

WTIO30 FMEE 270645

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 5/7/20212022

1.A SEVERE TROPICAL STORM 7 (VERNON)

2.A POSITION 2022/02/27 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 12.2 S / 87.7 E

(TWELVE DECIMAL TWO DEGREES SOUTH AND
EIGHTY SEVEN DECIMAL SEVEN DEGREES EAST)

MOVEMENT: EAST-NORTH-EAST 5 KT

3.A DVORAK ANALYSIS: 3.5/4.0/W 2.5/24 H

4.A CENTRAL PRESSURE: 980 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): 28 KM

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

28 KT NE: 130 SE: 295 SW: 295 NW: 150

34 KT NE: 75 SE: 95 SW: 130 NW: 100

48 KT NE: 45 SE: 35 SW: 50 NW: 45

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1002 HPA / 300 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/02/27 18 UTC: 13.3 S / 88.1 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 150 SE: 345 SW: 195 NW: 130

34 KT NE: 100 SE: 175 SW: 100 NW: 85

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

24H: 2022/02/28 06 UTC: 13.9 S / 86.8 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 120 SE: 240 SW: 195 NW: 165

34 KT NE: 95 SE: 110 SW: 85 NW: 110

36H: 2022/02/28 18 UTC: 15.0 S / 85.9 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 155 SE: 270 SW: 220 NW: 155

34 KT NE: 110 SE: 130 SW: 95 NW: 100

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

48H: 2022/03/01 06 UTC: 16.6 S / 85.1 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 185 SE: 380 SW: 260 NW: 150

34 KT NE: 120 SE: 215 SW: 120 NW: 100

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

60H: 2022/03/01 18 UTC: 18.3 S / 84.2 E, VENT MAX= 065 KT, TROPICAL CYCLONE
28 KT NE: 205 SE: 465 SW: 315 NW: 240
34 KT NE: 130 SE: 260 SW: 165 NW: 165
48 KT NE: 75 SE: 75 SW: 85 NW: 85
64 KT NE: 35 SE: 55 SW: 55 NW: 35

72H: 2022/03/02 06 UTC: 20.0 S / 83.0 E, VENT MAX= 075 KT, TROPICAL CYCLONE
28 KT NE: 230 SE: 435 SW: 315 NW: 220
34 KT NE: 140 SE: 250 SW: 195 NW: 150
48 KT NE: 95 SE: 75 SW: 85 NW: 85
64 KT NE: 45 SE: 65 SW: 75 NW: 45

2.B LONGER-RANGE OUTLOOK:

96H: 2022/03/03 06 UTC: 24.1 S / 80.0 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM
28 KT NE: 305 SE: 405 SW: 260 NW: 240
34 KT NE: 175 SE: 250 SW: 175 NW: 155
48 KT NE: 75 SE: 65 SW: 75 NW: 95

120H: 2022/03/04 06 UTC: 28.9 S / 77.3 E, VENT MAX= 050 KT, POST-TROPICAL
DEPRESSION
28 KT NE: 295 SE: 380 SW: 250 NW: 240
34 KT NE: 150 SE: 260 SW: 195 NW: 155
48 KT NE: 70 SE: 60 SW: 60 NW: 70

2.C ADDITIONAL INFORMATION:

T=3.5 CI=4.0

UNDER THE INFLUENCE OF THE FUJIWARA EFFECT, VERNON CONTINUES TO SUFFER FROM THE PROXIMITY OF TROPICAL DEPRESSION 08 LOCATED LESS THAN 350 KM TO THE SOUTHEAST. MICROWAVE IMAGERY BETWEEN 00Z AND 03Z SHOWS THAT THE INTERNAL STRUCTURE OF THIS SMALL SYSTEM HAS BEEN WELL ERODED (LOSS OF THE EYE IN 85 GHZ). THE 55 KT INTENSITY IS BASED ON A CONSENSUS OF OBJECTIVE METHODS (ADT, AIDT AND SATCON) AND A SMOS PASS AT 54 KT AT 0021Z THIS MORNING.

IN TERMS OF TRAJECTORY, THE FORECAST REMAINS SUBJECT TO THE FUJIWHARA EFFECT DURING THE NEXT 24 HOURS. THEREAFTER, VERNON IS GUIDED TOWARDS THE SOUTH-SOUTHWEST BY THE MID LEVELS HIGHS LOCATED AT THE EAST OF THE SYSTEM AND PERSISTANT WEAKNESS IN THE SUBTROPICAL RIDGE IN THE SOUTH. THIS TRACK WILL CONTINUE WITHIN THE NEXT SEVERAL DAYS, LEADING VERNON TO GAIN THE SOUTHERN LATITUDES WHILE REMAINING WELL AWAY FROM THE INHABITED LANDS OF THE BASIN.

THE INTENSITY PREDICTION REMAINS DELICATE BECAUSE OF THE INTERACTION BETWEEN THE TWO SYSTEMS. THIS WILL INDUCE A MUTUAL GENE BUT WHICH SHOULD BE LESS MARKED FOR VERNON. THE INCREASE OF SHEAR, THE DECREASE OF LOW LEVELS CONVERGENCE AND AN ATTENUATED OCEANIC POTENTIAL CAN STILL WEAKEN THE SYSTEM DURING THE NEXT 24H. BEYOND THAT, CONDITIONS ARE BECOMING A LITTLE MORE FAVORABLE FOR INTENSIFICATION AND A NEW PEAK OF INTENSITY IS EXPECTED IN THE MIDDLE OF NEXT WEEK, PROBABLY AT THE STAGE OF A TROPICAL CYCLONE. THE AVAILABLE MODELS ARE IN AGREEMENT

WITH THIS SCENARIO.

NO IMPACT EXPECTED FROM THIS SYSTEM ON INHABITED LANDS.