

WTIO30 FMEE 140035

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 7/1/20202021

1.A MODERATE TROPICAL STORM 1 (ALICIA)

2.A POSITION 2020/11/14 AT 0000 UTC:

WITHIN 30 NM RADIUS OF POINT 8.0 S / 79.2 E

(EIGHT DECIMAL ZERO DEGREES SOUTH AND
SEVENTY NINE DECIMAL TWO DEGREES EAST)

MOVEMENT: SOUTH-WEST 19 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 1.0/12 H

4.A CENTRAL PRESSURE: 995 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 40 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: 90 SE: 240 SW: 90 NW: 90

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2020/11/14 12 UTC: 10.2 S / 76.9 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

24H: 2020/11/15 00 UTC: 12.5 S / 74.8 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

36H: 2020/11/15 12 UTC: 14.5 S / 73.7 E, VENT MAX= 070 KT, TROPICAL CYCLONE

48H: 2020/11/16 00 UTC: 16.2 S / 73.2 E, VENT MAX= 080 KT, TROPICAL CYCLONE

60H: 2020/11/16 12 UTC: 17.5 S / 73.0 E, VENT MAX= 070 KT, TROPICAL CYCLONE

72H: 2020/11/17 00 UTC: 18.5 S / 72.7 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK:

96H: 2020/11/18 00 UTC: 21.7 S / 71.9 E, VENT MAX= 025 KT, FILLING UP

2.C ADDITIONAL INFORMATION:

T=CI=3.0

OVER THE LAST SIX HOURS, CONVECTIVE ACTIVITY GOT BETTER ORGANIZED AROUND ALICIA CENTER. 2027Z AMRS2 AND 2223Z SSMI SHOW THAT EVEN THE INNER IS STILL ELONGATED, IT FEATURES INCREASING SIGNS OF CURVATURE. ON THE LATEST IMAGES, A PERSISTENT WARM SPOT CAN BE SEEN ON THE INFRARED IMAGERY, PROBABLY RELATED TO THE BROAD STRUCTURE OF THE INNER CORE.

ALICIA CONTINUES TO MOVE RAPIDLY SOUTH-WESTWARDS 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 TRACK. FROM MONDAY ONWARDS, THE UNCERTAINTY BECOMES IMPORTANT IN RELATION TO THE WEAK STEERING FLOW AND THE EXISTENCE OF TWO POSSIBLE SCENARIOS: CONTINUATION OF A SOUTH/SOUTH-EASTWARD MOVEMENT OR TAKEOVER OF THE TRADE WIND IN THE STEERING FLOW. THE FIRST ONE SEEMS STILL MORE LIKELY.

ON THIS TRACK, THE ENVIRONMENTAL CONDITIONS ARE VERY FAVOURABLE UP TO MONDAY MORNING. WITH THE HELP OF STRENGTHENING EQUATORIAL WESTERLY WINDS, A VERY GOOD DIVERGENCE, LITTLE SHEAR AND A VERY STRONG OCEANIC POTENTIAL, ALICIA IS LIKELY TO REACH TROPICAL CYCLONE INTENSITY IN THE NEXT 24/48H. AT THE BEGINNING OF NEXT WEEK, CONDITIONS ARE EXPECTED TO DETERIORATE SIGNIFICANTLY WITH INSUFFICIENT OCEANIC POTENTIAL SOUTH OF 17S, AND INCREASING SHEAR ASSOCIATED GRADUALLY WITH DRY MID-TROPOSPHERIC AIR INTRUSIONS.