

WTIO30 FMEE 101840

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 16/5/20242025

1.A TROPICAL CYCLONE 5 (DIKELEDI)

2.A POSITION 2025/01/10 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 13.4 S / 54.1 E

(THIRTEEN DECIMAL FOUR DEGREES SOUTH AND  
FIFTY FOUR DECIMAL ONE DEGREES EAST)

MOVEMENT: WEST 15 KT

3.A DVORAK ANALYSIS: 4.5/4.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 983 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 65 KT

RADIUS OF MAXIMUM WINDS (RMW): 22 KM

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

28 KT NE: 120 SE: 270 SW: 260 NW: 130

34 KT NE: 95 SE: 165 SW: 150 NW: 95

48 KT NE: 55 SE: 75 SW: 60 NW: 55

64 KT NE: 30 SE: 35 SW: 35 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2025/01/11 06 UTC: 12.5 S / 51.4 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 120 SE: 250 SW: 230 NW: 140

34 KT NE: 95 SE: 120 SW: 130 NW: 95

48 KT NE: 55 SE: 65 SW: 65 NW: 65

64 KT NE: 35 SE: 35 SW: 35 NW: 35

24H: 2025/01/11 18 UTC: 12.7 S / 49.2 E, VENT MAX= 070 KT, TROPICAL CYCLONE

28 KT NE: 120 SE: 165 SW: 120 NW: 120

34 KT NE: 95 SE: 100 SW: 85 NW: 85

48 KT NE: 65 SE: 65 SW: 45 NW: 45

64 KT NE: 30 SE: 30 SW: 35 NW: 35

36H: 2025/01/12 06 UTC: 13.3 S / 46.6 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 120 SE: 150 SW: 120 NW: 100

34 KT NE: 75 SE: 85 SW: 95 NW: 65

48 KT NE: 35 SE: 55 SW: 0 NW: 0

48H: 2025/01/12 18 UTC: 13.9 S / 44.2 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 130 SE: 175 SW: 120 NW: 100  
34 KT NE: 85 SE: 100 SW: 95 NW: 75  
48 KT NE: 35 SE: 55 SW: 45 NW: 0

60H: 2025/01/13 06 UTC: 14.6 S / 42.1 E, VENT MAX= 065 KT, TROPICAL CYCLONE  
28 KT NE: 130 SE: 185 SW: 150 NW: 110  
34 KT NE: 95 SE: 100 SW: 110 NW: 75  
48 KT NE: 55 SE: 65 SW: 55 NW: 45  
64 KT NE: 35 SE: 30 SW: 35 NW: 35

72H: 2025/01/13 18 UTC: 15.7 S / 40.6 E, VENT MAX= 065 KT, TROPICAL CYCLONE  
28 KT NE: 130 SE: 155 SW: 130 NW: 95  
34 KT NE: 85 SE: 85 SW: 100 NW: 65  
48 KT NE: 55 SE: 55 SW: 55 NW: 45  
64 KT NE: 30 SE: 35 SW: 35 NW: 30

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

96H: 2025/01/14 18 UTC: 19.2 S / 39.0 E, VENT MAX= 075 KT, TROPICAL CYCLONE  
28 KT NE: 175 SE: 285 SW: 215 NW: 130  
34 KT NE: 110 SE: 165 SW: 120 NW: 75  
48 KT NE: 65 SE: 75 SW: 65 NW: 55  
64 KT NE: 45 SE: 55 SW: 45 NW: 45

120H: 2025/01/15 18 UTC: 23.5 S / 40.2 E, VENT MAX= 080 KT, TROPICAL CYCLONE  
28 KT NE: 240 SE: 220 SW: 205 NW: 175  
34 KT NE: 140 SE: 130 SW: 140 NW: 95  
48 KT NE: 70 SE: 70 SW: 70 NW: 60  
64 KT NE: 50 SE: 60 SW: 60 NW: 50

#### 2.C ADDITIONAL INFORMATION:

T=CI=4.5-

OVER THE PAST 6 HOURS, DIKELEDI'S CLOUD PATTERN HAS IMPROVED, WITH THE APPEARANCE OF AN EYE FEATURE IN VISIBLE SATELLITE IMAGERY. THE SMALL SIZE OF THE SYSTEM'S CORE AND THE PRESENCE OF A MODERATE EAST-SOUTHEAST SHEAR SPREADING CIRRUS CLOUDS ABOVE THE EYE MEAN THAT THE EYE PATTERN IS NOT YET CLEAR IN INFRARED IMAGERY. SUBJECTIVE DVORAK ANALYSIS IS MAINLY BASED ON MET/PT AND ESTIMATED AT 4.5-, SUGGESTING AN INTENSITY AT THE MINIMAL STAGE OF TROPICAL CYCLONE WITH WINDS OF 65 KT. HOWEVER, IN THE ABSENCE OF RECENT RELIABLE OBJECTIVE DATA, THIS ESTIMATE IS RATHER UNCERTAIN.

