Direction Interrégionale de Météo-France pour l'Océan Indien
50 Boulevard du Chaudron
97490 Sainte-Clotilde
Tél : 0262 92 11 00
Fax Exploitation : 0262 92 11 48
Fax Direction : 0262 92 11 47

WTIO30 FMEE 011321
RSMC / TROPICAL CYCLONE CENTER / LA REUNION
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 6/6/20202021
1.A MODERATE TROPICAL STORM 6 (DANILO)

2.A POSITION 2021/01/01 AT 1200 UTC:
WITHIN 20 NM RADIUS OF POINT 11.6 S / 72.3 E
(ELEVEN DECIMAL SIX DEGREES SOUTH AND
SEVENTY TWO DECIMAL THREE DEGREES EAST)
MOVEMENT: QUASI-STATIONARY.

3.A DVORAK ANALYSIS: 2.5/2.5/D 0.5/12 H

4.A CENTRAL PRESSURE: 996 HPA
5.A MAX AVERAGE WIND SPEED (10 MN): 35 KT
RADIUS OF MAXIMUM WINDS (RMW): 65 KM

6.A EXTENSION OF WIND BY QUADRANTS (KM):
28 KT NE: 0 SE: 150 SW: 150 NW: 150
34 KT NE: 0 SE: 75 SW: 75 NW: 75

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1004 HPA / 600 KM
8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):
12H: 2021/01/02 00 UTC: 11.5 S / 72.9 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM
28 KT NE: 85 SE: 110 SW: 150 NW: 130
34 KT NE: 75 SE: 10 SW: 75 NW: 95

24H: 2021/01/02 12 UTC: 11.3 S / 73.5 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM
28 KT NE: 120 SE: 110 SW: 150 NW: 175
34 KT NE: 110 SE: 10 SW: 75 NW: 130

36H: 2021/01/03 00 UTC: 12.4 S / 75.3 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM
28 KT NE: 155 SE: 130 SW: 285 NW: 205
34 KT NE: 140 SE: 20 SW: 140 NW: 120

48H: 2021/01/03 12 UTC: 14.6 S / 76.0 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM
28 KT NE: 85 SE: 295 SW: 195 NW: 185
34 KT NE: 75 SE: 110 SW: 130 NW: 150

60H: 2021/01/04 00 UTC: 15.9 S / 75.8 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM
28 KT NE: 110 SE: 130 SW: 175 NW: 110
34 KT NE: 100 SE: 55 SW: 95 NW: 85

72H: 2021/01/04 12 UTC: 16.8 S / 75.4 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM
28 KT NE: 95 SE: 295 SW: 155 NW: 150
34 KT NE: 85 SE: 120 SW: 120 NW: 95
48 KT NE: 45 SE: 45 SW: 55 NW: 65

2.B LONGER-RANGE OUTLOOK:
96H: 2021/01/05 12 UTC: 17.7 S / 73.3 E, VENT MAX= 065 KT, TROPICAL CYCLONE
28 KT NE: 155 SE: 305 SW: 315 NW: 230
34 KT NE: 95 SE: 175 SW: 220 NW: 165
48 KT NE: 75 SE: 75 SW: 110 NW: 85
64 KT NE: 65 SE: 45 SW: 65 NW: 55

120H: 2021/01/06 12 UTC: 18.0 S / 69.9 E, VENT MAX= 075 KT, TROPICAL CYCLONE
28 KT NE: 120 SE: 400 SW: 380 NW: 220
34 KT NE: 110 SE: 240 SW: 260 NW: 150
48 KT NE: 80 SE: 70 SW: 110 NW: 80
64 KT NE: 70 SE: 50 SW: 70 NW: 60

2.C ADDITIONAL INFORMATION:
T=CI=2.5+

DURING THE LAST 6 HOURS, THE CONVECTION IN CURVED BAND CONFIGURATION HAS BEEN QUITE FLUCTUATING BUT HAS MAINTAINED A STRUCTURE JUSTIFYING A DVORAK ANALYSIS OF 2.5+. FOLLOWING THIS ANALYSIS THE 06 SYSTEM WAS NAMED DANILO BY THE MAURITIAN METEOROLOGICAL SERVICE AND IS THEREFORE NOW A MODERATE TROPICAL STORM.

