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RSMC / TROPICAL CYCLONE CENTER / LA REUNION
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 14/2/20192020
1.A SEVERE TROPICAL STORM 2 (BELNA)

2.A POSITION 2019/12/07 AT 0000 UTC:
WITHIN 20 NM RADIUS OF POINT 9.3 S / 47.8 E
(NINE DECIMAL THREE DEGREES SOUTH AND
FORTY SEVEN DECIMAL EIGHT DEGREES EAST)
MOVEMENT: SOUTH-WEST 5 KT

3.A DVORAK ANALYSIS: 4.0/4.0/S 0.0/12 H

4.A CENTRAL PRESSURE: 982 HPA
5.A MAX AVERAGE WIND SPEED (10 MN): 60 KT
RADIUS OF MAXIMUM WINDS (RMW): 37 KM

6.A EXTENSION OF WIND BY QUADRANTS (KM):
28 KT NE: 170 SE: 130 SW: 110 NW: 170
34 KT NE: 110 SE: 110 SW: 90 NW: 150
48 KT NE: 70 SE: 70 SW: 60 NW: 90

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 600 KM
8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:
12H: 2019/12/07 12 UTC: 10.3 S / 47.4 E, VENT MAX= 080 KT, TROPICAL CYCLONE
24H: 2019/12/08 00 UTC: 11.5 S / 47.0 E, VENT MAX= 095 KT, INTENSE TROPICAL CYCLONE
36H: 2019/12/08 12 UTC: 12.7 S / 46.6 E, VENT MAX= 100 KT, INTENSE TROPICAL CYCLONE
48H: 2019/12/09 00 UTC: 14.1 S / 46.1 E, VENT MAX= 110 KT, INTENSE TROPICAL CYCLONE
60H: 2019/12/09 12 UTC: 15.9 S / 45.4 E, VENT MAX= 105 KT, INTENSE TROPICAL CYCLONE
72H: 2019/12/10 00 UTC: 18.1 S / 44.8 E, VENT MAX= 040 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK:
96H: 2019/12/11 00 UTC: 21.6 S / 44.5 E, VENT MAX= 030 KT, OVERLAND DEPRESSION
120H: 2019/12/12 00 UTC: 25.2 S / 45.6 E, VENT MAX= 030 KT, OVERLAND DEPRESSION

2.C ADDITIONAL INFORMATION:
T=CI=4.0+

THE CDO CLOUD PATTERN HAS PERSISTED FOR MORE THAN 12 HOURS WITH DEEP CONVECTION THAT REMAINS NEAR THE CENTRE. THE DVORAK ANALYSIS REMAINS AT A VALUE OF 4.0 ALLOWING TO ESTIMATE WINDS OF ABOUT 60KT. ON THE LAST IMAGES AN EYE BEGINNING SEEMS TO APPEAR SUGGESTING A RESUMPTION OF INTENSIFICATION.

FOR THE MOMENT, NO CHANGE IN THE FORECASTED TRACK: THE SYSTEM CONTINUES BENDING SOUTH-WESTWARD AND AFTER SOUTH-SOUTHWESTWARD WITH THE BUILDING OF A MID-LEVEL RIDGE EAST OF THE SYSTEM WHILE A WEAKNESS IN THE SUBTROPICAL RIDGE ARRIVES IN THE SOUTH. THE UNCERTAINTY IN THE MODELS IS REDUCED WITH THE AGREEMENT OF THE ECMWF MODEL ON A PASSAGE MORE THAN 100KM EAST OF MAYOTTE. THE CURRENT FORECAST IS CLOSE TO AROME AND GFS. IN THE LONGER TERM, A LANDING ON MADAGASCAR IS PLANNED NEAR THE AREA OF MAJUNGA.

ENVIRONMENTAL CONDITIONS REMAIN RATHER CONDUCIVE FOR RAPID DEVELOPMENT IN THE NEXT HOURS. WARM WATERS, EXCELLENT UPPER DIVERGENCE AND THE DECAY OF THE MODERATE SOUTH-EASTERLY VERTICAL WINDSHEAR ARE LIKELY TO HELP BELNA REACH INTENSE TROPICAL CYCLONE STATUS SATURDAY EVENING. AT LONG RANGE, UNCERTAINTY ON THE INTENSITY FORECAST IS IMPORTANT DUE TO POTENTIAL EYEWALL REPLACEMENT CYCLES AND THE LIKELY LANDFALL ON MADAGASCAR BUT THE TREND IS TO INTENSIFY UNTIL LANDING. BUT THE TREND IS TOWARDS INTENSIFICATION UNTIL LANDING AT THE THRESHOLD OF AN INTENSE TROPICAL CYCLONE.

ON THIS TRACK, BELNA SHOULD MOVE BETWEEN ALDABRA AND ASTOVE DURING THE NEXT HOURS. THE SYSTEM SHOULD THEN PASS CLOSE TO THE WEST TO GLORIEUSES THEN EAST OF MAYOTTE (ABOUT 130KM FOLLOWING THE PRESENT FORECASED TRACK). THE CLOSEST DISTANCE TO THESE ISLAND IS STILL UNCERTAIN. POTENTIAL ARE EVEN MORE UNCERTAIN TO THE SMALL SIZE OF THE INNER CORE AND STRONGEST WINDS (50-70KM), THE FIRST PERIPHERAL RAINBANDS MAY CONCERN MAYOTTE DURING THE NIGHT FROM SATURDAY TO SUNDAY.

INHABITANTS FROM THESE TERRITORIES, THE EAST OF COMOROS AND THE NORTHERN AND WESTERN MALAGASY COAST ARE INVITED TO MONITOR CLOSELY THE EVOLUTION OF BELNA.