

WTIO30 FMEE 090038

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 12/3/20202021

1.A SEVERE TROPICAL STORM 3 (BONGOYO)

2.A POSITION 2020/12/09 AT 0000 UTC:

WITHIN 30 NM RADIUS OF POINT 19.7 S / 76.3 E

(NINETEEN DECIMAL SEVEN DEGREES SOUTH AND
SEVENTY SIX DECIMAL THREE DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 11 KT

3.A DVORAK ANALYSIS: 3.5/3.5/S 0.0/24 H

4.A CENTRAL PRESSURE: 988 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): 33 KM

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

28 KT NE: 95 SE: 185 SW: 150 NW: 95

34 KT NE: 55 SE: 95 SW: 95 NW: 55

48 KT NE: 45 SE: 45 SW: 50 NW: 0

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

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2020/12/09 12 UTC: 20.2 S / 75.8 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 75 SE: 95 SW: 165 NW: 85

34 KT NE: 65 SE: 85 SW: 75 NW: 65

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

24H: 2020/12/10 00 UTC: 20.6 S / 74.8 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 65 SE: 95 SW: 195 NW: 75

34 KT NE: 55 SE: 85 SW: 85 NW: 65

36H: 2020/12/10 12 UTC: 20.5 S / 73.2 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 65 SE: 100 SW: 240 NW: 85

34 KT NE: 55 SE: 95 SW: 110 NW: 65

48H: 2020/12/11 00 UTC: 20.1 S / 71.2 E, VENT MAX= 030 KT, REMNANT LOW

28 KT NE: 45 SE: 165 SW: 195 NW: 55

60H: 2020/12/11 12 UTC: 20.2 S / 68.7 E, VENT MAX= 030 KT, REMNANT LOW

28 KT NE: 35 SE: 110 SW: 175 NW: 55

72H: 2020/12/12 00 UTC: 21.1 S / 65.3 E, VENT MAX= 030 KT, REMNANT LOW
28 KT NE: 35 SE: 110 SW: 100 NW: 65

2.B LONGER-RANGE OUTLOOK:
NIL

2.C ADDITIONAL INFORMATION:
T=CI=3.5+

IN THE LAST 6 HOURS, BONGOYO CLOUD PATTERN BARELY EVOLVED WITH AN EMBEDDED CENTER. MICROWAVE IMAGES SEEMS HOWEVER HINTING THAT A TILT MAY BE FORMING BETWEEN TH UPPER AND LOWER CORE (ESPECIALLY ON 2023Z AMSR2 DATA). THIS FACT IF TRUE WOULD BE LIKELY RELATED TO THE INCREASE OF THE DEEP VERTICAL WIND SHEAR. LATEST OBJECTIVE GUIDANCE DO NOT SHOW A SIGNIFICANT CHANGE THUS, INTENSITY IS MAINTAINED AT 55KT.

BONGOYO SEEMS AT THE END OF ITS DEEPENING PHASE AS THE FAVORABLE CONDITIONS WINDOWS IS CLOSING IN. INDEED, THE DEEP VERTICAL SHEAR SHOULD KEEP ON INCREASING IN THE NEXT HOURS AND BE ASSOCIATED WITH MORE EFFICIENT DRY INTRUSIONS. WITH A RAPIDLY DILUTING WARM CORE, THE SYSTEM IS THUS EXPECTED TO GRADUALLY WEAKEN INTO A RESIDUAL DEPRESSION. UNDER THE INFLUENCE OF BAROCLINIC PHENOMENA, NEAR GALE FORCE AND GALE FORCE WIND MAY REMAIN IN THE FOLLOWING DAYS IN THE SOUTHERN SEMI-CIRCLE.

AFTER MOVING SOUTH-SOUTH-WESTWARD, UNDER THE INFLUENCE OF THE MID-LEVEL SUBTROPICAL RIDGE AND THE TROUGH AT SOUTH, THE STORM SHOULD PROGRESSIVELY BEND WESTWARD. THE STEERING FLOW SHOULD COME DOWN TO LOWER LEVELS DUE TO THE WEAKENED STATE OF THE SYSTEM. BONGOYO IS THUS EXPECTED TO DRIFT GENERALLY WESTWARD ON THE NORTHERN SIDE OF THE SUBTROPICAL HIGH PRESSURE AREA. THERE IS STILL QUITE SOME UNCERTAINTY AT LONGER RANGE, ESPECIALLY IN REGARDS ITS CLOSEST DISTANCE FROM RODRIGUES.

UNDER A VERY ATTENUATED FORM THIS WEEK-END AND GIVEN THE CURRENT FORECAST TRACK, THE RESIDUAL LOW BONGOYO SHOULD NOT HAVE A SIGNIFICANT IMPACT IN TERMS OF WIND AND RAINFALL OVER THE INHABITED ISLANDS.