STILL QUASI-STATIONARY, THE STORM REMAINS AT THE EDGE OF A NORTH-EASTERN SHEAR ZONE ANALYZED BY CIMSS. IT WILL KEEP THIS QUASI-STATIONARY CHARACTER DURING THE NEXT 24-36 HOURS BY REMAINING NESTED ON THE AXIS OF THE MONSOON TROUGH. THIS WEEKEND, IT SHOULD START A MORE NOTABLE DISPLACEMENT IN A GENERAL SOUTH-EASTERN THEN SOUTHERN DIRECTION, SUCKED UP BY THE OTHER SYSTEM (FUJIWHARA EFFECT) AND UNDER THE INFLUENCE OF THE WESTERLY FLOW PRESENT NORTH OF THE MONSOON TROUGH. BY SUNDAY, THE CIRCULATION SHOULD THEN MIX WITH SYSTEM 5. FROM THIS DATE, THE SYSTEM RESULTING FROM THIS INTERACTION BETWEEN SYSTEMS 05 AND DANILO SHOULD THEN RESUME A GENERALLY WESTERLY TRAJECTORY ON THE NORTHERN FACE OF A BROAD SUBTROPICAL RIDGE.

THE SYSTEM REMAINS ON THE EDGE OF A NORTHEASTERN SHEAR UNTIL TONIGHT, THEN THE ALTITUDE CONDITIONS BECOME MORE FAVORABLE FOR DEVELOPMENT. HOWEVER, THE INTERACTION WITH MODERATE TROPICAL STORM DANILO TO THE NORTHWEST SHOULD SIGNIFICANTLY MODIFY LOW-LEVEL CONDITIONS. THE AVAILABLE MODELS PROPOSE THE DOMINANCE OF DANILO OVER SYSTEM 5, WITH DANILO CUTTING OFF THE MONSOON SUPPLY TO ITS RIVAL. EARLY NEXT WEEK, THE SURVIVING SYSTEM SHOULD BENEFIT FROM ENVIRONMENTAL CONDITIONS

THAT FAVOUR ITS STRENGTHENING, ALTHOUGH DRY MID-TROPOSPHERE AIR TO THE SOUTH COULD SLOW ITS PACE. DEPENDING ON THE LATITUDE AT WHICH IT EVOLVES, THE SYSTEM COULD BE GENERATED BY A LACK OF OCEANIC POTENTIAL SOUTH OF 200S OR MODERATE NORTHEAST SHEAR AROUND 15S. FOR THE MOMENT, THE PRESENT INTENSITY FORECAST FOLLOWS THE SCENARIO OF THE EUROPEAN NUMERICAL MODEL WITH A CONTINUOUS INTENSIFICATION DUE TO ITS SOUTHERLY LOCATION UNDER A LESS SHEARED ENVIRONMENT.

AS FOR THE FORECAST OF SYSTEM 05, THE CONFIDENCE IN TRACK AND INTENSITY REMAINS LOW AS THE TWO SYSTEMS INTERACT WITH EACH OTHER. ONE OF THE TWO SYSTEMS SHOULD TAKE OVER BUT IT IS NOT IMPOSSIBLE THAT THEY NEUTRALIZE EACH OTHER. THE INTENSITY FORECAST WILL BE OF BETTER QUALITY AS SOON AS THE RESULTING SYSTEM IS BETTER DEFINED. AS FOR THE WESTERN TRACK OF THE SYSTEM, IT IS RELATIVELY WELL DEFINED IN THE LONG TERM.