

WTIO30 FMEE 160100

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 15/1/20202021

1.A TROPICAL CYCLONE 1 (ALICIA)

2.A POSITION 2020/11/16 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 15.3 S / 72.8 E

(FIFTEEN DECIMAL THREE DEGREES SOUTH AND
SEVENTY TWO DECIMAL EIGHT DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 10 KT

3.A DVORAK ANALYSIS: 4.0/4.0/D 0.5/24 H

4.A CENTRAL PRESSURE: 979 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 65 KT

RADIUS OF MAXIMUM WINDS (RMW): 46 KM

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

28 KT NE: 190 SE: 240 SW: 240 NW: 150

34 KT NE: 120 SE: 160 SW: 140 NW: 80

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

64 KT NE: 0 SE: 0 SW: 50 NW: 50

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2020/11/16 12 UTC: 16.2 S / 72.4 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

24H: 2020/11/17 00 UTC: 16.7 S / 71.9 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

36H: 2020/11/17 12 UTC: 17.7 S / 71.2 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

48H: 2020/11/18 00 UTC: 18.8 S / 70.6 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

60H: 2020/11/18 12 UTC: 19.5 S / 69.8 E, VENT MAX= 025 KT, FILLING UP

72H: 2020/11/19 00 UTC: 20.3 S / 68.5 E, VENT MAX= 025 KT, FILLING UP

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=4.0+

VERY INTENSE CONVECTION HAS DEVELOPED DURING THE LAST 6 HOURS NEAR
THE CENTER OF ALICIA ACCOMPANIED BY VERY COLD CLOUD TOPS ON IR IMAGERY

(-90C). THE AMSR2 OF 2017Z REVEALS THAT THE INTERNAL STRUCTURE HAS IMPROVED WITH A CONSOLIDATED AND LESS TILTED EYE CONFIGURATION IN THE 89 GHZ CHANNEL. SHORTLY BEFORE 00Z, THIS EYE APPEARED IN IR WITH SOME RAW T-NUM AT 5.5 JUST AFTER 00Z. THE ADT THAT TOOK INTO ACCOUNT THE MICROWAVE EYE STRUCTURE ROSE TO AN ESTIMATE OF 65 KT (WINDS 10 MIN). EARLIER LAST NIGHT, A SMAP PASS ESTIMATED 64 KT AT THE SWATH'S EDGE. ALICIA IS THEREFORE ESTIMATED TO HAVE REACHED THE TROPICAL CYCLONE'S STAGE.

THE TRACK PREDICTION REMAINS GUIDED BY THE EASTWARD SHIFT OF THE SUBTROPICAL RIDGE WHICH INDUCES A POLEWARDS TRACK. THE LATEST MODELS SHOW LESS AGREEMENT ON THE SHORT TIME FRAME WITH IFS WHICH HAS SHIFTED SIGNIFICANTLY WESTWARD SUGGESTING A POSSIBLE FUJIWHARA EFFECT IN THE NEXT 24 HOURS WITH THE CIRCULATION OF TROPICAL DEPRESSION 02. THIS POSSIBILITY HAS BEEN PARTIALLY INTEGRATED IN THE NEW CMRS FORECAST.

THE POWERFUL ALTITUDE DIVERGENCE ALLOWED ALICIA TO CONTINUE A FINAL INTENSIFICATION. THIS ONE COULD STILL BE MAINTAINED A FEW HOURS THIS MORNING BEFORE THE SYSTEM NAVIGATES ON TOO COLD WATERS. LATER TODAY A DEFINITE WEAKENING TREND IS THUS EXPECTED WITH AN INSUFFICIENT OCEANIC POTENTIAL SOUTH OF 17S, PERSISTENT SHEAR AND INTRUSIONS OF DRY AIR AT THE MID LEVELS.