

WTIO30 FMEE 070645

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 5/3/20202021

1.A MODERATE TROPICAL STORM 3 (BONGOYO)

2.A POSITION 2020/12/07 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 14.6 S / 82.1 E
(FOURTEEN DECIMAL SIX DEGREES SOUTH AND
EIGHTY TWO DECIMAL ONE DEGREES EAST)

MOVEMENT: WEST-SOUTH-WEST 12 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D 1.0/24 H

4.A CENTRAL PRESSURE: 996 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 35 KT
RADIUS OF MAXIMUM WINDS (RMW): 37 KM

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

28 KT NE: 55 SE: 270 SW: 240 NW: 55
34 KT NE: 0 SE: 75 SW: 75 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2020/12/07 18 UTC: 15.4 S / 80.2 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 45 SE: 250 SW: 155 NW: 75
34 KT NE: 35 SE: 75 SW: 85 NW: 65

24H: 2020/12/08 06 UTC: 16.4 S / 78.3 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 65 SE: 250 SW: 185 NW: 75
34 KT NE: 55 SE: 100 SW: 130 NW: 65

36H: 2020/12/08 18 UTC: 17.9 S / 77.0 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 75 SE: 150 SW: 120 NW: 75
34 KT NE: 65 SE: 45 SW: 65 NW: 65

48H: 2020/12/09 06 UTC: 19.0 S / 76.4 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 45 SE: 120 SW: 120 NW: 85
34 KT NE: 35 SE: 110 SW: 85 NW: 65

60H: 2020/12/09 18 UTC: 19.3 S / 75.6 E, VENT MAX= 030 KT, TROPICAL DEPRESSION
28 KT NE: 20 SE: 215 SW: 110 NW: 65

72H: 2020/12/10 06 UTC: 19.2 S / 74.2 E, VENT MAX= 025 KT, REMNANT LOW

2.B LONGER-RANGE OUTLOOK:

96H: 2020/12/11 06 UTC: 18.6 S / 67.7 E, VENT MAX= 025 KT, REMNANT LOW

2.C ADDITIONAL INFORMATION:

T=CI=2.5+

SINCE 00Z, 03 CLOUD PATTERN HAS SIGNIFICANTLY IMPROVED WITH A CURVED BAND NOW WRAPPING AROUND THE CENTER OF MORE THAN A SEMICIRCLE. HOWEVER CLOUD TOPS WARMED UP SINCE THEN. GIVEN THIS EVOLUTION AND THE MICROWAVE PASSES OF THE END OF THE NIGHT (0050Z SSMIS), THE SYSTEM HAS BEEN NAMED BONGOYO BY THE MAURITIAN SERVICES. THE 0414Z ASCAT PASS CONFIRMED THE PRESENCE OF GALE FORCE WINDS IN THE SOUTHERN SEMICIRCLE.

LITTLE CHANGE IN THE TRACK FORECAST PHILOSOPHY : BONGOYO HAS RESUMED A WEST-SOUTHWEST TRAJECTORY DUE TO THE INFLUENCE OF THE SUBTROPICAL RIDGE FURTHER SOUTH. WITH THE PASSAGE FURTHER SOUTH OF A TALWEG, THE LOW SLOWS DOWN FROM TOMORROW BY TAKING A MORE MARKED MERIDIAN COMPONENT. FROM MID-WEEK, THE RETURN OF THE SUBTROPICAL RIDGE IMPOSES AGAIN A WESTWARD TRACK WHILE ACCELERATING.

ALONG THIS TRACK, BONGOYO WILL BENEFIT FROM A FAVORABLE WINDOW DURING THE NEXT 12 HOURS. NEXT NIGHT, THE REINFORCEMENT OF A MODERATE NORTH-WESTERLY CONSTRAINT IN THE MIDDLE TROPOSPHERE SHOULD LIMIT THE DEVELOPMENT OF THE SYSTEM. ON WEDNESDAY, DEEP VERTICAL SHEAR SHOULD ALSO INCREASE AND BE ASSOCIATED WITH DRY MID-TROPOSPHERE INTRUSIONS. THE SYSTEM SHOULD THEN RAPIDLY EVOLVE INTO A RESIDUAL DEPRESSION.

NO THREAT IS ENVISAGED FOR THE INHABITED LANDS.