

WTIO30 FMEE 230125

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 1/15/20182019

1.A TROPICAL DEPRESSION 15

2.A POSITION 2019/04/23 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 7.0 S / 81.3 E

(SEVEN DECIMAL ZERO DEGREES SOUTH AND
EIGHTY ONE DECIMAL THREE DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-EAST 7 KT

3.A DVORAK ANALYSIS: 2.0/2.0/D 1.0/24 H

4.A CENTRAL PRESSURE: 998 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 30 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 130 SE: 0 SW: 0 NW: 150

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 1000 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS:

12H: 2019/04/23 12 UTC: 8.4 S / 82.2 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

24H: 2019/04/24 00 UTC: 9.5 S / 83.1 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

36H: 2019/04/24 12 UTC: 9.9 S / 83.7 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

48H: 2019/04/25 00 UTC: 10.7 S / 84.7 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

60H: 2019/04/25 12 UTC: 11.5 S / 85.4 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

72H: 2019/04/26 00 UTC: 12.3 S / 86.2 E, VENT MAX= 070 KT, TROPICAL CYCLONE

2.B LONGER-RANGE OUTLOOK:

96H: 2019/04/27 00 UTC: 14.2 S / 88.0 E, VENT MAX= 080 KT, TROPICAL CYCLONE

120H: 2019/04/28 00 UTC: 16.4 S / 90.2 E, VENT MAX= 070 KT, TROPICAL CYCLONE

2.C ADDITIONAL INFORMATION:

FT=2.0+ CI=2.0+

THE LOW PRESSURE AREA MONITORED SINCE THE LAST 24 TO 36 HOURS EAST OF
THE CHAGOS ARCHIPELAGO HAS STRENGTHENED OVERNIGHT WITH IMPROVING
ORGANISATION IN THE CLOUD PATTERN ASSOCIATED WITH VERY COLD CLOUD
TOPS. MW IMAGERY SINCE YESTERDAY EVENING SHOW A CONSOLIDATING LOW

LEVEL CIRCULATION, DESPITE SOME MODERATE EASTERLY SHEAR. A PARTIAL ASCAT-C LAST NIGHT SHOW SOME 30 KT WINDS OVER THE NORTH-EASTERN QUADRANT AND A NEARBY BUOY REPORT FALLING SEA LEVEL PRESSURE. BASED ON ALL ABOVE, THE FINAL INTENSITY IS SET AT 30 KT.

THE SYSTEM MOVE SOUTH-EASTWARDS OVER THE SOUTH-WESTERN EDGE OF A LOW TO MID-LEVELS EQUATORIAL RIDGE. OVER THE NEXT FEW DAYS, THE EQUATORIAL RIDGE IS EXPECTED TO SHIFT WESTWARDS AND A HIGH TO MID LEVEL TROUGH IS GRADUALLY EXPECTED TO TAKE PLACE TO THE SOUTH-WEST OF THE SYSTEM. THIS PATTERN SHOULD FAVOR A CONTINUING GENERAL SOUTH-EASTWARDS TRACK OVER THE WHOLE FORECAST PERIOD. SOME MODELS SUGGEST THAT THE SYSTEM MAY INTERACT WITH A POSSIBLE DEVELOPPING LOW LOCATED FURTHER EAST. IF IT DOES SO, AN EASTWARD SHIFT OF THE TRACK IS POSSIBLE.

THE EASTERLY CONSTRAINT SHOULD LIMIT SOMEWHAT THE INTENSIFICATION PROCESS AT LEAST FOR THE FIRST 24 HOURS BUT AFTER THAT, THE SYSTEM MAY BENEFIT FROM IMPROVING ENVIRONMENTAL CONDITIONS, WITH A CLIMATOLOGICAL DEVELOPMENT RATE EXPECTED. LATER IN THE FORECAST PERIOD, SOME INCREASE IN NORTH-EASTERLY SHEAR MAY STOP THE DEVELOPING TREND BUT THERE IS STILL SOME UNCERTAINTY AT THIS TIME.