

WTIO30 FMEE 051900

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 23/6/20202021

1.A MODERATE TROPICAL STORM 6 (DANILO)

2.A POSITION 2021/01/05 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 16.5 S / 76.7 E

(SIXTEEN DECIMAL FIVE DEGREES SOUTH AND  
SEVENTY SIX DECIMAL SEVEN DEGREES EAST)

MOVEMENT: WEST 6 KT

3.A DVORAK ANALYSIS: 2.5/3.5/W 1.0/24 H

4.A CENTRAL PRESSURE: 990 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 45 KT

RADIUS OF MAXIMUM WINDS (RMW): 46 KM

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

28 KT NE: 130 SE: 555 SW: 520 NW: 130

34 KT NE: 0 SE: 130 SW: 130 NW: 55

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/01/06 06 UTC: 16.6 S / 75.3 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 55 SE: 150 SW: 205 NW: 75

34 KT NE: 35 SE: 85 SW: 35 NW: 65

24H: 2021/01/06 18 UTC: 16.6 S / 73.4 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 55 SE: 240 SW: 305 NW: 75

34 KT NE: 35 SE: 55 SW: 110 NW: 65

36H: 2021/01/07 06 UTC: 16.7 S / 71.0 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 55 SE: 155 SW: 185 NW: 75

34 KT NE: 35 SE: 100 SW: 35 NW: 65

48H: 2021/01/07 18 UTC: 16.8 S / 68.4 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 55 SE: 335 SW: 260 NW: 55

60H: 2021/01/08 06 UTC: 16.9 S / 65.9 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 55 SE: 165 SW: 195 NW: 55

72H: 2021/01/08 18 UTC: 17.1 S / 63.6 E, VENT MAX= 030 KT, TROPICAL DEPRESSION  
28 KT NE: 220 SE: 280 SW: 185 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2021/01/09 18 UTC: 18.0 S / 59.5 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 185 SE: 270 SW: 185 NW: 75

34 KT NE: 55 SE: 100 SW: 30 NW: 65

120H: 2021/01/10 18 UTC: 18.9 S / 56.1 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 185 SE: 270 SW: 185 NW: 75

34 KT NE: 55 SE: 100 SW: 30 NW: 65

2.C ADDITIONAL INFORMATION:

T=2.5- CI=3.5-

DURING THE LAST SIX HOURS, UNDER THE EFFECT OF THE NORTHERLY SHEAR, THE UPPER AND LOWER CIRCULATION HAVE BEEN TOTALLY SEPARATED. AS A RESULT, CONVECTIVE ACTIVITY HAS COLLAPSED. THE 1340Z SSMIS AND 1646Z AMSU-B MICROWAVE IMAGES CONFIRM THIS. THE INTENSITY WAS FIXED AT 45KT IN THE ABSENCE OF SCATTEROMETRIC DATA ON THE CENTRE. THE LATEST DATA ALSO SEEMS TO INDICATE THE BEGINNING OF A WESTWARD SHIFT.

IN TERMS OF TRACK PREDICTION, IF THE RECENT TRACK IS CONFIRMED, DANILO'S MOVEMENT IS STARTING TO BE DRIVEN BY THE SUBTROPICAL RIDGE. THIS MOVEMENT SHOULD PERSIST OVER THE NEXT 3 DAYS. AT THE END OF THE PERIOD, DANILO COULD MOVE SOUTH-WESTWARD WITH THE SHIFT OF THE GEOPOTENTIAL HIGHS TOWARDS THE EAST.

IN TERMS OF INTENSITY, THE FORECAST REMAINS VERY UNCERTAIN. THE SHEAR THAT HAS INFLUENCED DANILO SHOULD PERSIST TOMORROW. ANOTHER NORTH-WESTERN CONSTRAINT COULD ALSO IMPACT THE SYSTEM ON FRIDAY. IN THIS UNFAVOURABLE CONTEXT, CONDUCIVE TO DRY AIR INTRUSIONS, THE INTENSITY OF THE SYSTEM SHOULD REMAIN LOW OVER THE NEXT 3 DAYS. AT THE END OF THE PERIOD, ENVIRONMENTAL CONDITIONS COULD BECOME A LITTLE MORE FAVOURABLE WITH A GOOD UPPER DIVERGENCE AND LOW SHEAR. HOWEVER, SURFACE CONVERGENCE SHOULD BE WEAK ON THE NORTHERN SIDE. SO THIS POSSIBLE INTENSIFICATION IS FAR FROM CERTAIN. AS SUGGESTED BY SOME DETERMINISTIC RUNS, THE INTENSITY COULD BE MORE MODEST THAN THE PRESENT FORECAST.