASSIFIED AS A TROPICAL DEPRESSION THIS SATURDAY AT 18UTC, THE THIRD OF THE SEASON OVER THE SOUTHWEST INDIAN OCEAN.

THIS SYSTEM FOLLOWS A GENERAL WESTWARDS TRACK ALONG THE EDGE OF THE SUBTROPICAL RIDGE.

THE INTENSIFICATION OBSERVED THESE LAST HOURS HAS PROBABLY BEEN ENABLED BY DECREASING WIND SHEAR, WHICH IS NOW AROUND 10 TO 15 KT. THIS SHEAR SHOULD REMAIN WEAK UNTIL SUNDAY, BEFORE INCREASE SLIGHTLY FROM MONDAY, WHICH COULD ONCE AGAIN CAUSE MID-TROPOSPHERIC DRY AIR INTRUSION AND THUS DISRUPT CONVECTION. MOREOVER, LOW LEVEL CONVERGENCE IS BECOMING MORE AND MORE UNFAVORABLE ON THE NORTHERN SIDE OF THE SYSTEM, WHICH SHOULD PROGRESSIVELY MAKE THE CONVECTIVE CORE LESS CONSOLIDATED. IN AGREEMENT WITH AVAILABLE GUIDANCE, A WEAKENING TREND IS THEREFORE EXPECTED FROM SUNDAY NIGHT AND ESPECIALLY MONDAY AND THE SYSTEM'S INTENSITY SHOULDN'T INCREASE. NEAR-GALE FORCE WINDS MAY BE PRESENT UNTIL SUNDAY NIGHT TO MONDAY MORNING ON THE SOUTHERN MARGIN OF THE SYSTEM FAR AWAY FROM THE CENTER DUE TO THE PRESSURE GRADIENT EFFECT. THE WEAK REMNANT LOW SHOULD THEN GRADUALLY FILL UP ON TUESDAY WHILE DRIFTING SOUTH OF THE CHAGOS ARCHIPELAGO, WITHOUT ANY THREAT TO INHABITED LANDS.