

WTIO30 FMEE 131828

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 28/5/20242025

1.A SEVERE TROPICAL STORM 5 (DIKELEDI)

2.A POSITION 2025/01/13 AT 1800 UTC:

WITHIN 40 NM RADIUS OF POINT 15.7 S / 40.1 E

(FIFTEEN DECIMAL SEVEN DEGREES SOUTH AND
FORTY DECIMAL ONE DEGREES EAST)

MOVEMENT: WEST-SOUTH-WEST 6 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 997 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 55 KT

RADIUS OF MAXIMUM WINDS (RMW): 24 KM

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

28 KT NE: 120 SE: 85 SW: 45 NW: 95

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

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2025/01/14 06 UTC: 17.0 S / 39.7 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 165 SE: 175 SW: 110 NW: 55

34 KT NE: 100 SE: 100 SW: 85 NW: 35

48 KT NE: 45 SE: 35 SW: 0 NW: 0

24H: 2025/01/14 18 UTC: 18.8 S / 40.0 E, VENT MAX= 070 KT, TROPICAL CYCLONE

28 KT NE: 215 SE: 205 SW: 130 NW: 130

34 KT NE: 130 SE: 110 SW: 100 NW: 85

48 KT NE: 45 SE: 55 SW: 35 NW: 45

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

36H: 2025/01/15 06 UTC: 21.2 S / 40.7 E, VENT MAX= 090 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 295 SE: 270 SW: 150 NW: 175

34 KT NE: 175 SE: 150 SW: 120 NW: 120

48 KT NE: 55 SE: 65 SW: 55 NW: 45

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

48H: 2025/01/15 18 UTC: 24.1 S / 42.0 E, VENT MAX= 110 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 270 SE: 185 SW: 130 NW: 195
34 KT NE: 150 SE: 100 SW: 100 NW: 120
48 KT NE: 65 SE: 55 SW: 45 NW: 45
64 KT NE: 55 SE: 45 SW: 35 NW: 35

60H: 2025/01/16 06 UTC: 26.6 S / 43.5 E, VENT MAX= 105 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 240 SE: 155 SW: 130 NW: 185
34 KT NE: 130 SE: 85 SW: 100 NW: 100
48 KT NE: 65 SE: 55 SW: 45 NW: 45
64 KT NE: 35 SE: 45 SW: 35 NW: 35

72H: 2025/01/16 18 UTC: 28.8 S / 45.8 E, VENT MAX= 100 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 240 SE: 150 SW: 130 NW: 175
34 KT NE: 120 SE: 85 SW: 100 NW: 95
48 KT NE: 55 SE: 55 SW: 45 NW: 45
64 KT NE: 45 SE: 45 SW: 35 NW: 35

2.B LONGER-RANGE OUTLOOK:

96H: 2025/01/17 18 UTC: 31.1 S / 54.1 E, VENT MAX= 090 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 240 SE: 140 SW: 220 NW: 175
34 KT NE: 120 SE: 75 SW: 95 NW: 95
48 KT NE: 55 SE: 45 SW: 45 NW: 45
64 KT NE: 45 SE: 35 SW: 35 NW: 35

120H: 2025/01/18 18 UTC: 31.4 S / 57.4 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 195 SE: 150 SW: 175 NW: 165
34 KT NE: 85 SE: 85 SW: 95 NW: 75
48 KT NE: 60 SE: 50 SW: 50 NW: 60
64 KT NE: 40 SE: 40 SW: 40 NW: 40

2.C ADDITIONAL INFORMATION:

OVER THE PAST 6 HOURS, DIKEDELI HAS BEEN EVOLVING OVER LAND IN NAMPULA PROVINCE, MOZAMBIQUE. ITS CLOUD CONFIGURATION HAS LOGICALLY DETERIORATED, WITH LESS COLD CLOUD TOPS. CONVECTIVE ACTIVITY REMAINS SIGNIFICANT WITH NUMEROUS WIND IMPACTS IN THE PROVINCES. MAXIMUM WINDS ESTIMATED BY RSMC ARE IN THE 55KT RANGE.

