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

0.A WARNING NUMBER: 7/13/20182019
1.A SEVERE TROPICAL STORM 13 (JOANINHA)

2.A POSITION 2019/03/23 AT 0000 UTC:
WITHIN 20 NM RADIUS OF POINT 16.1 S / 62.2 E
(SIXTEEN DECIMAL ONE DEGREES SOUTH AND
SIXTY TWO DECIMAL TWO DEGREES EAST)
MOVEMENT: SOUTH-SOUTH-WEST 3 KT

3.A DVORAK ANALYSIS: 3.5/3.5/W 0.5/6 H

4.A CENTRAL PRESSURE: 988 HPA
5.A MAX AVERAGE WIND SPEED (10 MN): 50 KT
RADIUS OF MAXIMUM WINDS (RMW): 37 KM

6.A EXTENSION OF WIND BY QUADRANTS (KM):
28 KT NE: 280 SE: 280 SW: 220 NW: 150
34 KT NE: 150 SE: 190 SW: 150 NW: 90
48 KT NE: 60 SE: 60 SW: 40 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 700 KM
8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:
12H: 2019/03/23 12 UTC: 16.8 S / 61.9 E, VENT MAX= 065 KT, TROPICAL CYCLONE
24H: 2019/03/24 00 UTC: 17.4 S / 61.7 E, VENT MAX= 075 KT, TROPICAL CYCLONE
36H: 2019/03/24 12 UTC: 17.9 S / 61.9 E, VENT MAX= 080 KT, TROPICAL CYCLONE
48H: 2019/03/25 00 UTC: 18.5 S / 62.3 E, VENT MAX= 085 KT, TROPICAL CYCLONE
60H: 2019/03/25 12 UTC: 19.1 S / 63.0 E, VENT MAX= 090 KT, INTENSE TROPICAL CYCLONE
72H: 2019/03/26 00 UTC: 20.1 S / 64.2 E, VENT MAX= 085 KT, TROPICAL CYCLONE

2.B LONGER-RANGE OUTLOOK:
96H: 2019/03/27 00 UTC: 22.4 S / 66.7 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM
120H: 2019/03/28 00 UTC: 24.9 S / 68.0 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM

2.C ADDITIONAL INFORMATION:
T=CI=3.5

THE CURVED BAND PATTERN IS MAINTAINED WITH A SPIRAL WINDING THAT INCREASES AND CONVECTION THAT INTENSIFIES NEAR THE CENTRE. THE 2132UTC

MICROWAVE DATA VALIDATE A CONSOLIDATION OF LOW-LEVEL CIRCULATION, LEAVING JOANINHA AT THE THRESHOLD OF A SEVERE TROPICAL STORM AT 00UTC.

JOANINHA'S TRACK, WITH A RELATIVELY SLOW MOVEMENT SPEED, ORIENTED SOUTH-SOUTHWEST STEERING BY A BUILDING MID-TROPOSHERE RIDGE LOCATED EAST OF THE SYSTEM. FROM SUNDAY ONWARDS, A CURVE IS EXPECTED : THE TRACK SHOULD CURVE SOUTHWARD AND AFTER SOUTH-SOUTH-EASTERLY WITH THE NORTHEASTWARD SHIFTING OF THE RIDGE. MONDAY AND NEXT DAYS,THE SYSTEM SHOULD BEND SOUTHEASTWARD OVER THE SOUTHWESTERN EDGE OF THE RIDGE AND THEN ACCELERATE AHEAD A DEEP MID-LATITUDE TROUGH. SOME MODELS CONTINUE TO PRESENT A TRAK WITH A LATER TURN INDUCING A SLOWER MOVEMENT. THIS RSMC TRACK FORECAST TAKES THE CHOICE OF THE EARLIER TURN LEADING JOANINHA TO PASS AS CLOSE TO RODRIGUES AS POSSIBLE DURING THE NIGHT FROM SUNDAY TO MONDAY BUT THE DISTANCE OF THE CLOSELY PASSAGE IS VERY UNCERTAIN.

ENVIRONMENTAL CONDITIONS ARE STILL CONDUCIVE FOR INTENSIFICATION. VERTICAL WINDSHEAR IS WEAK AND THE UPPER LEVEL DIVERGENCE IS VERY GOOD BOTH POLERWARD AND EQUATORWARD. THE OCEAN HEAT CONTENT IS HIGH. THESE ELEMENTS PROMOTE TO AN INTENSIFICATION FASTER THAN THE CLIMATOLOGICAL RATE DURING THE NEXT 3 DAYS, AND MORE SPECIFICALLY FOR THE NEXT 12 HOURS. AT THE TIME OF THE PASSAGE AS CLOSE AS POSSIBLE TO RODRIGUES, JOANINHA SHOULD HAVE REACHED ITS MAXIMUM INTENSITY AT THE THRESHOLD OF AN INTENSE TROPICAL CYCLONE. FROM TUESDAY, ENVIRONMENTAL CONDITIONS ARE EXPECTED TO DETERIORATE PROGRESSIVELY WITH AN INCREASING WESTERN VERTICAL WINDSHEAR AHEAD THE AFOREMENTIONED DEEP MID-LATITUDE TROUGH. SO, THE INTENSITY OF THE SYSTEM SHOULD WEAKEN SIGNIFICANTLY FROM WEDNESDAY DUE TO THE INCREASING VERTICAL WINDSHEAR AND AN ENVIRONMENT DRIER AND DRIER.

CURRENTLY 400KM FROM THE RODRIGUE COASTS BUT WITH A SLOW DISPLACEMENT, JOANINHA IS A TROPICAL SYSTEM PRESENTING A REAL DANGER FOR THE INHABITANTS OF RODRIGUES. THE POPULATION IS REQUIRED TO KEEP INFORMED OF THE EVOLUTION OF THE FORECASTS.