

WTIO30 FMEE 061819

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 27/6/20202021

1.A TROPICAL DEPRESSION 6 (DANILO)

2.A POSITION 2021/01/06 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 16.5 S / 74.0 E

(SIXTEEN DECIMAL FIVE DEGREES SOUTH AND
SEVENTY FOUR DECIMAL ZERO DEGREES EAST)

MOVEMENT: WEST 7 KT

3.A DVORAK ANALYSIS: 2.5/2.5/S 0.0/12 H

4.A CENTRAL PRESSURE: 995 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: 555 SW: 370 NW: 0

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/01/07 06 UTC: 16.5 S / 71.5 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 0 SE: 370 SW: 280 NW: 0

24H: 2021/01/07 18 UTC: 16.6 S / 69.0 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 0 SE: 280 SW: 205 NW: 0

36H: 2021/01/08 06 UTC: 16.8 S / 66.5 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 0 SE: 280 SW: 205 NW: 0

48H: 2021/01/08 18 UTC: 17.0 S / 64.5 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 0 SE: 220 SW: 185 NW: 0

60H: 2021/01/09 06 UTC: 17.5 S / 62.3 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 0 SE: 185 SW: 150 NW: 0

72H: 2021/01/09 18 UTC: 18.0 S / 60.5 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 55 SE: 185 SW: 150 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2021/01/10 18 UTC: 19.4 S / 57.0 E, VENT MAX= 035 KT, MODERATE TROPICAL

STORM

28 KT NE: 95 SE: 220 SW: 220 NW: 95

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

120H: 2021/01/11 18 UTC: 21.0 S / 54.1 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM

28 KT NE: 110 SE: 240 SW: 240 NW: 110

34 KT NE: 75 SE: 110 SW: 110 NW: 75

2.C ADDITIONAL INFORMATION:

T=CI=2.5.

LITTLE CHANGE OVER THE LAST 6 HOURS ON THE DANILO'S CLOUD PRESENTATION WHICH STILL PRESENTS A SHEARED PATTERN WITH A CENTER AT THE NORTHEASTERN EDGE OF THE CONVECTIVE ACTIVITY. THE LATTER REMAINS VERY FLUCTUATING PENDING ON THE OCCURRENCE OF CONVECTIVE "BURST". ACCORDING TO THE AFTERNOON ASCAT SWATHS, THE FINAL INTENSITY IS DOWN AT 30 KT.

IN TERMS OF TRACK FORECAST, DANILO IS MOVING WESTWARD UNDER THE INFLUENCE OF THE LOW TO MID-LEVELS SUBTROPICAL RIDGE. THIS TRACK SHOULD CONTINUE OVER THE NEXT 3 DAYS. AT THE END OF THE PERIOD, DANILO COULD MOVE MORE SOUTH-WESTWARDS WITH THE SHIFT OF THE SUBTROPICAL HIGHS TOWARDS THE EAST.

IN TERMS OF INTENSITY, THE FORECAST REMAINS VERY UNCERTAIN. THE SHEAR THAT IMPACTED DANILO SHOULD CONTINUE OVER THE NEXT TWO DAYS. IN THIS STILL FAVORABLE CONTEXT FOR DRY AIR INTRUSIONS, THE INTENSITY OF THE SYSTEM SHOULD REMAIN LOW.

OVER THE WEEKEND, THE ENVIRONMENTAL CONDITIONS COULD BECOME A LITTLE MORE CONDUCIVE FOR INTENSIFICATION WITH A GOOD UPPER LEVELS DIVERGENCE AND LOW SHEAR. HOWEVER, THE SURFACE CONVERGENCE COULD BECOME WORSE AND WORSE: IT REMAINS WEAK ON THE NORTH SIDE WITH A CONVERGENCE OF HUMIDITY COUNTERACTED BY THE PRESENCE OF DRY AIR AT THE PERIPHERY OF THE SYSTEM. ON THE SOUTH SIDE, A BAROCLINIC INTERACTION BETWEEN THE SOUTHERN LIMIT OF THE LOW LEVELS WARM AIR ASSOCIATED WITH DANIELO AND AN UPPER LEVELS TROUGH PRESENT BETWEEN THE MASCARENES AND MADAGASCAR IS SUGGESTED BY IFS AND GFS AROUND 60E BETWEEN 25S AND 30S. THIS BAROCLINIC INTERACTION IS LIKELY TO SIGNIFICANTLY INTERFERE WITH THE SOUTH SIDE LOW LEVELS CONVERGENCE. SO THIS POSSIBLE INTENSIFICATION IS FAR FROM BEING CERTAIN, WHICH IS REFLECTED IN THE DATA FROM EPS AND GEFS. THE MOST RELIABLE DETERMINISTIC GUIDELINES CONTINUE TO DIVERGE AT THIS TIME: SCENARIO OF RE-INTENSIFICATION SUGGESTED BY IFS/UKMO AND FILLING BY GFS/HWRF.

LATER THIS WEEK AND THIS WEEKEND DANILO WILL THEREFORE PASS NEAR THE MASCARENES ISLANDS. A PROBABLE DETERIORATION OF THE WEATHER CONDITIONS IS EXPECTED FROM EAST TO WEST: FRIDAY / SATURDAY FOR RODRIGUES AND FROM SATURDAY EVENING OR SUNDAY MORNING FOR THE MAURITIUS LA REUNION SECTOR. THE EXTENT OF THIS DETERIORATION REMAINS TO BE SPECIFIED.

