

WTIO30 FMEE 261322

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 21/13/20182019

1.A INTENSE TROPICAL CYCLONE 13 (JOANINHA)

2.A POSITION 2019/03/26 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 19.5 S / 64.8 E

(NINETEEN DECIMAL FIVE DEGREES SOUTH AND
SIXTY FOUR DECIMAL EIGHT DEGREES EAST)

MOVEMENT: EAST-SOUTH-EAST 6 KT

3.A DVORAK ANALYSIS: 6.0/6.0/D 0.5/12 H

4.A CENTRAL PRESSURE: 942 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 100 KT

RADIUS OF MAXIMUM WINDS (RMW): 37 KM

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

28 KT NE: 330 SE: 370 SW: 260 NW: 220

34 KT NE: 220 SE: 310 SW: 220 NW: 190

48 KT NE: 130 SE: 200 SW: 130 NW: 130

64 KT NE: 90 SE: 90 SW: 90 NW: 90

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2019/03/27 00 UTC: 20.2 S / 65.6 E, VENT MAX= 105 KT, INTENSE TROPICAL
CYCLONE

24H: 2019/03/27 12 UTC: 20.6 S / 66.2 E, VENT MAX= 095 KT, INTENSE TROPICAL
CYCLONE

36H: 2019/03/28 00 UTC: 21.1 S / 66.7 E, VENT MAX= 085 KT, INTENSE TROPICAL
CYCLONE

48H: 2019/03/28 12 UTC: 21.8 S / 67.0 E, VENT MAX= 075 KT, INTENSE TROPICAL
CYCLONE

60H: 2019/03/29 00 UTC: 22.8 S / 67.4 E, VENT MAX= 065 KT, TROPICAL CYCLONE

72H: 2019/03/29 12 UTC: 24.0 S / 67.9 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK:

96H: 2019/03/30 12 UTC: 26.7 S / 69.1 E, VENT MAX= 045 KT, POST-TROPICAL
DEPRESSION

120H: 2019/03/31 12 UTC: 28.3 S / 68.6 E, VENT MAX= 040 KT, POST-TROPICAL
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=6.0-

ON EIR IMAGERY, THE ANNULAR VERY COLD CLOUD TOPS HAS CONSOLIDATE DURING THE LAST HOURS, WITH AN EYE WARMER WITH A IMPROVING DEFINITION HOWEVER TEMPORALY ALWAYS ALLONGATED, SO THE INTENSITY HAS BEEN SLIGHTLY INCREASED.

JOAHNINHA FOLLOWS A TRACK TOWARDS THE SOUTH-EAST (LONG TREND HEADING), WITH A MORE EASTWARDS TREND SINCE 06Z. THIS PATTERN IS LIKELY DUE TO A TWO ANTAGONISTIC MID-LEVEL STEERING FLOWS : A NEAR EQUATORIAL RIDGE (NER) LOCATED TO THE NORTH-EAST, HAVE A WESTWARD EXTENSION THAT ALLOW SOME TEMPORARILY MORE EASTWARDS COMPONENT. A WEAK SUBTROPICAL RIDGE (STR) LOCATED TO THE SOUTH IS LIKELY THE REASON OF THE CURRENT SLOW MOTION. AS THE NER MOVE WESTWARDS AND THE STR EASTWARDS, A GENERAL SLOW AND IRREGULAR SOUTH-EASTWARDS TRACK IS STILL EXPECTED WITHIN THE NEXT FEW DAYS.

THE SPREAD AMONGST THE GUIDANCE HAS CLEARLY REDUCE WITH THE COMING CLOSER TO THE MAIN OTHERS MODELS OF THE LAST RUNS OF IFS, REMAINING HOWEVER TO WEAK IN INTENSITY AND SPEED OF MOVEMENT. THE FORECAST IS MADE OF THE CONSENSUS THE USUALLY BEST PERFORMERS.

THE ENVIRONMENTAL CONDITIONS REMAIN FAVORABLE DESPITE A GENERALLY WESTERLY DEEP LAYERS SHEAR WHICH HAS SLOWLY START TO INCREASEALTHOUGH STILL BEING LOW TO MODERATE. UPPER LEVEL POLEWARDS DIVERGENCE AND GOOD OCEANIC CONTAIN SHOULD HELP TO INTENSIFY A LITTLE MORE DURING THE NEXT HOURS. THE INTENSITY FORECAST IN THE NEXT 12 HOURS LIES TOWARD THE HWRF SOLUTION AND THEN BECOME CLOSER TO ICNW AFTER THAT TIME.

FROM WEDNESDAY, THE WESTERLY SHEAR IS FORECAST TO INCREASE IN ASSOCIATION WITH A DRYER ENVIRONMENT AND A DECREASE OF THE OCEANIC POTENTIAL SOUTH OF 22S, THEREFORE A GRADUAL WEAKENING TREND SHOULD START BY THAT TIME. BY THE END OF THE WEEK, JOANINHA MAY INTERACT WITH AN APPROACHING UPPER LEVEL TROUGH FROM THE SOUTH-WEST AND COULD START AN EXTRATROPICAL PROCESS.

JOANINHA HAS MADE ITS CLOSEST POINT APPROACH TO THE NORTH-EAST OF RODRIGUES AT A DISTANCE AROUND 80 KM AT THE END OF THE MORNING. DESPITE THE MOVING AWAY, DUE TO THE INTENSIFICATION OF THE SYSTEM AND WEAK SPEED, CONDITIONS MAY GET BETTER VERY SLOWLY DURING TODAY. THEREFORE THE INHABITANTS ARE INVITED TO CLOSELY MONITOR THE PROGRESS OF JOANINHA AND FOLLOW THE INSTRUCTIONS PROVIDED BY LOCAL AUTHORITIES.