

WTIO30 FMEE 051818

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 9/3/20192020

1.A INTENSE TROPICAL CYCLONE 3 (AMBALI)

2.A POSITION 2019/12/05 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 10.0 S / 62.5 E

(TEN DECIMAL ZERO DEGREES SOUTH AND

SIXTY TWO DECIMAL FIVE DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 11 KT

3.A DVORAK ANALYSIS: 5.5/5.5/D 2.0/6 H

4.A CENTRAL PRESSURE: 962 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 90 KT

RADIUS OF MAXIMUM WINDS (RMW): 15 KM

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

28 KT NE: 70 SE: 110 SW: 90 NW: 70

34 KT NE: 60 SE: 90 SW: 60 NW: 60

48 KT NE: 50 SE: 60 SW: 50 NW: 50

64 KT NE: 30 SE: 40 SW: 30 NW: 30

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 300 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2019/12/06 06 UTC: 11.3 S / 62.1 E, VENT MAX= 100 KT, INTENSE TROPICAL CYCLONE

24H: 2019/12/06 18 UTC: 12.2 S / 62.0 E, VENT MAX= 080 KT, TROPICAL CYCLONE

36H: 2019/12/07 06 UTC: 12.5 S / 61.9 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

48H: 2019/12/07 18 UTC: 13.1 S / 61.3 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM

60H: 2019/12/08 06 UTC: 13.8 S / 60.6 E, VENT MAX= 030 KT, FILLING UP

72H: 2019/12/08 18 UTC: 14.4 S / 59.9 E, VENT MAX= 025 KT, FILLING UP

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=5.5

DURING THE LAST 6 HOURS, THE SYSTEM HAS UNDERGONE AN EXPLOSIVE INTENSIFICATION. EYE IS SURROUNDING BY A RING OF VERY COLD TOP CLOUDS

WHILE THE EYE IS WARMING. CONSIDERING THAT THE SYSTEM IS VERY COMPACT, THE DVORAK CONSTRAINT RULES HAVE BEEN BROKEN.

LITTLE CHANGE IN TERMS OF TRACK FORECAST FOR SHORT TIMES: A LOW AND MID_LEVEL RIDGE CENTRED ON THE EASTERN HALF OF THE BASIN STEERS THE SYSTEM GENERALLY SOUTH-SOUTHWESTWARDS. FROM SATURDAY, WHEN THE SYSTEM IS EXPECTED TO WEAKEN SIGNIFICANTLY, THE DIRECTIONAL FLOW SHOULD COME BACK DOWN TO THE LOW LEVELS INDUCING A MORE SOUTH-WESTERN TRACK THAN INITIALLY EXPECTED : THE RESIDUAL MINIMUM SHOULD THUS DRIFT SOUTHWEST AND CONTINUE TO FILL UNTIL MONDAY.

AMBALI CONTINUES TO BENEFITS FROM GOOD ENVIRONMENTAL CONDITIONS : IN THE UPPER LEVELS, DIVERGENCE REMAINS GOOD AND VERTICAL WINDSHEAR IS LOW. OHC IS PARTICULARLY HIGH OVER THIS AREA OF THE BASIN. THE INTENSIFICATION COULD CONTINUE THIS NIGHT. BUT, FROM TOMORROW AND BEYOND, DUE TO AN APPROACHING UPPER LEVELS TROUGH, A WESTERLY SHEAR CONSTRAINT APPEARS IN THE MID-LEVELS, THEN IN THE UPPER LEVELS QUICKLY AFTER, ASSOCIATED WITH MID-LEVELS DRY AIR INTRUSION. A RATHER RAPID WEAKENING IS SUGGESTED BY THE AVAILABLE INTENSITY GUIDANCE. THE INTENSITY FORECAST FOR SUCH A SMALL SYSTEM REMAINS CHALLENGING AND ASSOCIATED WITH A GREATER THAN USUAL UNCERTAINTY.