THE SYSTEM WILL CONTINUE TO EVOLVE OVER THE NEXT 6 HOURS OVER THE MOZAMBIKAN LANDMASS, MOVING SOUTHWARDS OVERNIGHT AND RE-EMERGING IN THE CHANNEL ON TUESDAY MORNING, CARRIED BY THE NORTHERLY FLOW ALONG THE WESTERN EDGE OF THE MID-TROPICAL RIDGE OVER THE BASIN. FROM WEDNESDAY/THURSDAY, THE SYSTEM COULD MOVE CLOSER TO THE MADAGASCAN COAST, GUIDED BY THE UPPER-LEVEL NORTHWESTERLY FLOW SET UP BY THE MID-TROPICAL RIDGE AND A DISTANT TROUGH TO THE SOUTH. THE VAST MAJORITY OF MODELS HAVE THE SYSTEM TRANSITING THROUGH THE CHANNEL, AND FOR THE MOMENT DO NOT FORECAST A POSSIBLE LANDFALL ON THE SOUTHERN TIP OF THE GRANDE ILE. THE RSMC PREDICTION IS A COMPROMISE BETWEEN THE VARIOUS GUIDANCE SYSTEMS AVAILABLE, AND THERE IS STILL SOME UNCERTAINTY AS TO THE SYSTEM'S FINAL TRAJECTORY.

IN TERMS OF INTENSITY, DIKEDELI WILL WEAKEN IN THE SHORT TERM THROUGH INTERACTION WITH THE MOZAMBIKAN LANDS. HOWEVER, AS ITS TERRESTRIAL EXPERIENCE IS LIMITED IN TIME (NO MORE THAN 12 HOURS), DIKEDELI SHOULD MAINTAIN ITS SOLID INTERNAL CONSTITUTION. IT SHOULD REGAIN A SATISFACTORY OCEANIC ENERGY POTENTIAL WHEN IT HEADS OUT TO SEA ON TUESDAY MORNING, COUPLED WITH GOOD ENVIRONMENTAL CONDITIONS DESPITE PERSISTENT ALTITUDE VWS. IT SHOULD THEN GRADUALLY CONTINUE TO INTENSIFY OVER THE NEXT FEW DAYS, ONCE AGAIN REACHING TROPICAL CYCLONE STATUS ON TUESDAY AND PROBABLY INTENSE TROPICAL CYCLONE STATUS ON WEDNESDAY, DESPITE SLIGHTLY LESS FAVORABLE OCEAN POTENTIAL THEREAFTER. MOREOVER, DEPENDING ON THE EVOLUTION OF THE SYSTEM, A POSSIBLE EYEWALL REPLACEMENT CYCLE DURING ITS MATURE PHASE COULD CAUSE ITS INTENSITY TO FLUCTUATE.

IMPACTS ON INHABITED LAND OVER THE NEXT 72 HOURS :

MOZAMBIQUE (NAMPULA / ZAMBEZIA PROVINCE COASTLINE):

- STORM FORCE OVERNIGHT UNTIL TOMORROW MORNING.
- HEAVY TO LOCALLY TORRENTIAL RAIN MONDAY THROUGH TUESDAY. RAINFALL TOTALS OF 100-150MM IN 24HRS, OR EVEN 200-250MM LOCALLY ALONG THE COAST.
- WAVES OF 4 TO 6M UNTIL TUESDAY MORNING. SURGE OF AROUND 1M50 TO 2M SOUTH OF THE POINT OF IMPACT, BETWEEN THE TOWNS OF QUINGA AND NORTH ANGOCHE.

SOUTH-WEST MADAGASCAR (TOLIARA PROVINCE) - FROM WEDNESDAY:

- WAVES OF 4 TO 6M LIKELY.

JUAN DE NOVA MONDAY AND TUESDAY:

- HEAVY RAIN - 100MM CUMULATIVE RAINFALL IN 24H.
- WAVES OF 4M POSSIBLE.

EUROPA FROM WEDNESDAY :

- GALES TO STORMS LIKELY, HURRICANE-FORCE WINDS NOT RULED OUT A PRIORI.
- HEAVY RAIN (100-150MM CUMULATIVE).
- WAVES OF 4 TO 6M LIKELY.