

WTIO30 FMEE 131846

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 6/1/20202021

1.A MODERATE TROPICAL STORM 1 (ALICIA)

2.A POSITION 2020/11/13 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 6.4 S / 80.8 E

(SIX DECIMAL FOUR DEGREES SOUTH AND
EIGHTY DECIMAL EIGHT DEGREES EAST)

MOVEMENT: WEST-SOUTH-WEST 14 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 997 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 35 KT

RADIUS OF MAXIMUM WINDS (RMW): 74 KM

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

28 KT NE: 130 SE: 370 SW: 220 NW: 130

34 KT NE: 70 SE: 240 SW: 0 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:

12H: 2020/11/14 06 UTC: 7.8 S / 78.6 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

24H: 2020/11/14 18 UTC: 10.0 S / 76.3 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

36H: 2020/11/15 06 UTC: 12.5 S / 74.4 E, VENT MAX= 065 KT, TROPICAL CYCLONE

48H: 2020/11/15 18 UTC: 15.0 S / 73.6 E, VENT MAX= 075 KT, TROPICAL CYCLONE

60H: 2020/11/16 06 UTC: 16.7 S / 73.2 E, VENT MAX= 065 KT, TROPICAL CYCLONE

72H: 2020/11/16 18 UTC: 18.0 S / 72.9 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK:

96H: 2020/11/17 18 UTC: 19.8 S / 72.4 E, VENT MAX= 030 KT, FILLING UP

120H: 2020/11/18 18 UTC: 23.6 S / 73.1 E, VENT MAX= 025 KT, FILLING UP

2.C ADDITIONAL INFORMATION:

T=CI=2.5+

OVER THE LAST SIX HOURS, CONVECTIVE ACTIVE INCREASED NEAR THE CENTER
WITH AN IMPROVING CURVATURE. 1530Z ASCAT SWATH CONFIRM THIS IMPRESSION
WITH WINDS REACHING GALE FORCE IN THE EASTERN SEMI-CIRCLE. HOWEVER
THE INNER CORE IS STILL QUITE BROAD AND ELONGATED WHICH MAY SLOW THE

DEEPENING RATE AT SHORT RANGE. THIS SYSTEM WAS THEREFORE NAMED ALICIA BY THE MAURITIUS METEOROLOGICAL SERVICE AT 1730Z.

STILL NO CHANGE IN TERMS OF FORECAST PHILOSOPHY. ALICIA CONTINUES TO BE GUIDED BY THE STEERING FLOW GENERATED BY THE SUBTROPICAL RIDGE. THE SYSTEM SHOULD SOON ACCELERATE ITS SOUTHWESTWARD MOVEMENT. UNDER THE IMPULSE OF THE DYNAMICS FURTHER SOUTH, THE RIDGE IS GRADUALLY SHIFTING EASTWARD AND WILL LEAVE A NORTHWARD DIRECTED STEERING FLOW FROM SUNDAY ONWARDS. THE NUMERICAL MODELS ARE IN GOOD AGREEMENT ON THIS GLOBAL TRAJECTORY. FROM MONDAY ONWARDS, THE UNCERTAINTY BECOMES IMPORTANT IN RELATION TO THE WEAK STEERING FLOW AND THE EXISTENCE OF TWO POSSIBLE SCENARIOS: EVACUATION IN THE EXTRA-TROPICAL DOMAIN OR FILLING UP IN THE TROPICAL DOMAIN NORTH OF THE RECONSTRUCTED LOW-LEVEL ANTICYCLONIC BELT. THE FIRST ONE SEEMS MORE LIKELY FOR NOW.

ON THIS TRACK, THE ENVIRONMENTAL CONDITIONS ARE VERY FAVOURABLE OVER THE NEXT 2 DAYS. WITH THE HELP OF STRENGTHENING EQUATORIAL WESTERLY WINDS, A VERY GOOD DIVERGENCE, LITTLE SHEAR AND A VERY STRONG OCEANIC POTENTIAL, ALICIA MAY REACH TROPICAL CYCLONE LEVEL ON SUNDAY. AT THE BEGINNING OF NEXT WEEK, CONDITIONS ARE EXPECTED TO DETERIORATE WITH INSUFFICIENT OCEANIC POTENTIAL SOUTH OF 17S, AND INCREASING SHEAR ASSOCIATED GRADUALLY WITH DRY MID-TROPOSPHERIC AIR INTRUSIONS.