

WTIO30 FMEE 160626

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 38/5/20242025

1.A INTENSE TROPICAL CYCLONE 5 (DIKELEDI)

2.A POSITION 2025/01/16 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 28.9 S / 44.7 E

(TWENTY EIGHT DECIMAL NINE DEGREES SOUTH AND
FORTY FOUR DECIMAL SEVEN DEGREES EAST)

MOVEMENT: SOUTH-EAST 17 KT

3.A DVORAK ANALYSIS: 5.5/6.0/S 0.0/6 H

4.A CENTRAL PRESSURE: 945 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 95 KT

RADIUS OF MAXIMUM WINDS (RMW): 22 KM

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

28 KT NE: 390 SE: 280 SW: 205 NW: 230

34 KT NE: 280 SE: 220 SW: 100 NW: 130

48 KT NE: 130 SE: 110 SW: 60 NW: 110

64 KT NE: 85 SE: 65 SW: 45 NW: 65

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1003 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2025/01/16 18 UTC: 31.6 S / 49.0 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 390 SE: 220 SW: 150 NW: 220

34 KT NE: 205 SE: 140 SW: 95 NW: 110

48 KT NE: 100 SE: 85 SW: 45 NW: 55

64 KT NE: 65 SE: 45 SW: 35 NW: 45

24H: 2025/01/17 06 UTC: 33.6 S / 54.1 E, VENT MAX= 065 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 415 SE: 205 SW: 230 NW: 285

34 KT NE: 215 SE: 130 SW: 130 NW: 155

48 KT NE: 95 SE: 75 SW: 45 NW: 55

64 KT NE: 65 SE: 45 SW: 35 NW: 35

36H: 2025/01/17 18 UTC: 34.6 S / 60.7 E, VENT MAX= 055 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 390 SE: 150 SW: 195 NW: 280

34 KT NE: 195 SE: 95 SW: 110 NW: 150

48 KT NE: 95 SE: 65 SW: 0 NW: 55

48H: 2025/01/18 06 UTC: 34.8 S / 68.1 E, VENT MAX= 040 KT, EXTRATROPICAL DEPRESSION
28 KT NE: 345 SE: 165 SW: 205 NW: 315
34 KT NE: 165 SE: 110 SW: 85 NW: 165

60H: 2025/01/18 18 UTC: 34.8 S / 75.7 E, VENT MAX= 035 KT, EXTRATROPICAL DEPRESSION
28 KT NE: 205 SE: 165 SW: 110 NW: 155
34 KT NE: 75 SE: 110 SW: 0 NW: 0

72H: 2025/01/19 06 UTC: 34.8 S / 82.0 E, VENT MAX= 035 KT, EXTRATROPICAL DEPRESSION
28 KT NE: 205 SE: 165 SW: 155 NW: 150
34 KT NE: 75 SE: 110 SW: 0 NW: 0

2.B LONGER-RANGE OUTLOOK:
NIL

2.C ADDITIONAL INFORMATION:
T=5.5+ CI=6.0-

OVER THE PAST 6 HOURS, DIKEDELI HAS INITIALLY EXPERIENCED A PHASE OF STRUCTURAL IMPROVEMENT, WITH A 3-HOUR AVERAGE EYE ANALYSIS OF 6.0, BEFORE DROPPING SLIGHTLY TO 5.5+ AT AROUND 06UTC. IN ADDITION, A SAR PASS AT 0230Z MEASURED MAXIMUM WINDS AT 100KT 1 MINUTE. DIKELEDI IS THEREFORE ESTIMATED AT 95KT AT 06UTC.

CURRENTLY AT A LATITUDE OF 28.8S, DIKELEDI BECOMES THE MOST SOUTHERLY INTENSE TROPICAL CYCLONE IN OUR DATABASE, ECLIPSING ANGREEK'S RECORD FROM LAST SEASON.

LITTLE CHANGE IN TERMS OF TRACK. THE SYSTEM IS DRIVEN IN THE SHORT TERM BY A RIDGE OF HIGH PRESSURE TO THE EAST AND A TROUGH CIRCULATING FURTHER SOUTH, GENERATING A SOUTHWESTERLY SHIFT. FROM TONIGHT ONWARDS, THE SUBTROPICAL RIDGE WILL THICKEN AND DIKELEDI WILL CIRCULATE ON THE SOUTHERN SIDE OF THIS RIDGE, HEADING DUE EAST. THERE IS LITTLE UNCERTAINTY ABOUT THE SHAPE OF THE TRACK, BUT THERE IS SOME DISPERSION BETWEEN THE DIFFERENT LEADERS IN TERMS OF SPEED. THE RSMC FORECAST IS CLOSER TO THE FASTER IFS SCENARIO. IN TERMS OF INTENSITY, DIKEDELI IS CURRENTLY IN A FAVORABLE ENVIRONMENT, WITH GOOD UPPER LEVEL DIVERGENCE, LOW WIND SHEAR AND HIGH OCEAN POTENTIAL. IT SHOULD THEREFORE REMAIN AN INTENSE TROPICAL CYCLONE FOR THE NEXT FEW HOURS. FROM TONIGHT ONWARDS, THE WESTERLY SHEAR SHOULD GRADUALLY INCREASE, ALLOWING INTRUSIONS OF DRY AIR AROUND THE HEART OF THE SYSTEM. IN ADDITION, AS IT MOVES OVER COOLER WATERS, DIKEDELI SHOULD BEGIN TO LOSE ITS TROPICAL CHARACTERISTICS FROM TOMORROW, WHILE CONTINUING TO WEAKEN. DIKEDELI SHOULD REACH EXTRATROPICAL LOW STATUS EARLY THIS WEEKEND.

IMPACTS ON INHABITED LAND :

SOUTHWEST MADAGASCAR (TOLIARA PROVINCE):

- HEAVY RAIN STILL POSSIBLE IN THE NEXT FEW HOURS NEAR THE COAST, WITH CUMULUS OF 100MM POSSIBLE. IMPROVEMENT TOWARDS THE END OF THE DAY