

WTIO30 FMEE 290008

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 31/13/20182019

1.A TROPICAL CYCLONE 13 (JOANINHA)

2.A POSITION 2019/03/29 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 22.5 S / 68.3 E

(TWENTY TWO DECIMAL FIVE DEGREES SOUTH AND
SIXTY EIGHT DECIMAL THREE DEGREES EAST)

MOVEMENT: SOUTH-EAST 6 KT

3.A DVORAK ANALYSIS: 4.0/5.0/D 2.0/24 H

4.A CENTRAL PRESSURE: 958 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 80 KT

RADIUS OF MAXIMUM WINDS (RMW): 28 KM

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

28 KT NE: 310 SE: 440 SW: 370 NW: 240

34 KT NE: 220 SE: 280 SW: 220 NW: 190

48 KT NE: 130 SE: 150 SW: 130 NW: 110

64 KT NE: 70 SE: 70 SW: 60 NW: 60

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 1300 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2019/03/29 12 UTC: 23.5 S / 68.8 E, VENT MAX= 070 KT, TROPICAL CYCLONE

24H: 2019/03/30 00 UTC: 24.5 S / 69.3 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

36H: 2019/03/30 12 UTC: 25.6 S / 69.3 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

48H: 2019/03/31 00 UTC: 26.3 S / 69.0 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

60H: 2019/03/31 12 UTC: 27.8 S / 68.4 E, VENT MAX= 045 KT, POST-TROPICAL
DEPRESSION

72H: 2019/04/01 00 UTC: 30.2 S / 68.7 E, VENT MAX= 045 KT, POST-TROPICAL
DEPRESSION

2.B LONGER-RANGE OUTLOOK:

96H: 2019/04/02 00 UTC: 34.6 S / 68.0 E, VENT MAX= 040 KT, POST-TROPICAL
DEPRESSION

120H: 2019/04/03 00 UTC: 38.9 S / 70.2 E, VENT MAX= 040 KT, POST-TROPICAL
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=4.0 CI=5.0

DURING THE LAST 6 HOURS, CLOUD PATTERN HAS CONTINUED TO DETERIORATE DUE TO AN INCREASING NORTHWESTERN VERTICAL WINDSHEAR. THE CURRENT INTENSITY IS IN GOOD AGREEMENT WITH OBJECTIVE DVORAK ESTIMATIONS FROM CIMSS INDICATING AN INTENSITY CLOSE TO 80KT.

JOANINHA MOVES SLOWLY SOUTHEASTWARD UNDER THE INFLUENCE OF A WEAK MID/HIGH TROPOSPHERE FLOW STEERED BY A NEAR-EQUATORIAL RIDGE (NER) AND A MID-LATITUDE TROUGH (MLT) AXED NEAR MADAGASCAR. FROM SATURDAY, THE SYSTEM IS FORECASTED ACCELERATE PROGRESSIVELY SOUTHWARD WITH THE STRENGTHENING OF BOTH NER AND MLT. SUNDAY, THE SYSTEM SHOULD TEMPORALLY CURVE SOUTHWESTWARD WITH A BUILDING RIDGE LOCATED IN THE SOUTH BUT THAT SHOULD SHIFT QUICKLY EASTWARD LETTING JOANINHA GO TOWARDS THE SOUTHERN LATITUDES.

THE DISPERSION BETWEEN THE MODELS IS STILL IMPORTANT. THE RSMC'S TRACK FORECAST IS BASED ON THE US CONSENSUS GUIDANCE, WHICH HAVE SHOWN BETTER PERFORMANCE IN THE JOANINHA CASE.

MOVING SOUTHWARD, JOANINHA WILL ENCOUNTER A MODERATE TO STRONG NORTHWESTERN WINDSHEAR WHICH SHOULD SIGNIFICANTLY ACCELERATE ITS WEAKENING FAVOURED BY THE LACK OF OCEANIC POTENTIAL SOUTH OF 25S. FROM SUNDAY, THE SYSTEM IS EXPECTED TO GRADUALLY LOSING ITS PURELY TROPICAL CHARACTERISTICS EVOLVING UNDER THE SUBTROPICAL JET BUT WITHOUT INTERACT WITH THE BAROCLINIC AREA. SO, THE SYSTEM SHOULD EVOLVE LIKE A WARM SECLUSION WITH A SHALLOW WARM CORE. MONDAY, THE SYSTEM IS FORECASTED TO MOVE BENEATH THE TROUGH AND SHOULD EXPERIENCE A WEAKENING VERTICAL WINDSHEAR. THE SHALLOW CONVECTION COULD STRENGTHEN WITHIN THE CIRCULATION.