IN TERMS OF TRACK FORECAST, DIKELEDI IS MOVING RAPIDLY WEST-NORTH-WEST TOWARDS THE NORTH OF MADAGASCAR. THE SYSTEM SHOULD MAKE LANDFALL OVER THE PROVINCE OF ANTSIRANANA ON SATURDAY LATE AFTERNOON OR EVENING. THEREAFTER, AS IT EXITS INTO THE MOZAMBIQUE CHANNEL, THE MOVEMENT CURVES TO THE WEST-SOUTH-WEST DUE TO A SLIGHT WEAKNESS IN THE SUBTROPICAL RIDGE. DISPERSION BETWEEN MODELS INCREASES SHARPLY FROM SUNDAY AND ESPECIALLY MONDAY, WITH A MORE OR LESS RAPID TURN TO THE SOUTH-WEST AND THEN SOUTH, AND MORE OR LESS CLOSE TO THE COAST OF MOZAMBIQUE (NAMPULA PROVINCE), DEPENDING ON THE LEVEL OF THE STEERING FLOW AND THE MORE OR LESS IMPORTANT EFFECT OF A TROUGH SOUTH

OF AFRICA. THE RSMC FORECAST IS A COMPROMISE MAINLY BETWEEN GFS, AROME AND AIFS MODELS, WHICH SEEM TO BETTER HANDLE THE SYSTEM.

IN TERMS OF INTENSITY, NO SIGNIFICANT CHANGE TO THE FORECAST. DIKELEDI IS CURRENTLY UNDER OVERALL GOOD ENVIRONMENTAL CONDITIONS, WITH VERY WARM WATERS, STRONG UPPER-LEVEL DIVERGENCE, BUT A RELATIVE INFLUENCE OF EAST-SOUTHEASTERLY WIND SHEAR (BUT THE SYSTEM IS MOVING IN THE DIRECTION OF THE SHEAR, WHICH REDUCES ITS DISRUPTING EFFECTS). THESE GOOD CONDITIONS SHOULD LAST UNTIL SATURDAY EVENING, ALLOWING THE SYSTEM TO CONTINUE INTENSIFYING. GIVEN ITS SMALL SIZE, RAPID INTENSIFICATION IS POSSIBLE, AND AN INTENSE TROPICAL CYCLONE STAGE PRIOR TO LANDFALL OVER MADAGASCAR CANNOT BE RULED OUT, EVEN IF THIS IS NOT THE PREFERRED SCENARIO. FROM SATURDAY NIGHT INTO SUNDAY MORNING, THE SLOWDOWN IN MOVEMENT, INCREASING THE EFFECTS OF SHEAR, AND THE PASSAGE OVER MADAGASCAR WILL MORE OR LESS WEAKEN THE SYSTEM. ONCE BACK OVER THE WARM WATERS OF THE MOZAMBIQUE CHANNEL, THE SYSTEM SHOULD ONCE AGAIN ENCOUNTER GOOD CONDITIONS AND GRADUALLY INTENSIFY. THIS INTENSIFICATION WILL BE HIGHLY DEPENDENT ON ITS TRACK. THE RSMC FORECAST CALLS FOR REGULAR INTENSIFICATION TO TROPICAL CYCLONE STATUS AT 120 HOURS.

IMPACTS ON INHABITED LANDS OVER THE NEXT 72 HOURS :

MADAGASCAR:

- GALE FORCE WINDS SATURDAY FROM MIDDAY ON EAST COAST OF ANTSIRANANA PROVINCE. HURRICANE-FORCE WINDS LIKELY ON SATURDAY LATE AFTERNOON AND EVENING NEAR THE LANDFALL AREA (BETWEEN VOHEMAR AND ANTSIRANANA).
- VERY ROUGH SEAS TO LOCALLY HIGH SEAS SATURDAY AFTERNOON AND FOLLOWING NIGHT, WITH WAVES OF 4 TO 6 METERS AND LOCALLY 6 TO 8 METERS NEAR THE LANDFALL AREA.
- HEAVY RAIN FROM SATURDAY AFTERNOON UNTIL SUNDAY OVER ANTSIRANANA PROVINCE AND NORTHERN TOAMASINA PROVINCE. ACCUMULATIONS OF OVER 100 MM AND LOCALLY 200-300 MM IN 24H NEAR THE CENTER OF THE SYSTEM AND 150-200 MM OVER THE EXPOSED MOUNTAIN TERRAIN.

MAYOTTE :

- HEAVY RAIN FROM SATURDAY NIGHT AND ESPECIALLY ON SUNDAY. CUMULATIVE RAINFALL IN EXCESS OF 150-200 MM IN 12HRS POSSIBLE.
- GALE FORCE WINDS POSSIBLE ON SUNDAY.
- WAVES NEAR 4M POSSIBLE ON SUNDAY.

COMOROS :

- HEAVY RAIN ON SUNDAY IN THE FAR PERIPHERY OF THE SYSTEM. RAINFALL UP TO 100 MM LOCALLY, AND 150 MM OVER HIGH GROUND.

MOZAMBIQUE :

- GALE FORCE WINDS POSSIBLE FROM MONDAY AFTERNOON AND FOLLOWING NIGHT.
- WAVES NEAR 4M POSSIBLE BETWEEN MONDAY AFTERNOON AND TUESDAY MORNING.

